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Volume II

Oral and written evidence

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Environment, Food and Rural Affairs Committee

The Environment, Food and Rural Affairs Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of the Department for Environment, Food and Rural Affairs and its associated bodies.

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The current staff of the Committee are Richard Cooke (Clerk), Joanna Dodd (Second Clerk), Sarah Coe (Committee Specialist—Environment), Clare Genis (Senior Committee Assistant), Jim Lawford and Mandy Sullivan (Committee Assistants) and Hannah Pearce (Media Officer).

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Witnesses

Wednesday 15 October 2008

Dr Paul Leinster, Chief Executive and Ms Liz Parkes, Head of Waste, Environment Agency

Mr Steve Lee, Chief Executive Officer and Mr Robert Lisney OBE, Chair of CIWM Strategy Special Interest Group, Chartered Institution of Wastes Management (CIWM)

Mr Phillip Ward, Director for Local Government Resources, WRAP

Wednesday 12 November 2008

Mr Dirk Hazell, Chief Executive, Mr Richard Skehens, Managing Director, Grundon Waste Management and Ms Gill Weeks, Regulatory Affairs Director, Veolia Environmental Services (UK) Plc, Environmental Services Association

Mr John Bland, Deputy Clerk and Treasurer, Greater Manchester Waste Disposal Authority

Ms Lindsay Millington, Director General, British Metals Recycling Association and Mr Graeme Carus, Director of Business Development, European Metal Recycling Ltd

Wednesday 19 November 2008

Mr Julian Walker-Palin, Head of Corporate Policy for Sustainability and Ethics, ASDA, Ms Gemma Lacey, Project Manager, Corporate Social Responsibility and Mr Arthur Sayer, Manager, Recycling and Waste, John Lewis Partnership and Mr Richard Whitefield, Production Manager, Brecknell Willis

Mr Andrew Kinsey, Senior Sustainability Manager, Bovis Lend Lease and Mr Jon de Souza, Director of Member Services, Constructing Excellence

Monday 24 November 2008

Ms Samantha Harding, “Stop the Drop” Campaign Manager and Mr Neil Sinden, Policy Director, Campaign to Protect Rural England, Mr Phil Barton, Chief Executive and Mr Mike Phillips, Chairman, ENCAMS

Ms Jill Ardagh, Director General and Mr Paul Smith, Chairman, BSDA Environment Committee, British Soft Drinks Association, Ms Jane Milne, Director of Business Environment, British Retail Consortium

Rt Hon Jane Kennedy MP, Minister for Farming and the Environment, Mr Daniel Instone, Senior Responsible Owner, Waste Programme and Mr Roy Hathaway, Head of Waste Regulation and Business Waste, Department for Environment, Food and Rural Affairs
Wednesday 4 November 2009

Dr Paul Leinster, Chief Executive, Ms Liz Parkes, Head of Waste and Mr David Jordan, Director of Operations, Environment Agency

Rt Hon Hilary Benn MP, Secretary of State, Mr Roy Hathaway, Head of Waste Regulation and Business Waste and Mr Andy Howarth, Head of Hazardous and International Waste, Defra
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Oral evidence

Taken before the Environment, Food and Rural Affairs Committee

on Wednesday 15 October 2008

Members present

Mr Michael Jack, in the Chair

Mr David Drew  Dan Rogerson
Patrick Hall  Dr Gavin Strang
Lynne Jones  David Taylor
David Lepper  Paddy Tipping
Miss Anne McIntosh  Mr Roger Williams

Memorandum submitted by the Environment Agency (Waste 30)

SUMMARY

The Environment Agency welcomes the opportunity to provide evidence to respond to the Environment, Food and Rural Affairs Committee inquiry into the Government’s Waste Strategy.

We support the leadership provided by Government through publication of the Waste Strategy for England. It recognises that a range of actions need to be taken across society to achieve more sustainable waste and resource management. We need to see similarly strong leadership through the delivery phase to ensure that those actions are effectively brigaded, prioritised and resourced. The Waste Strategy Board will need to put in place effective systems for monitoring delivery of the Strategy, informed by the Waste Stakeholder Group. Crucially, Government needs to ensure it has the right range of delivery mechanisms and that the responsibilities of delivery bodies are clear. This is particularly important for non-municipal waste, which is not within the control of local authorities, and where the drivers for change are arguably less explicit and more vulnerable to market forces.

1. IMPLEMENTATION OF THE STRATEGY

1.1 The Strategy sets a clear direction of travel for the sustainable management of England’s waste. It identifies a wide range of actions that need to be taken by Government and its delivery bodies to deliver change in conjunction with business and local communities. Those actions are grouped under the six key headings of pricing framework, effective regulation, resource efficiency, infrastructure investment, local and regional governance and shared responsibility. Further detail is provided in the high level implementation plan identifying timeframes and lead delivery bodies for each of 94 actions.

1.2 It will be essential to ensure that each of the delivery bodies is clear about the outcome to be achieved and is equipped to deliver within the timescale. Ongoing review of the effectiveness and impact of delivery is essential, as is coordination of the work of the delivery bodies to avoid gaps or duplication.

1.3 The Waste Strategy Board has been established with membership from across Government, the LGA and ourselves to oversee implementation of the Strategy, provide robust challenge and identify the further steps that may be needed to ensure it is effectively delivered. We welcome the decision to appoint two non-executive members to broaden the composition of the Board. It is essential that the Board is of sufficient status to drive action across Government and secure buy in from the wider business community.

1.4 We believe that effective stakeholder engagement is crucial to implementing the Strategy successfully and welcome the establishment of a new forum to take this forward. In particular we would like to see a focus on waste produced by industry and commerce where the delivery landscape is more complex and where further or more innovative interventions may be needed if we are to see more sustainable resource use and responsible waste management. Early indications are that the signalled increase in landfill tax could result in a significant shift away from landfill but in order to maximise the potential benefits of this, other measures may be needed to ensure that alternative recovery and disposal options come on stream.

1.5 Our principal role is to regulate the waste management industry, ie those who transport, recover or dispose of waste. Increasingly we also work upstream with waste producers to reduce their waste and its impacts and we have a crucial role in tackling waste crime. We also provide data and information to support national, regional and local government on strategic waste planning.
1.6 The Strategy sets the national policy framework for waste management development but it is the spatial planning system that defines, in broad terms, the scale and nature of waste management facilities needed regionally and locally. Regional planning bodies and waste planning authorities prepare spatial development plans that must reflect National Planning Policy and, on waste in particular, Planning Policy Statement 10 Planning for Sustainable Waste Management (PPS10).

1.7 We consider it necessary to strike an appropriate balance between the need for communities to take responsibility for their own waste and the need for some waste streams to be planned and provided for at a regional or supra-regional level. PPS10 also acknowledges that some waste streams may need consideration at the National level. We welcome the move towards this for hazardous waste in the Waste Strategy along with plans for National Policy Statements on waste infrastructure set out in the Planning White Paper Planning for a Sustainable Future.

1.8 Successful delivery of the national policy framework is dependent on regional planning bodies and waste planning authorities being bold and producing good quality spatial plans that meet the requirements of PPS10 and provide more certainty for potential investors in waste management infrastructure and to local communities. For regionally significant (strategic) facilities the Regional Spatial Strategy (RSS) should identify in broad terms what is needed and where it needs to go. Waste planning authorities need to identify sites or suitable areas in their plans to accommodate what is identified in the RSS as well as their own local needs. We believe that identifying sites or suitable areas in spatial plans will help encourage developers to make applications for new facilities in appropriate locations, and should help the timely determination of those applications. The Waste Strategy Board will need to monitor progress in this area.

2. THE ROLE OF REGULATION

2.1 We welcome the Strategy’s recognition of the crucial role that effective regulation plays in protecting the environment and public health and in encouraging resource efficiency. We welcome the focus on achieving effective regulation, which delivers its aims without imposing undue costs on business.

2.2 We have already made significant progress in simplifying our regulatory systems and ensuring we act in a proportionate and risk-based way, minimising costs to business. We are pleased that the Strategy recognises the importance of what we have achieved so far, and the need for continued joint working in this area.

2.3 The Strategy also acknowledges that it is vital to ensure compliance with the regulatory framework. We endorse the Strategy’s focus on better and earlier engagement with stakeholders to encourage compliance and prevent pollution. We agree that we need to focus enforcement effort on activities with the greatest potential environmental impact and on maintaining a level regulatory playing field.

2.4 We support the Strategy’s proposals to develop an action plan to deal with illegal waste activity. Unfortunately, we cannot use our charging income to tackle waste crime, and our work in this important area will be limited unless we are properly funded. We also need to ensure that appropriate sanctions are available and that the courts recognise the seriousness of waste crime. We believe that further work is needed to put in place an effective regime covering export of recyclable (“Green List”) waste in recognition of the increasing importance of international markets in achieving domestic recycling targets.

3. THE CLASSIFICATION OF WASTE

3.1 Waste is defined by the European Waste Framework Directive and its meaning has been clarified in recent years through a series of legal judgements. The lack of clarity has fuelled debate and disagreement, often at the expense of identifying better options for managing waste and minimising its impacts. Greater consensus is now emerging across Europe, driven by the production of guidance from the European Commission and negotiations on the revised Waste Framework Directive.

3.2 We have focused our efforts on clarifying the law and easing the regulatory burden on waste. We have done this by adopting regulatory positions for low risk waste recovery activities and developing, with WRAP, quality protocols that define when key waste streams can cease to be waste. We estimate that quality protocols for Tyres, Pulverised Fuel Ash, Flat Glass & Waste Vegetable Oil will between them have the potential to bring 5.5 million tonnes of waste back into productive use with a value of £262 million over 10 years.

4. FINANCIAL INCENTIVES

4.1 It is clear that much depends on the key fiscal measures, in particular acceleration of the Landfill Tax Escalator, which we welcome. This should help move towards the point where landfill is no longer the cheapest option for most waste. This strong economic signal is necessary to drive investment in new technologies.

4.2 Increasing costs for landfill and variable household charging may lead to an increase in illegal activity, however, and it is essential that we and local authorities have the necessary powers and resources to tackle this problem.
5. **The Role of Composting**

5.1 We are pleased that the Strategy seeks to limit and reduce the volumes of biodegradable waste being landfilled. More needs to be recycled, treated and recovered to maximise its value as a resource and minimise its impact on the environment. This applies to biodegradable waste from all sources—not just municipal or household waste. We welcome proposals to allow local authorities to pilot variable charging for household waste. The current debate could usefully be informed by a comparison of the increasing cost of landfill versus the true cost of recycling, set within the context of what households pay for other essential utilities.

5.2 We believe that both composting and anaerobic digestion have an important role in achieving this diversion from disposal to recovery and in controlling emissions of greenhouse gases. However, we need to ensure these activities are located, operated and regulated in a way that minimises the impact on the environment and local amenity. For example, much can be done to minimise the impact on local communities and hence opposition to new facilities by composting food waste using in-vessel technology and ensuring green waste composting is carried out in acceptable locations. There is also a need to ensure that there are sufficient facilities available to meet the growing demand so that the effective operation of existing plants is not undermined.

5.3 In particular, local authorities need to consider the impact of their chosen collection method on the quality of inputs to, and hence the value of, the outputs from the treatment process. The importance of this has been highlighted in the Quality Protocol for compost that we produced jointly with WRAP and with the support of the composting sector.

5.4 The final destination for composted material also needs to be considered, particularly as it is likely to be competing with industrial wastes that have traditionally been applied to land. Work is underway on assessing the land bank available for the spreading of organic materials.

6. **Waste Minimisation**

6.1 We welcome the priority given in the Strategy to waste prevention and the acknowledgement that all parts of society have a role to play in reducing the amount of waste and its environmental impact. We agree that producers, retailers and consumers must take a greater share of the responsibility.

6.2 We welcome the creation of a new Products and Materials Unit within Defra to identify and catalyse improved environmental performance of products throughout their life cycle. The commitment to publish a progress report on delivery in Spring 2008 is an encouraging indication of the urgency and importance attached to this area of work.

6.3 We support the Government’s continued commitment to producer responsibility obligations. It is right that businesses should be required to take financial responsibility for the environmental impact of products they place on the market.

6.4 We would like to see a review of the effectiveness of current and proposed producer responsibility legislation. In particular, we would like to see a greater focus on reducing the impact of products and minimising waste production, rather than on simply increasing recycling rates. In the decade that producer responsibility legislation has been in force for packaging in the UK, recovery rates have more than doubled. However, there has not been a reduction in the amount of packaging used or packaging waste discarded. We consider it timely to review the Packaging Essential Requirements Regulations in order to make it easier for the enforcement bodies to take action against companies that are using excessive amounts of packaging.

6.5 Further, we would like to see a model developed for effective producer responsibility legislation, along modern regulation principles, that builds on best practice.

6.6 We expect that the future implementation of the Batteries Directive will reduce the proportion of batteries going to landfill, an outcome we welcome. However, the legislation is unlikely to have a significant impact on the number of batteries used. We would like to see Government come forward with proposals aimed at promoting viable environmentally preferable alternatives to batteries.

6.7 We note proposals to establish with the paper industry an agreement to reduce paper waste and increase paper recycling, building on existing agreements for newspapers, magazines and direct mail but extended to office papers, free newspapers, catalogues and directories. The voluntary agreement in relation to addressed direct-marketing material has had only a modest impact on the amount of material distributed. We think that Government could be more ambitious in this area. Moving quickly to an opt-in system would more rapidly curb this growing waste stream.

7. **Climate Change**

7.1 The Waste Strategy concentrates on lowering future methane emissions by reducing landfill of biodegradable waste. We strongly support this but it only addresses part of the problem. We would have liked to see equal emphasis on reducing methane emissions from waste already landfilled and from the (albeit reducing) biodegradable element that will be landfilled in future.
7.2 If we are to deal with the overall issue of present and future emissions of greenhouse gases from landfill, then the proposals in the Waste Strategy must be taken forward as part of an overarching strategy for the future of landfill in this country. Such a strategy would need to consider how to deal with closed landfills, many of which do not have the necessary infrastructure to monitor and collect landfill gas and whose operators may not now have the financial resources to do so. It could also help clarify the numbers, types and location of landfills needed in future.

8. Anaerobic Digestion

8.1 Anaerobic digestion is well established in this country as a means of treating and recovering sewage sludge. We think that it may have a particularly useful role in treating and recovering food wastes from commercial and industrial as well as household sources. We support the Government in its wish to encourage local authorities and businesses to consider further use of anaerobic digestion.

8.2 As with other treatment processes it will be essential to control the quality of inputs and outputs as well as the process itself. We are currently working with WRAP to develop a quality protocol for digestate from the process. This would enable operators to produce digestate to a certified quality standard free from waste regulatory controls.

9. Infrastructure and New Technologies

9.1 The spatial planning system needs to plan for an adequate number and type of waste management facilities reflecting Government Policy and targets in the Waste Strategy. As the Waste Strategy acknowledges we have made considerable progress in diverting waste away from landfill in recent years and increasing the recycling and composting of waste. However, as a number of recent reports have pointed out, on municipal waste alone there is a need for a step change in the actual provision of alternatives if we are to meet our biodegradable municipal waste diversion targets under the Landfill Directive. The right climate for investment needs to be maintained, including ensuring there is regulatory certainty. We welcome the work of Defra’s Waste Infrastructure Development Programme (WIDP) on this area.

9.2 Active management of the local authority procurement pipeline and support for local authorities through a network of WIDP transactors should help deliver critical infrastructure more quickly over the next few years. We would encourage Government to ensure this also facilitates investment in infrastructure for non-municipal waste, and would emphasise the importance of monitoring the delivery rate of new infrastructure.

9.3 Waste Strategy recognises the role of energy recovery from waste, that cannot be sensibly recycled, as part of a balanced energy policy. It envisages energy recovery technologies (including anaerobic digestion) accounting for 25% of MSW by 2020 (down from 34% in Waste Strategy 2000). England and Wales currently has an operational design capacity of 3.8 million tonnes per year of MSW in 18 incinerators. In addition, local authorities have given planning consent for a further capacity of 1.5 million tonnes. We support the recovery of energy from waste as part of the waste management and disposal hierarchy where it does not undermine opportunities to re-use and recover resources.

9.4 Energy from waste plants are subject to regulatory controls that are tighter than applied to any other industrial sector. Permits for incinerators are only issued if they meet stringent controls to minimise pollution of the environment, impact on human health and the effects on the amenity of the locality.

9.5 The UK increasingly relies on export markets to ensure value is recovered from waste. Government needs to ensure it understands those markets and the impacts of market changes on the UK’s ability to recover its waste. We consider further work is urgently needed in this area.

Environment Agency
November 2007

Supplementary memorandum submitted by the Environment Agency (Waste 30a)

A. Environmental Permitting

The new Environmental Permitting regime came into force on 6 April 2008. It replaces over 40 separate sets of regulations with a single streamlined regulatory system. The new system means we can cut down on red tape while maintaining high environmental standards. It helps us focus our effort on high risk activities and outcomes, leading to better environmental protection. This is a major better regulation initiative and has been well received by customers. Alongside Defra and the Welsh Assembly Government, we are looking to include other permitting systems in the second phase of the Environmental Permitting Programme.
B. REvised WASTE FRAMEWORK DIREcTIVE

We broadly welcome the proposed revisions to the Waste Framework Directive which we expect will need to be implemented in the UK by 2010. We strongly support the proposed simplification, modernisation and clarification of European waste legislation and that the UK will be able to retain its approach to waste exemptions. We are particularly pleased to see support for the concept of “ceasing to be waste” and believe the provisions for “end of waste criteria” will help to ensure resources are recovered while maintaining a high level of environmental protection. We welcome the move to promote legal certainty and clarity on the meaning of waste and a number of important definitions such as recycling. We support the new recycling targets and the strengthened provisions on waste prevention.

Environment Agency
August 2008

Witnesses: Dr Paul Leinster, Chief Executive, and Ms Liz Parkes, Head of Waste, Environment Agency, gave evidence.

Q1 Chairman: Good afternoon, ladies and gentlemen. Welcome to this first public evidence session of the Committee’s inquiry into the Waste Strategy for England. On behalf of the Committee, may I formally welcome Mr Paul Leinster, the chief executive of the Environment Agency. I think this is the first time in your current role that you have been before us. We had got so used to Sir John Harman and Baroness Young. I will not say it is nice to see a new face because they were always very helpful to us but you are particularly welcome and I hope you will enjoy giving evidence to the Committee. You are supported by Liz Parkes, who is the head of waste. Can I at the outset thank you for your written evidence? You certainly seem to like the Waste Strategy. It took me quite a long time as I read through to find some points where you disagreed with it. You have not fallen in love with it too much, have you?

Dr Leinster: I do not think so. Basically, it is a sound document.

Q2 Chairman: Let me ask you about the Waste Strategy which is a key part in terms of the beginning of the document and laying out what the government sees as the waste hierarchy. Perhaps you could comment from the Environment Agency point of view on whether the government have the balance right in terms of dealing with the consequences of producing waste, as opposed to the production of waste itself. Some might say there is more emphasis on the recycling elements as a solution to the waste problem rather than tackling the production of waste in the first instance. How do you see that from the Agency’s point of view?

Dr Leinster: I think your observation is right. As you go up the waste hierarchy, it becomes increasingly more difficult to get measures in place. It requires more people to change behaviour and look at the waste they are producing to see if there is a better way of doing things. Under our regulation, the Pollution, Prevention and Control Directive, we have a way in to this. Under PPC we can require companies to look at their resource efficiency. PPC sites currently account for about 16 million tonnes of waste. These are the major, industrial sites and we regulate them under integrated pollution, prevention and control. We can put into permit conditions a requirement for them to address their resource efficiency. One of the other areas that we have been working on—we have been working closely with WRAP on this—is quality protocols. How do you get materials which are previously defined as waste back into use so that people see the waste that is produced as a resource rather than something to dispose of? We are actively working on about 15 protocols to reduce the amount of waste that is disposed of.

Q3 Chairman: I know that has been a problem in the past and we will look at that in a little more detail but you said a second ago that you could talk to companies, if I understood you correctly, about the production of waste. Could you give us an example of an exchange you have had with a company where you have said, “Look, there is too much waste coming out of you”? How did the conversation go?

Dr Leinster: It becomes quite difficult because you are having to have a good understanding of their production process and look at ways in which that production process can be changed. The way we tend to do it is by benchmarking, by showing what are relative performances within the sector and using that as a means of highlighting—

Q4 Chairman: It is a very interesting interventionist approach but how do you identify who are the people that you would like to have a conversation with?

Dr Leinster: We look at the quantities of waste that are produced. We have a series of reports which come from all of those companies. Any company which is regulated under integrated pollution, prevention and control has to give us an annual return in terms of the major emissions to air, the discharges to water and the waste that is produced. One of the things that we are now asking for, but they have been reluctant so far, is to provide us also with some production data so that we are able to normalise the amount of waste that they produce against the level of production that they have. The way we tend to focus on it is on gross quantities of waste produced by a site and we go and target those sites which are producing the most or other places where we know you can recycle or reuse that particular type of material.
**Ms Parkes:** The action we would take would depend on the sector. Half of all the waste from these sectors we regulate comes from the power supply sector. Whilst we all support waste minimisation and avoiding production at source, it is very difficult to stop producing those ashes and those byproducts. The work we have been doing with WRAP on the quality protocols is about defining quality standards for the reuse and recycling of that material, stimulating the markets for reuse of that in the secondary aggregate trade. The action we need to take is very sector specific.

**Q5 Chairman:** Do you have enough resources to enable you to pursue what is obviously a promising line of inquiry?

**Dr Leinster:** I think we do. Another example that is related to the power sector is if you have flue gas desulphurisation which is taking the sulphur gases out of power stations, you produce a byproduct—we have now defined it as a byproduct—which can be used instead of new gypsum within plasterboards. A number of these sites have relationships with plasterboard manufacturers and the material goes from the power station into new plasterboard production.

**Q6 Chairman:** Effectively it moves from the status of a waste with all that entails to a raw material?

**Dr Leinster:** Yes, it does.

**Q7 Chairman:** That process that you describe seems to address some of the rather bizarre stories that used to come out when we were doing our hazardous waste inquiry about when a waste is not a waste.

**Dr Leinster:** Yes.

**Q8 Chairman:** Looking at the overall balance, there is an enormous amount of attention paid to the household waste stream, but when we look at it in tonnage terms it is a smaller part of the overall waste picture. In terms of the policy balance, have we got it right? An enormous amount of focus and political attention goes on the household waste sector and not on other areas which are bigger.

**Ms Parkes:** I do not think we have been wrong to have the focus on municipal waste. There are very clear and demanding targets from Europe. It is quite polluting waste and it is about changing consumer behaviour, so it is very important, but we do feel that having got measures in place to tackle municipal waste, attention does now need to be turned to industrial and commercial waste which is 91% of the overall waste stream. The challenges there are different. We do not have the same mechanisms to bring about change. If you look at what has happened on municipal waste, at the beginning of the century it was quite a challenge to get UK recycling rates up to anything comparable with what is happening in Europe, but that has now changed. Domestic waste recycling is about 30%. When you look at the measures that have been taken to bring that about, you have clear directive targets; you have the landfill tax which provides the economic incentive; you have clear responsibilities for local government to collect, recycle and dispose of that waste. We have a huge amount of investment coming forward to generate new infrastructure so all the levers are there. We think we have to look at that model and see what else needs to be done to the industrial and commercial side.

**Q9 Chairman:** Coming back to the Strategy, do you feel that it provides an adequate toolkit to take up the challenge that you have just put before the Committee?

**Ms Parkes:** The Strategy was a review of the previous strategy. It was not intended to be a whole new approach. The intention was to focus on municipal waste but not at the expense of industrial and commercial waste. We think the time is right to look at that, to see what has happened.

**Q10 Chairman:** Do you feel that there needs to now be a separate piece of work done on that or not?

**Ms Parkes:** Yes. There is further work that is needed and we are working on that in partnership with Defra and others to look at industrial and commercial waste in more detail and see where industry is doing the right thing anyway and where is the economic climate that would be encouraging them to do the right things and what further interventions might be needed to bring about a step change in behaviour.

**Q11 Mr Drew:** What research have you done into the differentiated map out there of local authorities, particularly where there is a split between waste collection authorities and waste disposal authorities? Have you as yet managed to show for example that unitary authorities, where you have managed to combine the roles, are more effective at recycling than those where there are two tiers?

**Ms Parkes:** We obviously receive an awful lot of information under the Landfill Allowance Trading Scheme. We are the monitoring authority for that and we receive the reports from waste disposal authorities on the amount of waste going to landfill. We do put out regular information on that. I think it is too early to say and it is not for us to sit in judgment on what is the right model of delivery for this at local government level. Local authorities had to employ the right methods that work for their local situation, depending on the types of properties they have, depending on where their populations are coming from. Lots of local authorities are making huge drives here to encourage the public to do the right things as well as investing in new infrastructure. Obviously, meeting the landfill diversion targets does remain a challenge but it does look like most authorities are on track to do that.

**Q12 Miss McIntosh:** You gave the figures for recycling in this country. Am I not right that many other European countries, particularly the Scandinavian countries, are now going away from recycling and much more heavily towards incineration?
**Ms Parkes:** I do not think it is about moving away from recycling. There are figures in Defra’s Waste Strategy of that show that a high level of recycling is not incompatible with a high level of energy recovery. Some of the countries you have mentioned may have more integrated systems that look at energy from waste, district heating schemes, and look at this as a whole, but we do not believe that either of those is incompatible. The challenge is reducing reliance on landfill and we really think that in England there has been quite a significant step change. At the start of Landfill Directive implementation, we had something like 1,500 licensed landfills in England and Wales and that has now reduced to 500 operational sites, so quite a big step change and I think it does seem to us that the corner has been turned but there is no room for complacency. There is still a long way to go but this is a highly different picture to the one we saw at the beginning of the millennium.

**Dr Leinster:** When you look at the development and the maturity of the waste management industry in different countries, they are at different stages. You need to look at what is the best environmental option for the types of waste that you are receiving, how best they can be used within the overall mix, so you start looking at them as a resource rather than as a problem to be got rid of.

**Q13 Paddy Tipping:** The point Liz made was that it has gone from 1,500 to 500. What is the projection forward?

**Ms Parkes:** There will always need to be landfill for disposal of residual waste that you cannot do anything else with. There is about six and a half year’s landfill capacity left in England and Wales. The challenge is that that is not evenly distributed but obviously looking at reducing reliance on landfill is a good thing. For a long time we have had a plethora of mineral extraction sites that needed to be restored. Landfilling has certainly been a safe option but not the most sensible option in terms of sustainable resource use. New ones are still being created, albeit at a slower rate and obviously, with the current economic downturn, we would not expect to see a big increase in new landfill capacity.

**Q14 Miss McIntosh:** I understand that in the United States they are going back over old landfill sites and extracting minerals because of their value. Are there plans to do that in this country?

**Dr Leinster:** People are starting to look at it. One of the interesting things is that the levels of a number of the precious metals in landfills are higher than the levels in the native ores now. It certainly is an option that needs to be looked at because the extraction could be easier.

**Q15 Chairman:** One of the Strategy’s elements is reform regulation to drive the reduction of waste. You are a regulatory body. What have you done to fulfil that objective of the Strategy?

**Ms Parkes:** Paul has already talked about the Integrated Pollution, Prevention and Control Directive which has very clear obligations in terms of resource efficiency. We implement the producer responsibility legislation in relation to the packaging: Waste Electrical and Electronic Equipment and there are other voluntary mechanisms in place. The crucial thing the Agency has done is really looking at removing unnecessary regulatory burden. For instance, there are an awful lot of what we would call fairly low risk waste activities that strictly speaking do need a licence. Under the legislation they require a permit from us. We do not think that is sensible in all cases and we have put in place a system whereby we assess the risk from those activities. We look at the benefits to the environment from recycling and we have, if you like, set aside the legislation reducing the need for many thousands of permits. Also, we adopt regulatory positions where we think the law may be setting out the right challenge but it may be too challenging for the industry to meet. We work in partnership with industry to make sure that regulations come in on time and are rigorously enforced but we are also mindful of the need for alternatives. If you want to divert waste from landfill, you need to be confident that alternative infrastructure is there in order to enforce rigorously. All the time, it is adjusting our regulatory approach to try and bring about that step change in encouraging recovery whilst not having a negative impact on the environment.

**Q16 Chairman:** When you look at the various streams of waste, whether it be municipal, business or commercial, what are the ones that make you pull your hair out and say, “Look at that. They are producing all of this and they are doing absolutely nothing to reduce their waste stream”? Who are the real sinners in the waste world?

**Ms Parkes:** Historically, they have been in the construction industry because it is a huge amount of resource that is going on to sites and often coming off sites as waste, never having been used. Obviously, where elements of that waste are hazardous, that is extremely wasteful, frustrating and potentially damaging for the environment because we have seen quite a high level of fly tipping associated with the construction industry. We are pleased to say that the site waste management plans that have recently been made mandatory do seem to be having an impact. This is an example of where something that started off as a voluntary initiative, working with the big players has really started to bring about a change. Frankly, it just makes good economic sense so that is where I think we have been most frustrated but the signs are encouraging. The area we are now turning our attention to because we think it needs more of a strategic approach is the whole issue of organic wastes. If you look at all the organic material foodstuff, green waste, that comes out of either homes or commerce, shops, industrial processes and you put all that together, that is something like 100 million tonnes of waste potentially that can go back on to land and add value. It is a potential source of energy. What we think is really important is to look at this as a strategic resource and identify what the best outcomes are for that material so that we see a higher grade material going on to the very best land.
This is where our quality protocol on compost is really helpful in those markets. Also, lower grade material can be very valuable in restoring contaminated land and helping to meet the regeneration targets. We think taking a strategic approach for the whole of that sector is an important next step and that is the work we are just commencing at the moment.

**Dr Leinster:** Can I add a couple of examples? One is the success of the hazardous waste regulations and the implications of those for construction and demolition waste. Prior to the introduction of the regulations it was easier for construction and demolition companies to consign something and define it as hazardous waste because there was no cost differential. They just consigned a lot of material as hazardous waste. Now, with the new regulations in place, people take the time to segregate it and to deal with that bit of the material which is hazardous in the right way. Getting people to segregate their wastes and deal with them all as separate waste streams has provided a lot of benefit. One of the areas that does make me scream still is subcontractors. You can deal with the prime contractors and they will have site waste management plans but sometimes subcontractors do not have the same disciplines and controls around what they do. What we need to do to those folks is make it easy for them to be doing the right thing and sometimes it is not easy for them to dispose of their waste in the right way.

**Q17 David Taylor:** Liz Parkes seemed to suggest a moment or two ago that the reduction in numbers of landfill sites from 1,500 to 500 was necessarily a performance indicator but is it not the case that there is a smaller number of larger sites? There is a very large site straddling the Leicestershire/Derbyshire border called the Albion site. In relation to the area and operational lifespan, are they greater typically now for new sites that are being sanctioned?

**Ms Parkes:** I do not think we have seen an increase in bigger sites. We have just seen a reduction in smaller sites and small operators who perhaps inadvertently got into land filling, farmers and so on, filled up their sites and got out of it. The economies of scale are such that, yes, we are going to see larger sites and we will see. I suspect, over tipping on existing sites because, having established that precedent, it is easier often for people to get planning permission.

**Q18 David Taylor:** Can we move on to waste as a resource and look at the European Waste Framework Directive? In its earliest incarnations, it was rather imprecise and unworkable. Legal decisions over the years have helped and you yourself said that there was a lack of clarity which fuelled debate and disagreement, often at the expense of identifying better options there are for managing waste and so on. In June of this year revisions were agreed in Brussels, were they not, which should remove some of the barriers to greater use of waste. How do you see this developing in the months and years that lie ahead? What is the follow-on from those changes?

**Ms Parkes:** We are still awaiting the final text from the Commission which is expected this autumn. We are pleased that the whole Directive has not been thrown up in the air because you are absolutely right. The case law has provided clarity. Let us remember that it is supposed to be a Framework Directive so it is not supposed to provide a lot of technical detail. We are pleased that the fundamental structure of it has not changed and we can therefore continue to rely on that body of case law. Where we most welcome the changes is looking at the end of waste criteria. The work we have been doing with WRAP on quality protocols is quite revolutionary and I do not think many people thought we would get this off the ground. It was to define end of waste and set standards for specifications and it has really led the way with this work now in Europe. We are delighted that the Commission has recognised that work. We do indeed consult with the Commission before we adopt any of these standards and protocols to make sure that they are going to be well received at European level and we need to look at these as internationally traded commodities as well. The devil will as ever be in the detail and it will be about the implementation of this, but we do not think it is going to bring about a huge amount of change in itself.

**Q19 David Taylor:** I am pleased to note that there could be new products—metals, paper, glass, tyres and textiles. Representing an area where there are substantial numbers of quarries which have in the past used recycled fuel oil—you are aware of the dilemma that there was with that; it was concentrated at quarries who could then use it in their work—the Environment Agency were not helpful in developing that operation at all. I think it has withered away in many part of the quarrying industry. That is unfortunate, is it not? Why are you doing nothing on RFO?

**Dr Leinster:** We are doing stuff on RFO. The work on the rest of the waste protocols shows that if people take the right approach then we are very happy to say that that material ceases to be waste. However, if there is a clear, environmental impact with something, then we have to say that there is an unacceptable environmental impact.

**Q20 David Taylor:** They were using it to minimise their use of virgin fuel oils. The fact that what they were doing was sat upon meant that the virgin fuel oil consumption went up and there was a risk that the waste fuel oils were not being recycled and in fact were being dumped in an illicit way in some cases. That cannot make a lot of sense, can it?

**Dr Leinster:** A lot of the waste fuel oils then went to other places like the steelworks so they were finding other outlets for beneficial use. The thing that we have to do is to make sure that the environment is protected. I think the work that we have done in other areas demonstrates that we do take a pragmatic approach if either environmental impacts...
are such that we cannot in some cases do it or there are legislative requirements which we cannot at this stage get around.

Ms Parkes: If we had started the work on protocols by picking substances such as fuel oil, the barriers would have come down at a Commission level and we would not have got this off the ground. We have started with materials to convince people that this is a viable way forward. It is interesting because for years parts of industry have said that this material clearly is not waste. We have said, “Tell us what is in it. Tell us what specification you are working to so you can give your consumers confidence that this is not going to damage the environment”. That information has not existed so the protocol work has allowed us to work in partnership with industry and really generate for the first time those quality standards that, once they are in place, have really unleashed huge markets. Far from something being classed as waste being a barrier, it has really opened the floodgates. Doing this in a well controlled and managed way has given the European Commission confidence that this is a legitimate way forward. I think it may be slightly tortuous in the short-term but I think the medium and long-term gains are quite enormous in this.

Q21 David Taylor: Sometimes the professional perception of particular material can change. Having had power stations in the area and one still very close by, I can give you an example: pulverised fuel ash was once seen as an inert substance which was landfill but now it is being seen in a different light and with other potential uses. That is always a possibility with something that was not considered to be either of significant environmental impact at some point or to have any beneficial economic use. That may change as the years go by. Do you see yourself acting as a catalyst in those changes of definition or just responding to them?

Ms Parkes: Absolutely. We have driven this. Some might say it may be by being fairly rigorous about our classifications to try and ensure a level regulatory playing field but I think it is precisely that has acted as a catalyst. It is ourselves with WRAP getting the industry together. There are some industries where the sectors are just not mature enough to develop these markets. I have had trade bodies saying to me, “We just cannot get there yet. We like the approach and we would like to work on this but our sector is not yet ready.” I think we have absolutely been the catalyst.

Q22 David Taylor: In my view you have been pretty successful in working with the Waste Resources Action Programme. What we recently heard was that funding is going to be reduced by 30% or so over the next few months and years. Do you feel that will imperil your joint work on quality protocols? The figures we heard were that you predicted that over a 10 year period more than five million tonnes could be brought back into productive use and that the saving would be about a quarter of a billion pounds. Is that benefit going to be imperilled by the short term thinking on the part of government in terms of WRAP’s budget?

Dr Leinster: We hope not. We are working very closely with WRAP just now, jointly funded by Defra. We are working on 15 protocols. The important thing is not just writing the protocols but also making sure that they then get embedded in and that we do not get leakage around the system is well. We need to make sure that these get used properly and get embedded in the system. We are also looking at other sources of funding for this. We have the aggregate sustainability fund providing money. We are looking at marine dredgings. There are about 30 to 70 million tonnes per year. It depends what is going on in any one year. We are looking at how that can be used beneficially as well. In terms of how we will take this forward, the programme just now is about a million a year. We want to make sure that we maintain that programme and we will work closely with WRAP to ensure that we can take it forward together.

Q23 David Taylor: When you first heard of the planned budget reductions for WRAP, what was your immediate reaction? Was it alarm or concern or were you philosophical?

Dr Leinster: We were philosophical, I think. We have budget reductions. They have budget reductions. It is one of the things that we have to manage. Going forward, I am sure we are going to see even more budget reductions. We need to make sure that we focus on those activities which deliver the best outcomes.

Q24 Lynne Jones: I wonder if you could provide us with a list of the 15 protocols you are working on and some kind of estimate of when you expect to complete them, because we have had criticisms from various organisations. We went to Sutton last week and they were concerned about stabilising waste and the ability to send compost for use in reclamation projects. They blamed the Environment Agency. Could we have that list together with any constraints perhaps on producing them more quickly?

Dr Leinster: I would be happy to do that.

Q25 Dr Strang: If it is the case that data is not available on commercial and industrial waste, does that not make it very difficult to implement and monitor the Strategy? Is the Agency doing anything to try and change that?

Ms Parkes: Waste data has been an issue for a long time and I think we have made considerable improvements on data around for instance hazardous waste which has really helped to get on top of that particular set of waste streams. Municipal waste information again has hugely improved with waste data flow, a system that is used for reporting for the landfill targets. We are looking at what more can be done. It gets very difficult where waste is transferred to a number of different people and you have subcontractors. We think it is more important to look at not so much what has been happening as what is going to happen in the future.
and what are the opportunities. We are looking more strategically at waste streams like organic wastes. We do not need a huge amount of data to get on and determine what it is that can be better done with these resources to improve the environment but meanwhile there is further work going on to look at real-time data, improvements to the whole duty of care system and electronic transfer notes. There is a number of innovative projects that we are working on in partnership with business to see how we can help them better manage their resources. I think that is what is key, rather than people sending data to the Agency. It is how we can help businesses to better understand their material flows and where there is wastage in the system.

Q26 Dr Strang: Do you think the Strategy really focuses sufficiently on the need to incentivise industry to use its resources more effectively and manage its waste?

Dr Leinster: As Liz said at the beginning, the Waste Strategy has had rightly a focus on municipal waste because the landfill diversion targets were focused around biodegradable municipal waste. Those are external European targets that we have to meet. Now I think the time is right to start looking at some of these other major streams. One of the things that you find is that if a business can see an economic benefit then they will recycle the materials. Usually from industry the wastes are more segregated than typically municipal waste would be. Therefore, you do tend to have the possibility of collecting clean, segregated waste which then can be handled quite readily by other processors. What you need to do is then to see if the market can be created to start pulling that material through rather than people having to think about just where they are going to dispose of it. The recycling and reuse rates in industry are higher than in municipal waste because of that economic connection.

Q27 Dr Strang: Do you think we should more effectively join up municipal and non-municipal waste management?

Ms Parkes: I think we certainly need to make sure there are not barriers that stop facilities—

Q28 Dr Strang: Are there incentives in the current arrangements which provide a disincentive to local authorities to get involved with commercial and industrial waste, including the Landfill Trading Allowance Scheme where they could get involved in financial penalties?

Dr Leinster: There are disincentives because if they take some commercial waste then that gets added to their municipal waste targets or it gets counted as municipal waste. That is clearly a disincentive. And if there was some way of being able to use the same facilities that have it segregated in some way, that clearly would be a benefit because you have the infrastructure that could be used but currently is not being used.

Ms Parkes: Having said that, some local authorities are collecting more commercial waste now than they were. Some are collecting less but some are seeing this as a business opportunity.

Q29 Dr Strang: In principle, it would be a good idea to have them collecting more?

Ms Parkes: Particularly for small businesses, it needs to be easier for them to do the right thing. We have done a lot of things like producing a waste recycling directory. You can go online and find out how to recycle your materials but with many civic amenity sites not taking trade waste, with sites in town centres being moved out—they are often seen as bad neighbour locations—we go after criminals and it is really important that they can also find it easy to do the right thing. We just need to look at the provision of facilities across the board and not just focus on municipal waste. Industry will look after itself but small businesses need to be helped and if there is a facility there then let us make that accessible for commercial waste as well.

Q30 Chairman: Dr Leinster, you said that one of the barriers to local authorities becoming more involved, particularly in support of the small and medium-sized enterprises, was at the moment a lack of an ability to differentiate or separate waste streams according to their source. Is it doable? Is it practical to do that?

Dr Leinster: Yes, I think it is. You would have to have separate collections and you would then have to be able to weigh the material that was going in but it is possible to weigh wheeble bins going into disposal carts. I know this has been discredited in places.

Q31 Chairman: Is it an objective that is worth pursuing with vigour? You said it is something that could happen and Ms Parkes said it would be a good idea if small and medium-sized enterprises were supported. Those are fine aspirations but if one were to say okay, how do we improve the opportunities for waste collection to be properly handled via the local authority route, is that an objective that should be pursued vigorously?

Ms Parkes: I think it is one of the options that is worth looking at.

Q32 Chairman: That is a little bit soft round the edges, “one of the options that is worth looking at”. Who should look at it?

Ms Parkes: It is not one size fits all. If there are no local facilities it is very difficult. We do hear from businesses and it can be difficult to procure services. Local authorities are under an obligation to provide commercial waste collection services if asked.

Q33 Chairman: Whose job would it be to make this aspiration a reality? Who should do the work?

Ms Parkes: It would be for Defra to signal its intentions.
Q34 Lynne Jones: The National Industrial Symbiosis Programme is just the organisation set up to do that, to put all commercial organisations in touch with one another to make sure that there is cooperation between companies. They had their budget cut by 42%, even though they were enormously successful. Does that not cause you some concern? Surely that is not the way to go if we want to move in the direction you are saying we need to go in.

Dr Leinster: There is a big education programme. I once ran a small business and if you are running a small business, you have lots of things to do and you have limited management time, the things that you are being asked to do have to be easy to do. I think sometimes, if after one phone call you cannot find somebody to come and take your waste cardboard, you do not phone again because that was your one time to get the answer. We have to be promoting easy ways for doing the right things and the other is from a consultancy background. The second member does bring an industry head to bear.

Q38 Chairman: There is nobody who does it for real on the board?

Ms Parkes: No.

Q39 Chairman: Is that a deficiency? Do you not think there ought to be somebody with real world experience on it?

Ms Parkes: Defra have also established a waste stakeholder forum which is bringing together representatives from across different organisations and business. That is, if you like, providing a sounding board to the Waste Strategy Board and certainly that group has been very vocal in wanting to see greater attention on industrial and commercial waste.

Q35 Lynne Jones: Local authorities are not necessarily the best people to do that. We have an organisation which really ought to be allowed to do far more and cutting its budget by 42% is hardly the way to go, is it?

Ms Parkes: This was really set up to promote the waste exchange concept between businesses. I think what the Committee is asking about is more general requirements around collection of commercial waste. If you have a whole network of operators out there providing a service for households, the inevitable question is: does it not make sense for them to also provide that service for the shops and offices that they pass on their way?

Dr Leinster: If you are a jobbing builder, it must be easier for you to be able to go and dispose of that in an appropriate manner than it is to find the place where you would potentially want to fly tip it.

Q36 David Lepper: Does the Agency have within its remit monitoring in any way of the academic research that is going on in universities for instance, on waste, what to do with it, recycling and so on? Obviously there is a lot of commercial research and industrial research going on but is academic research something that you keep an eye on as well or is it somebody else’s responsibility?

Dr Leinster: We have a science department. Currently there are 200 people in our science department with our own research and development budget. One of the areas that we work on is waste.

Ms Parkes: We also join up with Defra because there is no point in everyone doing everything. There has been an awful lot more joining up of research programmes in recent years.

Q37 Chairman: From your evidence it was not clear to me about this new Waste Strategy Board that has been established. You say it has membership from government, local government and ourselves. Is there anybody in business on it?

Ms Parkes: BERR are obviously represented on it and also there are two non-executive members, one of whom is from a local government background.
to everything but agreeing what facilities are needed where. I think it is inevitable that delays are built into a democratic process.

Q42 Lynne Jones: Can the Environment Agency do anything to help with the partnership working?  
Ms Parkes: We do help. We have guidelines that we have issued to help the applicants find their way through the process, to help give the public confidence. We dual track applications which means that you can make an application for your planning permission at the same time as your permit so that there is no delay from our side. We provide views to try again to give the public confidence that if this facility is granted planning permission we can be satisfied that it will not cause a problem to the environment, but we are aware these things still take time.

Q43 Lynne Jones: Is the money available in the infrastructure delivery programme adequate?  
Ms Parkes: It is a huge programme and the infrastructure seems to be coming forward. The indications are that it is on track.

Q44 Paddy Tipping: Could I just ask you about the Planning Bill that is going through Parliament at the moment? That is not going to help waste infrastructure at all, is it?  
Ms Parkes: My understanding is that it will only impact on very, very large waste infrastructure. Applications of that size are unlikely to come forward because they would not be very popular with the public, so I think it does not really impact on waste infrastructure.

Q45 Paddy Tipping: Is there a need to look at that during the course of the Bill?  
Dr Leinster: There has always been this tension between the regional strategies because there are regional waste strategies and each region has a technical advisory body. They have done work which has identified the mix of the facilities that should be provided within a given region for the mix of waste which is being produced, but there has always been a disconnect between that strategic approach and the local, and locational approach. I remember giving evidence in front of a committee here probably about six or seven years ago, talking about the disconnect between the regional, strategic approach and the locational approach. It is still there. One of the other things that we have done to help in this process and speed the process through from our side is that we now issue, if operators are willing to accept them, licences with standard conditions. If you accept a licence with a standard condition, it just goes straight through.

Q46 Paddy Tipping: You told us that the permit system and the planning system could run together in sync. That does not always happen, does it?  
Ms Parkes: No. It is up to the applicant whether they wish to put both applications in. Some may want to wait until they have the certainty of planning permission but many will work jointly with us and the planning authority. Then we can make sure that information does not need to be submitted twice. I think it also helps the public. This can look very confusing if you have two different permit bodies, so we do work very closely and I think where industry puts its mind to it can get applications through in a reasonable time but it does require quite a lot of investment and forward planning. You have to take your local populations with you.

Q47 David Lepper: I am just wondering about the example of my own area and the East Sussex and Brighton & Hove waste plan. I think the consultation on that strategy began before I was elected here in 1997. The leader of the council who initiated it has had an illustrious career, not only in local government but here in this place and is now Government Chief Whip in the House of Lords and still the elements of the plan are not all in place. That is something like 11 or 12 years that this process has dragged on. I am not sure how common that is and I would welcome your comment on that. It seems to me that the problem, when there is that slow progress or the lack of it, is that there are continual, one hopes, advances in the scientific basis of the infrastructure which, as time goes on, are likely to discredit almost some of the earlier parts of the consultation on the strategy. It is as if we have to start all over again. Maybe that is what the opponents of it want but I am not sure how common that sort of situation is and what can be done about it if it is a common occurrence.  
Ms Parkes: I could not comment on the speed with which plans are coming forward but I think, as Paul said, there is a disconnect often between the plans that are there and the infrastructure being delivered. It is left to the market to bring forward facilities at the right time. The thing that has changed in recent years is that there is more confidence now around the industry that, when new requirements are coming in, they will come in on time and they will be enforced. Many years ago there were complaints from parts of the industry that they had invested in new technology for fridge treatment for instance—we all remember that—and there were delays to legislation being brought forward. We just have not seen that kind of delay in the last five years and there is much more confidence that the regulations will come forward and that we will then enforce those rigorously. Inevitably there is a time lag.  
Dr Leinster: There is this disconnect between what people produce and throw into their bins and where they think it is dealt with. At some stage people do have to accept that facilities are required to deal with the waste that we as a society produce.  
Ms Parkes: I heard a recent example from a councillor who objected to a civic amenity site over many years on the basis that it would be a bad neighbour facility. He is now very pleased because it is bringing residents into the town who are then spending money in local shops. We are perhaps a little way away from that but once you have made the trip to the supermarket the next stop down at the tip on a Sunday morning does seem to be very
common. People have to make that linkage between what they are buying and what they are throwing away.

**Chairman:** People feel very virtuous when they have been to the civic amenity site. They feel they have done a good thing.

**Q48 Dan Rogerson:** Following on from Paddy’s question about the Planning Bill, it occurs to me that the whole point about the Planning Bill is that bigger schemes will come forward and it will not matter what the local people think. Do you think there are things that could be done to allow us to follow more the Scandinavian model rather than companies and local authorities finding that the only option they can work out between them is for bigger scale things that allow large amounts of waste being transferred?

**Ms Parkes:** I think that is about getting waste management built into regional spatial strategies and being looked at as an integral part of all the developments going on, looking at neighbourhood facilities, a plan led process where local authorities are practically thinking about what they do want rather than waiting for the proposal to come forward that is not perhaps going to be well received.

**Q49 Lynne Jones:** Can I ask about energy from waste? First of all, how would you define energy from waste? Some people think that it is an acceptable way of describing very unwanted operations such as incineration and anaerobic digestion.

**Ms Parkes:** It is kind of what it says it is. It is generating energy from waste in whatever form. I know the public may think it is a euphemism for incineration but no one is just building incinerators any more. No one would build a plant like that and indeed we require heat to be recovered from these plants so it is an all-encompassing term.

**Q50 Lynne Jones:** Currently I understand we are dealing with 10% of our waste through energy from waste and the target in the Waste Strategy was 25% by 2020, although back in 2000 there was a target of 34% by 2015. Why have we reduced our targets and is the current target sufficiently ambitious?

**Dr Leinster:** The Waste Strategy 2000 estimated how many incinerators there might be, depending on what facilities came forward, rather than setting a target. It was more looking at what potential mix of facilities there would be and then it derived a figure. All that they have done now within the revision is to again look at what is happening in practice and provide another estimate. It is not a target to be achieved; it is a consequence of decisions which are being made.

**Q51 Lynne Jones:** You think that the current target is realistic?

**Dr Leinster:** I do not think it is a target. It is just something which will happen, depending on the waste contracts that individual local authorities and groups of authorities make with waste companies.

**Q52 Lynne Jones:** If we have the necessary infrastructure?

**Dr Leinster:** Yes.

**Q53 Chairman:** Is that because your standpoint as an agency is looking principally at waste as a resource first and foremost and you do not want to be seen to be encouraging energy from waste in case that gets in the way of that principal objective?

**Dr Leinster:** The objective for me would be that you should not have an incinerator which then destroys waste minimisation programmes or interrupts re-use and recycling although, as Miss McIntosh was saying earlier, some other countries, because they have moved to a different position, are now reviewing that. I think it is possible to have high levels of minimisation, re-use and recycling and still have higher levels of incineration than we currently have. If there is going to be incineration in the mix, we believe—and one of our permit requirements is—that there must be associated heat recovery from that. Incinerators work best when they have a defined input because, just as with any fuel, you want to know what the calorific value is of the material that you are putting in so that you have efficient burning.

**Q54 Lynne Jones:** What would be the most appropriate material for incineration and what is the most appropriate material for anaerobic digestion? Presumably food waste for the latter?

**Ms Parkes:** Food waste for the latter and probably wood for the former. At the end of the day we need the right mix of options and it is for local authorities to determine what is going to work for them in their circumstances. What would have been a shame is if we had a diversion from landfill straight to energy from waste, bypassing consumer behaviour because, when people put material out for recycling, hopefully they will also start to think about what they buy as well as the feel good factor from recycling. Now we are at the level of where our continental partners were. I think the time is right to look at what more can be done for energy from waste but, as Paul says, not at the expense of those other, very vital programmes.

**Q55 Lynne Jones:** I was pleased to hear you say that new plants would have heat recovery but last week we were discussing an anaerobic digester that has been built near Heathrow and yet none of the heat from that has been recovered. We were told that 60% of the energy from waste plants, whether they are incinerators or AD, is simply wasted because there is not the infrastructure to collect the heat to feed it into buildings and so on. Even when we are recovering, the gas is being used for electricity generation rather than the more efficient use for heat. What can we do? How should we proceed to try and deal with this problem? It is not just about waste management. It is about having recipients for the heat.

**Dr Leinster:** Yes, which comes down to a locational decision as well.
Lynne Jones: This AD was right next to Heathrow. Why could not somebody join up those two projects?

Q56 Paddy Tipping: Can I talk to you about specifics because you are a consultee on the planning process? There is a big new incinerator planned in north Nottinghamshire. You have not objected to it even though there is no heat being used from this incinerator. Why is that?

Dr Leinster: I will look into it.

Q57 Paddy Tipping: I was told by your local people that you were going to issue a policy paper that defined your position on the use of heat, but it is clear to me that this incinerator is going to be built with nowhere for the heat to go. In principle you ought to be objecting to it.

Ms Parkes: We do have a policy that requires heat to be recovered so we will have to look at why that has not happened.

Q58 Paddy Tipping: This has been built by means of a 25 year pfi. During the 25 years and in the next 25 years the way that we dispose of our waste will change radically. I do not think in 25 years’ time there will be enough waste to feed this incinerator. Is that a concern of yours?

Dr Leinster: Absolutely. What we should not be doing is having incinerators which then mean minimisation, re-use, recycling get impacted and that has to be over the 25 year period. I do have concerns over locking technologies in on a 25 year basis when technologies are moving as fast as they do.

Chairman: It will be all right. When they run out of municipal waste because of the new technologies, all the old Environment Agency records will be gone.

Q59 Lynne Jones: Birmingham already has a 30 year contract for its incinerator and huge amounts of waste which could be recovered are sent there. Why cannot Nottingham send some of their stuff that should be incinerated? There should be co-operation between the different authorities rather than new incinerators.

Ms Parkes: Defra’s advice on the Waste Strategy is very clear, that local authorities need to avoid being locked into long term contracts or plant that is too big. They need to be responsive to future, technological changes.

Q60 Mr Drew: Unless I am wrong, I think part of the problem with the whole pfi process to try and deal with the threat is that in a sense everybody is working in their own silo. You have your device. Defra have to make some decisions on whether they make the pfi credits available and then local authorities have to role this forward. There is a whole series of case studies of delay and obfuscation. Is it not better that we get much more joined up thinking and certainly joined up action to evolve strategies? I do not want one size fits all but you cannot have one authority in one place with an incinerator and another authority saying, “We are not having incineration at all.” They could be dishonest and send their stuff, dare I say it, to the incinerator next door which of course is not unknown. Where are we going to? Are you part of the solution or do you see yourselves as perhaps part of the problem unless we can grapple with this really successfully now, because an awful lot of local authorities out there, I would allege, do not know what they are doing.

Ms Parkes: Our role on municipal waste is fairly limited. We are the reporting and monitoring authority for the Landfill Allowance Trading Scheme but a lot of the dialogue that you are talking about, as I understand it, does happen between local government and Defra. Certainly Defra have been looking at how to remove those barriers to joining up the creation of—

Q61 Mr Drew: Are you saying you would welcome being part of the tripod rather than being a short leg of the two legged stool?

Dr Leinster: One of the places these discussions should be happening is at the regional technical advisory boards so within each region there is a discussion about what the strategic approach is. If you go to certain parts of the country, local authorities, both the waste collection authorities and waste disposal authorities, are getting together and jointly coming up with solutions, but the responsibility for municipal waste disposal does sit with the local authorities and they need to get their heads around this using the advice which is available.

Q62 Mr Drew: Have you got any powers at all if you think either this process is not being carried through properly or successfully?

Dr Leinster: No.

Q63 Mr Drew: So you just monitor it once it has happened?

Ms Parkes: It is a monitoring role in relation to meeting the Landfill Directive targets. Our only real role in relation to municipal waste is that we permit the sites that receive the waste, and we are very keen to make sure that we do not cause any delay, and, if we can help both the local authorities by providing data and we can help the public in terms of public confidence, then we do that. As Paul said, it comes back to the RTABs (regional technical advisory boards) to do that joining up at a regional level because, as you say, they need to get out a strategy as to what is actually happening on the ground and making sure that the facilities are actually coming forward.

Q64 Miss McIntosh: I will resist your invitation to mention the local applications, because I think we will be here all afternoon. Perhaps I can send a sample t-shirt of each one! You have expressed your concern about the potential for increased crime from particularly the increased cost for landfill and the pilot on variable charging for household waste. Do you believe that you have the tools to tackle this and what do you believe to be the cost of tackling this?
Can I make it clear, representing probably one of the most deeply rural areas of anybody on this committee, that this is a very real issue. It does seem very unfair that a private landowner has to pay for the illegal substance to be removed off their land, whereas a public landowner has it removed at public expense.

Ms Parkes: We spend between £100–150 million each year with local authorities, on tackling fly-tipping. We are under no illusion that this is a problem for urban and rural communities and that, as regulatory controls tighten and costs go up, the incentive for people to do the wrong thing is ever growing. What we have been doing in recent years is working even more closely in partnership, not just with local authorities but other enforcing bodies, not just the police but others—the Vehicle Licensing Agency, for instance—to really target those areas where we think there is organised crime. We focus on what we call the big, the bad and the ugly, or nasty. I should say, fly-tipping activities, so that local authorities deal with the smaller incidents, we deal with large-scale organised crime, and we have built up, through our fly capture database, a much better picture of what is happening which has allowed us and local government to better get on top of this problem. I think the better recording of fly-tipping has meant that the picture looks like it is getting worse, whereas in actual fact it probably just is improved reporting at the moment, but we have really been targeting our action. We take a large number of prosecutions now. In fact, you have got something like a one in four chance of being prosecuted by the Agency at that top end of the scale. Fines have been going up, which is good news, but are still too low. We have been working very closely with government on improving the range of sanctions available to us—things like fixed penalty notices—and we are confident that we have the right type of tools available to us, or available to us shortly with the new Bill coming forward. What we need to do is to look at what are the reasons why people do not comply. As we have said earlier, we need to make it easy for small businesses to do the right thing, we need to target the really illegal elements, and we have certainly been doing that around things like hazardous waste and illegal sites, as opposed to illegal incidents. We have got very tough targets internally on tackling illegal sites and closing them down, but this takes time. In the most recent prosecution we took, sentencing happened last week. It has actually taken four years to bring that, and that is not because anyone has been slow, it is because these things take time and if you are going to go after some, frankly, very challenging people to deal with, very dangerous people to deal with, it takes time and it takes a lot of co-operation. In that case we saw a 32-month prison sentence, which is a good news that the courts are actually starting to give custodial sentences that in some way reflect the seriousness of the crime but in many cases still do not reflect the avoided costs. So there is more to do. We are working with magistrates, we are working very closely with local authorities, but we think it will continue to be a challenge.

Q65 Miss McIntosh: Earlier Dr Leinster did say that, for example, some of them—and, let us face it, they are crooks—actually are charging people a fortune for removing building materials. These people are probably paying that money in good faith, but these people, so-called merchants, are probably not even considering applying for a licence. They have got no intention of applying for a permit. Could we, at the very least, not have a public awareness campaign so that the people paying these crooks should ask to see the permit, so at least at the front end they are not encouraging them?

Ms Parkes: One of the things we have been able to do recently with money from BREW (the landfill tax funding) is to put our public register of registered waste carriers online. So, again, it goes to the heart of making it easier for people to do the right thing. We are looking at this and Defra are consulting—they have finished consulting now—on reforms to the whole duty of care and waste carrier system, because we think we need a system whereby using a registered carrier is the same as you would do as using a Corgi registered gas fitter. We need to get it in the public consciousness of doing the right thing; so we are calling for things like vehicle registration to be displayed to make it easy to increase that awareness. Local authorities are doing a lot to increase awareness in their locality on doing the right thing, but we do think it will continue to be a challenge. We also work very closely with legitimate business and we have got some very good examples where we have worked to tackle illegal vehicle dismantlers. For instance, in the Midlands we closed down 60 sites working in co-operation with legitimate business that can tell us where they are being undercut, and we provide a phone number, so that people can call us in confidence, so that we can get away from just talking about the generality to dealing with specific activities that are happening.

Q66 Chairman: Do you think we need the equivalent of the “proceeds of crime” approach, where these really serious people who are illegal dealing with sometimes very dangerous substances, not just get fined but lose every possible gain, in a business sense, from their bank balance, like we do with the proceeds of crime?

Dr Leinster: We have scored two successes in this last year. One was where we had the first extradition. We had somebody extradited from Southern Ireland back across and successfully prosecuted them, and the other one was, we used the Proceeds of Crime Act for the first time and had a recovery of 1.1 million against them. We have just brought in some additional forensic accountants to assist with that sort of work so that we are able to go after people with “proceeds of crime”. One other thing that we also would like to see, which will help on the waste carriers, is waste carriers carrying a badge or a licence so that you would know from the licence that they have up whether or not they are a registered carrier. If they had that, again, we could use that to publicise the whole approach. The other one is we are looking at an automated system for phoning up everybody who purports to be a waste carrier in
Yellow Pages, and we have just done a trial where we can do automated calls to people. The people who really want to be waste carriers come and register with us; those who do not do not and we can then target action against them.

**Q67 Miss McIntosh:** Just to revert to the point that I said right at the beginning of this series of questions, that you believe there is the potential for this type of crime to increase. I think you said that you think the courts are recognising the severity of the crime, but if it is going to increase, because of the increased landfill tax and because of the variable charging, should you not be able to use those revenues to help defer your costs in this regard?

**Dr Leinster:** Yes. We have actively said all along that we believe the Environment Agency should get additional funding from landfill tax as a means of protecting the landfill tax. You always get leakage from tax regimes and you always have a means of protecting the income, and we believe that that should be done in this situation as well.

**Q68 David Lepper:** You have mentioned the extradition from Southern Ireland and you have given us a case involving a million pounds plus. When you talk of organised crime, is that predominantly organised on a local level, or nationally, or even internationally? What is the balance there?

**Dr Leinster:** All of those. Just to put it in context, in terms of fines, when it comes to a fine, the average fine was £2,800. If you are running a tyre disposal scam in which you charge people to dispose of tyres at maybe three pounds a tyre, whereas the going rate is five to six pounds a tyre, and then all that you do is leave them in some nearby lay-by, you can quickly raise money. We have got evidence. There were some cable burning activities and other activities in the Manchester area and we squeezed that activity there. The same people turned up in the North East doing similar activities.

**Q69 David Lepper:** Is there an international element?

**Ms Parkes:** Yes.

**Dr Leinster:** Yes.

**Q70 David Lepper:** Particular countries?

**Ms Parkes:** It is too difficult to say, but that proves to be a real challenge.

**Q71 Dan Rogerson:** Turning to composting and anaerobic digestion, which we touched on a little bit before, in your evidence to us you have said that you certainly support it as an important role in diversion but that we need to ensure that activities are located, operated and regulated in a way that minimises the impact on the environment and local amenity. What do you think are the main factors which we need to look at in order to make sure that that happens, that the local environment and amenity are safeguarded?

**Ms Parkes:** I think that historically people have felt that composting could be undertaken by anyone, and we have said we think to do it at a scale that does the right thing environmentally these do need to be professionally run and properly located so that they do not give rise to lots of complaints. Our experience is that if you do put them in the right place, if you have the right impermeable pavement, if you have a competent operator that makes sure the windrows are frequently turned, that monitors the temperature and keeps a check, crucially, on the input, because different types of waste will generate odours, then these can be very good ways of dealing with waste, but it means you have got to get the technology right and it has got to be just in the right place really. We think there is growing potential, but we have been working very closely with some of the new companies and local authorities that are doing this to try and make sure these are acceptable. We probably get more complaints from residents about composting facilities than anything else.

**Q72 Dan Rogerson:** Existing composting facilities?

**Ms Parkes:** Yes, and concerns about new ones, but we do not see any real reason why, if they are properly run, these should give rise to nuisance. Most waste facilities, frankly, could be operated out as black box in a building with emissions control, and apart from traffic movement they should not really have an impact on local facilities, on local amenity.

**Q73 Dan Rogerson:** What do you think waste collection authorities should be doing to ensure that the quality of what is collected leads to a good quality product in the end?

**Ms Parkes:** As with any waste recycling, you have to get out what you put in, and we do think with some of the concerns over the quality of material, and particularly the quality of material that is being exported, if we want to reassure the public that it is worth recycling, that their recyclables are actually being recycled, then we will have a duty to make sure that quality material is being collected, and if local authorities want to do cost-effective recycling—we know now you can secure quite high prices with increasing raw material costs for recycling—then the better quality the material, the better the chances it is going to be recycled and the better the revenue to be generated from doing it. So it makes good sense, and the more the public thinks about what they are recycling and segregating, hopefully, the more they will think about what they are buying and, ultimately, what they are throwing away, which is what we need to get to with this.

**Q74 Dan Rogerson:** That is why they should do it, but what do you think they need to do? What are the things that local authorities are not doing at the moment that they could do? What is the best practice?

**Ms Parkes:** I think the biggest challenge (and it comes back to that frustration and the point that gets raised with us) is why are there so many different types and different messages around waste collection? Local authorities have to pick what is going to work for their local community, recognising co-mingled collections makes it very easy for the public. If you are starting from a zero recycling rate,
then you probably need to do that to get started, but once you have got your public recycling, then the more the messages could be simple, the more that one end of the street provides the same type of service. It could be a different service, but if we could at least widely adopt the common labelling, colouring systems that Defra do recommend as best practice, and that is not just in local authorities but across industry and commerce and, of course, across the public sector, it just makes its easier for people to do the right thing. I think there is such a plethora of different systems, different messages, it is just very confusing, and that is certainly the thing that I get challenged over the most.

Q75 Chairman: What are you doing to address that issue? In my constituency we have a totally different kerbside recycling regime than, for example, down here in London, and when we went to the London Borough of Sutton's facilities, again we saw different variations on the same theme. It must inevitably affect the overall performance, particularly in the local authority municipal waste sector, as to what can be done when you have got all these different ways of doing it.

Ms Parkes: We have certainly flagged it up to Defra. It is something I have personally flagged up at the Waste Strategy Board. As I said earlier, we have no remit over municipal waste at all, other than regulating the treatment, or disposal, or recycling sites, but we have certainly been raising that with government. We think it is something, going forward, that we will need to look at: how do we get greater public engagement on this? I think getting simple messaging, common colours, if not common collection systems, is a pretty good way to go.

Chairman: I congratulate you on your optimism in that. Let us hope we see some action on it. Thank you very much indeed for your contribution this afternoon, as I say, and for your written evidence. It was very much appreciated. We will move on in a second to the Chartered Institute of Wastes Management.

Further supplementary memorandum submitted by the Environment Agency (Waste 30b)

Thank you for your letter of 21 October 2008 requesting additional information.

In the attached annex I have summarised our progress to date with the Waste Protocols work and indicated the further work that is planned. I can advise that all of the work is on track.

You asked for clarification of the principles we use to set out licence conditions for incinerators on the use of heat. We believe that heat should be recovered as far as practicable, consistent with the requirements of Best Available Techniques. Heat is usually first recovered through the generation of electricity. The residual heat is sometimes captured to heat water or generate steam. We recognise that plant location and the availability of long term customers has a significant bearing on whether it is viable to recover this residual heat.

We require all municipal waste incinerators to recover energy and will not issue a permit for a plant without any energy recovery. We ask operators to design their facilities to optimise the generation of electricity and then to ensure that residual heat, that would otherwise be lost, could be used to generate a supply of steam or hot water in case opportunities for its use subsequently arise. All of the existing municipal waste incinerators generate electricity with a few also providing heating / steam.

Our standard permit conditions for energy from waste plants also require sites to operate to high standards of energy efficiency. They require operators to produce an annual report on energy consumption, maintain an energy management system which helps operators target areas for improving energy efficiency and to design, maintain and operate the permitted installation to secure energy efficiency.

The transition to the Environmental Permitting Regulations has proceeded smoothly. We worked closely with Government and the regulated community to ensure that business could proceed as normal despite the changes. Existing operators will have experienced very little change and we have worked hard to ensure that those making new applications feel the benefits of this more streamlined approach. A wide range of activities and sectors are covered by the new regime and there continues to be provision for lower risk activities to be exempt from the permitting requirements. We are working with Defra on a review of the exemptions system to ensure it provides the right level of regulatory control and Government has recently consulted on its proposals.

We are aware that parts of the metal industry have concerns about the costs of regulation. We work very closely with the sector to ensure we understand their concerns and address them wherever possible. As a result we have developed Standard Permits for metal storage and for metal recycling that meet the needs of the sector. Standard Permits are permits which have a set of conditions and limits pre-established with industry. This type of permit is simpler and cheaper to apply for and, because they are not consulted on
individually, they are likely to be issued more quickly. The sector has welcomed our current consultation on a Standard Permit for the dockside storage of scrap metal. In specific response to the sector’s requests we have also developed a more proportionate system for meeting a key requirement of the rules on the export of metal, namely the need to demonstrate that packaging recycling is undertaken to standards that are “broadly equivalent” to those operating in this country. We also continue to target illegal operators who undercut legitimate business, for instance our “Operation Scrapbook” campaign in the Midlands tackled over 60 illegal sites.

At a recent meeting with the then Environment Minister, Joan Ruddock, we invited the British Metal Recycling Association to identify whether there were any other specific issues that continue to cause difficulties for their members. As a result we are undertaking a review of the Environment Agency forms that metal recyclers may need to complete under different regimes to identify what more can be done to rationalise and ease the administrative burden. Liz Parkes meets regularly with the sector.

You asked separately, from Rahul Sareen, for a statement on waste exports. I have attached a statement as Annex 2 to cover this.

I hope this information is helpful. If you would like further information, please contact us. We would be happy to provide it.

Dr Paul Leinster CBE
Environment Agency

November 2008

Annex 1

**WASTE PROTOCOLS PROJECT**

1. The Waste Protocols Project is a joint Environment Agency and WRAP initiative, in collaboration with industry. It is a Defra-funded business resource efficiency project.

2. The project aims to achieve one of the following outcomes:
   - produce a Quality Protocol (QP) which clearly sets out the steps that must be taken for the waste to become a non-waste product or material that can be either reused by business or industry, or supplied into other markets, enabling recovered products to be used without the need for waste regulation controls; or,
   - produce a regulatory position statement, which clearly informs the business community of what regulatory obligations they must comply with to use the processed waste material.

3. Progress
   - The Quality Protocol for the production and use of quality compost from source-segregated biodegradable waste was launched in May 2006. This is applicable in England and Wales.
   - In August 2007, we changed the legal classification of steel making by-product “Blast Furnace Slag” from waste to by-product, with clarification from the EU, and through consultation with industry.
   - We confirmed in October 2007 that virgin timber waste, from processing virgin wood or certain waste from woodland management, was to be de-regulated. Non-virgin, treated or used, timber remains regulated as a waste.
   - In the last six months public consultations have been completed for anaerobic digestate from mechanical biological treatment (MBT) processes, tyre-derived rubber materials, non-packaging plastics, flat glass and waste vegetable oil. These materials are currently undergoing a post consultation review phase before a draft Quality Protocol is notified to the European Commission’s Technical Standards Committee.
   - We have published a technical report and regulatory position statement for contaminated soils. Consultations for the remaining materials will commence over next few months.

4. Materials Summary and status

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**Regulatory Positions**

- Blast Furnace Slag: Issued August 2007
- Wood: Issued October 2007
- Contaminated Soils: Issued June 2008

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**WASTE EXPORTS**

**THE ENVIRONMENT AGENCY ROLE:**

We are the designated authority for all notifiable international (transboundary) shipments of non-hazardous and hazardous waste into and out of England and Wales. These movements are covered by the Waste Shipment Regulations.

On 12 July 2007 the revised Waste Shipment Regulations came into force. The new rules set three different levels of control over movements of waste, depending on what the waste is and where it is being moved to. These are:

- **Prohibited**
  - The export of waste for disposal or hazardous waste for disposal or recovery to developing countries is prohibited, apart from some very restricted exceptions.

- **Notifiable**
  - If shipments of waste require notification then prior written permission must be obtained from the regulatory authorities in all concerned countries.
  - Shipments of hazardous waste to OECD countries will almost always require a notification.
  - Movement of all waste to the EU countries that have joined since 2005 will always require a notification.
  - Movements of some green list (see below) wastes to non-OECD countries may require notification.
  - Around 100,000 tonnes of waste are exported to other EU states for recovery each year under this system. These wastes typically arise from industrial processes and have hazardous properties. The exporter must be granted permission by us before the waste can be exported and we have well-established systems to process applications and to monitor these exports.
GREEN LIST

— Green list items are the low hazard “commodity” wastes such as scrap metal or waste paper sent for recovery often to countries such as China and other emerging economies. We do not have authoritative figures on the scale of such exports but interpretation of UK trade data suggests around 12 million tonnes of waste are exported a year under these controls.

— Movement of items on the green list neither need to be prenotified nor need prior permission before going ahead. But movement of such items should comply with specified information and requirements. The guidance on how to do this can be found on our website at http://www.environment-agency.gov.uk/commondata/acrobat/faq—1818419.pdf.

— As such, our regulatory role in green list waste exports is essentially “passive”. Exporters do not need our permission to export these wastes and do not inform us about them. Consequently we do not know with certainty where exports take place from but we are expected to ensure they are being exported for recovery in an environmentally sound fashion.

— Government have provided us with some extra funding to target green list exports. We are using this money to carry out intelligence-led regulatory and enforcement activity. We are working with Government and WRAP to improve the quality of recyclables collected to increase their value and ensure that they stay within the legitimate market.

Memorandum submitted by the Chartered Institution of Wastes Management (Waste 22)

The Chartered Institution of Wastes Management (CIWM) is the professional body which represents around 7,300 waste and resource management professionals, predominantly in the UK but also overseas. The CIWM sets the professional standards for individuals working in the waste management industry and has various grades of membership determined by education, qualification and experience.

CIWM’s special interest group for Sustainable Management of Resources and Waste Strategy were consulted on this inquiry and their comments helped form the response for CIWM. CIWM’s Biological Treatment special interest group informed CIWM on the responses for questions 5 and 8.

EXECUTIVE SUMMARY

In preparation of this evidence CIWM has worked with the Institution of Mechanical Engineers and the Institution of Civil Engineers and welcome the Waste Strategy for England 2007 and believe that the overall strategy is the correct one. However, during the consultation we have identified a number of shared concerns that we believe will fundamentally affect the ability of England to deliver against the targets set out in the strategy and those required by legislation originating from Europe.

Infrastructure deficit

The existing infrastructure, and the current rate of growth of infrastructure, will not deliver the more sustainable approach to waste envisaged in the strategy.

Most importantly, future infrastructure needs to cater for all wastes, regardless of origin (ie commercial and industrial waste as well as municipal), and there are four areas in particular where attention needs to be focused:

— the necessary skills to plan, build and operate new waste treatment plants;
— an effective planning system;
— communications and awareness raising to improve co-ordinated action by all parties; and
— decision support tools, including better data, cost benefit and life cycle analysis, etc.

Waste treatment technologies

The strategy should avoid promoting one type of technology over another. We believe that local authorities, either individually or jointly, are best placed through their strategic planning role to identify what scale and type of technology best suits their needs.

Waste as a resource

Although the strategy takes a big step forward by linking waste into the wider environmental agenda—including resource efficiency, energy policy and climate change—we want to see this message driven home through a detailed action plan to ensure that the concept and practice of using waste as a resource becomes effectively embedded.
The following is specific to CIWM:

The new Waste Strategy for England successfully identifies the need to integrate three important policy and delivery issues:

— Climate change, energy and resource efficiency
— The need to include all wastes, not just municipal wastes, as parts of sustainable resources management, and
— The need for partnership working—between public, private and third sectors as well as between different tiers and areas of local government—and an integrating role for local authorities.

Having painted this broader picture it is vital that Government keep up the momentum to deliver on the 94 proposed actions in Chapter 8 of the strategy. Only co-ordinated and sustained action by all stakeholders will deliver the more sustainable resources management vision. In this, co-ordination through the Waste Strategy Board and the Waste Stakeholder Group will be vital.

More encouragement and direction to adopt a broader role is now needed for local authorities to help deliver this strategy. Previous waste strategies have focused on the “waste” function of local authorities. Now, the resources agenda means more corporate interests will develop. This is as much about economic development opportunities and social engagement as it is about waste management. The authorities will need to show innovation, leadership, and partnership with others—involving the private and third sectors; joint working with other authorities and vertical governance within the regions to plan, procure and provide for wastes and resources; and land acquisition, strategic and spatial planning to support development plans. Local authorities can do this, but they need to be properly resourced to do so, and—as with national Government—will need to communicate outside of the “normal” set of stakeholders.

The Committee advised they will consider nine particular points and CIWM would comment as follows:

1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management.

   1. CIWM supports the strategy’s promotion of shared responsibilities for waste by all parts of society.

   2. CIWM also welcomes the strategy’s broader scope to all wastes. Previous strategies focussed almost entirely municipal waste which represents less than 10 percent of the total tonnage.

   3. However, most of the early action under the strategy again focuses on municipal wastes and local authorities. The strategy does contain proposals to drive commercial and industrial resource efficiency and more sustainable waste management but these tend to be longer term and less detailed. Notable exceptions include construction and demolition wastes targets under the draft Strategy for Sustainable Construction and proposals for statutory Site Waste Management Plans.

   4. The strategy encourages joint planning and procurement between Waste Disposal Authorities and Waste Collection Authorities in two tier areas and between groups of adjacent authorities. CIWM believes this will drive benefits from common practices, streamlined and better value procurement and improved economies of scale for some solutions. CIWM also believes the strategy rightly supports more localised resource management facilities and solutions fit to meet local circumstances.

   5. Notable examples of co-operation and collaboration exist throughout England, but much potential remains for joint working. Although the strategy encourages such joint working there are no firm proposals to either require, directly support or facilitate these plans.

   6. The strategy encourages authorities to provide better waste management/recycling services for businesses in their areas. There are examples of good practice but widespread delivery of such services by the public sector, either direct or via private sector contractors, requires full funding for the authorities. Following the Chancellors pre-budget report in October CIWM has highlighted concerns about the level of funding available to local authorities to deliver infrastructure and services needed. Copy attached Annex 1.

   7. The strategy also encourages broader roles for local authorities in planning for waste management and infrastructure for all wastes not just municipal. CIWM believes resource based strategies and infrastructure, regardless of sectors/sources of wastes are vital in delivering a proper resource economy. There are however, no firm proposals to require, directly support or facilitate this broader role in the strategy. Waste contractors advise that, because of the way in which the infrastructure is funded (eg PFI/ PPP) local authorities are often a reluctant to allocate capacity to treat commercial waste, especially any outside of their own “trade waste” collection service.

   8. The strategy encourages third sector involvement in service delivery through medium term proposals to assess and support. CIWM agrees the third sector adds value in terms of services and social benefits unlikely to be satisfied through either the public or private sector. CIWM would welcome clearer proposals to support third sector involvement where their “added value” is most appropriate.
9. Delivery of the strategy’s objectives will involve co-ordinated and sustained action by all parties, including permanent behavioural change and perceptions by the public at work and at home. This strategy stands or falls on the strength of leadership by Government from the highest level and through many of its departments working in close co-ordination. Also, given that Government has not created any formal strategic waste authority to monitor and manage the strategy, the arrangements for the Waste Stakeholder Group will need to be robust and clearly co-ordinated and lead by Defra. CIWM and other professional institutions will be pleased to commit to the work of this group and offer its information or skills wherever appropriate.

2. The role for and implementation of regulations, and their enforcement.

10. The strategy highlights Government’s intention to review and streamline waste regulation. CIWM supports this work to maintain proper protection for people and the environment whilst keeping regulatory burden on compliant waste businesses to the minimum necessary to achieve this.

11. The strategy specifically proposes new legislation eg review of the waste Duty of Care, statutory Site Waste Management Plans and waste carriers/transboundary movement controls. CIWM supports these proposals.

12. The legitimate resources and waste industry cannot compete with criminals. Regulators need full resourcing to combat all forms of environmental crime. This cannot come just via fees and charges paid by regulated businesses. This has been a consistent theme to recent CIWM consultations and inquiry submissions.

13. As the cost of responsible waste management rises any increase in environmental crime must be tackled. More resources are needed for the Environment Agency and local authorities to ensure that enforcement can be expanded, alongside provision at civic amenity sites for longer service hours and inclusion of commercial waste facilities (either additional to, or incorporated within household waste sites).

14. All local authorities should ensure that their enforcement officers have the necessary skills (similar to those in the Environment Agency). CIWM has worked with Defra and ENCAMS to deliver the FlyCapture training programme to help build these skills.

3. The classification of waste.

15. The European Waste Framework Directive is being reviewed and will include EU-wide protocols to identify when wastes have been fully recovered to a standard where they no longer need to be treated as “wastes”. This will support secondary materials markets, and reduce regulatory burdens and stigma associated with waste materials which are often indistinguishable from virgin materials.

16. This important work will pick up on development of protocols in the UK via WRAP, UK Environment Agencies and the industry, eg compost, anaerobic digestion (AD) and wood. CIWM fully supports this work and its recognition in the national waste strategy and wants to see Business Resource Efficiency and Waste (BREW) support continued for protocol development.

4. The proposals for financial incentives to increase household waste prevention and recycling.

17. CIWM responded in full to Defra’s consultation on Incentives for Household Recycling. The main points raised (attached in Annex 2) were:

— UK must move to full charging for household (residual) waste
— incentive proposed would be too small to affect substantial behavioural change.

18. Incentives to recycle or reduce will only work if proper separation and collection systems are available. CIWM wants to see greater co-operation and collaboration between authorities to procure and operate common collection mechanisms to support public participation.

19. CIWM wants to see action under the strategy to incentivise waste prevention and recycling by all sectors, not just for household waste.

20. The increased landfill tax escalator to £48/tonne by 2010 is a crude economic instrument. It will influence household behaviour, but only indirectly, although it is already beginning to have a direct impact on commercial and industrial waste production. CIWM wants transparent decisions on how the increased tax yield will be used and the local authority element fed back to support better service delivery by local authorities.
5. **The role of composting.**

21. Composting is a relatively low capital and revenue cost treatment for a broad range of organic wastes from all sectors and infrastructure can be developed quickly to help divert waste from landfill.

22. Control over inputs and process—for windrow and in-vessel composting—are vital to assure product quality. Composts produced could be beneficial to UK soils which have lost important organic content but only if quality is high and sustained through standards and protocols and market confidence is maintained. The emerging EU Soil Strategy recognises the need for targeted quality inputs to soils.

23. Composting biowaste to produce independently certified, quality assured compost can reduce greenhouse gas emissions through increasing soil organic matter and carbon sequestration. Compost can also help protect soil from heavy rainfall and prolonged summer droughts and helps reduce the need for chemical treatments.

24. Government must ensure that standards developed to protect soil quality and animal health are maintained and adequate to satisfy market requirements. If outlets for “compost” products are uncertain composting will be compromised as a sustainable resources solution.

6. **The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.**

25. The strategy includes proposals to support resource efficiency in all sectors, eg the new Products and Materials Unit, packaging standards & targets and extended Courtauld Commitment. However, CIWM is not clear on how or when these proposals will impact on resource efficiency, or whether they will be enforceable.

26. Packaging is an easy target in this enquiry but whilst further progress can be made on packaging design, CIWM also believes that packaging plays a vital role in preventing product loss. Government needs to show leadership in focusing on priority issues, including the need for careful assessment of least environmental cost solutions.

27. CIWM also called for new extended producer responsibility to be developed within this strategy for priority wastes/products. CIWM’s submission to Defra at the beginning of the strategy development is attached as Annex 3.

28. Waste minimisation for businesses tends to be driven by cost reduction for businesses. Stimulating household waste minimisation will be more complex and will need a range of complementary measures, relying heavily on sustained and co-ordinated communications. CIWM will be happy to work with Government and stakeholders to prepare and spread these messages.

7. **The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill.**

29. Existing measures including the Landfill Directive, landfill gas control and use at existing landfills and the Landfill Tax are already driving improvement. CIWM believes Government must maintain support for power generation from landfill gas through the Renewable Obligation Certificate (ROCs) scheme to maximise methane collection from landfill.

30. Measures in the strategy will put additional pressure on waste to landfill generally and reduce future methane potential from this source.

31. CIWM supports development of product/service/waste strategies with least environmental cost. The science and supporting information behind life cycle assessment (LCA) are maturing and although important steps are being taken to support such decision making. Government must maintain its support to the development of LCA techniques and skills.

8. **The promotion of anaerobic digestion for agricultural and food waste.**

32. CIWM supports use of a broad range of technologies to manage organic wastes. Of these, AD is a medium cost and relatively straightforward reliable technology to treat many wastes (including food) which can yield valuable energy. In all likelihood, AD facilities will be supported by composting of the digestate prior to the material being recycled to land. However, CIWM also believes that local authorities, jointly or individually are in the best position to identify which waste treatment technologies are appropriate to meet their needs and at which scale.

33. Significant potential exists to segregate and treat organic wastes from commercial and industrial as well as municipal sources, (Up to 20 million tonnes per year from all sources). As with compost, the key to success will be to maintain high quality outputs and therefore market confidence.

34. The potential exists to review the ROCs scheme to investigate the potential for biogas to be distributed via the gas distribution network to improve the flexibility of this technology.
9. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies.

35. The existing waste management infrastructure in England or the UK cannot deliver the objectives of the waste strategy (ies). Strong historic reliance on landfill in this country means that we must choose, design, build and commission new waste treatment facilities of significant size at a rate of one per week for the next decade. The facilities are needed to deliver much more than landfill directive biodegradable municipal solid waste (Article 5) targets. Facilities will be needed to meet the EU Batteries Directive whose first target date is 2012 but with almost no facilities to manage batteries anywhere in the UK. We will need an adequate network of hazardous waste treatment facilities, WEEE processing plants and liquid waste treatment facilities. The strategy also proposes exploration of general landfill bans—as are used elsewhere in Europe—which could require much more rigorous sorting and/or treatment of commercial and industrial wastes before the residues can be landfilled. In aggregate, these changes will mean even faster development of infrastructure than suggested above, involving all types of technologies and capacities as well as greater transportation of materials—locally, regionally, nationally and internationally.

36. The firm targets in the strategy, including:
   - doubling municipal waste recycling by 2020
   - more than doubling municipal waste recovery—including energy by 2020
   - twenty percent reduction of commercial and industrial waste to landfill by 2010
   - construction waste targets in the draft Strategy for Sustainable Construction
confirm the general scale of new waste treatment capacity development needed in England and the UK.

37. Energy recovery and materials processing facilities will be important parts of this infrastructure development. CIWM believes that energy recovery from residual wastes will be important—not just to meet landfill diversion targets, but also to gain carbon management and security of energy supply benefits—using a variety of technologies. Energy recovery will also be an important step in treating wastes already subjected to minimisation, reuse or recycling to allow the final residues to be landfilled. A copy of the CIWM position statement is attached as Annex 4.

38. The high rates of recycling envisaged in all UK waste strategies will hinge on a mix of careful separation of recyclable wastes by householders and businesses and mechanised sorting and separation from mixed wastes through specialised facilities. This is because the value of secondary resources and secure markets to use them depend on quality—which is often driven by preventing contamination in any form—eg mixing different plastics or allowing food to contaminate paper.

39. Technologies to separate “co-mingled” wastes are improving and can be cost effective. The “best” solution in any area will hinge on local circumstances but in terms of maintaining market confidence of the recovered materials consistent and high separation quality will be vital.

40. The resources and waste industry is becoming a “resource” industry—reprocessing materials to a standard acceptable to a range of markets. With limited manufacturing markets in the UK for secondary materials this means we are re-processing materials for re-introduction to global materials markets.

41. Current capacity to process recyclable materials is not adequate to meet future demand in terms of capacity, technologies or assured quality output. Early development of these capacities will be needed to support delivery of the waste strategies. CIWM identifies four critical issues in developing waste treatment infrastructure:

42. Information and skill

All parts of this industry need new skills and information to move away from transfer and landfill towards alternative treatments. CIWM has worked closely with Defra and others to support their New Technologies Demonstration Programme and to build and deliver education and training packages to build this skills base. A promotion flyer, developed under our MOU with Defra, is attached as Annex 5.

43. Decision support

Agreeing future strategies for sustainable management of resources and waste from all sectors will involve complex assessments and comparisons. CIWM believes that strategies should aim to manage these resources at least overall cost to the environment and health—locally and globally. Such decisions need skills and tools and data to support them and CIWM is working to spread awareness and use of tools such as WRATE developed by the Environment Agency.
44. Planning

The planning system for new waste infrastructure in England will be the rate determining step. The Planning White Paper (May 2007) sought to streamline the planning system for strategically important infrastructure but, as proposed, will fail to do so for waste. Proposals for a national planning statement and streamlined process for hazardous waste treatment (threshold 20 000 tonnes/year) will probably help, but for all other waste streams the most important infrastructure development will fall outside of the proposed threshold (> 50 MW generation capacity). CIWM accepts concerns over dilution of local accountability implied by “streamlined” planning processes but has urged Government to reconsider improvements to the planning regime to support new waste infrastructure. Of particular importance is the need for integration of Economic Development policy and Housing policy where the potential to embed CHP infrastructure and other emerging energy from waste technologies at the start of new developments is a major opportunity for the UK.

45. Communications

The strategy promotes “shared responsibility” for wastes at all levels—from waste prevention through to accepting responsibility for residual waste treatment capacity. CIWM believes that the consequences of waste production are often a forgotten issue for businesses and individuals alike.

46. Delivering the laudable objectives of this strategy will depend on mass behavioural and attitude changes in this country which can only be achieved through sustained and co-ordinated communications from the highest level of Government and through a broad range of stakeholders including CIWM. This Institution has stressed the need for a communications strategy and plan to accompany the waste strategies and has offered its input as part of making this happen.

Chartered Institution of Wastes Management

October 2007

Annex 1

Thursday 11 October 2007 Press Release

PFI funding increase is welcome but sustainable waste management could still feel the squeeze

The Chartered Institution of Wastes Management (CIWM) has expressed concern that sustainable waste and resources management has been short changed in the Government’s Comprehensive Spending Review delivered this week.

“Building a more sustainable approach to waste and resources management means high quality collection and recycling services for householders, high quality sorting and treatment facilities, and high quality recovered materials for industry—and there is an unavoidable cost attached to meeting these fundamental needs,” says CIWM chief executive Steve Lee.

The CIWM believes that the 1% real term increase will not be enough to help local authorities absorb rising waste management costs, meet national landfill diversion targets, and deliver higher statutory recycling and recovery targets—particularly given that overall funding is predicated on efficiency savings that could put waste management services under even more pressure.

In addition, although it welcomes the increased flexibility afforded by the removal of ring-fencing and other grant controls, the CIWM is concerned that the Government has focused heavily on the Private Finance Initiative as the key funding route for infrastructure development.

“The increase in PFI funding is welcome and much needed if we are to deliver the long term increase in infrastructure that is required. However, PFI is a complex and lengthy process that is unlikely to meet short and medium term infrastructure needs and will not always provide authorities with the flexibility to develop appropriately sized facilities to meet local requirements and circumstances. PFI is not a universal solution and the CIWM is keen to see sufficient choice in funding mechanisms when more detailed spending plans become available,” says Steve Lee.
Annex 2

Consultation on the Incentives for Recycling by Households

QUESTION 1:

Do you agree that local authorities should have the power to introduce financial incentives for promoting recycling and reducing household waste? Why?

CIWM agrees the option to use such a power should be available to local authorities. Recently a few local authorities have used different tactics to encourage residents to recycle and found themselves frustrated by the law and unable to proceed as they originally intended.

Other systems, such as alternate weekly collection of residual waste and reducing the size of the residual waste bin have proven successful in encouraging householders to think about recycling and reducing waste. The incentives scheme could have a similar effect.

Financial incentives give local authorities another option once they have tried others.

QUESTION 2:

(a) Do you agree that a power to introduce financial incentives would help local authorities to meet their recycling targets and their obligations under the Landfill Allowances Trading Scheme?

CIWM does not completely agree that by introducing financial incentives local authorities will meet their recycling targets and achieve their LATS obligations. A number of local authorities are close to or have already achieved recycling targets without even considering financial incentives or penalties.

LATS will be achieved by diverting biodegradable waste from landfill, not by rewarding or penalising residents for participating in recycling schemes or not. Garden waste is not considered part of the five waste streams so how can there be an incentive for diversion of biodegradable material from landfill. Paper, card and textiles (if collected) would be a part diversion from landfill if the material is recycled, composted or reused. This incentives scheme does not consider rewarding home composting in any way. CIWM understands it is difficult enough to count home composting towards BVPIs let alone determine incentives.

The power would be welcomed but there is hesitancy about Government making the assumption that local authorities are implementing such schemes when they are not. Local authorities would need confirmation that money will not be held back from the central fund on such assumptions.

(b) Are there other barriers that Government could address to help authorities boost recycling and meet their obligations under the Landfill Allowances Trading Scheme?

The UK recycling and composting achievements are always being compared with our European neighbours. One of the main differences with most of our European neighbours is that they have landfill bans that drive recycling, composting or energy recovery because certain material types cannot go to landfill. These landfill bans are implemented in addition to those within the Landfill Directive. National policy is decided by each country dependent on their circumstances and desired outcomes.

Whilst much good work has been achieved by WRAP, there remain concerns over the sustainability of local and international markets for recyclables.

QUESTION 3:

Do you agree that a waste financial incentive with net neutral impact upon local residents (Option C) is the best of the three options outlined in paragraph 5.2?

Option A of doing nothing is not really an option, resource and waste management has to move on from where it is now to achieve targets as set out in Waste Strategy 2007.

Option B is the preferred option for CIWM. Experience from overseas shows that charging for household waste has an impact on waste arisings and recycling. The resource and waste management industry and Government should be looking at what it wants and what it needs to do to get there and not start with a “we cannot do” attitude. If the current council tax system does not allow for direct charging do not rule it out because of this, look at what needs to be changed and how.
CIWM agrees that a direct charging scheme apart from the council tax may have an impact on central grant funding. This would at least make people finally realise what it does cost to collect, treat and dispose of THEIR waste.

Option C, CIWM has the tendency to agree with the House of Commons Refuse Collection report that says:

“The proposals fall short of recommendations made by Sir Michael Lyons and appear complex and timid. Rewards of as little as £20 a year are unlikely to prompt mass recycling and as every winner will require a loser, those who end up paying even £20 more for a service most believe they pay for through taxation is likely to be significantly more aggrieved than the gainers are pleased”.

CIWM would not support a bag based system as this would be a backward step in terms of health impacts and environmental protection.

CIWM favours Option B but could accept Option C as a stepping stone to the final outcome of charging. CIWM supports the idea as put forward by one of its members to pilot both options B and C (response to Q8).

QUESTION 4:

(a) Do you agree that any financial incentive scheme should be revenue neutral?

Cost neutral is more the issue for local authorities? To set up any scheme will involve funding for capital and administration. Residents are not to be charged anymore for waste management services but ultimately there will be increases in budgets which will lead to an increase in Council Tax.

The system needs to be simple and Option C does not appear simple. For two-tier authorities there will be added aggravation from residents about costs and stealth tax as highlighted by media reports. Disposal authorities are likely to gain from the reduction in waste not being landfilled (even though they may see increased activity at CA sites). If there are any increases in fly-tipping, collection authorities would have to foot the bill of clearance.

(b) Do you agree with the Government’s definition of revenue neutrality?

CIWM finds it very difficult to understand revenue neutrality for the option put forward.

The paper indicates cost savings in the years following the scheme introduction; one assumes this is from landfill cost savings as there is theoretically less waste being presented for disposal. Collection authorities do not incur disposal costs they incur collection costs and these will still arise unless waste is not collected.

(c) Do you agree that local authorities should be free to determine the level of charges under a financial incentive scheme?

Charges should be set at a local level; this will enable local authorities to take account of local circumstances.

QUESTION 5:

Apart from the “recycling incentive scheme”, what other models might meet the aim of incentivising behavioural change without increasing the overall cost to local residents?

Local authorities could look to gain sponsorship for prizes to allow residents to enter into competitions, or have giveaways—tickets to the cinema, shopping vouchers, etc. Further incorporate waste and recycling into the curriculum, at all age levels. Have a street competition—“our street is better than your street”, or name and shame the worst street(s).
**Question 6:**

The Government’s view is that it would be essential for local authorities to have good recycling services, fly-tipping prevention and enforcement strategies and measures to help disadvantaged groups in place before introducing financial incentive schemes. Good communication with local communities before the implementation of any scheme will be also be critical.

(a) If the Government were to allow financial incentives, what requirement should the Government place on local authorities as regards:

(i) existing recycling services—do you agree with the proposal to require authorities to offer a recycling/composting service for at least 5 waste streams to any household covered by a financial incentive scheme?

Any local authorities that would be considering going down this route of incentivising householders would be doing so after they have considered and implemented all other options. They would already have looked at how much material they could collect and how. To achieve a good recycling rate the full complement of materials would already have been targeted.

Including a specific five stream requirement would disadvantage those authorities that have decided to use waste from energy as an option. Instead of picking up plastic for recycling taking plastic in the residual and using the calorific value may well be more environmentally acceptable then transporting the recyclate across the country. (The research report modelled carbon impact and this should be considered in the waste stream options).

Five stream criteria are limiting and guidance should be issued and this should not be part of the framework.

(ii) waste crime strategies, and

This would be an important part of any local authority strategy involving change to a collection system, whether it is alternate weekly collection, charging for garden waste collection or incentives.

(iii) disadvantaged groups?

What is a disadvantaged group? The consultation document suggests it could include householders receiving council tax benefit. If the scheme is revenue neutral (as suggested) then their ability to pay is not compromised and they have the same potential to reduce residual waste as other householders.

The research report highlights that there is no statistical link between income and waste generation and the more likely relevant link is to household size. The more disadvantaged groups might then be those households with more than three occupants and families with small children; not one person living in a flat or those of a low socio-economic status.

(b) How far should these issues be determined by the Government, and how far at local level?

These are all local issues and would be difficult for the Government to have an accurate picture of the situation for each individual local authority. They should be determined at the local level.

**Question 7:**

(a) Do you agree that waste disposal authorities should have the power to implement financial incentive schemes at civic amenity sites?

If the power is granted to collection authorities, there is no way the disposal authorities could operate without a similar power to civic amenity sites. One does not work without the other.

(b) If so, how could financial incentives be administered at civic amenity sites?

There are already situations of queuing at CA sites and this is usually exasperated by the addition of permits, as used by some London boroughs. To have a system for incentives could be similar to the permit one and increase queuing time at all CIA sites that introduced it. This is likely to add to potential fly-tipping and waste migration.
QUESTION 8:

Are there other issues that Government needs to consider concerning financial incentive schemes?

Piloting options B and C to see which achieve the best recycling or minimisation of residual waste, or both.

For local authorities that have transient populations, chasing bad debt is already a full time job and if the cost of administering the system to reclaim is more than the debt the local authority will not bother. Local authorities have a duty to collect household waste and so there is a strong message being sent to residents that do not wish to participate—there is nothing the local authority can do about it. Fixed penalty notices could be served if these were allowed by the legislation but again there is the issue of non-payment.

Responsibilities on landlords would help with student populations who reside in many local authority areas.

Improving the message of Recycle Now, to include other materials and how the public can do their bit in the local area. If more materials are being targeted to increase recycling then maybe it is time the resource and waste management industry responded to the retail industry. Retailers have now moved away from mixed plastic pots for their yoghurt but there are no mechanisms for true collection and processing and sending to markets.

If more materials are to be targeted the logo on the material has to be accurate and easier to find. The public do not want to be hunting around the packaging to determine if it is compostable or recyclable. This limits the level of contamination in the recyclable container when processors are already calling for cleaner materials and setting specifications.

There have been increases in violence on collection crews over AWC, what will be the impact on the ground if incentives are introduced and the public don’t get what they think they are getting? The day to day impact is important.

Definitions of what is meant by waste streams, does cardboard count as one if mixed with paper or green waste or not count at all if included in green waste.

The term “good service” would need to be determined. Local residents might like the service they receive and BVPI shows good feedback but is this understanding the same as implied in this consultation.

Local authorities could give preferential planning for waste minimisation. If there were developments that included retail shops that used Weigh “n” Save (food sector) this would aid waste minimisation with food packaging.

The political angle of waste with Members is crucial. Many officers may support the idea of an incentives scheme but there may well be no political support and the scheme would not be able to gain financial support; the budget would not be allocated.

QUESTION 9:

Are there any powers, currently not available to local authorities, that would help them:

(a) encourage greater recycling and waste minimisation by households and

Using the Waste Minimisation Act 1998 in its original format so that more “teeth” was available for local authorities to move towards more minimisation of waste.

(b) manage waste more effectively and efficiently?

A number of local authorities feel that some clarification on the legality of “side waste” policies is required. Government might like to consider re-addressing the waste types that a charge can be made for, ie updating the Controlled Waste Regulations 1992.

Annex 3


The Chartered Institution of Wastes Management Lessons Learned Report

http://www.ciwm.co.uk/mediastore/FILES/12157.pdf
Chartered Institution of Wastes Management

Position Statement

Energy Recovery From Waste

The UK’s capacity to recover valuable energy from its waste is under-developed. Rapid planning and commissioning of appropriate plants and technologies is needed to support three vital policy areas: meeting tough landfill diversion targets; combating climate change; meeting carbon management needs and helping satisfy future sustainable energy demand. The Chartered Institution of Wastes Management (CIWM) is urging Government to recognise the important contribution of energy from waste in addressing these issues and to take practical steps now to support its expansion.

Waste Recycling

With concerted efforts by many authorities, England now recycles 27% of its household waste—Scotland, Wales and Northern Ireland are close behind. With a sustained drive to improve recycling the UK should match good practice elsewhere in Europe—recycling up to 50% of its municipal waste. However, even with this level of performance a wide gap remains between what we must stop sending to landfill and what we can achieve through a commitment to waste prevention and recycling. High performing European States close that gap through energy recovery from waste.

CIWM believes:

— experience throughout Europe shows that high recycling performance is compatible with efficient energy recovery from waste; for example Denmark and the Netherlands recycle 45% and 65% respectively of their municipal waste, whilst thermally treating 50% and 30% respectively [from Eurostat data 2003].

— preventing, re-using and recycling wastes are usually more environmentally beneficial, so energy recovery should be from “residual” waste (ie after economically viable removal of recyclable materials) wherever possible.

Energy

Only 10% of UK municipal waste is currently managed through energy recovery [from Defra 2005–6 data]. Government’s Energy Review is considering security and diversity of energy supply, influenced by higher oil prices, ageing coal-fired and nuclear-fired power stations and concerns over future reliance on coal, oil and gas imports. Given that across Europe 48% of our energy has to be imported, this review must recognise the energy value of what we currently discard as “waste” to landfill, as recommended in the EU Thematic Strategy on the Prevention and Recycling of Waste. Biomass is an important fuel of the future and our residual waste in the UK has the energy equivalent of 5 million tonnes of coal—aft having used the recoverable materials like paper for other purposes. Other wastes, such as wood could double that energy value. Energy from waste could therefore replace up to one-third of the coal used to generate electricity in the UK and easily satisfy Government’s 2010 target of 10% of electricity generated from renewable sources. However, it is unlikely to do so unless waste and energy markets are positioned to achieve this outcome.

CIWM was disappointed to note the lack of substance in the mid 2006 Energy Review document regarding the contribution energy recovery from residual waste could make, or positive steps to encourage its development. Preparation of the Government’s Energy White Paper in mid 2007 will provide an opportunity to link future energy strategy with development of waste strategies throughout the UK.

CIWM believes:

— national security of energy supply, especially for industry, means that we should exploit the energy value of UK generated waste before disposal;

— generating both power and heat from waste is typically up to 2–3 times as efficient (over 80%) as generating only electricity (approximately 25%). Wherever possible, appropriately scaled combined heat and power generation schemes from waste should be favoured;

— Combined Heat and Power schemes will also offer more stringent emissions control at a single centralised plant than is possible at heat / power sources for individual organisations or buildings. CHP also avoids the CO2 omissions from those local boilers etc.

— Further clarification by Government is needed regarding proposals in the 2007 Budget to use Enhanced Capital Allowances to help fund such schemes.

— Government should increase its support for CHP in general and particularly urgently for the development of district heating networks—these may then provide a platform for the development of a competitive “heat supply” industry in which waste and other forms of biomass may compete as local providers.
— Government should provide further support for the development of district heating via the planning system—new developments and substantial regenerations should be given suitable incentives to provide district heating

— Government, through the Renewables Obligation, has also considered the preferential (higher) rate paid for electricity generated from renewable sources, in proportion to the biomass remaining in the residual waste fuel to incentivise removal of plastics in particular. CIWM supports this decision and believes it encourages the manufacture of “clean” waste derived fuels and their efficient use. We understand that Government is actively considering clarification of the ROC System and this would be welcomed.

— Clear links will be needed between the mid 2007 Energy White Paper and future waste strategy development.

— Government should carefully consider—in the longer term—diversion from landfill of wastes other than biodegradable municipal waste. Significant energy-rich fractions exist in non-municipal and non-biodegradable wastes which are not permitted to be landfilled in many EU member states.

CLIMATE CHANGE

Even if we meet the Landfill Directive targets, 50% of biodegradable municipal waste will still go to landfill in 2013 and 35% in 2020. The carbon in landfilled residual waste is turned into roughly equal amounts of methane and carbon dioxide over a protracted period. Only a proportion of this gas can be collected and used as a fuel, and the fugitive methane has over 20 times the climate change impact of carbon dioxide. Energy recovery from residual wastes will therefore have less climate change impact than burning fossil fuels.

CIWM believes:
— government should stimulate energy recovery from residual waste to increase the likelihood of meeting its short to medium term climate change targets;
— government should continue to incentivise the collection and use of landfill gas methane through continued support of the renewables electricity tariff for this energy source
— Future strategy development should be underpinned by reliable life cycle assessment and carbon footprinting. CIWM will support the development and use of these approaches, and the inclusion of wastes and resources management into future carbon trading schemes.

TIMING

Early Landfill Directive targets are set for 2010 and 2013; Kyoto targets are set between 2008–2012; design, approval and commissioning of new energy from waste plants takes at least 5–10 years.

CIWM believes:
— government policy should promote new infrastructure development for energy recovery from wastes. Even if this is done quickly, the full effect may not be felt until the middle of the next decade;
— government policy should promote use of existing power generation and industrial energy use infrastructure to recover energy from residual waste where this use provides for an efficient use of the energy value of the waste, at least for the medium term to realise the energy supply, climate change and waste management benefits as soon as possible.

INTERPRETATIONS, DEFINITIONS AND STANDARDS

Burning waste derived fuels as a “waste” requires stringent emission controls under the European Waste Incineration Directive (WID), regardless of how highly processed or refined that “waste” is. Under the Large Combustion Plant Directive other fuels such as coal do not have to meet such stringent standards until 2015

Industry and regulators should cooperate to agree protocols and quality criteria for waste derived fuels that when combusted inherently produce less damaging emissions than many coals. Full consideration should be given to using this specification within the UK and Europe as the criteria to accept the resulting fuels as “fully recovered” and not subject to further control as a “waste”, other than the requirement that they should still be burnt in WID compliant plants to avoid a lowering of the presently applicable emission requirements.

Changes to the Waste Framework Directive (WFD) under Article 11 include a system of quality criteria for wastes processed to the degree that they are comparable to virgin raw materials and no longer need to be treated and controlled as wastes. The UK should seize the opportunity of the WFD Review to promote “end-of-waste” quality criteria for high specification waste-derived-fuels under Article 11.

The “best” technology for recovering energy from residual waste will depend on local, technical and financial circumstances. Strategic choices should be made on the back of detailed life cycle, environmental and health impact assessments of all options available.
CIWM therefore urges Government to:

— assess the current and likely future market for waste derived fuels that are still “waste”—especially in high energy use industries where security and diversity of fuel supply could be seen as a commercial advantage;

— promote the energy efficient use of “waste” as a fuel in industry, e.g. through enhanced capital allowances and differential tariffs for renewable energy;

— support Europe-wide standard setting for waste derived fuels and to set the standard high, thus helping to ensure customer confidence in them, and to avoid the possibility of such use resulting in increased polluting emissions;

— urge MEPs, and through them the European Parliament to treat high specification waste-derived-fuels as a priority for examination under Article 11 of the WFD Review.

— explore opportunities through Defra and the Environment Agency to set standards and waste recovery criteria in the UK as an interim position. The objective being to set the standard high—to encourage waste processing to a fuel and its use in an efficient way in industrial and power generation plants or new plants.

— prioritise the re-definition of energy recovery from waste as a true “recovery” rather than “disposal” operation under the Waste Framework Directive, based on energy efficiency criteria, to remove unnecessary barriers to transfrontier shipment of valuable waste derived fuels while they are still classed as “waste”.

— Urge the European Parliament and UK Government to support R&D to increase the proportion of waste derived fuels that can be successfully co-fired with coal.

**Summary**

— Energy recovery from waste in the UK lags behind best practice in other European states.

— It is needed to help reduce our reliance on landfill, our greenhouse gas emissions and reliance on other fuel sources—be they fossil fuels or nuclear.

— Public perception and understanding of energy recovery from waste is poor. Government policy and leadership is needed to support it—the review of national waste strategies alongside the energy review is an ideal opportunity to do this.

— Government policy and support for district heating needs to be strengthened

— Long delivery times for new infrastructure mean Government should encourage use of existing industrial and power generation infrastructure to recover energy from high specification residual waste derived fuels, but ensure that this support only extends to schemes that are able to demonstrate high levels of energy efficiency

— To develop standards for such high specification fuels from residual wastes, it is necessary to include waste-derived-fuels amongst the waste streams to be examined under art. 11 in the revision of the Waste Framework Directive.

— Even where high specification RDF is no longer classified as waste—the standards specified for the burning of wastes in the WID should continue to be applied (as they represent the Best Available Technique in accordance with the IPPC Directive) to avoid a lowering of emission standards

— The need for prompt action should not be used as an excuse to relax overall standards of environmental or health protection.

— Industrial & Commercial and non-biodegradable wastes have a significant energy recovery potential. UK policy is needed to help divert these materials away from landfill as well as biodegradable municipal wastes.

10 November 2006

Chairman of CIWM Thermal Treatment Special Interest Group

Defra/CIWM New Technologies Training Courses

How can we move away from landfill?

What technologies do we need?

How can we manage our resources more effectively?

Where can I learn about waste treatment options?

VRQ Level 3—Principles and Practices of Sustainable Waste Management

HLA Level 4—Waste Treatment Technologies
to ground level so that people like our members, local authorities and the regulators can actually do something practical about minimisation. I suspect your inquiry will find that there is no shortage of ideas that are put forward in both verbal and written evidence. Perhaps one of the big challenges to you is to find something that is not already out there being discussed by Defra, by other departments and by other agencies that are part of actually making this strategy happen. There are lots of ideas, but minimisation is starting behind recycling. Recycling has been relatively easy to bite into. Everyone understands what recycling is. Actually it is very heart-warming that the public want to be part of recycling. It is recognised by most people now as one of the first things that they can do as a personal or as a household contribution to combating climate change or to being more resource efficient. It is brilliant, but actually bringing about minimisation, I think, takes an awful lot more effort. There is some good work that has been done, perhaps we should name-check agencies like Envirowise, some great work being done by NISP, the Environment Agency talked about what they do through their regulatory regimes to encourage waste minimisation, but we do need to see more. We know that through general pressures thorough the landfill tax and the Landfill Directive that actually less is going to landfill, particularly from industry and commerce. Post consumers: rather different. It is probably correct that municipal waste continues to grow, but probably not at the 3% per year figure that tends to get thrown around. We suspect that the real rate of growth of municipal waste has seriously slowed down, it is probably closer to 1% now, and we are aware of some further work coming from Defra to actually have a look at that rate of growth of municipal waste, and their intention will be to at least fight municipal waste back to a position where it is no longer growing. What we then need to do is to turn the picture around and say that we are getting on top of consumer waste and we are successfully driving minimisation. That, I think, is probably the most important work on municipal waste remaining to be done. We also believe that there is a very important role for industry and commerce to play here. There is a very big question as to whether or not waste can be designed out, not just out of products but out of services and out of processes as well. We have heard a lot from the Environment Agency about how they would intend to do that through the businesses that they regulate. CIWM is also targeting manufacturers and service industries. Interestingly, we train more people outside of our sector now than we train inside our sector. We take that as quite a positive fact that businesses around us

Witnesses: Mr Steve Lee, Chief Executive Officer, and Mr Robert Lisney OBE, Chair of CIWM Strategy Special Interest Group, Chartered Institution of Wastes Management (CIWM), gave evidence.

Chairman: Gentlemen, I am sorry you were delayed from when you might have anticipated coming before us, but, as you can see, the enthusiasm of the committee for this subject knows no bounds and they have a lot of points to raise with the Environment Agency. Nonetheless, you are very welcome. Formally, may I welcome the Chartered Institution of Wastes Management and Steve Lee, their Chief Executive Officer, who I think was previously known to us in his incarnation with the Environment Agency—he is no stranger to the committee and we are delighted to see you here again—and you are supported by Robert Lisney, who is the Chair of the Institution’s Strategy Special Interest Group. It sounds magnificent. Perhaps we had better find out about that. Before I get too carried away, Anne McIntosh is going to start off our questioning.

Q76 Miss McIntosh: Do you think there is too much emphasis on household waste at present, given the fact it is only a low percentage of waste overall?

Mr Lee: The easy answer to that is, yes. We started off with a very heavy concentration on municipal waste, for very good reasons, and we heard an explanation of that in the evidence from the Environment Agency. We have got stiff measures, stiff targets to meet through European directives. Local authorities, I guess because of the role that they play, make themselves a relatively easy target for targets. We were actually quite pleased with the Strategy as it was produced in 2007. It was only a strategy, it is not a plan, and in chapter eight there are something like 94 individual actions mapped out there for pieces of work that are promised to be delivered by Defra and other agencies. That is an enormous amount of work and there are some brave promises in there in terms of the time that they are going to be delivered, but it is only a strategy, and through doing that work under the Strategy’s plan, we are quite confident that the focus of attention is going to come specifically off municipal waste and is going to have a much broader focus on all materials, and I think you will find that is a running theme through anything that CIWM has to say today. We want to look at wastes as materials; we want to look at it in the round. The fact that the concentration is coming off just municipal and looking at resources in the round we applauded.

Q77 Miss McIntosh: Moving on from there, you probably would agree that there is not enough focus on minimisation rather than recycling and reuse in the Waste Strategy?

Mr Lee: Yes. On minimisation, “focus” is an interesting word. There is a lot of focus on minimisation at the moment, but we need to turn that focus into action. It needs to be brought down
now are recognising that this is what they need to do, and we have got an entry level award, called a Waste Awareness Certificate, that is actually aimed at people who have got hands-on responsibility for materials in businesses, and we think that somewhere during the course of 2009 we will issue our ten thousandth Waste Awareness Certificate. Obviously, we aspire to a lot more, but we want to see businesses materials, resource, energy and waste aware because they have to be, particularly SMEs.

Q78 Miss McIntosh: Surely the worst offenders are the people that pack the stuff and send them to the supermarket. One of the good guys, Cadbury’s, trying to deliver Easter eggs without the packaging, does pose problems because they have got to make sure that they are not smashed before they reach the supermarket. It does drive people to distraction that when you get home, if you do shop in a supermarket, before you have put the stuff away you have emptied a whole load of rubbish. Are you driving that sort of rubbish down?

Mr Lee: I do not think it is the business of CIWM to drive down packaging, but we use our body of knowledge to influence wherever we can. There are examples of excessive packaging. There is no doubt about it. We can see them when we walk around the supermarkets ourselves. There are also very many good players out there. You have name-checked one; I could name-check a dozen others who are using their product design to reduce the weight or to simplify the materials that they are using for their packaging. Actually packaging does a very valuable job in terms of protecting the product that is inside it, making sure that there is no loss from the point of production through to the consumer, and in very many cases, of course, it dramatically extends the shelf life of the product, stopping horrendous wastage. I think it is very easy to see packaging as evil, the root of all problems with resource wastage. I think it is very easy to see packaging as evil, the root of all problems with resource wastage. I think it is very easy to see packaging as evil, the root of all problems with resource wastage. I think it is very easy to see packaging as evil, the root of all problems with resource wastage.

Q79 Chairman: CIWM will be selling Easter bars next year as a fund raiser!

Mr Lee: I wish we could.

Q80 Miss McIntosh: Can I challenge you on what you just said in reply to my question? I believe that we are all going to have to pay a higher council tax because of the land fill tax going up. So why should I, as the end user, pay? Why should it not be the producer’s responsibility, which we were told by the Environment Agency it is?

Mr Lee: CIWM definitely believes in the strength of producer responsibility and we think that the targets of producer responsibility will be driven upwards, and it will be a good thing too because that will mean that obligated businesses and compliance groupings will be driven much further towards local authorities to make sure that they can pull their share of materials back out of the waste stream. I believe in producer responsibility. I am with you. When we hear further evidence from Waste and Resource Action Programme (WRAP) in a minute, I am sure they are going to tell us about the Courtauld Agreement and I am equally sure they are going to tell us about good work that has been done by retailers and manufacturers to get on top of the amount of packaging that they pass on to us, the consumer. I think it is a long-term initiative, I think it is moving in the right direction, but that does not excuse examples of excess packaging that we can see around us.

Q81 Miss McIntosh: When you mentioned action in response to a question earlier—you said there is too much talk, not enough action—what would you like to see using waste as a resource? What action plan would you like to see?

Mr Lisney: In that case, I will pass on to Mr Lisney.

Mr Lisney: The issue about resources is that instead of waste we have now got two outcomes which we never used to have or never used to consider. One is materials and one is energy, and they need to be seen together, because when you start to strategically plan which route things are going to go down, you have got to look at them together and you have got to get the balance right. Both now actually leave a substantial income. Those two issues have changed in the last 10 years certainly and we have now got an economic equation to balance and that economic equation is really important. I think there are supply chain issues. So both from the producers who have got a stake in this, and they have producer responsibility notes and a financial system right the way through from landfill tax, which is another encouragement, all of those different mechanisms now have to be taken into account. So energy from waste is one of those economic balancing acts really. There are obviously incentives for doing that from government departments as well. So we have really got a totally different mindset, and I am not sure the mindset is throughout the land yet.

Q82 Dan Rogerson: I wanted to come down the hierarchy a bit. We have talked about minimisation and recycling and we have talked about waste disposal already this afternoon. Reuse, particularly in the context of the sort of thing that Anne is talking about, your household packaging: packaging provides a useful function, as you say, compared to
the developing world where loads of food is wasted because it cannot get to consumers. That is great, but could we be doing a lot more and does the Strategy say enough about reuse schemes? I am always told, “We used to do it but it will not work any more.” A lot of other countries in Europe do it and they do it quite well, so what could we be doing and does the Waste Strategy say enough about reuse?

**Mr Lee:** I think the Strategy is relatively silent on reuse. That is not to say that, again, it is not a group of issues that is not recognised by Defra being discussed by them with their fellow government departments, the agencies around them and through the Strategy Stakeholder Group, which I have the opportunity to sit on. There is no doubt about it, the third sector has got a great role to play here. They have got a fabulous track record in reuse of everything from furniture through to electronic articles—washing machines down to and including radios, I suspect. That tends to be the easy end of the spectrum. I would like to draw into the bracket of reuse, if you like, the work that has been done by NISP. NISP has done a great job in bringing businesses together so that one business’s waste is another business’s feedback. Whether we would need NISP in 20/25 years’ time or whether their job is to kick-start that understanding amongst businesses, I am less convinced, but I am still convinced that we are in that start-up period and I would like NISP to be out there doing that job. I had a very interesting discussion with somebody from an economically developing nation and he tasked me with the question: “Do you think an organisation like NISP would be needed in a country like mine?” I had to think about that for a while and I think the answer was, no, NISP would not be needed in a country like his, simply because there is such a high price, a high value, put on valuable materials. Fortunately for them in their situation, in inverted price, a high value, put on valuable materials. That tends to be the easy end of the spectrum. I would like to draw into the bracket of reuse, if you like, the work that has been done by NISP. NISP has done a great job in bringing businesses together so that one business’s waste is another business’s feedback. Whether we would need NISP in 20/25 years’ time or whether their job is to kick-start that understanding amongst businesses, I am less convinced, but I am still convinced that we are in that start-up period and I would like NISP to be out there doing that job. I had a very interesting discussion with somebody from an economically developing nation and he tasked me with the question: “Do you think an organisation like NISP would be needed in a country like mine?”

**Mr Lisney:** I think the big area is in the commercial wastes and I wish NISP well in what they are doing.

**Mr Lee:** I think the issue at the moment is a cost, energy and logistics issue as to whether the energy and overall environmental carbon balance of doing something like that is right. I guess at the moment it is not, because if it was and it was economic then it would be done. I think the other area is that we do not have the systems infrastructure for, say, refillable bottles, and so on, yet. I know there is a lot of talk and there are potential trials coming from supermarkets, I think, and let us see how we as the UK respond to those. It is an agenda that is out there, but it is not an agenda which actually has a lot of people batting for it at the moment.

**Mr Lee:** Can I draw your attention to the Irn-Bru example in Scotland. They do use a deposit and refund on refillable glass bottles. It is often pointed to as a success story. I would like to get some further information from Irn-Bru. I would like very much to know about their system. It is only for one of their products. They sell Irn-Bru in very many different types of packaging. This is only for their 750 ml glass bottles, so it is only a part of their business. I have just come from a discussion with another major soft drinks manufacturer purveyor and I have asked them why they are also not engaging in deposit and refund. I think their answer was pretty clear. They have done a very extensive study with the Carbon Trust looking at the energy consumed by their products and services right from cradle to grave and through their closed loop recycling ambitions. Their assessment at this stage is that, by using deposit and refund heavy glass containers, they would consume a lot more energy, not just in the transport of them but in the refilling and washing of them as well. They think they have more to gain by closed loop recycling on much lighter-weight materials like PET and aluminium. So at least these organisations are looking at it, but I keep an open mind, as I think we all ought to, on the future of things like deposit and refund.

**Q84 Paddy Tipping:** You are a professional body with more than 7,000 members, and you are in favour of alternate weekly collections, you are in favour of variable charging. Why can you not get the message across?

**Mr Lee:** Yes, we are in favour of these things, but we do not say that these are the only solutions either. About half of local authorities have not gone down the so-called alternate weekly collection route, and there may be many local authorities who do not seize on so-called incentive charging either. We say that these are systems that have been proven to work well in some instances and we believe that they will work well in some instances right across the United Kingdom. We stand for identifying and spreading...
best practice. Fortunately, we do not live in British standard towns and villages and cities; so the solutions in different parts of the country are fit for local circumstances. Why cannot we get the message across? Actually, I think there are a vast number of people who are quite comfortable with systems like alternate weekly collection. We do not know yet whether there are vast numbers of people who would be comfortable with things like incentive charges. That is why CIWM says we need to have pilot schemes. There are many different variants of how this could be put work and, frankly, until we have a go at some of these and monitor them very carefully, see what works under which circumstances and what does not, we are not doing much more than guessing, which is not a very good standpoint for a professional institution. We have always supported the idea of pilots. Getting the message across takes us to the big communications thing and CIWM has only really criticised the Waste Strategy for one thing, and that is for not having a complementary communications strategy to go with it. We have said that before it was produced, we have said it ever since it has been produced and we are working hard with organisations around us to at least try and co-ordinate communications to make sure that we are using common terms, common language, that where we have got common ground we can say, “We all believe this is right. You might not like the answer, but we think this is correct.” You will have seen in the evidence that CIWM has put forward to your inquiry that we took care to link arms with the Institute of Civil Engineers and the Institute of Mechanical Engineers because we found great common ground. One of the things that I very much like about the Strategy and the way that resource efficiency is starting to move in the UK is that the artificial boundaries around parts of our business are starting to fizzle and disappear; so we are now starting to find common ground with the renewable energy people, we are finding common ground with the construction materials people and we find that we can work very closely with ICE—we are not treading on each other’s toes—and we feel that the message is amplified. We would like Defra, the Environment Agency, WRAP, et cetera, to work together on a common communication strategy, because there are 50 million people to get this message across to at work and at home and it is what they individually do that makes the difference.

Q86 Paddy Tipping: Tell me briefly what has happened to these pilots? What do you know about them?

Mr Lee: What I know about them is that we are waiting for the Climate Change Bill because, as you know, it is in there. The consultation that was carried out by Defra gave local authorities a certain fixed period between when the Bill is finally given Royal Assent and when they should come forward with their proposals for a pilot scheme. I think Defra have put out very carefully thought through guidance that actually says there is a very broad range of options that the local authorities could come forward with here. We are not going to tell you what to come forward with and what not to come forward with. You know the time limit. As soon as we give you the green flag, you know that you need to come forward and we will choose the five best spread of options that we think have come forward from you, and I really look forward to finding out what that spread is.

Q87 Paddy Tipping: Do you think there will he five volunteers?

Mr Lee: It is not for me to say. I no longer work for a local authority and I am not an elected member. If I was to guess, yes, I think some will come forward. Will more than five come forward? Yes, just about. I was to guess, yes, I think some will come forward. Will more than five come forward? Yes, just about. I do not think dozens will come forward, but I think some will, and I think they will need a great deal of support from Defra, from organisations like CIWM and from other organisations, because they will be under intense scrutiny during the period of those pilots. But we need that understanding. We should not be basing our future strategies on guesswork.

Q88 Dr Strang: I wonder if you would be kind enough to respond to one or two of the points you heard me put to the Environment Agency. Do you think we should try to get more effective joined up responsibility between the municipal side and the non-municipal side, do you think, for example, we should require local authorities to introduce integrated waste management schemes for all sectors and do you think there are some disincentives in the current arrangements, such as the Landfill Tax Allowance Scheme, encouraging local authorities just to just stick on traditional municipal waste?

Mr Lisney: Local authorities do have a responsibility for both commercial, industrial and municipal waste but, from a planning point of view, they have to make plans for the disposal or
processing of all materials in their areas. I think you heard the Environment Agency say there is also a regional level of this sort of planning as well. It is only when it comes down to the action, the sharp end, when local authorities have no direct impact on the whole of the commercial industrial market economy. They do collect some trade waste, but it is a relatively small amount compared with the vast amount overall, and there have been some disincentives in the way the Landfill Tax Allowance Trading Scheme has operated, which again was explained by the Environment Agency. I think the big issue for local authorities in working together is that now we have moved away from getting rid of waste, from a linear approach to a closed loop approach, materials like this bottle here does not know whether it is household or commercial, yet it has got to go back now into the same process. So getting some integration and cost-effective processing facilities whereby materials in both sectors can go through processing at the same time is something which has not been in, let us say, the corporate remit of local authorities, it has generally been in the remit of the local authorities within the waste environment area, whereas if you are looking at a much broader issue, this is now much more of a corporate community strategy type agenda for local authorities. I do not think it has yet been presented to them in that way. So I think the agenda for local authorities to become much more involved in the commercial and municipal integration is very much to be encouraged, but I think they would need to be shown how to do it by not leaving it entirely to the current system for waste management, if you like, in the local sector because it is a big enough job just dealing with municipal waste.

Q89 Dr Strang: But you think it is achievable?  
Mr Lisney: I think it is achievable, yes.

Q90 Paddy Tipping: Again, in your interesting evidence you said that we need to open one new waste disposal plant a week. You heard the earlier discussion with the Environment Agency. What are the barriers? What needs to be done to unlock this?  
Mr Lisney: There are actually very few barriers, and it is interesting to say that because obviously we have not got a lot of infrastructure delivered in due time, but the biggest impediment is that we do not do the strategic planning right at the beginning. We do not actually operate as smart clients. If we did that, we would pick up the whole thing and plan it out. We would engage with communities in a sensible way, share and discuss what is needed so there is greater understanding of this whole looped process and what is processing, what is not waste, and so on. One would be able to talk about the environmental impact and also one would be able to look at the issue of resource as a market issue, an economic issue, from the point of view of the material to be recovered and sold and energy to be covered and sold. I think once we move to an agenda which is “a good” rather than “a bad”—waste is seen to be a bad and, therefore, has negative pejorative issues—to one where in the future that is the way our society is going to work, then I think investing in the front end, right at the beginning, means that we would get greater acceptance of facilities. We have already got the landfill tax escalating, which I think will mean that we are nearly at the tipping point for merchant facilities. So I think there are two roles. We still will not get a lot of things delivered unless our collective community has the right understanding of what the agenda is.

Q91 Paddy Tipping: At what level should that waste strategy be pitched?  
Mr Lisney: Steve mentioned about the work we have been doing in conjunction with the Institution of Civil Engineers and the Institution of Mechanical Engineers. In fact we have produced a document, which I can leave or send to the committee, on the case for a resource management strategy and how to deliver, and what we have said really is that this is such a corporate delivery it really needs an almost inter-government departmental team below the various departments that ensure that the Communities and Local Government Department, BERR and Defra and I think also OGC actually have a leadership team, because each of these areas are now not in silos but they are very much cross-cutting, it is very much a cross-cutting agenda, this one now, because we have an energy department now which has just been established in climate change. I think that is important. I might come back to that because we have another view on that. We have got a number of things, but there is not anybody leading below the level of the government departments, and we feel very strongly that, putting people together from both the departments and the sectors, there can be a lot of ambassadors really and, once you get ambassadors throughout the land, that helps education of key decision-makers in the public and private sector.

Mr Lee: Can I draw your attention to the summary of our evidence. We tried to provide a nice neat wrapping together of the ideas, bringing in the priority points of both ICE and IMechE as well. We identified four things that we have got to get right to be able to deliver the strategy from the point of view of the professionals who are actually trying to make that happen. First was data and skills. We heard the Environment Agency saying, actually, that they did not feel there was very much more data needed. However, for the people who have to make the plans and make it happen, we are a data hungry industry and we need to up our game in terms of understanding resource flows and we need to understand that not just on an individual town level or even an individual local authority level.

Q92 Chairman: Can I interrupt you here, because one of the things that struck me looking at the data is that some of it seems to be very out of date.  
Mr Lee: Of course it is.

Q93 Chairman: It takes an awfully long time to come through, and yet when we went to visit, if you like, waste on the ground, we are told that all kinds of
returns are going on a weekly, monthly basis to the Environment Agency and yet when you look at the overview data some of it is four years out of date. **Mr Lee:** I can tell you that most of the industrial and commercial waste data stems from 2002–03.

**Q94 Chairman:** Why is it so out of date? **Mr Lee:** It is out of date because that is the last time the Environment Agency embarked on an industrial and commercial waste survey right across England and Wales. It was a national survey.

**Q95 Chairman:** Am I not right, and again, sorry to interrupt, but the impression I got was that people in that business were making weekly returns of what they were doing? **Mr Lee:** Yes, indeed they do.

**Q96 Chairman:** We should ask the Environment Agency, about it. Where does all this information end up? **Mr Lee:** The strength and the weakness here with this data system that you talk about is the duty of care and the transfer note system that underpins it. Waste from very many businesses gets very variously described. I have seen an awful lot of “general waste”. I have seen skips full of garage waste and materials from offices, and it does not tell you whether it is paper or cardboard or glass and plastic mixed in. You will find that under the duty of care, which is supposed to be self-policing, not policed by the Environment Agency, not policed by the local authorities, the description of waste is nowhere near as strong as it needs to be. The duty of care is, if you like, up on the ramps at the minute; it is being discussed by Defra and a very broad range of stakeholders for reintroduction probably at about October 2009. We hope that the duty of care will be much stronger, we hope that people will be coding their wastes in very standard ways and we hope that the data that comes out of the duty of care will help people like Bob and me and members of the Chartered Institution to make decisions. At the moment it does nothing much more than its first intention, which was to make sure that the next person in the chain of responsibility for that waste, in general, knows what it is, knows how it is contained and they know how to prevent it causing harm to people or the environment. As a data stream, I have to say, it is not very strong at all. **Mr Lisney:** May I add, Chairman, that the data has never needed to be used before for business reasons, for economic reasons, whereas now, because of the lack of infrastructure, we need to use it in order to avoid risk. We need to know where the flow of materials is coming from in order to invest in infrastructure. There is a project, the Environment Agency are putting a lot of money into developing electronic duty of care at the moment, and in the south east region, in conjunction with WRAP and the South East Regional Development Agency—we are currently acting as pro bono director—we are launching what is called a pathway to zero waste programme with all the various actors in that area looking at how to deliver to infrastructure for a closed loop system and to avoid waste at all. One of the key issues for that is data right at the beginning, because you need to influence 74 local authorities, the whole of the regional technical advisory and planning system, and so on, and what the agency will be doing, putting a lot of resources and piloting and trying it out there, is this new system, and that will provide data on a monthly basis which can be much more effective in terms of taking decisions because you will be able to graphically look at where the flows are. We have not had that before.

**Q97 David Lepper:** Where will that data be available? **Mr Lisney:** That will be data available online. It will be available for everybody to see.

**Q98 David Lepper:** From SEEDA? **Mr Lisney:** The data will be the Environment Agency’s data.

**Q99 Lynne Jones:** You heard the discussion earlier about energy from waste and the relatively inefficient processes that we have. I notice that you are neutral on the types of technology, saying that no one type of technology should be promoted above another. I wonder why that is when that sort of policy just means that we carry on developing incinerators because people are used to them rather than encouraging advanced conversion technologies that are much more efficient. Would you care to comment on whether there are elements in the Waste Strategy which could be improved so that we are much more effective in the type of energy from waste plants that we generate? **Mr Lee:** We did not think that it was the job of a national strategy to dictate which is the perfect technology. I said earlier on that, fortunately, in the UK we tend not to live in standard communities; we do not have standard towns. There are very different circumstances, depending on whether you live in rural Cumbria or whether you live in the heart of Leicester. They are very different. We believe that the organisations that are in the best position to understand the local needs are the local authorities. Having said that, again, we see that there is great scope.

**Q100 Lynne Jones:** I am not just talking about the scale of the operation, but if you have got a technology that is much more effective in the conversion of waste to energy, then surely that is not affected by where the location is. It should be the scale of the operation that is affected. Certainly advanced technologies are much more efficient. I cannot understand why you are saying you are neutral on what should be promoted. Surely there should be best practice guidance. **Mr Lee:** I think the real trigger for efficiency in terms of energy recovery from residues is heat. It is relatively easy to generate electricity, relatively easy to hook into the National Grid and to supply it and to make money from it. It is much less so for heat. I think in the discussion centered around the Environment Agency’s evidence it came out that
probably twice as much energy comes out of waste as usable heat as is likely to come out as generated electricity. Finding a reliable market for heat, I think, is probably going to be one of the keys to the future. It sounds easy when you say it quickly, but you need to find a customer who has got a thirst for heat 365 days a year. I think that can be done, and we are starting to find industries that have got that appetite for heat, and local waste management solutions that can supply heat and energy locally, I think, will be very successful, but at the moment I think it is much easier to find a market for electricity than it is for heat.

Mr Lisney: There has been a large number of new technologies that have been proven in the relatively last few years, but they are proven in terms of their certain scale, they are proven in terms of efficiencies, but they are not necessarily proven in the UK or at the widespread scale, as yet. I think that is one of the issues.

Q101 Lynne Jones: We know best practice from other countries. We have seen examples in Germany, for example, on a committee visit. Why are we not promoting what is good practice in other countries?

Mr Lisney: I think the Institution does do that very much, but there is a difference between promoting good practice from anywhere in the world that is better than the UK at the moment. The issue is that people have got to receive that message and then they have got to procure those technologies, and some of those technologies are not necessarily offered in the way we procure things, certainly in the municipal sector at the moment.

Q102 Lynne Jones: What do you mean by “not offered”?

Mr Lisney: If you actually go out to tender for energy recovery services, let us say, or municipal service, the companies that might respond to that offer much, but there is a difference. I think the Institution does do that very much, but there is a difference between promoting good practice from anywhere in the world that is better than the UK at the moment. The issue is that people have got to receive that message and then they have got to procure those technologies, and some of those technologies are not necessarily offered in the way we procure things, certainly in the municipal sector at the moment.

Q103 Lynne Jones: Is not that self-defeating, because until there is support for those technologies they are going to continue to be undeveloped and we are going to continue to be using the conventional methods?

Mr Lisney: Yes, the Defra New Technology Programme was set up to prove that these technologies can be built, delivered and effective in the UK. Those technologies are just about now being built and coming on stream, so it will still be another year or two before we will be able to prove that. In the meantime, we also have lots of projects in the Municipal sector being procured at the moment which will be, let us say, bankable and cost-efficient technologies. They are all very good technologies nevertheless, but the issues are around—we talk about scale and other things. The other dimension that Steve mentioned about heat: it is generally something that has not been in contracts at the moment in the municipal sector because it adds another dimension of complexity.

Q104 Lynne Jones: Is this something that should be part of the Government’s Fuel Poverty Strategy?

Mr Lisney: I think one of the issues is that there is a bridge needed to be made between effectively the energy policies and this particular opportunity to provide energy. I think the Government’s energy policy came out just about the same time as the Waste Strategy and I think they were linked in some areas, but this could have been a really strong link.

Q105 Lynne Jones: I worked out that the waste energy that goes in heat is the equivalent of 800gw, which is a power station, is it not?

Mr Lisney: Yes, indeed.

Q106 Lynne Jones: It is unbelievable that we should do nothing and just accept that this happens.

Mr Lee: It is absolutely vital that we get on top of this heat market. I believe that we will. I know that Defra and people that we talk to in the Scottish Environment Protection Agency are actively searching their areas trying to find where those reliable heat markets are, and I look forward to that happening. But I would like to echo the point that Bob Lisney has just made. We in the waste management industry have started to realise in maybe only the last five to 10 years that we are part of a much bigger picture. It is not about waste disposal any more, it is about resource management, and we see ourselves as being part of the link between climate change, energy policy, resource efficiency and even social issues, and it is a fantastic step forwards, which is why we have now got the opportunity of starting to talk about waste as resources, planning for and making maximum use of those, as Bob has just described. CIWM would still call for much closer links between energy policy and waste policy. Just as a throw away figure, what we are landfilling at the moment from municipal sources is probably about the energy equivalent of five million tonnes of coal. The energy equivalent of what we are landfilling from industrial and commercial sources is probably about another five million tonnes coal equivalent. That is 10 million tonnes coal equivalent being landfilled. That does not pass the blush test if the lights start to go out. As a nation we owe to it ourselves to minimise waste. We owe to it ourselves literally to recycle our socks off, but once we have done that, equally, we owe it to ourselves to make sure that we recover the energy value from the real residues, and we have been relatively slow in coming forwards in that respect in this country.

Q107 Lynne Jones: Just a quick one on composting. Are there any practical steps that Defra or perhaps the Environment Agency need to take to ensure that the growth in composting does not compromise soil quality or animal health?
Mr Lee: Yes, you make a very good point. We think the biological treatment of appropriate waste has got a great future in this country. Anaerobic digestion, composting, the key to it all is quality: quality in terms of the inputs to the process, the management of the process itself and, even more importantly, management of the quality of the output from these biological processes. So long as the quality is good, the future is bright. Unfortunately, if we are found guilty of adding questionable materials to the soil, the soil will not forgive us and neither will the customers who take it. So I think quality has to be the absolute by-word in biological treatment. There is good work being done by organisations like WRAP and the Environment Agency. You will be aware already that they are putting a lot of effort into an end of waste protocol for anaerobic digestate—the stuff that is left behind after you have anaerobically digested things like food waste. We need good science on how to produce high quality biological treatment outputs. We need to understand how we can prove that we have got those high quality outputs, how to assay them, how to test them, how to report it and, equally, we need to be able to prove that we have added the right waste derived materials to the right soils at the right rate. This should not just be an excuse for unloading treated biological materials willy-nilly. We need to be able to prove that we have done it for the good of the soil. When we have done all of that, we have got an even bigger job in front of us, and that is tackling the attitudinal issues around waste derived materials going into soil; because even if we have the science to prove that the input is good, the process is good, the output is good and it is being applied in the right way to the right soils, there is still a knee-jerk reaction in many places that food that is developed from farms that have received waste derived materials is not what the customer will want. There should be no good reason why that should be the case. So I think, once we have got the science behind us, we have to work on the communications issue, and if there is one common theme running through almost every question that you have asked us, CIWM, this afternoon it is that we have a huge communications job in front of us.

Q108 Chairman: Gentlemen. Thank you very much. Just before you go, there is one thing that I would be grateful if you would reflect on. You have highlighted to us some very important areas for future work if the Strategy is to deliver its potential, and you have just closed by highlighting one very important issue that weaves its way through the whole picture, but you also said at the beginning that there was almost a plethora of initiatives, and one of the key issues was actually turning those initiatives into reality. In the light of our questioning and your own thoughts, it would be very helpful if you might just submit to us a little bit more supplementary evidence to develop where you see some particularly good ideas perhaps not being implemented at the speed or with the importance that you think they should have because there is a resource problem. It would be helpful to do a little winnowing out for us within that area. Thank you very much indeed for your contribution. It is much appreciated. We look forward to those further bits of information.

Mr Lee: Thank you for the opportunity.

Supplementary memorandum submitted by the Chartered Institution of Wastes Management (Waste 22a)

CIWM would like to thank the Committee for giving the Institution the opportunity to submit oral evidence towards its Inquiry and in allowing the submission of further information.

Regarding “resources” needed to make the National Waste Strategy work, there are two high level issues. The first relates to skills and people. The resource and waste management sector needs to show that it can operate a “value-added” service. This will include resource efficiency/management advice to customers and moving towards planning for and managing wastes as a strategic resource. This sector is hungry for skills. CIWM has supported proposals for a National Skills Academy and will continue to drive for skills and professionalism across the sector.

Secondly it is clear that the ambitious programme set in the 2007 Strategy review will have to be delivered through Government departments and agencies with the right resources to either undertake or commission the appropriate work. In short this means money.

CIWM recognises pressures on Government finances but believes that adequate funding of work to support and develop the waste and resources strategy should be available through the landfill tax if necessary. CIWM believes it is time for a thorough and transparent review of the collection, likely value of, and use of landfill tax monies. The purpose of the tax is to help direct materials away from landfill—preferably helping to put waste back to work or otherwise regain value from it. Compared to the rigorous assessment of the tax on its introduction, CIWM believes a lack of transparency has developed around the final destination and distribution of the revenue, despite the fact that the tax has increased significantly since its introduction.

Alongside this assessment CIWM believes that everybody—Government, the resources/waste sector, local Government and waste producing businesses—needs a longer term plan for the future of the landfill tax. There is a clear plan to 2010–11 when the tax will reach £48 per tonne for “active” waste. There is a need for a 10 year plan for landfill tax. CIWM recognises this as a tax plan bigger than a single government, but
such is the scale and importance of managing resources wisely. It has been shown that where businesses can anticipate future costs, they can and will make better plans in advance of those costs being imposed. Anticipation of the landfill tax is as effective as the tax itself.

In addressing the question posed at the end of the evidence session: “What good ideas within the Strategy have yet to be put into practice, or where their implementation could be speeded up or improved” CIWM has submitted additional comment under the priority activities proposed in the 2007 review table 8.7 High-level Implementation Plan as follows:

— Action 1 Increase the standard rate of landfill tax by £8 per year from 2008 to at least 2010.

As above, CIWM believes there is a lack of transparency on how this money is used. A longer term programme is required, extending beyond the term of one Government. A 10 year plan of landfill tax would enable local authorities and the waste industry to take this on board and plan its future resource management.

— Action 9 Establish domestic waste protocols to determine when certain categories of waste cease to be waste.

Defra have given confirmation that the existing programme of work is secured and CIWM believes that the current protocols are the right priorities and should continue to complement work carried out by SEPA. CIWM believes there should be early confirmation about Government’s financial support for the Environment Agency and WRAP to secure and expand the programme as it is vital within the UK as well as feeding into the “End of Waste” EU Waste Framework discussion.

— Action 11 Review controls on handling, transfer and transport of waste including consultation.

Early enhancement of the waste “Duty of Care” will help data generation and prevent waste crime. The long gestation period of this initiative is an example of good and important work hampered by a lack of or turnover in skills and specialists in and around Defra.

— Action 12 Develop and implement an action plan to tackle illegal waste activity.

CIWM feels that the deployment of skilled staff by local authorities to help prevent and enforce against waste crime is held back by a lack of resources to maintain training. Local authorities are not investing in Defra/EA (now ENCAMS/CIWM) Fly-capture training.

— Action 19 Implement pre-treatment requirement for non-hazardous waste.

CIWM feels that a light touch implementation is holding back development of treatment technology and infrastructure. All policy implementations must be backed by Defra-led sustained and co-ordinated communications, and by regulators in the Environment Agency and local authorities with the skills and resources to enforce properly.

— Action 22 Consider the introduction of further restrictions on the landfilling of biodegradable wastes and recyclable materials.

— Action 87 Set targets for reducing commercial and industrial waste landfilled.

This is key to reducing industrial and commercial waste going to landfill and in driving the management of resources regardless of their origin. CIWM would like to see Defra fully resourced to pursue this policy initiative—using consultants if necessary and fully co-ordinating data research and development modelling etc of impacts with Welsh Assembly Government and SEPA/Scottish Government.

— Action 34 Develop evidence base and methodologies to identify products with the most significant environmental impacts over their entire life cycle.

— Action 74 Consider reflecting impacts from wider embedded emissions, including from waste, in carbon dioxide calculator.

CIWM believes that LCA is the right way to go and CIWM fully supports the approach as set out in the July 2008 consultation Progress Report on Sustainable Products and Materials. CIWM wants to see Defra, WRAP and the Environment Agency funded to undertake research and development and life cycle assessment tools and skills developed to put these concepts into action.

— Action 41 Establish a statutory producer responsibility system for managing waste batteries; transpose EU Batteries and Accumulators Directive.

Implementation of the EU directive and producer responsibility schemes is already delayed and Defra must be fully supported by adequately funding WRAP. As with ozone depleting substances regulation, delayed implementation often frustrates development of domestic (UK) technologies and expertise in a likely high growth international market of the future. In general, the Inquiry should clarify with WRAP and the Environment Agency which actions under Chapter 8 of the Strategy are postponed or delayed through lack of resources.

— Action 68 Continue to increase awareness of consumer impacts on the environment of resource consumption and waste management…
CIWM would like to see a more comprehensive communications plan to complement the Waste Strategy. This plan should identify priorities in terms of awareness and outcomes or actions by other stakeholders and resources required to plan, co-ordinate, etc and deliver a sustained communications programme to change behaviours.

- Action 70 Launch zero waste places initiative to incentivise excellence in sustainable waste management.

Defra has recently announced the launch of six zero waste places projects. Whilst CIWM applauds this work, it is one year later than suggested in the Strategy Action Plan. Defra should confirm what resources it requires, directly or indirectly, to drive its own action plan for the Strategy.

- Action 90 Publish second three-year Research and Development Strategy.
- Action 92 Further develop evidence base to underpin policy development and evaluation.

CIWM is happy to collaborate with projects under this programme wherever possible and sees research and development as an essential input to evidence based policy development. CIWM notes within the Waste and Resources Evidence Strategy for England 2007 an allocation of £12M over three years and would be concerned to see a reduction of such resources below that level.

- Action 93 Develop regular and robust waste data to underpin national targets, indicators and analysis of impacts of the Strategy.

CIWM has repeatedly identified (including in its written evidence to this Committee) collection analysis and reporting/availability of waste/resources data and information as fundamental to developing more sustainable resources management. Ideally this needs to embrace resources flows on a regional or sub-regional basis and Government funding or resource flow programmes should be made a priority using landfill tax based monies.

In closing the Institution would like to reiterate that cash needs to be directed for delivery. Not at Government level as with PFI credits but to enable regional level teams to facilitate delivery based on the type of skills developed by NISP and many other NGOs. Perhaps the Pathway to Zero waste pilot starting in the South East (as mentioned in our oral evidence) is the model, where based on the work of the Environment Agency/WRAP and taking the policies from Defra and BERR, the RDA is taking the lead to facilitate supply chain partnerships to ensure delivery and matching private and public sector together, to derive the full benefits of spatial delivery/logistics as well as market based infrastructure solutions.

Chartered Institution of Wastes Management

November 2008

Memorandum submitted by WRAP (the Waste & Resources Action Programme) (Waste 50)

INTRODUCTION

1. WRAP (the Waste & Resources Action Programme) is a-not-for profit UK company providing recycling and resource efficiency programmes for Defra, the Scottish Executive, the Welsh Assembly and the Northern Ireland Assembly. The organisation was formed in 2000 to implement a number of the actions set out in the Government White Paper Waste Strategy 2000.

2. WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials, and to recycle more things more often. This helps to divert waste from landfill, reduce carbon emissions and improve our environment.

3. WRAP operates at the top end of the waste hierarchy, which gives priority to reducing waste at source, reusing products and recycling materials. We have published research demonstrating the environmental advantages of recycling over alternative disposal based options. This research, supplemented by more recent data, shows that the UK’s current recycling efforts are saving 18 million tonnes of CO2 equivalent greenhouse gases, compared with landfilling or incinerating the same materials. This equates to taking 5 million cars off UK roads.

4. Our recently published Annual Review for 2006–07 reported on our achievements over the past year, and since we were set up. Our main achievements include:

   — 5.8 million tonnes of extra annual recycling capacity has been developed across the UK;
   — £182 million has been invested in the recycling sector from commercial sources; and
   — 64% of people in England now describe themselves as committed recyclers, up from 45% in 2004, when we began the Recycle Now behaviour change campaign.

5. Since publishing this review last month, WRAP has also calculated the expected impact of all the recycling infrastructure we have funded since starting work in 2001. We have calculated that the whole-life impact of these projects, funded between 2001 and 2006, will be to divert 86.8 million tonnes of waste from landfill, and to save 12.5 million tonnes of carbon dioxide equivalent greenhouse gases. This will make a significant contribution to the United Kingdom’s need to reduce our use of landfill, and to meet our climate obligations under the Kyoto Protocol.

6. Most of our programmes are directly relevant to the policies and targets set out in Defra’s Waste Strategy for England 2007 (WS07). We therefore welcome the opportunity to contribute to this enquiry. Given the subject of the inquiry, all of the material below relates to our activities in England only, unless otherwise stated.

**Executive Summary**

7. Many of WRAP’s programmes will help the Government to implement the policies set out in Waste Strategy for England 2007. Details are set out below. We look forward to working with Defra and other stakeholders to help implement the policies and measures set out in the Waste Strategy.

8. WRAP is currently in discussion with Defra about budgets for the CSR07 period. It is clear that budgets will be tight, and this is naturally a concern, given the ambitious nature of the targets in the Waste Strategy. If resources are constrained, it will be vital that expenditure is aligned closely with the priorities in the Strategy. We discuss this in more detail in paragraphs 12–15 below.

**Introduction**

9. The Committee has highlighted nine areas of particular interest, and our memorandum comments on each of them in turn.

*How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management*

10. WRAP has an important role to play in the implementation of Waste Strategy for England 2007 (WS07). We currently run programmes to develop markets for five of the seven “priority materials” identified by Defra in the Strategy—paper & card, plastics, glass, food & garden wastes, and wood. We are also running programmes that work directly with all three of the “priority sectors” that the Strategy identifies—the retail, construction, and food & drink sectors. In addition, we have a large waste minimisation programme that is already addressing several of the issues raised in the Strategy regarding minimisation.

11. WS07 commits the Government to continue work on changing the behaviour of consumers and householders. WRAP has been responsible since 2004 for the Recycle Now national consumer campaign to persuade householders to change their behaviour, and to recycle more things, more often. During the lifetime of the Recycle Now campaign, the proportion of the general public describing themselves as “committed recyclers” has increased by 19%, from 45% in 2004 to an average figure during 2007 of 64%. This is, of course, due to a number of interacting factors, not least the major efforts made by local authorities up and down the country (many with assistance from WRAP’s ROTATE and BCLF advisory teams) to make it easier for their residents to recycle. However, we believe that the provision of consistent national messages, and the support we have given to local communications campaigns, has been instrumental in making recycling the environmental activity that more people (70% in Defra’s recent Survey of Public Attitudes) say they do than any other.

**Resourcing**

12. The Committee will be aware of the recent press reports about potential reductions in Defra’s budget, the likely scale of which was confirmed by Helen Ghosh, Permanent Secretary to Defra, when she gave oral evidence to your Committee on 21 November.

13. Given that the Government’s environmental policy objectives have not changed—and indeed, the Prime Minister’s welcome speech to the WWF on 19 November proposed expansions in several areas—it seems unfortunate timing that this speech came so soon after the revelation of significant potential cuts to Defra’s budget.

14. At the time of writing, negotiations with Defra (and the devolved administrations, who provide the remainder of our funding) over WRAP’s future budget are ongoing. We are committed to using our best endeavours to maximise our impact—particularly on our three core objectives of landfill diversion, carbon emission reduction and increased economic benefits to UK businesses—whatever the level of resources made available to us.
15. However, it is inevitable that any reductions in WRAP’s budget will feed through to a reduction in the impact of our programmes, and consequently in our ability to support the Government’s resource efficiency agenda as fully as we would like, particularly in the areas highlighted in Defra’s Waste Strategy for England 2007, and on the climate change agenda.

The role for, and implementation of, regulations, and their enforcement

16. In our view, change is most effectively delivered when there is a sensible mixture of sticks and carrots. For example, in 2001, a majority of local authorities did not believe that the Government’s proposed target to recycle or compost 25% of household waste by 2005 was possible. However, this was achieved on time, through a mix of statutory targets on councils, and non-statutory advice, support and funding.

17. The issue of effective implementation and enforcement of regulations is absolutely crucial to their value. For example, in the current climate of high levels of public interest in recycling, it is vital that the Environment Agency are able to devote sufficient resources to intelligence-led enforcement of the EU Waste Shipments Regulation, so that public confidence is maintained that, where waste is exported for recycling abroad, this is done legally and in an environmentally sound manner.

The classification of waste

18. The Waste Protocols project is a joint WRAP and Environment Agency initiative in collaboration with industry, funded by Defra’s Business Resource Efficiency and Waste (BREW) programme. Its purpose is to address one aspect of the classification of waste: the question of when a waste ceases to be a waste.

19. Uncertainty over the point at which waste is fully recovered, and thus ceases to be waste, has meant that some materials have continued to be controlled under the EU Waste Framework Directive and, in some cases, disposed of to landfill unnecessarily. The protocols project is intended to provide more certainty, to stop useful materials being landfilled and to increase the use of waste as a resource.

20. The project aims to achieve one or more of the following outcomes for each waste considered:
   — produce a Quality Protocol defining the point at which waste may become a non-waste product or material that can be either reused by business or industry, or supplied into other markets, enabling recovered products to be used without the need for waste regulation controls;
   — produce a statement, in accordance with the Environment Agency’s low risk regulatory policy, indicating that the use of the waste is considered to be such low risk that it would not normally be in the public interest to take enforcement action for failure to obtain a waste management licence; and/or
   — produce a statement that confirms to the business community what legal obligations they must comply with to use the treated waste material.

21. The protocols project has now been running for two years. The quality protocol for the production and use of quality compost from source-segregated biodegradable waste was launched in May 2006. At present, a further 14 waste streams are under consideration: non-packaging wood, food oil, flat glass, non-packaging plastics, tyres (crumbled or shredded), pulverised fuel ash (PFA), blast furnace slag, contaminated soils (washed/stabilised), boiler ash from combustion of paper sludge, uncontaminated topsoil, steel slag, incinerator bottom ash (IBA), gypsum from waste plasterboard, and anaerobic digestate. Further information on the project is available on the Environment Agency’s website.

22. Subject to the availability of resources, WRAP would welcome the opportunity to continue this project with the Environment Agency, in order that further priority waste streams can be considered.

The proposals for financial incentives to increase household waste prevention and recycling

23. In principle, WRAP believes such schemes should be one of a range of tools available to authorities to help reduce waste and recycle more, so long as residents can recycle easily a good proportion of their waste locally, and schemes are implemented effectively, and with the support of residents. Where asked to do so, WRAP will deliver the best practical support it can to councils wishing to implement such schemes either as pilots or, in the longer term, as permanent schemes, should the Government decide to extend the powers.

The role of composting

24. Two WRAP programmes are relevant to this question: our home composting programme, and our market development programme for organic waste.

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2 See www.environment-agency.gov.uk/subjects/waste/1019330/1334884/?lang=_.

Home composting

25. Home composting is a cost-effective way to reduce the amount of household waste that local authorities have to collect, whilst simultaneously enabling householders to produce a useful soil improver for their gardens. Since 2004, WRAP’s home composting programme has worked with 112 authorities in England and Scotland to provide over 1.6 million compost bins to householders, and provided support to new composters in how to use them. Research undertaken by WRAP has shown that each new composter recruited will divert on average 220kg of biodegradable waste from landfill each year. Over one third of English and Scottish households are now composting at home.

Market development programme for organic waste

26. WRAP has a large market development programme for organic waste, of which a key element is developing quality standards for waste-derived compost made from source-separated material. We developed and funded the PAS100 publicly available specification for compost with the British Standards Institution (BSI), and have worked hard to ensure that this has gained acceptance, particularly within high-end compost markets such as horticulture. PAS100 forms the basis for the compost quality protocol mentioned above.

27. In our current Business Plan (2006–08), we placed a particular emphasis on the role which the composting of organic waste can play in helping to achieve the UK’s Landfill Directive targets. Garden and food waste represents 60% of all biodegradable municipal waste—the basis of the Landfill Directive targets—and, therefore, we have to find large scale, alternative ways of dealing with this waste if the targets are to be achieved.

28. To do this, we are working both to expand composting capacity and to open up new markets such as land remediation. Government has an important leadership role to play here by ensuring that major publicly funded investments on brownfield sites use high quality, organically derived compost to improve the quality of the soil.

29. Since our creation, WRAP has helped the composting sector to process an extra 349,000 tonnes of compost a year. We intend to continue to work with all parts of the agricultural and horticultural sectors—farmers, growers, crop consultants, growing media manufacturers and product suppliers—to raise awareness of the value and viability of waste-derived compost, and also to change their behaviour, so that the market for such compost grows.

The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

30. WRAP’s current waste minimisation programme covers two main areas: packaging and food waste.

Packaging

31. Packaging from groceries alone is estimated at 5 million tonnes a year. Of course, much of that packaging performs a necessary function, but there are significant opportunities to reduce the total weight of packaging sent for disposal by a mixture of reduced material content and closed loop recycling.

32. To this end, WRAP has sponsored the Courtauld Commitment, a voluntary agreement involving more than 90% by market share of the UK retail sector and many of their leading suppliers, with the objective of halting the growth in packaging waste by 2008 and establishing an absolute reduction by 2010. Following the signing of the Commitment, a number of the leading retailers have now announced specific reduction targets of up to 25% in their packaging.

33. WRAP has taken a multi-pronged approach to reducing packaging waste. This involves:
   — strategic engagement with retailers and brands;
   — stimulating packaging optimisation research through our Innovation Fund;
   — promoting the environmental and commercial benefits of packaging optimisation;
   — maintaining an open dialogue with the UK grocery sector, including giving guidance on best practice;
   — providing a forum for all parties in the retail supply chain to come together and discuss key strategic issues that require a common approach; and
   — providing publicly available tools and resources\(^3\), such as The Guide to Evolving Packaging Design, case studies, technical and research reports, a “best in class” database, the result of an international packaging study and a “concept room”, in order to stimulate change.

\(^3\) All tools available from the WRAP website, at www.wrap.org.uk/retail.
Food waste

34. An estimated 6.7 million tonnes of household food waste is produced each year in the UK, about half of which could have been eaten. Most of this waste ends up in landfill. The environmental costs of this are significant. Once in landfill, food waste breaks down to produce methane, which is 23 times more powerful than carbon dioxide as a greenhouse gas. WRAP has estimated that 20% of the UK’s greenhouse gas emissions are associated with food production, distribution and storage. If we stopped wasting food that could have been eaten, we could prevent at least 15 million tonnes of carbon dioxide equivalent emissions each year.

35. In November, we launched a “Love Food Hate Waste” consumer facing campaign\(^4\) to encourage behavioural change. We are working with the UK grocery sector, food industry, Government and organisations such as the Food Standards Agency to develop practical solutions and improved communications, to make it easier for consumers to get the most from the food they buy, and to waste less of it.

The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

36. As mentioned in the introduction, we have produced research which shows that current UK recycling rates save 18 million tonnes of CO\(_2\) equivalent greenhouse gases, compared to incinerating or landfilling the same waste materials. This is equivalent to taking 5 million cars off the UK’s roads. We therefore recognise that effective waste policies have the potential not only to deliver reductions in resource use, but also to help fight climate change.

37. In our next Business Plan, covering the period from 2008 to 2011, WRAP intends to deliver a significant contribution to the reductions in greenhouse gas emissions discussed in WS07 (and required as a result of the EU Landfill Directive), in particular through expanded work on food waste prevention, and the composting and anaerobic digestion of organic wastes. In particular, both of these areas have the potential to lead to reductions in methane emissions from landfill sites.

38. There are also very significant carbon savings to be made from greater recycling of other inorganic materials—in particular, aluminium and other metals. WS07 makes clear that action here will be a priority.

The promotion of anaerobic digestion for agricultural and food waste

39. We agree with WS07 that anaerobic digestion (AD) is a beneficial way to deal with agricultural and food waste. WRAP is currently working with seventeen local authorities across England to trial new services where household food waste is collected separately and taken to anaerobic digesters or in-vessel composting sites. The AD plant breaks down the food waste releasing methane gas which is then converted into electricity for the National Grid. The process takes place in a sealed vessel so that odours are contained.

40. One of the current obstacles to AD is that the digestate byproduct, which can be put on soil as a conditioner, is subject to waste regulation, and this can limit the uses to which it can be put. We are devising a Waste Protocol, similar to the PAS 100 protocol for compost mentioned above, to define when the digestate is fully recovered, and ceases to be a waste. Such digestate would fall outside of waste regulation, widening the end-market opportunities.

The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

41. WRAP’s original mission was to develop end-markets for recyclate. In order to do so, one of our functions was to increase the UK’s capacity to reprocess waste materials collected for recycling. We have calculated that, between WRAP’s creation in 2001 and March 2007, we made it possible for the UK recycling industry to process an extra 5.8 million tonnes of waste per year.

42. However, over the same six years, the proportion of household waste collected for recycling by local authorities in England has increased hugely during that same period, from 12% in 2000–01 to 31% in 2006–07. Thus, although UK recycling infrastructure has expanded, the growth in processing capacity has not kept pace with the volume of material available. As a consequence, the proportion of certain waste streams (particularly paper and plastics) being exported for recycling abroad has increased significantly over the last few years.

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\(^4\) The consumer-facing campaign website is at: www.lovefoodhatewaste.com.
43. It is important to recognise that many of these waste materials are internationally traded commodities, and are subject to the laws of supply and demand. If the UK does not have sufficient reprocessing capacity, or is unable to offer internationally competitive prices for the collected materials, then—subject to exporters complying with all requirements of the EU Waste Shipments Regulation—the material will be exported.

44. WRAP’s Business Support programme is working hard to grow the UK reprocessing sector: our target in the current business plan is to help the UK recycling sector to grow at twice the growth rate of GDP. To achieve this, we are working to provide greater market pricing transparency, innovative investment mechanisms such as our least guarantee scheme, eQuip, and intensive support and advice to businesses in the sector. We also work with the Regional Development Agencies (RDAs), helping them to recognise the benefits of incorporating the promotion of resource efficient businesses into their economic development activities.

CONCLUSION

45. WRAP’s activities are directly addressing the policy questions raised in Defra’s Waste Strategy for England 2007 and, subject to the availability of resources, we look forward to helping the Government to implement the Strategy over the coming years.

WRAP (the Waste & Resources Action Programme)

November 2007

Supplementary memorandum submitted by WRAP (the Waste & Resources Action Programme) (Waste 50a)

INTRODUCTION

1. WRAP (the Waste & Resources Action Programme) is a not-for profit UK company providing recycling and resource efficiency programmes for Defra, the Scottish Government, the Welsh Assembly Government and the Northern Ireland Executive. The organisation was formed in 2000 to implement a number of the actions set out in the Government White Paper Waste Strategy 2000.

2. WRAP’s mission is to help individuals, businesses and local authorities to reduce waste and recycle more, making better use of resources and helping to tackle climate change.

3. Our recently published Impact Review for 2006–08 reported on our work over the past two years. Our main achievements include:
   — 4.8 million tonnes of waste diverted from landfill each year;
   — 2 million tonnes of greenhouse gases saved (measured as CO₂ equivalent);
   — 3.9 million more people describing themselves as “committed recyclers”; and
   — a 10% growth in the recycling sector.

4. It is also worth recording that since WRAP started in 2001, we have supported new infrastructure capable, over its operational life, of recycling and reprocessing more than 111 million tonnes of waste. This has led to the saving of 15.7 million tonnes of greenhouse gases (CO₂ equivalent).

5. Given the subject of the inquiry, all of the material below relates to our activities in England only, unless otherwise stated.

6. This memorandum supplements our original memorandum, submitted to the Committee on 30 November 2007. We have taken the opportunity here to bring the Committee up to date with developments over the last 10 months, including the publication of our fourth Business Plan, and the finalisation of our budget for 2008–09.

EXECUTIVE SUMMARY

7. Many of WRAP’s programmes will help the Government to implement the policies set out in Waste Strategy for England 2007. Details are set out below. We look forward to working with Defra and other stakeholders to help implement the policies and measures set out in the Waste Strategy.

8. Since our November 2007 memorandum, we have finalised our new Business Plan and our budget for 2008–09, both issues that were unresolved at that time. Details are given below, in paragraphs 15 to 18.
9. The five other main issues discussed below are as follows:
   — The value of a more holistic approach across waste streams (para 12);
   — The value of an action plan to assist implementation (para 13);
   — The importance of improving the consistency of local authority waste collection schemes (para 14);
   — The need to continue work on consumer packaging (para 14); and
   — The importance of action on food waste (paras 21, 32–33).

General Points

10. The Committee has highlighted nine areas of particular interest, and this supplementary memorandum comments on each of them below. However, before turning to those issues, we have made some more general points.

11. We would like to start by saying that we would commend Defra’s Waste Strategy for England 2007, as being the most comprehensive approach to the issues that the Government has ever produced. There are many positive aspects to the Strategy, and it provides an excellent basis for action.

12. Nonetheless, we feel that the Strategy could benefit from a more holistic approach to the various waste streams that arise in England. It correctly identifies that only 9% of England’s waste arisings come from households—compared to 24% from commercial and industrial sources, and 32% from the construction and demolition sector. Yet much of the focus of the Strategy continues to be on household waste. We do, however, recognise that much of the rationale behind the focus on household (municipal) waste lies with EU legislation, and the Landfill Directive in particular.

13. As one of the major delivery bodies involved in putting the Strategy into practice, we would welcome a clear action plan, showing who is responsible for implementing each part of the Strategy. This would help WRAP to develop a better understanding of the overall context within which we are working.

14. The Committee has invited views from stakeholders on the priorities for future action. We would suggest four:
   — the need to develop a holistic view across all sectors and waste streams;
   — food waste—WRAP’s work has highlighted the huge scale of the problem, and started to address solutions, but this is an area where additional action could reap great rewards, diverting waste from landfill, reducing carbon emissions and saving money;
   — the need to improve the consistency of local authority waste collection schemes, over time, so that householders can expect a certain, minimum level of service (in terms of which waste streams are collected) regardless of where they live in England; and
   — consumer packaging—giving product designers and retailers increased incentives to develop packaging solutions that continue to protect the product, but at lower weight, with lower carbon impact, using more recycled material in their production, and which are themselves easier to recycle (eg by using only the most commonly used plastic polymer types).

WRAP Business Plan and Budget for 2008–09

15. At the time of writing our original memorandum, we had not finalised our Fourth Business Plan, and were in discussions with Defra over our budget for 2008–09. Both of these issues have now been resolved.

16. Defra provided us with a budget for 2008–09 of £43.2 million. Although this represented a reduction of 30% in our budget for activity in England, when our increased funding from Scotland, Wales and Northern Ireland is taken into account, WRAP’s overall UK budget for 2008–09 is £62 million. With this level of resources, WRAP has been able to bring forward a substantial programme of activities for the coming three years.

17. This programme of activities is set out in our Fourth Business Plan, launched earlier this year, and covering the period April 2008 to March 2011. This Plan focuses on three key targets:
   — To divert 8 million tonnes of waste from landfill;
   — To save 5 million tonnes of greenhouse gases (measured as CO₂ equivalent); and
   — To generate £1.1 billion of economic benefits for the UK.

18. The Plan is designed on a holistic basis, looking at all aspects of the resource efficiency loop. However, it also indicates our intention to prioritise four particular areas of work:
   — Food waste;
   — Packaging waste;
   — Waste collection systems; and
   — Quality of materials.
COMMENTS ON THE COMMITTEE’S NINE HIGHLIGHTED AREAS

19. The paragraphs below give our updated views on the nine issues highlighted in the inquiry’s terms of reference. Where we have nothing to add to what was said in our original memorandum of November 2007, we have indicated this.

How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management

20. WRAP continues to have an important role to play in the implementation of Waste Strategy for England 2007 (WS07). Under our new Business Plan, we are running programmes to develop markets for four of the seven “priority materials” identified by Defra in the Strategy—plastics, glass, food & garden wastes, and wood. We are working directly with all three of the “priority sectors” that the Strategy identifies—the retail, construction, and food & drink sectors. In addition, we have a large waste minimisation programme that is already addressing several of the issues raised in the Strategy regarding minimisation, and also recently highlighted by the House of Lords Science and Technology Select Committee’s inquiry on waste reduction.

21. WS07 commits the Government to continue work on changing the behaviour of consumers and households. WRAP continues to run the Recycle Now national consumer campaign, which aims to persuade households to change their behaviour, and to recycle more things, more often. However, we have more recently also introduced a new consumer-facing campaign dealing with food waste—Love Food Hate Waste. Early results from this campaign are encouraging, with 1.5 million households saying that they are now committed to reducing their food waste.

The role for, and implementation of, regulations, and their enforcement

22. Nothing to add to 30 November 2007 memorandum.

The classification of waste

23. Since November 2007, there has been significant progress on the joint WRAP and Environment Agency project to develop quality protocols for a number of discrete waste streams. This has included consultation on quality protocols for waste flat glass, vegetable oil-derived biodiesel, anaerobic digestate, pulverised fuel ash and furnace bottom ash.

24. Work is ongoing, but we are confident that the quality protocols project is on track, and will lead to substantial benefits to the businesses involved, and to the environment, by taking materials that have until now often ended up in landfill, and finding productive alternate uses for them as valuable resources.

The proposals for financial incentives to increase household waste prevention and recycling

25. Nothing to add to 30 November 2007 memorandum.6

The role of composting

26. Two WRAP programmes are relevant to this question: our home composting programme, and our market development programme for organic waste.

HOME COMPOSTING

27. Our home composting programme is continuing this year, but with a significantly reduced level of subsidy offered to our partner authorities, as a result of our budgetary position. Although this means that that the prices we are now charging partners for bins and accessories has increased, home composting remains very good value for money as a means of diverting biodegradable waste from landfill. In addition, we continue to provide the central infrastructure and support that has been valued by partner authorities in the past.

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MARKET DEVELOPMENT PROGRAMME FOR ORGANIC WASTE

28. Our recent Impacts Review confirms that, over the last two years, WRAP has supported the development of an additional 470,000 tonnes of composting capacity in the UK. In addition, over that period we have launched 24 trailblazer projects to demonstrate the benefits of using waste-derived compost in brownfield redevelopment projects, putting more than 100,000 tonnes of such quality compost to good use.

The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

29. WRAP’s current waste minimisation programme covers two main areas: packaging and food waste.

PACKAGING

30. A recent highlight for us has been the achievement of our first target under the Courtauld Commitment: to stop the growth of packaging waste arisings. We were pleased to achieve this target (representing a cut in packaging of 82,000 tonnes a year) against a background of retail sales growth, and the view in some quarters that packaging could not be reduced significantly without increasing product damage.

31. WRAP and the grocery sector are now discussing possible future action on food and packaging waste, building on the success of the Courtauld Commitment to date, and looking to extend it beyond 2010. The issues we will be considering include:

- how the carbon impacts of packaging might be measured;
- extending the objectives to cover food waste and packaging at back of store and in the grocery supply chain; and
- how to encourage increases in the amount of recycled content in packaging, and making the packaging itself easier to recycle.

FOOD WASTE

32. At this time of increased pressure on household budgets, we have also worked hard to ensure that consumers are aware of the financial savings to be made through reducing food waste, given that it currently costs the UK consumer £10 billion a year (or £610 a year for the average family).

33. Early results from our Love Food Hate Waste campaign, mentioned earlier, are very encouraging. The campaign has helped to increase significantly both consumer awareness of the scale of the food waste problem (that we produce 6.7 million tonnes of it each year, representing one third of all the food we buy) and also of the solutions, with 1.5 million households now committed to reducing their food waste. As a result, the programme has so far saved 110,000 tonnes of food waste from being sent to landfill.

The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

34. In our current Business Plan, covering the period from 2008 to 2011, WRAP intends to deliver 5 million tonnes of greenhouse gas emissions savings (measured as CO₂ equivalent). This represents over half of the savings discussed in Waste Strategy 2007, and shows our commitment to maximising the contribution of resource efficiency to meeting our climate change goals.

The promotion of anaerobic digestion for agricultural and food waste

35. We have recently published a report showing the results of the trials we ran with 19 local authorities across England to collect household food waste separately, and take it to anaerobic digesters (AD) or in-vessel composting sites. This report showed that 4,272 tonnes of food waste were diverted from landfill, preventing the release of 1,967 tonnes of CO₂. In the majority of areas, more than 70% of residents agreed to separate their food waste for composting. On the basis of these encouraging results, we believe that if consumers are given the right tools and are provided with a good service, they will participate in such initiatives.

36. One of the current obstacles to AD is that the digestate byproduct, which can be put on soil as a conditioner, is subject to waste regulation. This can limit the uses to which it can be put. As mentioned above, we have recently consulted on a Waste Protocol to define when the digestate is fully recovered, and ceases to be a waste. Such digestate would fall outside of waste regulation, widening the end-market opportunities. Stakeholder reaction to the consultation has been largely positive, and we look forward to developing the final protocol.
The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

37. As mentioned in the introduction, we have calculated that, between WRAP’s creation in 2001 and March 2008, we have supported new infrastructure capable, over its operational life, of recycling and reprocessing more than 111 million tonnes of waste. This has led to the saving of 15.7 million tonnes of greenhouse gases (CO2 equivalent).

38. We have also recorded above that, over the last two years, we met our target to help the UK recycling sector to grow by 10% (twice the rate of GDP).

39. This is not to say that there is not more to be done—clearly there is. However, we believe it is important to put on record the significant progress that has been made over recent years.

Dr Liz Goodwin
Chief Executive
WRAP
October 2008

Witness: Mr Phillip Ward, Director for Local Government Services, WRAP, gave evidence.

Q109 Chairman: We move on to our final witness for this afternoon, Mr Phillip Ward, who joins us from WRAP. You are very welcome. You are the Director for Local Government Services.

Mr Ward: That is right.

Q110 Chairman: Thank you very much for your two pieces of evidence. It was kind of you to update your first submission with some more relevant comments, which are very much appreciated. You have been patient in sitting through our discussions, so you have got a fairly good idea of the kind of things that we are interested in. Most people so far have welcomed the Strategy as such, but, given the work that you do, perhaps you would like to comment on whether you think the balance is right within the Strategy between the recycling issues and the waste minimisation issues?

Mr Ward: We do support the Strategy, and we thought it was a good document. It approached the issues in the right way and it probably will not surprise you to know that we put quite a lot of time and effort into helping Defra understand the numbers as we saw them from our point of view. So we are not in fundamental disagreement with the Strategy at all and we are very concerned to be playing a positive part in delivering the bit of it which is concerned with the recycling part of the story. I think one of the things that we are beginning to understand since the Strategy was published even is the degree to which the boundary between what can be recovered and recycled and what necessarily has to be disposed of is constantly shifting. Our understanding of what can be done in relation to recycling is extending and improving all the time. The Strategy is not a strategy for all time, but I think our only issues are, take, for example, mixed plastic where we have done some really very interesting work demonstrating that recycling mixed plastic does seem to offer a better environmental outcome, certainly than incinerating it to recover energy. We think there are some areas where we can extend the argument about where the boundary should be. The other one, of course, would be food waste, where, again, we have been demonstrating that it is possible both to capture food waste from the domestic waste stream and to put it to good use from an environmental point of view.

Q111 Chairman: Let me bring you back to the Strategy itself, because in your second contribution to the committee you said in paragraph 12, “Nonetheless, we feel that the Strategy could benefit from a more holistic approach to the various waste streams”, and you conclude that section by pointing out that really it looks like the focus is a bit too much on the household and not enough on the commercial and industrial sources, because, as you point out, 9% of England’s waste arises from households compared to 24% from commercial and industrial sources and, indeed, 32% from the construction and demolition sector. Perhaps you would like to comment on that criticism of the Strategy.

Mr Ward: In one sense we are saying much what the other witnesses this afternoon have said, that there were very good reasons why the municipal sector was addressed first. There is a much more significant waste stream out there in the commercial industrial sector. The Strategy does recognise that, certainly more so than its predecessor. The 2000 document really did not address this question to the extent that the new document does; so we think the document is moving forward, but, again, as we have already discussed, knowing precisely what to do around the commercial industrial stream is problematic when so little is known about its make-up, what is actually in it and where it is going to, and so that is an area for further development. I do not think, in a sense, we are saying the Strategy is wrong, but what we are saying is that this is an area which is still developing.

Q112 Chairman: Our previous witnesses were kind enough to point out that there was effort being made, certainly as far as the business end of the spectrum is concerned, and trying to discover a bit more about what is in it in a more timely fashion. Do you think, having looked at that work, that it is sufficient? Is it proceeding fast enough?  

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Mr Ward: No.

Q113 Chairman: No?
Mr Ward: I think the work which was referred to today does not in any sense look to me to be comprehensive in terms of understanding what is going on in the commercial and industrial waste stream, but that is an enormous task, and a very expensive one, if you are really going to repeat the 2002 exercise, which the Environment Agency did, which is the only, as it were, solid data which exists. There are approaches, however, which we believe could be adopted and which we are exploring at the moment perhaps to take individual sectors and start breaking the commercial and industrial waste stream down into sectors so that you can look at what we would call the whole resource efficiency loop, so you can look at both the waste prevention in that sector, you can look at the collection and sorting of materials in that sector, the reprocessing capacity that is needed for it and what the markets might need. So we might be able to address this more satisfactorily perhaps on a sectoral basis.

Q114 Chairman: Who should be responsible for doing that particular exercise?
Mr Ward: The way that things work is that we are a delivery body for Defra, and so, if Defra were to commission us to do this work, then I think we could make a very positive contribution to it. At the moment we do not have that commission from them, so we are involved at the fringes of this.

Q115 Chairman: Have you suggested to Defra that you should have it?
Mr Ward: We have a conversation with Defra every year about the best way to spend the budget which is available.

Q116 Chairman: And your sub-total budget was reduced this year.
Mr Ward: We have an agreed programme with them, and so this is what we are doing at the moment.

Q117 Paddy Tipping: Pursuing the Chairman’s line of questioning, it would be possible to resolve the issues of mixed plastic by 2015 and everything could be recycled by 2015. It is technically possible. That is at least what your Chief Executive told me. Do you not look doubtful about it? She told me this. Who would take that forward? How would you do that?
Mr Ward: What we have done so far is to examine, as it were, the practicalities of sorting the plastic out, but that has always been one of the big barriers. The way in which we do all of our work is we go in, we try to discover where the barriers are and what we can do to fix them. One of the first barriers was; can you sort the stuff out? We think we have demonstrated that there is a market demand for these materials if they can be produced to a sufficient quality. We announced yesterday that we have put together a significant consortium now to produce a full scale trial of that in the UK, which involves Sainsbury, Nextec and Valpak. So it is a very significant consortium we have put together to say; let us go and do this now on a commercial scale and prove it can be done. The next part of the story is: can we actually arrange for it to be collected in an economic way? Can we secure the feed stuff to go into this? Once we have demonstrated that the whole loop can work, then, as we have seen with, for example, bottled plastics, where we did a similar exercise three or four years ago, the commercial sector will come in behind it, and we are seeing very significant investments in plastics recycling in the commercial sector on the back of us having demonstrated the possibilities and having supported some early trials. So that is the model that we would adopt in relation to this. It is entirely possible, given energy prices and oil prices—I know they have come down a bit but they are still relatively high. With that sort of driver behind it and landfill tax and all the other things coming on, we think it is entirely possible that the market could pick up and could actually start providing a consistent mixed plastic collection across the UK.

Q118 Paddy Tipping: But that is a market approach. I am an old-fashioned Stalinist. I just believe in saying: “This is what we are going to do”, and I cannot understand why Defra, or somebody in government, is not saying: we are going to sort this out by 2015. Would it not be better? The whole history of the past month has been more intervention by government and less by the market. Did we not ought to be cracking the whip a bit as a government and saying: “Let us get this sorted”? Mr Ward: Those are options. I cannot speak for Defra. What I would say is that saying, “Let us get it sorted”, yes, of course, there are ways of doing this, but there is a price, and someone needs to come up with the money to make it happen in one form or another. We do not apologise for the market-based approach because we feel that we have actually made the market work quite well in this area and we think there is plenty of room for further development in that approach.

Q119 David Lepper: The Chairman has already referred to a budget cut that WRAP has suffered as part of the Comprehensive Spending Review in the 2007 Budget. I have always thought that WRAP was doing a good job, and it looks as if Joan Ruddock, who was a member of this committee and was then Minister of Environment, thought so as well when she appeared before the Lords’ Science and Technology Committee.8 She said “They are doing a good job”, but a number of the programmes that you have been responsible for, I think she cited that, “the grants to supermarkets to reduce packaging had run their course”, and I think I got a similar answer when I asked about funding for the Real Nappies Scheme, which I did not think had really run its course. There are far too many still going to landfill. What is going to

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be the effect of that cut in budgeting, particularly in England, because I gather that you have received additional funding in Scotland, Wales and Northern Ireland. What is going to be the effect of that cut in funding, particularly for England? Is England going to lose out in some of these programmes which have been discontinued?

Mr Ward: I am not sure losing out is the way to look at it. Obviously we were disappointed with the budget reduction. I should stress, at the point at which this reduction was made we were on a planned growth, so the actual budget we have for this year is not 30% below where we were but 30% below where we expected to be. It is important to make that point. Yes, of course we were disappointed by that, and it did mean we had to trim back on some of our programmes. The areas where we did make significant reductions were in support of local authority communication programmes, which we were sorry about, but that was a choice we had to make, and also the public awareness, the Recycle Now campaign was another area where we had to make reductions. Again, we are concerned that that does expose us to the risk that, despite the good progress we have made in raising public awareness, that will begin to slide back if we cannot keep up the pressure. Those were the sorts of areas where we made choices. I think it is inevitable and right that we should be prepared to not carry on doing something for ever just because we have always done it. We do need to look back and say: “Have we done enough in this area for it to be self-starting?” I think the supermarket example is a fair one. The work we have done by engaging the retailers and all the brands in that packaging work means that innovation work now has a considerable momentum of its own. The case for us, therefore, intervening with public money is much less strong. We are still making some strategic interventions there but mainly working with groups of people to look at the generic problems rather than addressing particular innovations.

Q121 David Lepper: Defra has been carrying out a delivery landscape review. What contribution did WRAP make to that?

Mr Ward: Like all the other delivery bodies encompassed by the review, we have been submitting evidence to them about our view of the world, how we see the delivery landscape, what improvements we would like to see and also commenting on some of their early thoughts about options that might be considered, and we have, obviously, made our full views known on that. I guess the key thought: we are very keen that Defra should recognise the importance of resource efficiency as a total activity involving both households and businesses, recycling businesses, retailers, you know, a complete group of people in the different stages of the loop I have described. We think it is really important that there should be a body which is capable of taking that overview around the whole loop and not being tempted into thinking that somehow everything would be tidy, if everything was swept into one national body. There is a case for a degree of specialism.

Q122 David Lepper: Looking a bit further ahead insofar as that is possible, after 2011, after this spending round, is there a future for WRAP or is the work that you do likely to be dispersed elsewhere?

Mr Ward: We have obviously been giving some thought to where we go. Our current business plan takes us to 2011. Obviously, you begin to think about what the next one might involve. We believe that the resource efficiency agenda will still be very important in 2011. We are obviously facing up to oil prices and carbon, which are very, very important debates, but the availability of physical resources to make the things that we all need, the products and so on, is going to be something which we will not have solved by 2011. Our view is that we need a resource-efficiency body and we think we would like to make our case for being the authoritative body for resource efficiency, and that is the role we would like to try and develop for ourselves post 2011.

Q123 Mr Drew: I remember going with this committee to visit Leicester to see the work that you have done in partnership with that authority. Do you get frustrated that you have got local authorities who really buy into this and are prepared to put the resources where their mouth is that they make a really good contribution but there are an awful lot of local authorities who would not be on the same planet as Leicester? How do you get them on the same planet? Is that not one of your weaknesses, that you just do not have the ability to disseminate the really good practice to make a difference?

Mr Ward: I think we do have the ability to disseminate. We need to bear in mind that there is a standard policy which is around giving local authorities the freedom to make their own choices and deciding on the future of their own areas. So we are in one sense limited by a desire not to have central dictation to authorities—the non Stalinist approach—but we do work very extensively, and what we are trying to do now is to target our
activities on the authorities who are clearly having trouble with their recycling rates, who are not getting up to the mark. In the past we have tended to sit and wait for people to come knocking on our door saying, “Can you help?” We are now going knocking on their door saying, “We think we have got something to offer you.” So we are trying to engage more proactively, we are trying to offer them a more integrated service so we can offer them technical advice on how to do it but also advice on how to communicate and how to deal with the difficulties that come up. If you look at Tower Hamlets, we have got a high concentration of flats, and so on. These are very special and different issues to solve compared with the problems that you might have in a more rural area. So we are trying to identify the issues and the challenges for them and offer them targeted advice. Before I came away I was looking at the fact that we are just about to train our two thousandth local authority officer in aspects of improved recycling practice; so I think our reach in terms of getting the message out is quite strong but, at the end of the day, you have to get a lot of things coming together, which is a local authority who wants to make progress and a team behind it with the necessary skills who can make it happen.

Q124 Paddy Tipping: Can I take you briefly back to the Landscape Review, because you are providing information and you are having a discussion with Defra. Just remind me, the people who are running this review actually work in Defra, do they not? There are no outsiders involved. It is an in-house exercise.

Mr Ward: This is the review of the Strategy.

Q125 Paddy Tipping: The Landscape Review.

Mr Ward: The Landscape Review. The Landscape Review is being run essentially by Defra civil servants, although I believe they have a consultant employed: from Serco, I think. So I think they have employed external consultants to help them.

Q126 Paddy Tipping: Would it not be better to have some outsiders on that body? Is there not a danger that Defra just want to tidy the world up and reduce budgets?

Mr Ward: I imagine that the process they are going to go through at some point will be they will take this to the Waste Strategy Board, or some such body. I am not quite sure how they are going to get their external input. Obviously, each of the delivery bodies has had their say, so we are being listened to in that sense, but whether an external view would be necessary, I am afraid that is not something I am competent to comment on.

Q127 Paddy Tipping: You do not subscribe to the conspiracy theory that there is a grand design across there at Defra that is going to change the world between policy analysis and the people who are going to deliver for Defra?

Mr Ward: I only subscribe to conspiracy theories on Friday afternoons. That is my iron rule on these things.

Q128 Chairman: We will have a special session then at half past three on Friday and see what you have to say. It could be really interesting! You have been involved in some of the efforts to reclassify materials which might have gone as waste but which could be used as a raw material together with the Environment Agency in terms of developing these new waste protocols. Would you like to give us some commentary on how you think that exercise is going, whether you think it is going to deliver and what you think the results will be?

Mr Ward: You have heard quite a bit about the number—I think 15 protocols currently underway. Only one has so far been published. We are very pleased with the way the protocols are going. It is taking longer than perhaps we might have thought when we set out, but the issues are, as it were, difficult ones and they need to be got right. We do agree with the Environment Agency on that point, that producing a protocol which is defective and which immediately becomes dismissed as ill-founded is not going to help anybody. It is important we get them right. The one which has been published, we have, I think, vindicated all our hopes for this process, in the sense that the minute it was published the applications to register for the PAS 100 compost standard went through the roof so that it was immediately seen by the sector as being a valuable thing which is being done and, therefore, a good thing. I think it is also important—to get out a point that has been made—that because the Waste Framework Directive is now importing this concept into the European context, the fact that the European Commission are following this very closely, and we hope will follow a very similar pattern in relation to Europe—

Q129 Chairman: You indicated that the first of these 15 had taken longer than you anticipated. Is that because of the technical difficulty of doing the work? It is not an issue of resource?

Mr Ward: No, I do not think it is an issue of resource. I think Paul Leinster said explicitly he thought 15 was what was manageable. These are very technical issues. The one on composting turned on really quite difficult issues around metallic traces in the soil and the impact that has on microbial activity. This is not trivial stuff, it really needs to be got to the bottom of, and it does require someone to bring together the right technical expertise and make sure we get the right answer.

Q130 Chairman: If it is getting such rave reviews as far as the first one is concerned, what would your recommendation be to try to speed the process up? Because you have only got 14 to go now, so the job is on the move.

Mr Ward: To be fair, I think there are significant sections of that 14 which are very close to being published now, so the work on that is largely done. Our view, I think, is that by having a team that becomes more expert in the process you have to go through and the best way of resolving difficulties, and so on, the process is likely to speed up rather than slow down as people become familiar with the
process. It will be possible to speed them up. I think that is probably the most important thing. Obviously, there is always a case for adding a little more resource at the margin, more money for research, consultants, or whatever, but I really think that the main thing is to have clarity about the process and getting all the stakeholders to understand what is going on and getting buy-in to that and, once that is running as a smoothly operating process, they should roll off the production line fairly regularly.

Q131 Chairman: You have been playing a very significant part in helping England to increase its recycling rates, and the sleepiness of the hill over time will just get steeper. They are challenging targets. Would you agree that the targets are challenging that we have set ourselves?

Mr Ward: I think that they are, and I think it is quite important to look back a little bit at where we have come from, because in 2000 we recycled very little. We have accelerated very fast to the point where we are now. Roughly about 34% was the last figure I saw. That is an astonishing performance by local authorities, but in order to get there they have essentially adopted a very British approach to make do and mend with whatever kit they can lay their hands on, and very limited amounts of new investment being available, and also uncertainties about reprocessing infrastructure and where stuff is going to go. What we have ended up with is a very diverse system: lots of authorities running different ways trying to solve the same problem, depending largely on which particular investment they have made in trucks and when their contracts with their waste contractors are coming up for renewal, and so on. So we have a very great patchwork. The research we have done about the barriers to recycling shows us quite clearly that this is a significant barrier now to people. They do not understand it, they do not quite understand why it is different here, why their mum has a different system where she lives, and so there is a significant proportion saying: “It is too difficult. I do not want to engage with this. I do not understand the rules. Can I put a window envelope in here? Do I have to take the top off the bottle?” All these things are a real barrier. We think that if we are going to move on from 34 to 45, which is the next immediate target, then, frankly, we have to resolve some of these barriers, and that does mean trying to get more consistency around at least what local authorities collect. There is convergence going on in relation to that but it needs to speed up. For example, I discovered the other day there are still 28 authorities who do not collect tin cans.

Q132 Chairman: Who is going to do that job of improving the consistency? Who actually has got it on the agenda as a job that we must do?

Mr Ward: We have.

Q133 Chairman: But?

Mr Ward: We have to work with other people. We have to work with the Local Government Association, for example, and we work with LARAC, which is the Committee of Recycling Officers. We have to work with these people in order to get the local government buy-in to this and we have to make the case to people. We have to provide them with a valid argument for why they should do this and what benefit they will get from it. This is work which we are doing and we have initiated a project now working with all those groups, which we call the principles of a good recycling service. This is designed to try to establish some common ground about what a good recycling system would actually look like so that the public, who were used to people coming and taking their bin away once a week and putting it in a hole in the ground but are now presented with an array of different systems and they do not really know if what they are getting is what they should be entitled to expect. So we think it is really quite important that we try to establish some common ground between us and the Local Government Association and its members to try to see if we can get some agreement on what the basic provision ought to be for a good recycling service, and we need to start that process moving forward.

Q134 Chairman: At the domestic level, if you are going to improve further recycling rates, is it a question of more carrots or more sticks?

Mr Ward: I would think, if you are driving a donkey, the choice between carrots and sticks is one you may need to resolve. I always think when you are dealing with a whole population, what you really need is both those implements and a few more besides. You are dealing with intelligent human beings; they are going to be motivated by different things and will respond to different sticks. What we believe very firmly is that most people, if they are provided with a service that fits their circumstances, that they can use satisfactorily, if it is explained to them properly and it is delivered reliably, will try to fit in with the system, will try to do what the system is asking them to do, and only a relatively small proportion of the population just will not be bothered and will not make any effort. So this question about sticks—fining people for not following the rules and so on—is something which we believe should be very much a last resort to be applied when people have had the system explained to them, their difficulties have been addressed and, if they are still not using the system, then fining is a last resort. Basically, we think the key thing here is to develop a system which people understand, is convenient for them, is flexible to reflect different circumstances. If you live in a small, two-bedroom maisonette in a crowded street your ability to take five large wheelie bins in your garden is going to be heavily constrained. You need to have a system which is suited to your circumstances. If it is explained to you and it is convenient and it is delivered sensibly, that is the way we would like to go to get people to do it because it is the right thing to do and they feel good about it.

Q135 David Lepper: Have you looked at what happens in any other European countries?
Mr Ward: Yes.

Q136 David Lepper: Have you come across systems where, instead of this: “If you want to do it, you do it and if you do not want to do it, you do not do it”, which is the system that you are basically describing, that is out of the window and things are much more in line with the Paddy Tipping approach of. “This is what you will do across the country. Get on with it”?
Mr Ward: No, I do not think we have come across a system like that, to be honest.

Q137 Paddy Tipping: The day will come!
Mr Ward: What we tend to find in continental countries is, because the individual municipalities can be quite small, you do tend to find conglomerations of municipalities and they will agree a common approach and apply that across a number of different the communes. I am not aware of systems where it is laid down that it has got to be done this way or that way?

Q138 Paddy Tipping: In your evidence you told us that waste was being exported abroad. Is that plastics and paper?
Mr Ward: Those are the two main items, yes.

Q139 Paddy Tipping: Why is that? Why can we not have the facilities here to deal with that?
Mr Ward: Two reasons really. One is that we do not have the facilities here: the investment has not taken place so our recycling is growing faster than the investment in it. The other one would be that China, which is where most of this stuff goes, is desperately short of resources and prepared to pay a very high price for it. So the economics of investing here and trying to close the loop here do not look as good as sending it to China, where they are prepared to pay very high price for the material. I think that is essentially what underlies it. I think there are aspects of the system which are unhelpful, in the sense that the packaging recovery system probably does not help with the closed loop, and I think there are changes which could be made to that which would increase the incentives for closed loop recycling in the UK, but essentially that is it. It is a global market for these commodities and they move where we get the best price.

Q140 Paddy Tipping: Have you ever tackled how much stuff is going abroad?
Mr Ward: Yes, of course.

Q141 Paddy Tipping: And what the regulations are, because there are regulations around this, and, finally, what you would need to do to stop it going abroad?
Mr Ward: I can certainly give you a note on our views on all those issues. I am not sure we necessarily share the objective of stopping it going abroad, but encouraging more of it to be recycled here, certainly.

Q142 Lynne Jones: Before I ask the question I was supposed to ask, can I quote from the Friends of the Earth’s submission. They say, “The Government displays a touching faith in voluntary initiatives which is not backed by any evidence base”, and they say that the progress we have made so far, which is not insignificant but certainly we lag behind other countries, has largely been brought about as a result of regulation and incentives such as landfill tax. So, whilst in response to my colleague’s question about whether we needed a bit of Stalinism you said that the market is working, the market is only working providing there are regulations and incentives. You say you are in charge, but really you have only weak capacity for imposing regulation incentives to try and bring about best practice. Would you care to comment whether the Government needs to do more in terms of incentives?
Mr Ward: You say we have weak—. We do not have any influence at all. We are not a regulatory body. We cannot fine anybody. We have no regulatory purpose.

Q143 Lynne Jones: You are the ones who are charged with this job of making sure that the local authorities, as you put it, converge towards best practice, but have you got the tools to do the job other than exhortation?
Mr Ward: We have, in everything we do, we have a very strong basis of evidence and so we have good arguments, and we are old-fashioned enough to believe that if you make the argument in the right way, if you understand enough about their perspective of what the problem is, you can help them to find ways in which they can deal with their problem and your problem at the same time. It is not a total solution, and I do not want to get over philosophical on this, but at the end of the day what we are increasingly finding is that markets are actually an efficient way of resolving constraints imposed by outside systems in one way and another. They are not an independent factor. So, yes, a regulatory structure puts people in a certain position. So we work with local authorities who are concerned about achieving their LATS objectives. One good way of doing that is to increase their recycling rates. A very good way of doing that is to start collecting food waste and taking that out of the waste stream. If we can provide them with good arguments and good practical ways in which they can do it, then it is highly likely that they will want to listen to us. That is really the only influence we have. It is the influence of a sound evidence base presented on the basis of an understanding of where the other party is so that we can try to persuade them to do the right thing because they can see that there is a good solid case behind it.

Q144 Lynne Jones: How successful have your campaigns been to increase composting and reduce food waste? I understand Birmingham is the biggest local authority in the country. I have asked them about this and they are working with you but they are going to have a pilot which is collecting from schools. It seems a very timid approach for a city like Birmingham. Then, going back to the other point, I was horrified to discover that the door-step collection, which includes bottles, the bottles are recycled into aggregate, not back into glass, and yet they get the same credit for recycling into aggregate.
The citizens of Birmingham are there thinking they are doing their bit in recycling their bottles, and yet it is not being recycled into glass. It seems that we are really playing at it. We do not seem to be taking the whole issue seriously enough when you consider the problems that we are going to face with climate change.

Mr Ward: I have sympathy with the points you are making and, clearly, glass aggregate is not a preferred option. A number of local authorities have been going down this route. Again, this comes back to the PRN system. It gives the same credit for recycling to aggregate as it does for recycling to remelt.

Q145 Lynne Jones: So we need to change the rules?
Mr Ward: We do, indeed. But, again, this is an example of where we have, as it were, done the research, we have got the evidence base, we have a story that we can now go to local authorities and say, “Look, we think you should do it differently for this reason.” There are cost pressures, and so on, which are going the other way, and I think Birmingham really ought to be looking very seriously at a separate food waste collection. It is an obvious thing for them to want to do. They are one of the people we are knocking on the door of, saying, “Come on, talk to us about some of these issues”, but the Government’s policy at the moment, what the LGA and local government very strongly want is they do not want central government telling them how to do things. They want to be left to run their local areas according to the way their local people want them, and that is a constraint on us. All we can do is to try and persuade them.

Q146 Lynne Jones: Even the Local Authority Waste Advisory Committee is advocating that there should be incentives in terms of charging, and yet do we cut through this sort of political point scoring really? It is not a party political matter as such because, whichever party is in power, if they so much as suggest fortnightly collection, then the other party will castigate them. We need to beef up these messages that are getting across. Everybody knows about the constraint on us. All we can do is to try and persuade them.

Mr Ward: The answer is they are but perhaps not fast enough for you. We are making very significant successes and the numbers of authorities who are introducing food waste collection is growing significantly.

Q147 Lynne Jones: What do you mean by significantly?
Mr Ward: I have not got the latest count in front of me, but the evidence is that people who sell the kit, the buckets and the bins, and so on, to do this, those companies are telling us that they are getting very healthy order books from local authorities, but they do not have to come to us and tell us about it.

Q148 Lynne Jones: A doubling of their orders does not actually mean that there is significant amount of food waste collection, does it?

Mr Ward: Again, you have to look back at what the issues are. All of these local authorities have LATS targets to achieve. The LATS targets mean they have to get biodegradable waste out of landfill. Food waste collections have to be addressed if they are going to achieve those LATS targets. The question is when do they do it and how do they do it and do they do it in the best way, but they will have to do it. I think they do understand this. The debate at the moment is all about: if I have a separate one on a weekly basis do I put it in with the garden waste or the fortnightly basis?” This is where the debate is at the moment, not whether we should be collecting food waste or not. These are the issues we have to work with.

Q149 Lynne Jones: You say they have to do it, but the target in the Waste Strategy is only 50% recycling by 2020, and there are other countries that are at 70% even now. So I do think that you are being very complacent.
Mr Ward: I do not think I am being complacent. They will have to address food waste in order to achieve their LATS targets, which are specifically based on biodegradable waste. There is no doubt about that. They cannot achieve those targets without dealing with food waste.

Q150 Lynne Jones: Can I turn to your campaign on Love Food Hate Waste. Is there a need for concerted retailer action to improve information on use-by and sell-by dates to stop consumers being over cautious about using up food?
Mr Ward: There is. We are working with the retailers and with the Food Standards Agency to see whether we can do something to improve both the understanding and the way in which labels are presented so that people can get the message from them more quickly. Obviously there is a point to the use-by date, which is to try and stop people poisoning themselves. Food preparation skills in this country are relatively low, if you have been watching Jamie Oliver, so people do need clear guidance about whether they should or should not eat food, but at the moment there is complete confusion around the labelling of sell-by, use-by, best-before, and so on, and this is an activity which we are working with, with the retailers through the Courtauld commitment and with the FSA to see what we can do to improve the situation.

Q151 Lynne Jones: You say you are working with them, but what is actually being done?
Mr Ward: We are meeting with them to explore the issues. We have some research which we have done which helps to explain where the consumers are and what they understand by the labels and what they find confusing, and we will try to reach an agreement which the retailers can manage in terms of how they get this information on to the packs, because there is always a practical problem about how it can be displayed. Can it be displayed in a common way? That is often an important thing. If it is in the same place, people know where to look for it and what it is and then the FSA need to sign it and say, “Yes, we are
happy that it will protect public safety." We have got all the parties round the table and we are going to reach an agreement, I hope, fairly soon about that.

Q152 Lynne Jones: Are you discussing BOGOFs?
Mr Ward: Yes, we have talked about BOGOFs quite a lot with the retail sector, and our view is that the number of BOGOFs which are on offer is dropping and more retailers are finding alternative offers to people rather than the BOGOF offer. So I think the message is getting through on that. It has not disappeared completely, but they are certainly getting less common on perishable foods, which is the key area where they are a problem.

Chairman: Mr Ward, thank you very much indeed for your contribution. Thank you for agreeing to supply us with some further information. We look forward to receiving it. Thank you very much.

Further supplementary memorandum submitted by WRAP (the Waste & Resources Action Programme) (Waste 50b)

WASTE STRATEGY FOR ENGLAND 2007 INQUIRY: THE ROLE OF EXPORT MARKETS

Thank you for your letter of 21 October, following my appearance in front of the Committee on 15 October. This letter responds to your questions, and outlines:

— how global markets impact on the destination of waste for recycling or disposal;
— the policy regime and regulatory controls that apply to exports of waste; and
— WRAP’s activities to develop UK recycling capacity.

By way of introduction, it is worth highlighting that government policy recognises the part that export markets play in the UK’s overall waste strategy. Defra’s Waste Strategy for England 2007 gave WRAP the remit to develop “a centre of expertise on export markets to help businesses manage the market risks, maintain the value of recycled material and comply with the controls on export of waste”. This was not a remit to promote exports, but to ensure that all those involved in recycling had access to good information on which to make their decisions. WRAP’s view is that both domestic and export markets have a role to play in the environmentally and economically sound management of materials for recycling, and that an unbalanced reliance on one market or the other will prejudice our ability to achieve that.

IMPACT OF GLOBAL MARKETS

In 2007, around 110 million tonnes of material were recovered from the UK waste stream for recycling and reprocessing. Of this, 97 million tonnes (88%) were recycled in the UK (of which 71 million tonnes were aggregates), and 13 million tonnes (12%) were exported for recycling. Of the 6.3 million tonnes of packaging materials recovered for recycling and reprocessing, 2.3 million tonnes (37%) were exported.

The materials exported for recycling are predominantly high value commodities whose virgin equivalents are also traded in international markets. This includes:

— ferrous metals (6 million tonnes exported in 2007);
— paper and board (4.7 million tonnes);
— aluminium (0.9 million tonnes);
— plastics (0.55 million tonnes); and
— glass (0.25 million tonnes).

The destination of the material sent for recycling and reprocessing is determined by a combination of legal restrictions (discussed below) and the economics: in particular, the interaction between demand from the importing country, and the costs associated with shipping the material to that destination. These costs can be a significant fraction of the value of the materials.

For recovered paper and plastics, by far the main destination for the materials is China. China accounts for over half of recovered paper exports, while over 80% of recovered plastics exports are destined for China, mainly via Hong Kong. For metals, aluminium exports largely go to Asia, with a large proportion of the materials destined for Malaysia, as well as China. End markets for recovered ferrous metals are more diverse and include Europe (in particular, Spain and Turkey) and Asia. For glass, the main destination is container manufacturers in Europe.

The emergence of China as a major end market for UK recovered materials reflects the rapid industrialisation of the Chinese economy, and its growing need for raw materials of all kinds. Until recently, Chinese manufacturers have been willing and able to pay higher prices for materials than other buyers. This has been one of the key factors driving the broad-based increases in commodity prices—including recovered materials prices—observed during 2007 and early 2008. On one view, this increase in prices has undermined
the economic viability of some UK recycling capacity. However, the alternative view is that it has supported the rapid expansion in domestic recycling which would otherwise have been stifled by a lack of processing capacity for recovered materials.

The slowing in the global economy has also been one of the key triggers for recent dislocation in the markets for recovered materials. Economic growth is slowing sharply worldwide, including in the UK and our principal export markets. One aspect of this is that commodity prices, which surged to historic highs over 2007 and the first half of 2008, have fallen sharply in recent weeks. Although the pattern is most strikingly true of oil, it also holds for a number of other commodities including metals, paper pulp and primary plastics—and for recovered materials. The same is also true of shipping costs, which form a key part of the cost base for exported recovered materials. Conditions in commodity markets—including recovered materials markets—are extremely volatile at the moment. The implications of this volatility for the recycling rate and the net cost of recycling systems in the UK are not presently clear.

POLICY AND REGULATORY ENVIRONMENT

For the sake of clarity, it is worth recording that policy on waste shipments to and from the UK is the responsibility of Defra, while the regulatory control system is the responsibility of the Environment Agency (in England and Wales), SEPA (in Scotland) and the Department of Environment for Northern Ireland.

There are a range of different levels of regulatory control that can apply to waste exports from the UK, ranging from outright prohibition to the low-level “green list” controls which apply to certain wastes being sent for recovery. This control system is implemented across the EU by the Waste Shipments Regulation (EC/1013/2006). Further information about the UK’s policies and controls can be found on the Defra10 and Environment Agency11 websites.

It is important to note, first of all, that exports of waste from the UK for disposal are prohibited (save in some very limited and exceptional circumstances). In general, only exports for recovery are allowable.

Many commodity type wastes, such as clean waste paper, can be exported freely to many countries, including countries outside the EU, under relatively light regulatory controls (the “green list” controls mentioned above), provided the waste is destined for recovery to broadly comparable standards to those applying in the EU. The rules are not intended to curtail this legitimate trade; indeed, any attempt to do so would be likely to put the UK in breach of its international obligations on free trade. Many such waste exports occur entirely legally without the need for any permission or consent from UK regulators.

The trade in hazardous and other, more problematic, wastes (such as mixed household waste) is much more heavily regulated. Generally, such wastes can only be sent to other EU or OECD Member State countries (that is, it is illegal to export such waste to non-OECD, developing countries, even for recovery), and even then, they can only be exported if prior permission is obtained from the relevant regulatory authorities before the waste is shipped.

In addition to the legal controls in place in the UK and EU, importing countries may impose their own additional controls on the import of waste to their jurisdiction. For more details on these, please refer to WRAP’s recently published report “International Trade in Recovered Paper and Plastics: International Regulations and Commercial Practice”12.

It is worth noting that, in order to demonstrate compliance with the recycling targets in the EU Packaging Waste Directive (94/62/EC), packaging material exported from the UK for recycling generates Packaging Export Recovery Notes (PERNs) on the same basis as the Packaging Recovery Notes (PRNs) generated by domestic recycling of packaging materials. (Background on this can be found on Defra’s website: www.defra.gov.uk/environment/waste/topics/packaging/compliance.htm.) One possible criticism of this arrangement is that it inhibits the use of the income generated for developing recycling infrastructure, instead encouraging price support for collected materials.

WRAP’S ACTIVITIES

WRAP has been actively involved in supporting the recycling and reprocessing industry in the UK, in particular by encouraging the development of sustainable end-markets for recycled materials, and investments in reprocessing capacity where market failures would otherwise prevent investment. However, as the volumes of recyclate collected have risen, export markets have acted as a complement to domestic markets. However, the situation, and the dependence on export markets, varies widely across materials.

The UK recovers more paper for recycling than can be used by the UK paper industry—in part because we import a lot of the paper we consume. In 2007, the UK consumed around 13 million tonnes of paper, but manufactured only 5 million tonnes (using around 4 million tonnes of recovered paper in the process).

10 www.defra.gov.uk/environment/waste/strategy/int—shipments.htm
11 www.environment-agency.gov.uk/wasteshipments
12 www.wrap.org.uk/businesses/market—knowledge/international—markets—event—2008
By comparison, around 8.5 million tonnes of UK waste paper was recovered for recycling; some here, and some abroad. There is little opportunity to increase domestic recycling of recovered paper, so here, exports complement rather than substitute for the domestic market.

For plastic bottles, opportunities for investment in domestic capacity have, until recently, been limited by the availability of collected materials of the quality needed by domestic recyclers, and by the economics of sorting. Exports to China have provided an interim market until a critical mass of bottles could be collected to justify factories being built in the UK to recycle them. But investment in UK reprocessing capacity is now taking place. Over the past couple of years, domestic plastic bottle recycling capacity has increased from around 30,000 tonnes per annum to around 150,000 tonnes per annum, and it is likely to increase to around 250,000 tonnes per annum by the end of the year. This will divert the vast majority of waste plastic bottles in the UK away from export.

WRAP has also investigated the environmental impact of exporting recovered materials to China. In a report released this summer (“CO2 impacts of transporting the UK’s recovered paper and plastic bottles to China”), WRAP concluded that there are net benefits from recycling paper and plastic bottles, compared to landfills, even if they have to be shipped as far as China to be recycled.

We believe that achieving a diversified set of end markets is important to ensure stability of demand for UK material. We have, therefore, been supporting the expansion of domestic recycling capacity, and the development of local end markets for recycled material. For example, we have provided support to companies investing in domestic plastic bottle processing capacity, and we have developed the first process to recycle plastic milk bottles into new milk bottles and other food grade applications. We also recognise, however, the key part that export markets play in ensuring there are sufficient sustainable end markets for the materials collected in the UK.

One crucial element, both for the domestic and the export markets, is the quality of the material provided by the recycling supply chain. Lower quality material, even if it is legally acceptable for export, risks being rejected by importing countries when demand slows. For this reason, WRAP has embarked on a programme to improve the quality of material provided by UK Materials Recovery Facilities (MRFs), starting from the quality of the materials delivered from households, and including the systems in place in MRFs to manage quality. Ensuring the best possible quality throughout is one of the key ways to foster the development of sustainable domestic markets and reliable access to export markets.

Finally, in view of the Committee’s interest in the commercial and industrial waste sector, you may wish to draw their attention to a WRAP initiative, announced since I gave evidence, to halve the amount of construction waste sent to landfill by 2012. This is being implemented through a voluntary agreement similar to the successful Courtauld Commitment, agreed between WRAP and the retail sector. It was launched on 16 October, and has already attracted the support of 14 major organisations within the construction sector. More details are available on our website (www.wrap.org.uk/construction/halve—waste—to—landfill), or from Patrick Mahon, WRAP’s Policy Analyst.

Philip Ward  
Director for Local Government Services  
WRAP  
November 2008
Wednesday 12 November 2008

Members present

Mr Michael Jack, in the Chair

Mr David Drew  David Taylor
Lynne Jones    Paddy Tipping
Miss Anne McIntosh  Mr Roger Williams
Dr Gavin Strang

Memorandum submitted by the Environmental Services Association (Waste 39)

ESA is the sectoral trade association for the United Kingdom’s waste and secondary resource management industry, a sector contributing around £9 billion per annum to GDP. We help our Members to recover more of the value contained in the UK’s waste whilst protecting the environment and human health.

EXECUTIVE SUMMARY

— Driven by EU law, England is now delivering the highest ever amounts of recycling and landfill diversion.
— However, recycling is still lower than in many EU Member States. While it is difficult to make direct comparisons of national recycling rates, the UK recycles less than other Northern EU countries.
— Household recycling rates have quadrupled over the last decade as HMG’s policy has focussed on weight-based targets but to improve low levels of investment in recycling infrastructure in the UK it is essential that HMG has clear dialogue with industry.
— Like other waste streams, municipal waste management should be fully funded on a basis consistent with the polluter pays principle. HMG has missed an opportunity to introduce direct charging for household waste.
— HMG has correctly focussed on Municipal Solid Waste (“MSW”) to comply with EU law but MSW accounts for only 10% of Britain’s total waste and policy should facilitate development of infrastructure to recover more of value contained in other wastes
— Waste Strategy for England 2007 is a welcome step on the road to more sustainable waste management. However, HMG has missed an opportunity fully to co-ordinate it with planning and energy policy.

1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste. Localisation as opposed to centralisation of waste management.

The private sector has successfully delivered dramatically increased recycling at relatively modest cost. ESA’s Members bring experience gained worldwide and are at least as ambitious as HMG and the Devolved Administrations in wanting recycling performance improved. Since the last Century, ESA has expressly recognised that our sector’s future must be based on recovering more value contained in waste and not on ever larger volumes of waste.

The market for our sector’s services is a distress purchase: customers buy the cheapest solution allowed by law. Virtually all relevant primary law is EU law and our sector needs sound implementing Government strategy supported by appropriate economic and policy drivers.

ESA welcomes HMG’s targets to increase recycling and resource efficiency. Aspirations in HMG’s Waste Strategy 2000 were unsupported by effective policies, regulations and economic incentives and this mistake cannot be repeated.

We comment as follows on the objectives of the Strategy:

(a) Decouple waste growth from economic growth and put more emphasis on waste prevention and reuse:

ESA strongly supports this principle in a context of resource efficiency over complete life cycles and in 2002 the European Environment Agency reported relative decoupling of waste and economic growth in the EU. However reduction in waste arisings is likely to be fairly slow—particularly as England expects 3m more households—so priority must be given to ensuring existing wastes are managed.
(b) **Meet and exceed LFD diversion targets:**

Given the shortfall in infrastructure and slow pace of public procurement, ESA is not as optimistic as HMG that LFD diversion targets will be met.

(c) **Secure investment in infrastructure:**

Investors need to be confident infrastructure will be used. Businesses need to be alerted to the basic duty of care, of which most are ignorant, and the Environment Agency must have sufficient public funds to secure the convictions of unregulated environmental criminals who seek to bypass regulated infrastructure.

(d) **Increased recycling of resources and recovery of energy.**

HMG controls the levers that determine whether we become a “recycling society”. Thousands of new waste management facilities are required to meet domestic recycling targets and clear planning guidance is needed to turn national policy aspiration into local recycling and recovery.

Since 2002 LATS, and the landfill tax have been the principal drivers to reduce landfill of MSW but these policy instruments must be supplemented by simplified processes for planning and developing waste management infrastructure, including more effective land use planning and a simpler and cheaper process for awarding local authority contracts.

The Strategy correctly recognises that the recycling market is global. The UK cannot become a recycling society in isolation from other countries. Local services will not always be viable and the proximity principle may not always affordably produce the best result.

2. **The role for and implementation of regulations, and their enforcement.**

Our Members’ customers buy regulatory compliance and regulation makes the market in our sector.

Operators and investors require clear rules with appropriate guidance set out well in advance to allow investment to be planned. Good consultation with industry is required both in the design and implementation of new regulatory regimes.

Historically, the UK implemented EU rules poorly. As the Select Committee is aware, transposition was often left until the last minute, creating unnecessary uncertainty and confusion for waste producers and managers.

The Select Committee has considered bungled regulatory interventions at the start of the Century: a succession of EU laws affecting the management of Ozone Depleting Substances (principally found in fridges); the Landfill Directive (especially relating to hazardous wastes); WEEE and chronically overdue regulation of agricultural waste. In response to deep concern, HMG created structures such as the hazardous waste forum and the agricultural waste forum but there has been a feeling that these were used as a one-way conduit for information rather than constructive dialogue.

Fewer more recent examples coincide with less waste-related regulation from Brussels in the last two years. The major regulatory change in 2007 was the requirement for all waste to be to be treated before landfill, potentially affecting every business in the UK. Communication of this requirement was imperfect: a YouGov survey carried out in October 2007 found that only 17% of businesses surveyed were aware of the Producer Pre-Treatment requirement of the EU Landfill Directive and only 4% had a thorough understanding of their obligations. ESA has persistently urged that much be done by DEFRA, the Environment Agency and BERR to ensure that new regulations are transposed effectively and that proper information reaches businesses and we would be most grateful if the Select Committee could consider this.

The current Chief Executive and retiring Chairman of the Environment Agency have substantial improvements to their credit. One is the recognition of the fundamental distinction between essentially competent and honest regulated companies and criminals who deliberately operate outside regulation.

ESA believes the recycling society can be built only if HMG strongly supports the Environment Agency in fighting criminals and establishes a national reputation for zero tolerance of environmental crime. Investors in regulated infrastructure need to know regulation will be enforced. Environmental criminals undermine legitimate infrastructure and compromise public health and environmental quality. Over the last three years BREW funding of £2 million p.a. has been made available to the Agency to fight flytipping: ESA has repeatedly told DEFRA this is inadequate. With further reprioritisation of resources in DEFRA it is imperative that the fight against environment crime is properly resourced.

ESA has consistently supported the Agency’s drive to modernise regulation. In 2006 ESA agreed a “sector plan” with the Environment Agency which set out shared sectoral objectives.

ESA’s Members also invest in environmental management systems (EMS) to ensure environmental impacts are minimised, and ESA would like to these systems better recognised in the practical regulation of sites with a higher weighting in the Agency’s OPRA score for a site.

There appears to be no prospect of the prospective new Waste Framework Directive (“WFD”) modifying the tried and tested EU definition of waste and we hope that if by-products are defined in WFD this will not amount to unwarranted deregulation of hazardous industrial wastes.

WFD should clarify when specified materials cease to be waste and, in the interim, the joint WRAP/Agency waste protocols project is setting out protocols specifying standards to which materials need to be treated in order to cease being classed as waste, or to be regulated in a less prescriptive way. However it is essential that the UK also engages fully in the EU process of developing “end of waste” criteria to ensure that the UK “protocols” reflect emerging EU thinking. For example, given HMG’s preference for Anaerobic Digestion, it is very important that a standard promptly emerges for the compost like material which this process produces.

4. *The proposals for financial incentives to increase household waste prevention and recycling.*

In advocating piloting of revenue-neutral incentive schemes, HMG missed an opportunity to allow local authorities to implement charging schemes reflecting the polluter pays principle and to raise revenue to invest in recycling infrastructure.

Councils must be properly resourced to increase recycling and recovery rates. England’s household recycling has quadrupled in the last decade but the easy wins have been secured and the UK still spends less than many EU neighbours.

Experience of WRAP’s recent mass advertising campaign supports the view that recycling drives, such as incentive based charging, must be accompanied by education and information programmes to ensure that Waste Collection Authorities are able to send materials of appropriate quality to Material Recovery Facilities (MRFs).

5. *The role of composting.*

In the last five years following the Strategy Unit report of 2002 and the setting up of the Waste Implementation Programme, the volume of composted biodegradable MSW has risen dramatically.

Around 2 million tonnes of material from MSW is composted each year. Whilst ESA welcomes the development of quality standard PAS100 and the associated waste protocol which simplifies the application of quality compost to land, HMG must also clarify potential uses and associated markets for a wider range of compost grades.

WRAP’s focus on developing markets for high grade outputs has a negative impact on outlets for lower grade material. A huge volume of different materials—residues from food processing, agricultural wastes and sewage and industrial sludges—competes to be spread on land. Cost and availability are important considerations.

It is manifestly inappropriate for all households to compost at home, and whilst initial uptake of schemes can be high, experience has shown that, without consistent promotion and support, participation levels fall. We agree with HMG’s caution in including home composting in the calculation of MSW landfill diversion.

6. *The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.*

Waste minimisation that is consistent with sustainability over the entire life cycle should be a policy priority but is no substitute for investment in infrastructure. Despite waste minimisation programmes and the implementation of producer responsibility legislation, the European Environment Agency notes that for municipal waste, indicators point to increasing waste generation.

HMG has been slow to implement producer responsibility schemes, with particular problems in implementation of the WEEE directive, but ESA supports HMG’s taste for cap and trade schemes which more effectively align economic and environmental sustainability than the detailed prescription in some Member States.

While we would have preferred an EU increase in packaging recovery targets, we welcome HMG’s unilateral announcement of higher packaging targets.

Better labelling of packaging is essential: particularly as regards so-called compostable/biodegradable packaging. Clear and accurate information is required both by consumers and waste managers as to the precise nature of these materials and the circumstances under which they might break down as this affects collection and treatment of organic waste. EU standards exist for many of these materials and it is essential that they are met consistently by producers.
7. The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill.

The EU waste management sector has already made significant strides in reducing emissions of greenhouse gases. Modern landfills can capture over 80% of methane generated and much of this methane is used to generate electricity: about one third of the UK’s renewable electricity is derived from landfill gas which replaces energy from fossil fuel.

The reduced biodegradable content of MSW being sent to landfill will cut the methane produced but, given the lag in disposal and capping of a site and the beginning and peak of gas production, significant volumes of landfill gas will be produced for decades and operators should be incentivised to generate energy from this source. Unfortunately, the Energy Review in May 2007 reduced the incentive for operators to generate electricity from landfill gas resulting in methane being flared off.

Given the right economic incentives, much more energy could be generated from waste, using a range of technologies and offsetting carbon emissions from fossil fuel sourced energy. The UK continues to generate much less energy from waste than other Member States and ESA has called consistently for all energy from the biodegradable fraction of MSW to be supported by the Renewables Obligation, no matter what technology is used to recover energy.

8. The promotion of anaerobic digestion.

Anaerobic Digestion offers potential for treating agricultural wastes and wastes from food production, resulting in energy generation and material which can be applied beneficially to land.

Whilst Waste Strategy 2007 states that “the Government wishes to encourage local authorities and businesses to consider using anaerobic digestion” (page 78) ESA believes that the choice of technology should be based on market considerations. ESA welcomes the Government’s intention to increase support of AD but this should not, for example, be at the expense of support for energy generation from landfill gas.

Further work is required to determine the effectiveness of AD as a method for treating and recovering mixed MSW on a large scale with variable feedstock. ESA suggests that local authorities need clear regarding AD’s suitability for source segregated waste streams.

9. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies.

The UK relied on landfill as the primary method of managing waste. Landfills tend to be large, with location defined by the existence of suitable geology and a hole to be filled. Often landfill plays a role in environmental improvement such as restoring used mineral workings.

Existing alternative infrastructure is widely recognised to be inadequate and the Environment Agency has warned that thousands of new facilities will be required to replace landfills. Such facilities will generally be smaller than the landfill they replace and will not be limited to locations by geology. National and local government therefore need policies facilitating a more dispersed network of waste management infrastructure which could be placed closer to or within centres of population.

The difficulty in obtaining planning permission is the single biggest brake on the development of infrastructure and the review of PPS10 two years ago was not a panacea. Local authorities are not delivering sufficient planning consents and the Planning White Paper published in the same week as the Waste Strategy did not address adequately waste management needs.

In principle, the Government’s proposals to devise a National Policy Statement for waste management development could help to deliver a range of waste management infrastructure. However, the focus on large scale infrastructure is too narrow: instead policy should recognise that waste management facilities of varying sizes, types and capacity are essential if the UK is to comply with EU law.

The proposed Infrastructure Planning Commission is an additional layer of decision making which could add complexity, confusion and delay to the planning system, at a time when additional waste management infrastructure is urgently required. Instead, a stronger regional dimension to waste management planning is needed, with regions better resourced and empowered to make strategic planning decisions.

ESA welcomes the preparation of a National Policy Statement for waste management development as an urgently needed opportunity to provide planning authorities with a robust framework to ensure new infrastructure can be delivered promptly and efficiently.

Even with a renewed planning system delivering new infrastructure, England will be for the foreseeable future be dependent on exports of materials for reprocessing as there is simply insufficient reprocessing capacity in the UK. Over half of the UK’s paper collected for recycling is processed overseas, and over two thirds of plastic. Announcements such as the granting of planning permission for a new newsprint mill in Kings Lynn in November 2007 increase British capacity but, in a context of increased collections, most material will continue to be exported.
In response to growing interest in the fate of material collected for recycling, the Recycling Registration Scheme was launched by ESA in April 2007. The Scheme allows companies to demonstrate—by an independent audit—that they are operating in compliance with a Code of Practice which requires wastes handled or processed at registered MRFs and exported out of the UK:

- to be handled or processed at the registered MRFs in accordance with good British industry practice;
- to accord with Green List Waste Guidance; and
- when exported, to go to a recovery facility authorised to operate under applicable domestic legislation and in general compliance with all applicable domestic environmental and health and safety law.

As of November 2007 the scheme had eight Members with a similar number of sites applying for membership.

Environmental Services Association

November 2007

**Supplementary memorandum submitted by the Environmental Services Association (Waste 39a)**

1. **How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management**

   a) Decouple waste growth from economic growth and put more emphasis on waste prevention and reuse:

   Notwithstanding the prospect of recession, ESA still believes the UK needs ongoing investment in new infrastructure to recover value in waste and that the Government should be bolder than hitherto in promoting producer responsibility which has the longer term capacity to minimise both the volume and toxicity of waste.

   The Committee may wish to note provision in the new Waste Framework Directive requiring Member States to develop national waste prevention programmes and additional duties on the European Commission.

   b) Meet and exceed LFD diversion targets; c) Secure Investment in Infrastructure; and d) Increased recycling of resources and recovery of energy:

   Our written evidence stated that, given the shortfall in infrastructure and slow pace of public procurement, ESA was not as optimistic as the Government that the long term landfill diversion targets would be met.

   That is still our position: indeed, the Planning Bill is broadly irrelevant to our sector and financing infrastructure is difficult.

2. **The role for and implementation of regulations, and their enforcement**

   Our written evidence noted our “Sector Plan” agreed with the Environment Agency. The annual review of progress against the objectives in the Plan is due to be published and the first monitoring report, reporting progress against the targets in the Sector Plan, is due next summer.

   Construction waste is one area where there have been some positive actions to improve regulation over the last year. Since 6 April 2008 Site Waste Management Plans (SWMP), which record the amount and type of waste produced on a construction site and how it will be reused, recycled or disposed, have been compulsory for all construction projects in England costing over £300,000.

   ESA welcomed the Environment Agency’s aims to make efficiency gains by reducing red tape through their Environmental Permitting regime, which came into force on 6 April 2008. ESA hopes that their Integrated Regulation Programme will allow the Agency better to distinguish between well-managed firms and intentionally non-compliant firms, and to target enforcement activity accordingly.

   Defra, the Welsh Assembly Government and the Environment Agency have just consulted on their review of the waste exemptions from environmental permitting, the first such review since 1994. ESA hope that the revised arrangements will provide a better framework through which the Environment Agency can more effectively enforce exemption conditions. We would hope to see reduced abuse of the exemptions system, fewer illegal operations, and exempt operations bearing their fair share of regulatory costs, with effective sanctions on law breakers as well as more rigorous and transparent reporting requirements.
Over three years from 2005, the Business Resource Efficiency and Waste (BREW) Programme provided £2 million pa to the Agency to fight flytipping. ESA repeatedly advised that this was inadequate. Yet even this funding no longer exists as BREW has closed. It remains imperative that the fight against environment crime is properly resourced, particularly as the Landfill Tax continues to rise. ESA has previously advocated a “zero tolerance” approach to fly-tipping before the Committee.

3. The classification of waste

As we predicted, the new Waste Framework Directive (“WFD”) has not modified the tried and tested EU definition of waste. We are also very pleased that the Rapporteur and then the European Parliament and Council accepted our advice that there should not be significant de-regulation of business waste, including hazardous waste, by adopting a broad definition of by-products, a specific type of non-waste. The definition now included in the Directive is broadly based on existing jurisdiction of the European Court of Justice.

Further EU standards are proposed for some materials (including at least aggregates, paper, glass, metal, tyres and textiles) with the effect that once these standards are attained, the wastes become products. We have supported the Environment Agency and WRAP in fully engaging in the process of deriving standards. However, the Committee might wish to discuss with the Minister the Government’s interpretation of the relationship between this “end of waste” process and REACH: our sector—and, no doubt, others—would welcome clear, reliable and timely guidance.

4. The proposals for financial incentives to increase household waste prevention and recycling

ESA has consistently wanted local authorities to be empowered at least to pilot incentive/charging schemes to promote recycling and discourage production of mixed residual waste. We regret that this has not attracted greater political consensus and note that time is already short to put in place drivers to promote compliance with the challenging landfill diversion targets for 2013.

While we welcome provision for pilots in the Climate Change Bill, we are surprised by the Government’s timidity as regards the education and information programmes needed for public support and acceptance.

5. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

We have already expressed concern at the Government’s disinclination better to co-ordinate waste with planning and energy policies. While we welcome the carbon focus of the new Department for Energy and Climate Change, we do so on the basis that, by means not yet clear to us, this will help rather than hinder such co-ordination.

Environmental Services Association
November 2008

Witnesses: Mr Dirk Hazell, Chief Executive, Mr Richard Skehens, Managing Director, Grundon Waste Management, and Ms Gill Weeks, Regulatory Affairs Director, Veolia Environmental Services (UK) plc, Environmental Services Association, gave evidence.

Q153 Chairman: Welcome to the further session of the Committee’s inquiry into the Waste Strategy for England 2007. Can I formally welcome then, from the Environmental Services Association, Dirk Hazell, their Chief Executive, Richard Skehens, the Managing Director of Grundon Waste Management Limited, and Gill Weeks, the Regulatory Affairs Director of Veolia Environmental Services (UK) plc. Thank you for your written evidence, which was very helpful to us. Can I start with a question about your optimism about the United Kingdom meeting its landfill diversion targets. You express some concern as to whether we will actually hit the targets, that the Strategy the Government have put forward is optimistic in that respect. We have had submissions indicating that these targets that we have are currently not stretching enough. Do you think that we could do better than is laid out if, shall we say, policies, like, for example, banning certain wastes from going to landfill, were adopted? What do you think are the maximum levels of recycling that we might seriously achieve in this country by 2015?

Mr Hazell: Thank you, Chairman, and I will try to be brief with your question. I think the first answer is that it looks like the 2010 target will be met with 40% recycling, and that is corroborated by low prices in the landfill allowance trading market. The 2013 targets are another matter. The Audit Commission, as the Committee probably knows, have looked at that, they have far more evidence available to them than we have, and they think that delays in the planning system or in funding could in fact put those targets in jeopardy. That is our view, and, in any case, it takes years to put an item of infrastructure on-line even when it has got permission, and Defra have provided a schedule on that, so we think there are things the Government could do actually to
accelerate things. In terms of landfill bans, we have no dogmatic objection to landfill bans, although some materials, like asbestos, will always need to be landfilled. Article 22 of the new Waste Framework Directive encourages Member States to go for separate collection of biowaste for treatment outside landfill. ESA supported stricter obligations and, I suppose, one way of answering your question is to say that, if you were to prevail on the Government to go for separate collection of biowaste, that would be quite a good way of getting the recycling rate up for 2015 rather more quickly than might otherwise be the case. It is difficult to put a figure on what we think the 2015 figure is, but, as I have already said, we think there are difficulties with the 2013 target.

Q154 Chairman: Going back in time, you told us in your written evidence that the Waste Strategy 2000 made a mistake of not supporting its aspirations with effective policies, regulations and economic incentives. Do you think that the Waste Strategy for 2007 repeats that mistake?

Mr Hazell: No. I think it is fair to say, and I am not saying this just because we are here because we say it when we are not here, that your Committee has been a very helpful pressure on the Government, as indeed has the European Union.

Q155 Chairman: You can say that again! We like that!

Mr Hazell: Your Committee has been particularly helpful—

Q156 Mr Drew: Particularly the Chairman!

Mr Hazell: All the members and all the chairmen, by and large. It has been very, very helpful because certainly I have been in the job and Gill has been in the job for many years and actually, if you go back to the start of this decade, the only way we could ever get the Government to talk to us was actually to come and talk to you, and it was the same with the regulator. We are in a completely different context now. Defra has put far more staff and resources into it, there has been, since Margaret Beckett, a different ministerial attitude towards this subject, and, when you look at the Strategy that came out last year, there is a sort of route map of getting to where we need to be. There is clarification of the roles of different technologies, there is an accelerated increase in the landfill tax, and one of the things that would be very helpful to us, if you could extract it from ministers, is some sort of commitment for the medium- to long-term future of the landfill tax because that is a driver for investment. There is contemplation of enhanced capital allowances, there is nodding in the direction of more sustainable treatment for commercial, industrial and construction waste, there is a very timid reference to the “polluter pays” principle for household waste and there is reference to site waste management plans, so you are dealing with much more sophisticated theory, refined targets, but, as well as that, you have actually got some practical policies, so it is like being in a different country, frankly.

Q157 Dr Strang: You have said that, in your view, the rate at which we can reduce the production of waste is likely to be fairly slow and that, therefore, there has to be some concentration on the managing of existing waste. It would be fair to say, would it not, that that is contrary to the Government’s policy with its waste hierarchy which puts prevention at the top? If I could just throw in a further question, do you think we need more bold initiatives, and have you any suggestions as to what can be done to try and make more progress?

Mr Hazell: We do. There are two components to your question. The first is that we do not, as the waste resource management industry, oppose minimisation, we are not opposed to it, but the waste hierarchy is not a rigid imperative and it is not in itself an infallible guide to what is best for the environment. There was an awful lot of lobbying that surrounded the new five-stage hierarchy that is in Article 4 of the Waste Framework Directive. It is a five-stage hierarchy now, not a three-stage one, that is fine, and it does allow diversions from the hierarchy in the interests of what is environmentally feasible and also you have to take into account what is economically and socially appropriate as well, so there is reasonable pragmatism in that new framework law. Our concern on minimisation, it is not so much that we are against the minimisation because we are not, it is that, if the Government focuses too much on minimisation at this stage, it can become an excuse for not focusing enough on the infrastructure that will replace landfill, and we are still very short of that in this country. Second, in terms of stronger waste minimisation, we do support the Chief Executive of the Environment Agency’s evidence on PPC permitting; you have good evidence on that. He, rightly, referred to the quality protocols for end-of-waste for certain waste streams that the Agency are rapidly developing, and that is really with a view to influencing European Union standards because that has got to be decided at the European level. I think the only caveat we would offer this Committee is that there is a need for much clearer guidance on how that end-of-waste regime, the quality protocol regime, relates to the REACH regime, the new chemicals regime for Europe. Originally, waste was not supposed to be in it. We have got a deal for compost, which is quite helpful, but the other waste streams, if we could get official and clear guidance, because the REACH stuff is so complicated, on how the REACH regime relates to the quality protocols and end-waste, that would help. Also on minimisation, extended producer responsibility is something we would encourage the Government to look at much more closely. There is a generic reference to extended producer responsibility in Article 8 of the new Waste Framework Directive. This Government has not had a very strong record on producer responsibility and we do think that that needs to change if you are serious about minimisation. If you get the right extended producer responsibility, you encourage producers to build better-quality goods that last longer, they are easier to recycle at the end of their...
life phase, they are less hazardous, and you also build in the means financially to pay for the treatment once the consumer is finished with them.

Q158 David Taylor: Domestic recycling rates have quadrupled in the last decade or so and in your submission, in a passing comment, you say that is largely because the easy wins have been secured. Very briefly, what do you mean by that? It is paragraph 4.

Mr Hazell: Well, I am surrounded by two operators, but, in very broad terms, what has been taken out of the household waste stream is what is very easy to take out, so it has been things like paper, glass and, actually to help local authorities with their waste targets, we have had some green waste. As we are now looking higher up in terms of recycling rates, you have to take from more of the mixed waste stream, unless you go down separate collection and biowaste, but either of my colleagues can give you operational answers, if you want.

Q159 David Taylor: It will probably help if I complete the question by observing that you say also in your submission that the Government missed an opportunity to implement charging schemes reflecting the “polluter pays” principle. I wonder what evidence there is for that, and are you not reflecting the “polluter pays” principle. I wonder if I can have evidence that charging would improve—

Mr Hazell: Well, I think doing the sort of line of work that we are in, you cannot bear to read the Daily Mail these days! We sort of have to carry on with those and—

Q160 Mr Drew: You recycle it!

Mr Hazell: Indeed, that is probably the best thing to do with it!

Q161 David Taylor: It is a serious point. Do you have evidence that charging would improve—

Mr Hazell: It is a very serious point and I will give you a very serious answer. We are in no doubt that the last Secretary of State and the last Minister of State would have gone further. I think they probably thought with the Waste Strategy that they were doing what was politically possible with their quite timid proposal on the “polluter pays” principle. As a general environmental principle, you should support polluter pays. In terms of empowering local authorities to do what the Government is asking of them, it is probably better to give local authorities the power to do it. In terms of whether it works elsewhere, we did in 2002 commission quite a detailed study, a short one but detailed, from Ernst & Young which looked at continental experience and, if you want it, we are more than happy to table a short one but detailed study, a short one but detailed from Ernst & Young which looked at continental experience and, if you want it, we are more than happy to table the Ernst & Young report that gave indicative references to other European cities, but the whole point of piloting, and we hope that local authorities will pilot it, is actually to see what works in this country at this time in different types of area.

Q162 David Taylor: Do you recognise the political difficulties that would be thrown in front of the authorities that might want to move down that line?

Mr Hazell: Well, there is one political difficulty in one part of one particular political party, but it is not even the whole of that party. There is a certain amount of populism around this agenda, yes.

Q163 David Taylor: Have you any ideas what level of charge might be necessary to really start to change behaviour in that regard?

Mr Hazell: Well, we would be very happy to re-table the Ernst & Young report that gave indicative references to other European cities, but the whole point of piloting, and we hope that local authorities will pilot it, is actually to see what works in this country at this time in different types of area.

Q164 David Taylor: Do you have a structure for the pilots?

Mr Hazell: Well, I think it should be for the local authorities to decide what they want to do in their area. One of the complications has been that, when we started looking at this, we thought it would be an additional non-tax revenue stream, and what has not actually helped is that this Government was not terribly joined-up, so the proposal that came out of Defra for understandable political reasons turned out to be a tax, and that was not the original intention.

Q165 David Taylor: And the most well-to-do, middle-class areas, the Lichfields of this world, are able to achieve astonishing recycling rates, and of course inner-cities find that more difficult, do they not?

Mr Hazell: We have always ourselves emphasised that whatever comes into play must not be regressive. When Ernst & Young did their report, that led them to the conclusion that, to start with, the charge should be a direct, flat-level charge suitable for the local community rather than a variable one because obviously, if you are on income support, even if it is £1 or £2 a week, that is a big percentage of your income.

Q166 Miss McIntosh: Can I just ask what more we can do to recycle plastics and cardboard?

Mr Hazell: More is being done in the sense that a bit more infrastructure is being put in place in this country and a lot of it is being exported for recycling. I do not know if either of my colleagues want to add.

Mr Skehens: I think there is an awful lot of work going on in the background to extend the use of recycled plastics and also to look at the segregation of plastics so that you can get a much better split rather than just PET or HDPE. That is happening, but I do not think it is happening as quickly as everybody would like, but I think that will happen over the next two to three years and there will be advances there, and also in the segregation of the plastics.
Q167 Miss McIntosh: How could we speed it up?

Mr Hazell: Clear signals on the landfill tax are always going to be helpful.

Mr Skehens: That is a really good driver, particularly for businesses.

Q168 Miss McIntosh: I think Dirk did say that the UK is very short of replacement for landfill, that we are very light on the infrastructure really to replace landfill, so presumably that counts for this as well.

Mr Hazell: We are going to have difficulty with the 2013 targets, there is no doubt, because there is delay in providing the infrastructure.

Q169 Miss McIntosh: Is that because of planning?

Mr Hazell: Your question was not particularly time-specific. If you want to accelerate plastics, as Richard has said, for industrial and hazardous waste, the price signal is going to be very effective very quickly, and you are starting to see that the change in the climate for plastics has been quite rapid.

Q170 Lynne Jones: You say in your submission that “regulation makes the market” in the waste sector and you have already, I think, given us some examples of where you think more regulation would actually help in this. Would you like to expand on that and let us know whether regulation is doing enough to make the market.

Mr Hazell: Well, it could always do more, but, in all honesty, if we appeared, as we did, before this Committee five years ago, we would have said that regulation was as much a hindrance as a help. I do not think that is the case any longer. I think that the standard of regulation is better, but this country is still very slow to implement the European producer responsibility laws. On average, they come in about three years after they are supposed to come in in this country, so there is a weakness on the producer responsibility. There is certainly, as we have said a number of times, a need for a strong signal over a sustained period on the landfill tax; that is important. We would not object, as an industry ourselves, to legally binding recycling targets for some components of business waste, as long as they are justified environmentally, and one of the difficulties we have got with that is that the measurements for environmental sustainability are not what they should be. The OECD has been working on this for about 10 years and it has not really had support from all the governments, including our Government, that it might have had and the result is that the private sector is tending to fill the gap, and certainly our sector is among those that is putting its own voluntary sustainability indicators in place. I think what would also be helpful, and it is a sort of regulatory issue, is that local authorities should be doing much more than they are to provide planning consents for new recycling and recovery infrastructure, and that is for business waste, not just their own municipal waste. A really fundamental gap in the regulatory picture at the moment, and Gill is happy to talk about this in much more detail, is the lack of awareness of three-quarters of Britain’s SMEs even of the fact that they have a duty of care because, if you have price signals and you have the basic knowledge that there is a legal duty, then actually, as long as it is seen to be enforced, most people are going to follow those signals quite readily.

Ms Weeks: As Dirk said, it is quite frightening, particularly with the SMEs, that a lot of people do not know what their responsibilities are. I think you took some good evidence from the Environment Agency about how they are trying to deal with environmental crime because that obviously comes in where, as the charges go up for disposal and dealing with their waste, clearly the environmental crime becomes more attractive. ESA helped with getting BREW funding for the Environment Agency to tackle crime, but I still think that we should be able to see some direction of landfill tax being put back into the Environment Agency to help fund environmental crime because I am not convinced that they are resourced enough to be able to deal with that. We need a national media campaign, I think, as well to make the SMEs and the small businesses aware of what they need to do, and again there was a £50,000 budget allocated by Defra for communicating the changes to the duty of care, and that is clearly wholly inadequate; we need a big national campaign. We have started seeing it for the domestic stream and I think we need to get it on to the mainstream media. The other one really is the registration of carriers. It is relatively simple to set up as a waste carrier; you just pay a fee to the Environment Agency about how they are trying to deal with environmental crime because I am not convinced that they are resourced enough to be able to deal with that. We need a national media campaign, I think, as well to make the SMEs and the small businesses aware of what they need to do, and again there was a £50,000 budget allocated by Defra for communicating the changes to the duty of care, and that is clearly wholly inadequate; we need a big national campaign. We have started seeing it for the domestic stream and I think we need to get it on to the mainstream media. The other one really is the registration of carriers. It is relatively simple to set up as a waste carrier; you just pay a fee to the Environment Agency. There is no technical competence or anything that you have to go through to get that, so I think that would help as well and it would just drive up standards across the business and hopefully get more waste out to be recycled.

Q171 Lynne Jones: Some of the money from the landfill tax is going to fund the BREW, the Business Resource Efficiency and Waste Programme, and also I am particularly interested in the National Industrial Symbiosis Programme because the headquarters are in my constituency. Would you care to comment on the effectiveness of those programmes which did actually suffer cuts in the last Defra budget?

Mr Hazell: I was actually on the BREW steering group and a lot of the recipients were not terribly good at demonstrating their inputs and outputs, and I am not referring to anybody by name. The Environment Agency were actually very good on the money that we helped to secure for their enforcement, they had very good input/outputs. The BREW Programme, as you know, has come to an end and, I gather, another select committee will be looking at that next year. As far as NISP is concerned, we are not really the right stage of the market for them, we are the people that put the materials back in for reprocessing and we hand the materials over to the reprocessors, and the main function of NISP is really to provide outlets for them, for those reprocessors.
Q172 Lynne Jones: But it is also to put companies in touch with one another, so one example is of stuff from the pottery industry, which used to go to landfill, actually going direct to the roofing industry to be made into roofing materials, so you cut out the middle man, as it were.

Mr Hazell: Indeed, and you are going to see a lot more of that as the landfill tax rises. Businesses will be doing more and more of that as the landfill tax goes up, it will be a very effective driver, and obviously, if there is some medium for providing information, that can only be helpful.

Q173 Lynne Jones: Is there anything that you, as an organisation, are doing in terms of sharing best practice?

Mr Hazell: Well, we do it all the time with our members’ customers. Most of the businesses in this country that know they have a legal duty of care know they have it only because of companies like Richard’s and Gill’s who tell them about the duty of care. It has been the case for many years that our companies work inside factories, for example, advising companies on how to reduce and mitigate their waste streams and how to improve recycling.

Ms Weeks: We work closely with NISP as well, it is an organisation that we have contact with, and we check fairly regularly what streams they are looking for and whether we, within our controls, have those kinds of streams, so, wherever possible for our big customers, we are looking to source their waste where it can be reused, so the big customers, I think, are covered and it is the SMEs that are more difficult to get to.

Q174 Lynne Jones: And that is where NISP has actually been more effective in the small businesses, I think.

Mr Skehens: Once again, as a company, Grundon do actually do a regular newsletter which updates all our customers on new legislation that is either just coming in or is already in there, so there are updates because, without that knowledge, it is very difficult for them to recycle and to treat their waste properly. I think more education of the SMEs would be beneficial and it should not just be down to the waste industry to do that, and I think with a lot more effort from other groups, including the Environment Agency, it would help the situation no end.

Mr Hazell: We have dropped a very heavy hint on a public information campaign.

Q175 Lynne Jones: Well, I am sure the Committee will take those points on board. Could I ask you whether responsibilities for municipal waste should be more effectively joined up with those for non-municipal waste?

Mr Hazell: There are a lot of problems with doing that. We are not sure it is the right thing to do. There are all sorts of competitive issues, for a start. Supposing a company, like Richard’s or Gill’s, has got some treatment infrastructure in place, it happens to be in a local authority that has got some spare PFI resources and that local authority decides to build something subsidised next to that site, then you have automatically got difficulties with competition. I think the best advice we can give this Committee is that, if the landfill tax goes up and if regulations are enforced, then this country’s businesses are going to do pretty much everything they need to do without a great deal of changes in contractual relationships.

Q176 Lynne Jones: Is the existence of the landfill tax though considered to be a perverse incentive for local authorities actually taking on some of these responsibilities? I know that you do not think it should.

Mr Hazell: Yes, the LAT Scheme is a perverse incentive for local authorities, and again we have signalled that there is difficulty with the 2013 targets. It would actually be quite perverse for local authorities, when they have got that difficulty with 2013, to add to those difficulties within the LATS framework by taking on responsibility for additional waste streams.

Q177 Lynne Jones: Well, only if it was a more efficient way of collecting, or dealing with, both streams.

Mr Hazell: The problem is really the micro businesses. The large businesses, as Gill and Richard have said, are dealing with it themselves and the medium-sized ones. The problem, to the extent that there is one, is really the micro businesses, but we really do think that, once the landfill tax hits £48 per tonne plus, a clear government signal that it is going to stay at that level or higher, and once these businesses know they have a duty of care that will change the dynamics very quickly.

Mr Drew: Are PFI credits the best way to be dealing with local authorities’ waste products?

Chairman: Can I ask you to respond to that when we come on to Paddy’s question because the two are related.

Q178 Paddy Tipping: You say that the alternative infrastructure to landfill is inadequate? Why is it? Is it so inadequate that we are not going to meet the new targets for recycling diversion?

Mr Hazell: It looks like the 2010 targets are okay. The recycling progress in recent years has been very good and household recycling in England has more than quadrupled in the last decade, so that is pretty good, but this Committee knows from pained evidence it has taken from us in previous years that it was a very, very slow process to get started. Defra themselves have published a schedule of how long some of this infrastructure is going to take to get on-stream. Richard Skehens is bursting to give you recommendations for, and tales of woe about, the planning system. There are real difficulties in getting the infrastructure on-stream, so 2013 is at risk, yes.

Paddy Tipping: So, Richard, you had better tell us about that.

Chairman: It is the “give us the woes” session now.

Q179 Paddy Tipping: There is a Planning Bill going through Parliament now, as we speak, but it does not do much for you, does it?
Mr Skehens: No. However, we did have one or two suggestions where we hope things can be speeded up. First, the timing, and inadequate delivery, of the waste development frameworks would be very helpful. I think, so far, only five local authorities have their waste development plans in place. Now, we happen to be in a state of limbo while they are not there and that is very difficult both for the local authorities and also for developers trying to get facilities through, so that is one area where, if there could be a big push there to get the waste developments plans through, at least it would give a bit of steer to where we want to go. At the moment, the industry are a little bit in the dark. The next recommendation is to extend the permitted development rights within our sector. Other utilities have obtained the permitted development rights and, although it might not seem a major issue, when we have to go for planning permission for minor, uncontroversial development within an existing waste site, it does make life more difficult and slows things down, so the reintroduction of PD rights to waste sites would be—

Q180 Paddy Tipping: Explain that to me a bit more, on an existing site, a shorter route to make changes. Mr Skehens: Well, under the permitted development rights, the owner/occupier of the land has the ability to make changes. I hope I am not teaching you to suck eggs here, but there are certain criteria by which you can make simple changes to your operations which will enhance the operations, speed them up, will give better measurement, for instance, by putting weighbridges in and such like. Without permitted development rights, you have to make a planning application each time you want to make this change, so it could be the parking of vehicles or it could be that the weighbridge is a very good example, and we all know that the planning system, by its very nature, is quite slow and laborious, but it also gives people an opportunity, so they may not object in principle to a weighbridge being moved, but they may object in principle to the waste site being there, so it just opens a can of worms. By allowing permitted development rights, and bear in mind that these are usually for pretty minor issues, it could actually make the industry more efficient. The third recommendation we would make follows the Environment Agency’s evidence on dual-tracking, ie, the simultaneous processing of applications for planning and permits. Unlike other industrial processes, however, which do not have to have a planning permission before they can get a permit, waste facilities have to have a planning permission before they can get a permit, so I think, in practice, a lot of the companies already try and twin-track the PPC permit and planning application, but it would make life easier if this hurdle of having to have the planning permission was not there because the permit sometimes guides the planning permission, so the chicken and egg situation would be reversed. The other element on applications is that we feel that the deadlines for responses should be enforced by the local authorities because a lot of applications are delayed quite dramatically by statutory bodies not actually bothering to respond or literally waiting till the last day and then asking a whole series of questions, and that, once again, delays the process. If they knew that the deadlines were going to be met, I think they would respond in a far more positive manner. Our fourth recommendation is that PPS10 should be better reflected in the waste development plans and, in the absence of waste plans, perhaps PPS10 should prevail.

Q181 Paddy Tipping: Can you just explain that a bit more to us?

Mr Skehens: Well, PPS10 was introduced in July 2005 and it sets out the national policies for the planning of waste. It is a very, very good document which most people, I think, accept and try and work to. Some local authorities, however, because they are still struggling with their waste development plans, have rather put it on the back burner, and what we are suggesting is that, while the waste plans are not in place or the local plans are not in place, perhaps greater emphasis should be placed on PPS10 in the interim because at least it will help the process to move forward. I think our final recommendation is on the proposed national policy statements. I think the Bill before Parliament at the moment concentrates very much on large-scale facilities and we would like to see that particular element of it widened because an awful lot of waste facilities, although absolutely vital to the local and regional infrastructure, will not come anywhere near the scale of these large facilities, and it would make life an awful lot easier if the Planning Bill were actually to pick that up and say, for small facilities, that it is very important as well and it might help to fast-track some of these applications through.

Mr Hazell: And it is a very important part of our evidence and, if it would be helpful to the Committee for us to reproduce Richard’s remarks and supplement them, we are more than happy to give you some supplementary evidence, if that is helpful.

Q182 Paddy Tipping: David Drew was asking about PFIs. Here we do a lot of PFIs and I guess you do as well, Richard.

Mr Skehens: We try and avoid them.

Paddy Tipping: They seem incredibly long-winded and difficult. Are they the best way of funding new infrastructure?

Q183 Mr Drew: I just want to come in on the back of that because this is highly pertinent to me because today Gloucestershire has just received its announcement of a £92 million PFI credits deal with Defra, and I am just intrigued because the County Council is now saying, “Well, the market will decide on the appropriate forms of waste disposal”, and I would just welcome the industry’s view on: is this the best way to actually do this? It appears that they are waiting for you to decide and you have got to make it work for the money, which may or may not be a good thing.

Mr Hazell: As an industry, and there are nuances between the different operators, but, as an industry, there is no ideological commitment to PFI. What we
want is something that is going to provide the money and is going to provide long-term certainty for the operation of capital equipment, so the PFI is a means of giving a local authority up to half the money they need for capital expenditure. It is true that the guidance that comes from central government on PFI has recently improved, but it does tend to be quite inflexibly interpreted by local authorities. It is also the case for our sector, and the CBI more generally is looking at the application of this across the whole economy, but, in our sector, the implementation of the European Union requirement for competitive dialogue has raised bid costs and it is very expensive to bid for contracts. At the absolutely final stage, for the winner it is now a bit quicker, but the industry’s total bid costs for any possible auction are much higher than they were and that is not great news in terms of competition. It is also the case, in the context of the sorts of contracts you get in this sector, that PFI is really more designed for buildings and the bulk of the added value and a lot of the contracts our sector provides are really on the service that is provided from those buildings. So we do not have this great ideological adoration of PFI as a sector, it is just the means to the end that happens to be available.

Mr Hazell: Well, let us answer your question in a very direct way, taking what, I think, is behind it, that this country could do with a lot more energy from waste facilities than it has currently got, and PFI is not a bad vehicle for energy from waste facilities. Again, it is for Treasury ministers to say what they think, but PFI has now lost a lot of its attraction to governments over the last 15 to 20 years anyway. We will work with the tools we are given and the key driver for our sector is regulation, but we also need some money, and, as long as we get both of them, we will deliver the services you require.

Mr Skehens: We have looked at this to see whether we can sort of perhaps benefit the increase in the EfW plants. Enhanced capital allowances would obviously help and the provision of ROCs for conventional energy from waste would help. Probably one of the key drivers is still the landfill tax because, if the landfill tax continues to go up and there is some certainty past 2010, which we have already mentioned, that will also help drive technology.

Q186 David Taylor: What capital allowances do you get, on average? Is it 40% in the first year and 25% thereafter?
Mr Skehens: Is it not 25, 25 and 25? That is for the plant, although the building obviously is written off over a much longer time.

Q187 David Taylor: Do you think that that mix of measures would be sufficient to drive it up?
Mr Skehens: Yes, it would help, it would definitely help.

Q188 David Taylor: Is there not some evidence that the Government, through covert means of PFI credits and others, are trying to get incineration, which is what it was once called in its controversial clothes and which has now morphed into energy from waste, is it not trying to get incineration as being the option, the only show in town, if you like, to local authorities who then have to wish incineration schemes on communities like Bardon in north-west Leicestershire where it is a very controversial issue at the moment?
Mr Skehens: Yes, I know Bardon. It is a controversial issue wherever you put them because I think the general public have an aversion to energy from waste or incineration, as you called it. There is a slight difference because, with pure incineration, that was devised just to dispose of the waste. I think with EfW, it actually does generate power from the waste which is very important and obviously, if you can combine heat and power from the plant, so much the better. From a personal point of view, I believe in an integrated system, so I do not think that one should drive in any particular direction. I think it is horses for courses and, if an EfW plant suited one area, it may not suit another area. However, without it, without more energy from waste in the country, I think we will be struggling as landfill decreases in the future.

Mr Skehens: I think it is misplaced. I think probably it is up to the industry to continue to explain what is happening. There is a huge difference in the energy from waste plant that was built in the 1980s from one that is built in this century.

Q190 Miss McIntosh: Just on the criminality and fly-tipping, what can we do to reduce fly-tipping? Are there sufficient resources and where should the Environment Agency take the resources from?
Ms Weeks: I think as I said earlier, I have some real concerns about the resourcing of the Environment Agency to be able to do a really meaningful job. As the cost of disposal or treatment goes up, so it becomes more attractive to the criminal element, and I think there are maybe two types of fly-tipping. One is a guy who shoves it in the back of his car and drives out into the country and chucks it on the side, but then there is the really organised crime as well.

Q191 Miss McIntosh: But we seem to get it both times in the rural areas.
Ms Weeks: That is right, and, in order for the Agency to be able to tackle that properly, it does take a lot of time and resource. I think what is also disappointing for them and must be rather soul-destroying is that in a lot of cases, when it gets to court, the fines are quite derisory and they are not a deterrent, particularly for the organised crime groups, so I think we need to be looking more at having more resources for the Agency for them to be able to do it and then really educating the court system to be able to get meaningful fines, confiscation of property, et cetera, to make sure that it is not as attractive to the organised groups to do it.

Q192 Miss McIntosh: But the problem is that, if they come in the dead of night, you have got to apprehend them to be able to prosecute.
Mr Hazell: Well, the Agency has actually followed our advice on that and they are using quite specialist policing techniques these days. I would emphasise what Gill has said, that we very strongly support the evidence you have already had from the Chief Executive of the Agency and we do agree that a bit of landfill tax should be used to protect the landfill tax revenue. Also, there is this need for public information, and this £50,000 budget that Defra has allocated on the duty of care and registration of carriers requirements is derisory. Again, if I go back to Lynne Jones’s question on the BREW Programme, the Agency were in a different class from others when it came to demonstrating what they did with the money they received and it is a very important point because, in principle, the money that the Agency takes from our members as regulated parties should actually only be spent on regulation, and that is indeed the basic legal framework. The public purse should be paying for the Agency to deal with the more serious fly-tippers because the local authorities certainly cannot.

Q193 Miss McIntosh: I think there is this issue though, with the greatest of respect, when it ends up on private land and it is so unfair to a private landowner, especially in the present climate, to be expected to move it.
Mr Hazell: I have read the evidence and I agree with your question, but the Agency needs to be resourced, and our advice to this Committee, based on what we have seen of the techniques they are using and the way they are engaging with our industry to get intelligence, the Agency needs a ring-fenced fund from the landfill tax to catch the criminals. As the landfill tax goes higher, every increase in the landfill tax is going to make this more of a problem. This is the time for this country to get tough on the criminals.

Q194 Miss McIntosh: With stronger penalties from the courts?
Ms Weeks: With stronger penalties, and also we have gone back to talking about duty of care again, so, if we can enforce the duty of care so that again, when businesses hand waste over to somebody they should not and that person then flytips it, they should be made to put it right. I take your point about private landowners and again it is just making sure that the courts, when they are caught, make the orders that people clean it up.
Chairman: Thank you very much indeed. Thank you for the crispness of your replies and the quantity of evidence that you have given us and thank you also for offering to send us the further material; that is much appreciated.

Further supplementary memorandum submitted by the Environmental Services Association (Waste 39b)

Further Requested Information

1. A copy of the report commissioned by the ESA from Ernst and Young in 2002 relating to incentives and charging for household waste

Please find relevant document attached: “Analysis of the Application of the Producer Pays Principle to Producers of Household Waste as a Driver Towards Sustainability” Ernst and Young, July 2002 (Funded by ESTET)\(^1\)

\(^1\) Not printed
2. A note of key points on the problems the planning system presents for the development of waste infrastructure

We have five recommendations:

Our first suggestion relates to timely and adequate delivery of waste development frameworks:

— Timely delivery of new waste management facilities depends on local authorities having in place up to date development plans with provision for the allocation of waste sites. Otherwise, the submission of development proposals are likely to run contrary to a development plan, increasing the chances of proposals being referred to committee or planning inspectorate upon appeal.

— The introduction of the Planning and Compulsory Purchase Act required all county councils to replace waste local plans with new waste development frameworks. In England, 34 County councils and even more unitary authorities are responsible for waste development frameworks but as of last month the Planning Inspectorate had approved as sound only five local authorities' waste development plans.

— HMG should indicate what action it proposes to take against local authorities taking longer than the law allows to complete a development plan document and should offer more guidance on how waste development frameworks should be prepared and specify the waste issues that must be included in the core strategy.

— ESA suggests that core strategies and site proposals should be considered simultaneously to increase wider understanding of waste management issues and speed up the overall delivery of Waste Development Frameworks. Waste development documents must outline the number, capacity and type of facilities that will be required to meet the needs for the management of the broad equivalent of waste generated within the boundaries of each local authority.

Our second recommendation is to extend Permitted Development Rights to our sector:

— We believe our sector should be treated like other utilities and that permitted development rights should be extended to minor, uncontroversial development on existing waste management sites. This is not a panacea but would release resources to focus on more substantial applications. This requires an amendment to the Town and Country Planning (General Permitted Development Order) 1995.

— The change would, for example, help existing facilities quickly to respond to regulators. For example, the installation of spray masts may be required on an existing facility in response to changes to the Environment Agency's permitting regime, or HM Revenue and Customs may request the installation of a weighbridge to ensure better data reporting for landfill tax purposes.

Our third recommendation follows the Environment Agency's evidence on dual tracking, the simultaneous processing of applications for planning and permits:

— Provided this a choice for the applicant, in principle we welcome parallel tracking of planning and permit applications. However, this could be made to work better with the following changes: most, but not all waste management planning applications need planning approval before a permit can be granted. Other industrial processes within the PPC regime do not have a requirement for prior planning permission and neither should we: developers should be able to submit an application for permit prior to application for planning consent where local circumstances dictate.

— While planning authorities adhere to a standard administrative and consultation process, the Agency's approach to such processes is inconsistent. ESA would welcome a public statement of the Agency's consultation procedures and timeframes. Also, the same specialist case workers (i.e. hydrologists, ecologists) assigned to assess a planning application should work on the permit.

— PPS10 noted that perceived and real health impacts are the responsibility of the environmental regulator and are addressed fully through the PPC regime. Planning authorities should rely on the Agency's permitting approach in dealing with health issues.

— The Environment Agency's standard response to planning authorities as a statutory consultee should not be "no objection" but a statement as to whether an application for development conforms with the Government's strategic waste objectives. The Agency should also desist from lodging planning objections on matters which are clearly permitting issues.

Our fourth recommendation is that PPS10 should be better reflected in waste development plans:

— ESA welcomed the Government's introduction of PPS10 in July 2005 which sets out the Government's national policies for planning for waste management. The policies of PPS10 should be taken into account by planning authorities in preparing development plans, and form a material consideration in determination of individual planning applications.

— ESA's Members have expressed concern that PPS10's policies have not adequately implemented through waste development plans. Robust interpretation of PPS10 has been broadly limited to decisions made by the Planning Inspectorate upon appeal.
ESA suggests development plans should be assessed, in the context of PPS10, for evidence of: apportionment; allocation of sites for waste management development; interpretation of the proximity principle as “nearest appropriate facility”; planning for residual waste; planning for shortfall in landfill capacity; and correct interpretation of self sufficiency.

Our final recommendation relates to the proposed National Policy Statement:

— ESA supports the Government’s proposals to devise a National Policy Statement for waste management development to highlight the Government’s priority and to update PPS10 in the context of WS 2007. The Government’s proposed focus of the National Policy Statement should be widened beyond very large facilities because smaller, strategically located facilities could equally help the UK to comply with EU law and improve sustainability.

3. In addition, the Committee would be grateful for your response to a supplementary question: What proportion of materials collected in England are exported for reprocessing? Is the industry working to fill the gap in specific reprocessing capacity in England, e.g. for plastics

— As we move away from landfill towards recycling and recovery, the only options are to build infrastructure or export material for recycling.
— According to the Confederation of Paper Industries (CPI), in 2007 the UK exported most (54%) of the paper collected for recycling. Also in 2007 (as reported by WRAP) 70% of plastics collected for recycling were exported, and 20% of glass.
— If the UK wants to increase domestic reprocessing capacity, then local authorities must make greater provision such facilities in their local development plans.
— Even with a renewed planning system delivering new infrastructure, England will be for the foreseeable future be dependent on exports of materials for reprocessing as there is simply insufficient reprocessing capacity in the UK. Lower energy, property and labour costs abroad and the strength of overseas markets abroad will continue to make exporting a viable option.
— Announcements such as the granting of planning permission for a new newsprint mill in Kings Lynn in November 2007 increase British capacity but, in a context of increased collections, most material will continue to be exported.
— In response to growing interest in the fate of material collected for recycling, the Recycling Registration Scheme was launched by ESA in April 2007.

Environmental Services Association
November 2008

Memorandum submitted by the Greater Manchester Waste Disposal Authority (Waste 11)

Greater Manchester Waste Disposal Authority (GMWDA) welcomes the opportunity to contribute to the work of the Environment, Food and Rural Affairs (EFRA) Committee. It has pleasure in submitting below the GMWDA submission, which follows the EFRA published issues, to the inquiry on the Waste Strategy for England 2007.

1. Executive Summary

1.1 GMWDA’s strategy fits well with the national strategy and will contribute significantly to its implementation for municipal waste in the North West region. Our investment will exceed the new national recycling and composting target for 2015—our prediction is for over 50% recycling and composting, significantly more than the 45% national target and meeting the 2020 target 5 years early.

1.2 However, the Authority wishes to stress that municipal waste makes up a relatively small proportion of the total waste arisings nationally. Its response below outlines the need for greater collaborative working across all the waste sectors with a stronger steer and support mechanisms from Government. The various Government sponsored projects undertaken by organisations such as WRAP and the BREW programme are very valuable but there is more opportunity for work between and across the sectors, especially on a regional and sub regional basis.

1.3 GMWDA believes that there is a need to revisit definitions, interpretation and classifications of waste which pose a barrier standing in the way between the public sector and other sectors.

1.4 Finally, and most importantly it is clear that current waste infrastructure is totally inadequate for the implementation of the waste strategy—this is the case overall nationally and regional and sub-regional scenarios. There remain risks relating to achieving timely planning approvals which may cause delays resulting in LATS penalties. Effective communications are needed at a local and national level. Continued and prominent Government promotional activity for the required infrastructure is essential.
2. GREATER MANCHESTER CONTEXT

2.1 GMWDA, as the largest Waste Disposal Authority in the UK, is responsible for managing around 1.4 million tonnes of municipal waste arising from the greater Manchester conurbation. This extends over Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside and Trafford metropolitan authorities. The tenth Greater Manchester authority of Wigan is a disposal authority in its own right.

2.2 GMWDA, in partnership with its constituent authorities, is proud to have made significant progress towards the implementation of a waste management strategy of pushing local waste up the waste hierarchy—waste reduction, re-use and recycling. Its recycling rate has increased fivefold in the last few years from only 5% in 2001–02 to almost 27% in 2006–07. It has made rapid progress in developing and is now in the final stages of implementing a waste management PFI contract which is acknowledged to be the largest of its kind in Western Europe. This proposes new “state of the art” technology and processes to help GMWDA achieve its recycling-led waste strategy and will recover energy from waste that cannot be recycled.

3. EFRA QUESTIONS

3.1.1 How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management.

3.1.2 GMWDA believes that the implementation of the waste strategy for the municipal sector has a greater chance of achievement since there has been greater Government focus and support for this sector. However, this makes up a relatively small proportion of the overall waste arisings and it is this Authority’s view that more cross sector activity is needed.

3.1.3 However, definitions, interpretation and classifications of waste pose a barrier standing in the way between the public sector and other sectors.

3.1.4 Waste from businesses, charged for and collected by private contractors, has driven many organisations to become more focused upon waste prevention and encourages better waste management practice towards waste reduction, reuse and recycling. There has been a considerable change in attitudes and behaviours to waste in recent years, particularly in regard to reducing waste and recycling. Although the intent is stated within the Waste Strategy for England 2007, insufficient progress has been made in facilitating businesses, particularly SMEs to reduce, reuse and recycle their waste.

3.1.5 This Authority feels that, rather than seek to more narrowly define the associated regulations it would be opportune to revisit them in the current climate and endeavours for the implementation of the Waste Strategy for England 2007. It is time for all organisations to be encouraged to take responsibility for their waste and this should be reflected in the ability for councils to make the appropriate charges.

3.1.6 GMWDA, as the largest Waste Disposal Authority in the UK, is very keen to enter into this debate and has welcomed any opportunity to pursue further discussions with ministers and DEFRA officials to try to help resolve these issues.

3.2.1 The role for and implementation of regulations, and their enforcement.

3.2.2 The Authority’s submission does not seek to go into detail in relation to the role for regulations. GMWDA supports clear regulations supported by effective enforcement. It expects that any charges should be proportional to the level of regulatory and enforcement work carried out.

3.3.1 The classification of waste.

3.3.2 GMWDA’s is of the view that classification of waste should be clear and consistent. Views are given under 3.3.1 regarding the various classes of waste and the relevant waste producing sectors.

3.4.1 The proposals for financial incentives to increase household waste prevention and recycling.

3.4.2 GMWDA has welcomed the proposals by Government for restrictions on local authorities to be lifted through the introduction of a power to incentivise householders. However, it has expressed a number of concerns about the proposals put forward and the way in which schemes might work effectively. By giving the opportunity for many and varied schemes (albeit introducing local solutions) too much diversity could lead to schemes having detrimental effects upon each other or upon other authorities which do not seek to exercise such a power.
3.4.3 A power for financial incentives may assist authorities in achieving targets, but in limited situations. We have grave concerns about the potential administrative costs. We are dubious of the assertion that schemes could and should be cost neutral. Administrative costs may outweigh any benefits.

3.4.4 There is a need for householders to be aware of the actual cost of their waste management service. Even though many authorities communicate these costs through the council tax demand and information research has shown that many residents think that waste management costs are in the order of £500 pa. Without a true understanding of the costs, residents will be disappointed to learn how much incentive they might receive.

3.4.5 The Greater Manchester authorities are in the transition period of implementing changes to collection arrangements and at HWRCs (Civic Amenity sites) which are designed to improve recycling performance. The first phases of these changes have enabled recycling rates across the sub-region to more than quadruple. Government funding has enabled the schemes to be implemented and further funding from Government would ensure further boosted recycling rates.

3.5.1 The role of composting.

3.5.2 Composting forms an important part of the future for waste management and this is very true for implementing the GMWDA strategy, achieving the challenging recycling & composting target (50% minimum) and diverting waste from landfill.

3.5.3 The key role of composting for GMWDA is putting in place the infrastructure. In vessel composters (4 in total) will be provided to take combined green (garden) waste and food waste from households as collected by the metropolitan districts (as waste collection authorities). It is also essential to secure appropriate markets for the resulting material.

3.5.4 Large scale infrastructure, although key for large quantities of waste, is not the only role for composting. The first thought should be for waste reduction, keeping materials out of the waste stream, encouraging ownership and responsibility for waste. This can be achieved through households home composting and community composting schemes.

3.6.1 The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.

3.6.2 The Waste Strategy for England 2007 should be applauded for placing its stronger emphasis upon waste prevention (minimisation). Our Municipal Waste Management Strategy for Greater Manchester already takes waste prevention forward for the future. The strategy is supported by action plans for waste minimisation, waste awareness and education and the future contract identifies the means of their implementation through delivery plans.

3.6.3 The Authority understands the need to work towards behavioural change and is employing specialist advisors to help influence residents and communities. But there needs to be an overall thrust beyond the householder. At GMWDA we are developing an Authority vision which takes into account our relationship, engagement and sphere of influence over other sectors:

- Engaging with the retail sector;
- Engaging with businesses, commerce and industry;
- Engaging better and more comprehensively with the community/voluntary sector;
- Helping secure funding for waste prevention and recycling in all sectors;
- Further engagement with the planning authorities;
- Taking a strong regional and national lead; and
- Ensuring continued increased cohesion at the collection/ disposal interface

3.6.4 We have already made representation to DEFRA to offer assistance in achieving a more collaborative approach, provided that the issues and barriers (identified under Issue 3.1.1) can be addressed.

3.6.5 The example of responsible packaging is an area where greater collaboration can take place between producers, users and managers of waste. The various Government sponsored projects undertaken by organisations such as WRAP and the BREW programme are very valuable but there is more opportunity for work between and across the sectors, especially on a regional and sub regional basis.

3.7.1 The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill.

3.7.2 The Government is to commended for the way in which key environmental documents published earlier in the year—the Waste Strategy for England 2007, the Planning White Paper and the Energy White Paper—were referenced to the overarching need to tackle climate change and reduce carbon dioxide emissions.
3.7.3 This Authority has risen to the challenge and recognised the influence it can have across the greater Manchester sub-region as a service provider, an estate/asset manager and as a community leader. It has signed the Nottingham Declaration on Climate Change and is developing a Climate Change Strategy alongside its vision.

3.7.4 In implementing its waste strategy GMWDA plans to slash use of landfill from 65% to 15%. This will come about by significantly increased recycling, in-vessel composting and the use of Mechanical Biological Treatment. The biological treatment will be through Anaerobic Digestion which will remove methane to produce green electricity. The plants will also produce a stabilised fuel to be transported (by rail) to a new power generation facility which will supply both heat and power. This will reduce the demand for fossil fuel and its environmental consequences.

3.8.1 The promotion of anaerobic digestion for agricultural and food waste.

3.8.2 GMWDA is delighted that the national strategy is encouraging the use of anaerobic digestion. As part of the proposed MBT (Mechanical Biological Treatment) plant outlined above this process is the key to divert Greater Manchester’s waste from landfill.

3.9.1 The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies.

3.9.2 It is clear that current waste infrastructure is totally inadequate for the implementation of the waste strategy—this is the case overall nationally and the local picture is exemplified by the GMWDA position. Here in Greater Manchester our Municipal Waste Strategy is to be implemented by £330 million of state of the art investment, supported by £100 million PFI credits.

3.9.3 In this way, GMWDA is well advanced in its proposals for the provision of new infrastructure and its means of investment and hence mitigate potential LATS penalties. However, there remain risks relating to planning which may cause delays resulting in penalties. Effective communications are needed at a local and national level. Continued and prominent Government promotional activity for the required infrastructure is essential.

Greater Manchester Waste Disposal Authority
October 2007

Witness: Mr John Bland, Deputy Clerk and Treasurer, Greater Manchester Waste Disposal Authority, gave evidence.

Q195 Chairman: Mr Bland, welcome. You are on your own.

Mr Bland: Absolutely, Chairman.

Q196 Chairman: No army of advisers, so you are a brave man to come before us! Thank you very much indeed for your written evidence and can I formally welcome John Bland, the Deputy Clerk and Treasurer of the Greater Manchester Waste Disposal Authority. You have a very enviable track record in terms of raising your recycling targets from, I think, 5% some seven years ago to now 27%, and you are obviously ambitious because you predict that you will be able to meet the Government’s 50% recycling target of 2020 by 2015, if we have been informed correctly. I suppose the first question is how stretching are the Government’s targets if you can do it five years earlier than the Government say you should do and, secondly, what are the barriers, do you think, to other people doing what you have done?

Mr Bland: Chairman, it was interesting sat there listening to that debate because I think you have hit on some of them already. We, in Greater Manchester, have done the easy stuff, as it was referred to, and we have taken that a little bit further, so, in addition to green waste, we are also doing food waste and have ambitions to push that further. We are also putting in place, through the PFI scheme, a very ambitious programme which will allow us to deliver what we think is a world-class environmental sustainable solution which actually takes a lot of things forward which national policy, I think, is beginning to catch up on in terms of those areas. I think the targets are fairly stretching and I think we are in a fortunate position in that we are two or three years ahead of most other authorities in terms of putting in infrastructure. I have been engaged for the last two days in detailed negotiations in trying to close our PFI, so we do believe that we will have that infrastructure in place and, on that basis, we are confident that we will hit the targets ahead of schedule in 2015, but that is only because we have those in. Other authorities which are nearby, particularly people like Merseyside who are behind in their procurement process, will struggle because it is about the investment in those areas. I think, to be honest, in terms of whether those targets are stretching, Greater Manchester is a mixed conurbation, as a number of you will know, and in certain areas, particularly the inner areas, that is very difficult, particularly given that we have gone for a separation system in terms of the bins that we put in place and those are very difficult in things like high-density terraced houses and also in flats, so I think it
would be very, very difficult to put that in place within the districts of Greater Manchester above that level, so I think they are still fairly stretching. We are in a fortunate position in that we started our procurement process early.

**Chairman:** You mentioned the question of infrastructure and I know Mr Tipping has some questions he would like to ask you about that.

**Q197 Paddy Tipping:** Just wanted to ask you, Mr Bland, about collecting different materials for recycling. There has been a very bottom-up approach, but there is a view around that the Government ought to define nationally more what approach, but there is a view around that the recycling. There has been a very bottom-up public said was di

**Mr Bland:** I think one of the advantages that we have had is that we have not had the constraint of "you must do". We have had an opportunity to actually consult, so, in terms of our municipal waste management strategy which, in turn, informed our PFI process, we did consult widely and what the public said was different in different areas, and we did not seem to impose that, but, through the stunning performance of some of the districts which have gone down those lines, we have come to a consensus that actually one size does not fit all. We do get ourselves into a situation where we have to have different ways of dealing with it because of that different type, mix and density of property, but we do believe that having the system which separates them out does improve that performance, so typically we would have obviously residual waste at the end, but food waste and green waste, whether those are separate or combined, depends on facilities. We believe that we will cope with both in Greater Manchester, but we will deal with them on a combined basis because, if you look at the environmental sustainability from cradle to grave here, not just the collection side, you do not want to have numerous vehicle movements because you have got too many bins in terms of that. We have also made it simple, so we do collect paper and card together. The classic one is, "What, what’s paper and what’s card? Can you put the Yellow Pages in it?" What about Tetra?" Well, all of those, either the paper sack or the no-blow bag or whatever the local authority has actually put in place, those are collected separately from dry-recycling of recycling glass and plastics, et cetera, partly because members went to see things in operation, particularly in Germany, and the masking effect, if I can use that term, for instance, if you get a plastic bottle in on a conveyer belt with a piece of paper over it, the technology will not work and what you end up with is somebody who actually does that [indicating manual removal]. If you ever want to see something which is probably not the type of job that we should aspire to in terms of danger, in terms of smelliness and what-have-you, go and see some of those where they have to hand-pick out those. We have gone for a technological solution which, we believe, will deliver that. Members were very, very clear and I remember some very heated conversation on that, that we were going for that, but, in summary, I think if you did have something which said, “One size fits all. You have to do this” and obligate, I do not think that would work. Giving people what they want, consulting with them, engaging with them and then making sure that you educate them into that, look to Greater Manchester and there is a good success story to see there.

**Q198 Paddy Tipping:** The Government has also recently put in a new performance framework for waste, as you indicated. How do you rate that?

**Mr Bland:** I think in terms of everything, if you put in a performance framework, sometimes it works well and sometimes it does not work and there are different strands of that. Clearly, having targets is useful as that forces things to happen. In some areas, for instance, the local authorities which make up Greater Manchester, they have gone for local area agreements and stretched targets in relation to that performance and again that has been successful. We are not planning at this moment in time to go for a multi-area agreement approach to that in terms of the whole of the conurbation.

**Q199 Paddy Tipping:** Why is that?

**Mr Bland:** I think because we are getting there anyway, and again it is a question of where those targets are going. If you have stretched targets across the whole of the conurbation, for instance, one of the district authorities has now got a separate food collection and it has made a very big difference in terms of that and that is being introduced, and what we actually want to do is invest in composting facilities, but we have not got them on-line and the difficulty with that then is that you cannot actually cope with them. The centre of the conurbation is Manchester City and they are indicating that they would like to explore that now, but we have not got, and the market has not got, those facilities in place at this moment in time, and we will deliver them through the PFI, but not to enable that to happen in the current round of multi-area agreements.

**Q200 Mr Drew:** You heard the previous discussion on PFI and you have got a PFI in place. You are smiling already.

**Mr Bland:** More or less.

**Q201 Mr Drew:** That is interesting. How flexible is PFI and what other routes did you look at? Is there an alternative to PFI for such a big scheme, but one where you have got variable outcomes, if you like, with different authorities doing slightly different things?

**Mr Bland:** We did examine, at the start of our process, numerous options in terms of how you would pull this together from those which were the local authority borrows for it and putting it in place through the PFI route. PFI, I think, is a route which allows significant transfer of risk, risk which we are not able to best manage in terms of that in terms of local authorities, but, from a performance point of view and a build point of view, you can do it, but traditionally the private sector is stronger in that. I think the change in the world climate in relation to finances will make PFI more difficult going forward
Mr Bland: I think we are fortunate in two respects. The first one is that we already have an energy-from-waste plant which was built several years ago and is operating. It is energy from waste. It is unable to provide a steam source, there is not any market for that within a distance which makes it economic in terms of exporting that without losing the steam. The other fortunate thing is that we have secured, as part of this PFI, a facility at the Ineos Chlor facility at Runcorn. They are the only chlorine manufacturer. They consume a vast amount of the national power and they are putting in a significantly-sized facility and we will take less than half of that, as a conurbation. We are taking 5% of the national waste in Greater Manchester and less than half of that would go in in terms of their requirements and that will bring good-quality CHP. Clearly, that has not been easy. That was a planning application that was not put in by the authority, but was put in by Ineos Chlor and recently determined by the Secretary of State, and we believe that will allow that facility to be built in the timescale that we want, and it is absolutely critical to hitting those targets.

Q204 Dr Strang: You have expressed reservations about the use of incentive schemes to encourage households to increase recycling. Do you have any alternatives to suggest to help us drive up the rate so that we can achieve our EU targets for landfill diversion and recycling? Could you say something, on a tangential point? We have achieved a great deal, as you know, in terms of recycling, not least by your own organisation. What are the main changes in terms of civic collection and amenity sites which have facilitated that? Are there any other changes in the pipeline you could tell us about?

Mr Bland: I think, in terms of incentivisation, it is probably another one of these “I do not believe that one size fits all”. The Authority does not have a position on that, partly because we think that some of the districts might want to go for a scheme which has that type of incentivisation. Certainly the technology to allow that to happen exists. We have reached where we are not by incentivising people but by engaging with our own resources and those provided by Defra, whether that was through WRAP or BREW, in order to make sure that people understand. That seems to be more effective in terms of what we have achieved than the compulsion of incentivising people or asking them to pay. In terms of some of the results and the learning there, I think the lessons are probably about learning from others, taking good practice and putting that across. Certainly one of our success stories is the partnership approach. It is not the Greater Manchester Waste Authority; it is the Greater Manchester Waste Authority, one of 10 partners, with the nine districts and coming up with that through the joint working arrangements that exist between the collection authorities and the waste disposal authority. We are putting in place the facilities that they want to use and they are able to provide the facilities to their population which suit their particular needs.

Q205 Dr Strang: Are you saying it is the local authority’s interaction with their ratepayers, et cetera, and the work they have put into this that has done this to some extent?

Mr Bland: I absolutely fundamentally believe that. Our process is predicated on large-scale public consultation to inform what we did. We developed a strategy from that and then we went and procured it and we put an education programme in place with the districts that support it. It is not a Greater Manchester Waste Disposal Authority function but with and through the districts a case of learning from each other and sharing experiences.

Q206 Chairman: Do you think that households and the vexed question of how you charge for waste services should at least have some idea of what it costs at the present time to provide those services on a household basis, if that is a meaningful quotient?

Mr Bland: As a former treasurer of a metropolitan authority the need to find yourself a good partner to overcome the point you made about the first plant, that you do not have a market for the heat, but also to maximise your chance that you can have an efficient and economic energy from waste plant?

Mr Bland: I think if the Committee was minded to go into that area, that would be quite helpful.

Q203 Chairman: Are you saying that perhaps an element that does not come through clearly from the Waste Strategy is the need to find yourself a good partner to overcome the point you made about the first plant, that you do not have a market for the heat, but also to maximise your chance that you can have an efficient and economic energy from waste plant?

Mr Bland: I think the Committee was minded to go into that area, that would be quite helpful.
Chairman: May I follow that up? One of the things that came out of our walk around the waste train in the London Borough of Sutton was the fact that textile waste has gone from 3% to 20%. They have christened this the Primark e

Mr Bland: I think “waste hierarchy” is right and as an authority that is the cornerstone of our municipal waste management strategy. I think there is a limit to what we as local authorities collectively can do in terms of minimisation. We do believe, and we have made submissions previously relating to this, in trying to reduce the amount of waste that is put in there. We do work locally with organisations which seek markets and believe that that is something which we can do more of and better in order to effect a reduction. As for where we are in terms of society, it would be interesting to see what happens in the current economic situation and whether or not that improves. One of the things that we are proud of is a 13% reduction in the amount of waste arisings that we have. Again, there is no magic bullet in order to do that but a number and a range of things. We are investing significantly more in our civic amenity sites through the PFI. That has had significant impact. We are pushing towards a 60% recycling target because this will encourage the public to be able to separate those things out. This is quite daunting; the first time you go there, instead of just throwing the waste over the wall, you might have 10 or 15 different types of receptacles. It is about investment going in up-front and having people there who, for want of a better description, meet, greet and direct people. We believe this happens through that type of initiative, but also by engaging through the third sector. There are some good examples in the districts of social enterprise solutions to deal with that. It may well be that in pushing our targets further we will want to look at that more broadly for the conurbation as a whole.

Q209 Lynne Jones: Your submission emphasises the contribution that composting can make to waste processing. In terms of minimising the amount of waste, should not more be done to encourage people, either at home or locally, to compost more, both in terms of green waste and food waste? I manage to compost all my food waste using the Bokashi system. Obviously that is not suitable for all people but it could be done locally within the community. What are the problems about that and do you think that is an approach that we should take more? What is inhibiting it? The Animal By-Products Regulations have been quoted to me.

Mr Bland: First, can I commend you on your ability to be able to do that. Home composting, as far as the authorities are concerned, is part of this armoury. It is important that people do that. It reduces the costs of collection; it does not have to be moved around and an end-use found for it because the end-use presumably is that you are fortunate enough to be able to re-use it in your garden and that saves money. It seems to be one of these virtuous circles that we should be able to encourage other people to make. We very much want composting generally. We had invested over the years, prior to going into the PFI, in a soil-forming process which went on the end of our dano drum process. Basically the dano sorts out the rubbish. What comes out the end of it is further processed into a soil-forming material, suitable not for compost in domestic circumstances but certainly, in terms of bringing landfill sites back into use as a sub-base, it was very good. We were unable fully to see that through because of the change in terms of the Animal By-Products Order. The technology we are employing now in terms of what would be the in-vessel composting system is fully compliant with the Animal By-Product Order and therefore the compost that comes out at the end of it will be suitable. There is a point, though, about markets and sustainability of markets that has not yet been solved. Again, there needs to be a public change perhaps from peat-based compost and realising an alternative to that which is more sustainable. We would be concerned about the markets, given that the tangential evidence at least is that compost is actually getting cheaper, both in real terms and also in terms of what you pay for it.

Q210 Lynne Jones: It could be downloaded. For example, a school could use its waste to give to the local allotment but you cannot do that because they are two separate premises. Do you think that something should be done about that?

Mr Bland: The rules are obviously there to protect in terms of infection and the animal by-product stuff. I cannot see how you can get round that unless you relax those rules. Clearly, the view was taken, in terms of protecting public health, that it was appropriate to do that. I think it would require us to go back to where we were before. I am not qualified to say whether that is a good or a bad thing. I am sorry.

Q211 Lynne Jones: You heard the discussion earlier about local authorities taking more responsibility for non-municipal waste. Would you care to comment on that and how we can replicate the success that there has been with municipal waste?

Mr Bland: I think it is a double-edged sword, to use that cliché. The problem inevitably is that there is always going to be a concern that that will take away something currently provided by the private sector. In many ways, the larger enterprises do not need all assistance in that particular area. I agree with the comment made that it is the smaller people that have that. We will have the ability to deal with some elements of that within the capacity that we are procuring. I think it makes sense to do that because the number of journeys is not cut, only being reduced. You would have to introduce it in a way that is sympathetic to the competitive advantage of the private sector and make sure those facilities exist. The answer is in the Joint Waste
Disposal Plan Documents, the JWDPDs, being put together now. We identified our sites for municipal waste. We are overlaying that obviously with the commercial waste ones and there is some symmetry there with sites that we did not require; potentially those facilities could provide for that. To give you a context of scale, in Greater Manchester there are about 8 million tonnes of industrial, commercial and domestic waste; the domestic element of that is only about 1–3 million tonnes, so it is a huge amount. We are not making a play for that but we do think we could provide a role. There are certain limitations on us taking that role forward with the current regulations.

Q212 Lynne Jones: What about reverse incentives? Do they operate in your area and the fact that you have a limited amount of allowances for landfill?
Mr Bland: Yes, that is what I was referring to. Again, we have evidence from local authorities that they are not keen on the ability to offer trade waste disposal because that would push up their Landfill Allowance Trading Scheme problem. If you do believe we will get to £150 per tonne, that is a pretty big incentive not to do it if you are only charging perhaps £60 a tonne to get rid of it.

Q213 Lynne Jones: What would you do about that?
Mr Bland: I believe we would need to look again at the way that LATS are treated. For instance, you could just take the municipal element out of the LATS calculation and that would allow you to deal with it without it coming through and the risk of penalties. The difficulty with that, of course, is UK PLC compliance with the overall directive, which could jeopardise that. I can see partly why that has gone. It is creating something that it was not meant to create in terms of advantage by moving into that area. I believe we have an educating role that we can fulfil.

Q214 Chairman: In your evidence at paragraph 3.1.5 you say: “There is ongoing debate about the types of chargeable household waste (schools, universities, nursing homes, charity shops run as businesses etc.) resulting from the means of interpretation of the Environmental Protection Act 1990 and the Controlled Waste Regulations 1992. This will only encourage organisations to be overly financed rather than sustainability driven.” Can you explain what that means?
Mr Bland: Bearing in mind your comments at the beginning on succinctness, Chairman, I think there is evidence that because of the way the regulations are interpreted, people are seeking to dispose of things in a way that is not necessarily sustainable but they may be driven by getting rid of it in a way that does not cost them any money. We are having separate discussions through our contacts with Defra around how that might be amended to facilitate a better solution all round.

Q215 Chairman: Can you give me a practical “for instance” because I must admit I did find that paragraph opaque. I want to know whether it is something that is a serious issue that we should be looking at or whether it is a technical problem with which you are dealing.
Mr Bland: I think it is both, Chairman. It is an interpretation issue and we can move away from that interpretation, I believe. Equally, it is about defining what it is that we want and how we do that.

Q216 Paddy Tipping: Is there not a problem with schools because schools want the local authority to take away their recycling, their paper and cardboard for example? Schools are not prepared to pay for that and ask: should the waste disposal or waste collection authority do it?
Mr Bland: Again, there are other examples. Unfortunately, there always seems to be a consequence. By introducing waste collection for card and paper separately, you do away with local scout or guide collection systems and they do not receive their £25 per tonne and £100 from what they used to collect was very good in terms of making sure that that community facility through brownies, guides or scouts existed; the £100 has gone because it is easier for somebody to drop it into the bag. It is a very difficult area that needs thinking through. I believe that process is happening in Defra at the moment.

Chairman: Mr Bland, thank you very much indeed and for your precise and practical contributions and for your written evidence.

The Committee suspended from 4.17 pm to 5.35 pm for divisions in the House

Supplementary memorandum submitted by the Greater Manchester Waste Disposal Authority (Waste 11a)

1) With regard to doubts expressed in your written evidence about the adequacy of the level of infrastructure for implementation of the waste strategy (para 3.1.5), what are the main barriers to investment in infrastructure?
   [Actually refers to para 3.9.2]

GMWDA believes that there are a number of barriers to investment in infrastructure:
   — Lack of actual funding being readily available.
   — Lack of capacity in technology providers.
   — Other pressures on Local Authority funds.
— Confidence in the planning system and public perception.
— Availability of suitable sites.
— Markets and end products for recyclate.

The current challenging economic position or “credit crunch” is having an exacerbating effect upon many of these issues.

Funding

GMWDA has a sound, modern technological solution for the future management of its municipal waste, but is yet to see this deal reach financial close. The Authority sees the increased risk-averse culture of the banks as a hindrance. We are experiencing some of our difficulties because banks are making a choice based on complexity, risk and richness of pricing.

Technical capacity

The Authority has chosen a preferred bidder with the best technology options for Greater Manchester and has reserved its “place in the line” for the provision of new technology for waste facilities. However, there are many other local authorities also seeking waste solutions. GMWDA is doubtful whether there is sufficient capacity in technology providers to satisfy the likely demand that the UK will have to comply with the Waste Strategy targets/ EU directive. Anecdotally we hear of companies being particularly selective in the projects for which they decide to bid.

Pressures on local authority funds

Local authorities have many pulls on their budgets to fulfil many statutory duties, apart for waste management. Additional funding for PFI is of course welcomed, but whilst the case for increased revenue funding appears to have been accepted the Local Government settlement does not fully reflect that. Locally, therefore districts in Greater Manchester have invested in waste whilst cutting other services.

Confidence in the planning system and public perception

The planning system has to deliver essential waste facilities alongside the pressures of local politics. Associated with this, negative public perception and NIMBY (not in my back yard) and even worse BANANA (build absolutely nothing anywhere near anyone) attitudes have to be counteracted.

Availability of sites

Local Authority Waste Development Plans may be able to identify appropriate potential sites for waste facilities, but this does not mean that that they will become available. GMWDA have carried out robust negotiations to secure sites for new facilities. This is not an easy task when landowners do not want to provide land for a waste purpose.

Markets and end products

Despite current difficulties in securing and maintaining markets for local authority collected recyclate GMWDA’s contractor is maintaining an outlet for the materials collected. But this does not fulfil Greater Manchester residents’ desire to recycle more materials, particularly mixed plastics. Work on “closed loop” systems to test sustainability/viability would be welcomed.

2) Paragraph 3.9.3 of your written evidence states that “continued and prominent Government promotional activity for the required infrastructure is required”. What form should this take?

In order for progress to be made to deal with the challenges to investment in infrastructure listed above GMWDA offers the following views and evidence of its own activities in some of these fields:

Funding

GMWDA offers some views on stimulating funding in the current financial situation, using the proposed Runcorn energy plant at Halton as an example. The GMWDA procurement project will secure half the total plant’s requirement. The Authority asks Government to consider full procurement through public funding more in the manner of municipality funding in other parts of Europe, which would stimulate activity the construction sector.
Planning issues and public perception

Together with its preferred bidder Viridor-Laing GMWDA has maintained an excellent track record in securing planning permissions for new waste facilities. This has been achieved by well resourced public and stakeholder engagement activity prior to planning application submission, listening to and acting upon concerns prior to submission.

In addition, the Authority asks Government to ensure that there are clear statutory limits for determination periods for major developments.

GMWDA also looks to Government to provide clear and consistent messages about technology. Demonstrator projects and local authority support from DEFRA have shown commitment but we would look to see policy clearly joined up between DBERR and DEFRA.

The Authority would also ask Government to look to beyond 2019–20 in relation to LATS and to begin to consider EU intentions and potential beyond this date so that authorities signing up to long-term contracts can begin to contemplate future impacts.

Greater Manchester Waste Disposal Authority

November 2008

Memorandum submitted by the British Metals Recycling Association (BMRA) (Waste 38)

EXECUTIVE SUMMARY

1. This response is from the British Metals Recycling Association (BMRA). The UK metals recycling industry has a turnover of £4 billion and recovers 15 million tonnes of metal every year. Metals can be recovered time and time again to make high quality new metals and 40% of the steel and aluminium used in the UK is made from recovered metal. Today the industry recycles two million cars a year, more than any other EU country, five billion food and drink cans and three and a half million white goods. The industry thus makes a greater contribution to UK obligations to meet EU “producer responsibility” Directive targets than any other industry.

2. The industry is a UK recycling success story, but faces excesses regulatory costs and burdens which do not improve the environment but rather the reverse. The regulations are hampering the ability of the industry to grow and remain competitive and so are reducing its capability to increase further levels of recycling, reduce greenhouse gas emissions and reduce landfill.

3. The Waste Strategy specifically mentions the importance of targeting action on specific materials. We strongly support this kind of approach and would recommend that government develops a specific strategy for metals. Aluminium is specifically mentioned in the Waste Strategy, which is welcome, but we feel that this should be broadened to cover all metals. As part of a strategy for metals, we would recommend sector specific guidance for the metals sector.

4. The Waste Strategy also mentions the need to simplify the regulatory system, making it more proportionate and risk based partly through the permitting and exemption systems. For the metals industry, however, it is essential that government realises that at present it is likely that the new Environment Permitting Programme (EPP) will result in an increase in costs and regulation for our industry—the opposite of what is intended. To avoid this, it is essential that our current licensing exemptions under paragraph 45 are retained for smaller metal recycling sites.

5. Overall the Waste Strategy should be developed in a way that o Vers some integrated strategies that look at how the mix of government policies can work together to meet the targets on end of life products, while protecting the environment and supporting the industries that are required to deliver this. This integrated approach needs to include landfill tax, energy from waste, research and development and BREW funding.

6. Recycled metal is classified as “waste” when it is in fact an extremely valuable secondary raw material. Metal scrap does not get fly-tipped as it is so economically valuable. Scrap metal is sold and traded as a commodity in a sophisticated national and international market. Environmental regulation has often served little or no purpose when the industry was successfully trading and operating long before the relevant Directives and regulations were conceived. The regulation is generally aimed at problem wastes or wastes for which there is no established market. Scrap metal is totally different and should be reclassified as non-waste as far as possible in the UK and under the EU’s Waste Framework Directive.

7. In summary there are a number of specific areas in which regulation and legislation can be improved that would benefit the industry and increase its capacity to recycle more. These include:

— Reclassifying metal as non-waste under the Waste Framework Directive and removing waste metal from the materials covered by the Transfrontier Shipment Regulations
— Developing a new metals strategy and introducing sector specific guidance for the metals recycling industry as it is such a different sector to other “waste” streams
— Retaining exemption from licensing under paragraph 45 for smaller metal recycling sites
— Encouraging local authorities to set aside a percentage of their energy from waste capacity to be for the use of materials from merchants and businesses rather than as at present solely using it for municipal waste
— Allowing companies an offset against landfill tax for investment in research and development for new technologies and processes to reduce landfill and increase recycling

INTRODUCTION AND BACKGROUND

8. The UK metals recycling industry has a turnover of £4 billion and recovers 15 million tonnes of metal every year. Metals can be recovered time and time again to make high quality new metals. 40% of the steel and aluminium used in the UK is made from recovered metal. Recycling metals reduces the pressure on landfill, reduces the demand for new raw materials, reduces greenhouse gas emissions and helps the UK to meet EU recycling and environmental targets.

9. The industry has been recycling since the industrial revolution, long before the UK and the EU started to focus on recovering waste materials. Sources include industrial by-products, construction demolition materials and small traders, as well as household waste. Today the industry recycles two million cars a year, more than any other EU country, five billion food and drink cans and three and a half million white goods. The industry thus makes a greater contribution to UK obligations to meet EU “producer responsibility” Directive targets than any other industry.

10. Because the industry recovers more metal than UK manufacturing needs, it also makes a significant contribution to UK exports. Sixty per cent of recovered metals are exported, with markets throughout the world. The UK is Europe’s largest exporter, accounting for 44% of Europe’s global trade in recovered metals and is home to the industry’s own commodity market, the London Metal Exchange. The international market for recovered metals is growing steadily, at around 5% each year.

11. BMRA is the trade body for the industry, representing over 95% of the industry, by volume. Its 300 members range from multi-national companies to a large number of small family owned enterprises, many of which have inter-dependent trading links.

12. But the industry is affected by an ever increasing range of complex legislation and regulation. Too often, this is “one size fits all” regulation that is designed for household waste businesses, for problem wastes or for recovered materials where the end market is uncertain. For metal recyclers, where the material is highly valuable and environmentally “low risk” and the market is established and efficient, this adds significant cost and bureaucracy with no public benefit.

13. These problems are compounded by Europe’s definition of recovered metal as “waste”. This encourages a negative public image for a highly successful industry, places unnecessary controls on transportation and severely inhibits international trade. The industry believes that recycled metals should not be classified as waste but more accurately as valuable secondary raw material.

RESPONSE TO SPECIFIC POINTS IN THE WASTE STRATEGY

The role for and implementation of regulations, and their enforcement

International Trade Issues

14. The current EU definition of recovered metal (scrap) as “waste” means that the industry is subject to Transfrontier Shipment and other regulations designed to prevent the dumping of problem wastes.

15. This poses particular problems for a sophisticated market in valuable secondary raw materials—where prices may be several thousand pounds (sterling) per tonne. Trade in recovered metals takes place in an international commodity market, which often relies on a chain of brokers and traders between source and reprocessor. The value of the material means that there can be little doubt that the metal will, at the end of the chain, be melted into equally high value new metals, using established reprocessing methods.

16. The European Commission’s revised Transfrontier Shipment Regulations, introduced on 12 July 2007, include the requirement that:

— Commercially confidential information should be publicly divulged;
— Advance certification must be obtained from overseas facilities to which the material is being sent, confirming that processes are “broadly equivalent” to EU facilities;
— Material can only be shipped to countries outside the OECD where the local government has confirmed it will accept this “waste”; such countries have also been invited by the European Commission to indicate if they would like pre-notification.
17. This kind of regulation may be useful for problem wastes, such as complex products from which materials have not yet been separated or materials for which there is not clear market. But for a high-price material that has been traded across the world successfully for years, this is costly, bureaucratic, impractical and unnecessary. It is regulation that is attempting to solve a problem that does not exist for recovered metals.

18. The regulation affects the UK more than other European metal recyclers. For example, of the 9.9 million tonnes of recovered steel which Europe recovers every year, 4.4 million tonnes comes from the UK (1.7 million tonnes from the Netherlands; 1.2 million tonnes from Belgium; 0.8 million tonnes from Germany). Already, certain UK shipments have been held up for many months.

19. Moreover, such regulation is not applied by non European countries, such as the USA, which are the UK's direct competitors in this international market. We already know of overseas customers who are turning to suppliers outside Europe. UK metal recyclers are thus placed at a commercial disadvantage in relation to both their European and international competitors.

20. BMRA position: Short term, this regulation needs to be implemented with an extremely light touch to avoid damage to businesses and to trade. Meanwhile, the industry needs urgent, high level support from the UK Government and from UK Members of the European Parliament in seeking amended regulations which recognize legitimate trade. We believe this may best be achieved by lobbying the European Parliament, Council and Commission for exemption of the metal recycling industry.

Licensing

21. Around 66% of metal recycling sites hold Waste Management Licenses. The remaining third are registered as exempt from such licensing under “paragraph 45”. The former are required to demonstrate that sites are run by competent managers. Three quarters of these are able to do so by “grandfather rights”—ie showing they have an experienced manager (often the owner) who has been in situ for well over 10 years. A further 11% prove their competence by undertaking an on-site assessment by Environment Agency staff. Thus, at present, only 14% incur training course costs. This system has worked well and, as far as we are aware, without risks arising.

22. Waste Management Licensing for England and Wales is currently being revised by Defra/Environment Agency as part of the Environmental Permitting Programme (EPP). Notwithstanding that this programme is promoted as simplifying regulation, it is clear that for metal recyclers regulation will become less sympathetic to particular sector needs, and operators will need to meet more requirements. In particular:
   — There are no plans to continue sector specific guidance (see below)
   — New technical competence requirements propose the removal of “grandfather rights” (also known as “deemed competence”), introduction of two-yearly training updates, and generic training content

23. At the same time, a Review of Exemptions is underway. It has been suggested that some of our currently exempt sites may be required to move to “standard” waste management licenses, which would require them to take on additional requirements including technical competence (above), obtaining planning permission and new surrender conditions. The reason offered is the volumes handled. But we do not accept that the volume of metal in any way increases environmental risk, nor do we know of problems caused by the current exemptions regime. We fear that this is a further “one size fits all” approach that is not risk based and could result in unnecessary regulation.

BMRA position

24. As noted above, the industry needs its own sector specific guidance. This is even more the case as EPP is tending towards generic regulation.

25. Current technical competence requirements work well. There is no risk-based reason for changing them. If, however, change is inevitable the industry must be allowed to develop and administer its own scheme as an external scheme for the broader waste industry cannot reflect the very different technical needs of the metal recycling industry.

26. There is no risk-based reason for changing current exemptions arrangements, which have worked well to-date. In particular, volume of metal handled does not increase environmental risk.

27. Although we welcome Defra and the Environment Agency’s increased openness in consulting at every stage, there are problems for industry in responding to consultations on parts of the system without the overall plan being set out. An industry-government “task force” to review the plethora of regulation affecting the metals recycling industry, which can take action to relieve the burden on companies, is urgently needed—similar to that which was arranged for the agricultural sector.
Sector specific strategy and guidance

28. Metal recycling is very different from the “waste sector”. We sell a valuable product all over the world in an established market, often through international commodity exchanges. Other materials recycling industries rarely have this mature structure.

29. Metal recyclers play a leading role in helping government meet EU targets for recovering end of life vehicles, WEEE, packaging and batteries. This is not only in recycling metals but also in developing advanced media separation techniques and new solutions for residual wastes. Because of the prevalence of metal in products, this role is more extensive than that of other recycling industries, such as glass, plastics, oil or paper. Administrative systems for implementing these Directives are increasingly onerous, particularly since they are designed in isolation from one another with limited industry “road testing”. Moreover, there is a need for more joined-up strategic thinking, involving industry, if longer term EU targets are to be met.

30. As a result of these Directives, and burgeoning environmental controls, the average UK metals recycling company now need to take account of nearly 20 different sets of environmental regulations, each with its own costs and paperwork. These include, for example, waste management licensing or exemption, hazardous waste regulations, WEEE and ELV treatment regulations and duty of care controls. This is in addition to the Scrap Metal Dealers Act, administered by local authorities, and other regulation such as health and safety and employment law.

31. Environmental regulation is generally produced on a “one size fits all” basis (for example, it is not possible to have a customized hazardous waste consignment system for batteries); and rarely has an industry like ours in mind.

BMRA position

32. We need sector specific legal and technical guidance for our industry. Such guidance used to exist, but now needs updating and, we understand, will be discontinued under the new Environmental Permitting Programme (below). This guidance is essential, both to help operators through the maze of regulation and to ensure that regulators properly understand the different context of our industry.

33. In order to ensure future EU targets are met, and to enable operators to make investment decisions (sometimes involving many £m and requiring several years commissioning), a joined-up strategy is now urgently needed. This needs to encompass post shredder technology, landfill targets, taxation, BREW funding and industrial Energy from Waste capacity. Government and metal recyclers (through BMRA) need to work together to develop such a strategy.

Classification of Waste

34. One of the fundamental problems is that European law currently classifies recovered metal as “waste”. This means that since the 1990s the industry has been subject to an increasing burden of UK waste regulation, notwithstanding that it produces a valuable secondary raw material that has been successfully traded internationally for many years.

35. The current classification results from an ECJ judgment relating to the EU Packaging Directive. There is now an opportunity to reclassify recycled metals under the EU’s Draft Waste Framework Directive (WFD) which is due to have Second Reading in the European Parliament in the new year. This will, inter alia, enable the point at which certain materials cease to be waste to be re-considered.

36. In preparation for the new Directive, the Commission’s research body IPTS in Seville is working on a methodology that might be used for metals (steel and aluminium) as well as aggregates and compost. This is expected to define the metal which the industry sells on to its customers as secondary raw material, or product (ie not “waste”). This would free the metal recycling industry of regulations relating to the transportation and shipment of waste, and perhaps other regulations. For the industry this would significantly improve public image, reduce costs and bureaucracy, and remove barriers to trade. There would be no negative impact on the environment; rather, by freeing up trade routes, more material is likely to be recycled.

37. The IPTS Working Paper II makes a clear case for re-classification:

“...It seems what differs scrap metal . . . from other waste streams is the fact that due to the high economic value and unquestionable environmental benefit of recycling, there is little risk in terms of failing the two over-arching principles required by end of waste definition, ie the existence of a market and the no-additional risks to health and the environment. Furthermore, the metal scrap industry as an integrated part of the metal industry, is well organised. From scrap collector to remelter/refiner, metal scrap is traded under either national or industry standards or specifications . . . such a system implicitly serves as a quality assurance system between companies along the supply chain.”
BMRA position

38. It is essential that the new Waste Framework Directive continues to include the draft paragraphs which enable waste/product re-classification and that metal is selected for consideration as soon as possible once the Directive is agreed. This includes ensuring that other materials (where, perhaps, the position is less clear) do not “jump the queue”. As the current “waste” definition poses particular problems for UK international trade (see above), UK government, MPs and MEPs are asked to speak loudly on this issue.

39. Meanwhile, UK government is urged to reduce the regulatory burden by:

— Agreeing that industrial off-cuts (also known as factory arisings or “new scrap”) are by-products, as defined in recent European guidance, and should not be considered waste.

— Recognising that exported metals recovered from WEEE and packaging will be reprocessed to broadly equivalent standards, by replacing the current burdensome (and often inoperable) paper evidence requirements with a protocol agreement similar to that which already exists for metal recovered from vehicles.

The adequacy of existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient technologies

40. The BMRA strongly supports the need for improvements in the UK’s infrastructure to make it possible to increase further levels of recycling and reduce still further the amount of material going to landfill.

41. In the UK, recycling for ELV, WEEE and other complex products is done on a commercial basis. Under the End of Life Vehicles Directive, for example, the current target is that 85% of each car should be recycled/recovered. This target is being increased to 95% in 2015. But at some point it becomes non-commercially viable to separate the residual non-metallic part of the car. As a result, approximately one million tonnes of non-metallic shredder waste has to go to landfill. In order to meet the targets, therefore, a more strategic solution is required. At the moment, energy from waste facilities are only for household waste. It is essential that a proportion of this capability is devoted to industrial residues in a number of regions. Industry, the CBI and the BMRA believe that a percentage of the use of incinerators should be reserved for merchant materials. This would enable businesses, like the BMRA’s members, to recover more materials and divert more from landfill.

42. BMRA has a specific proposal which may help to encourage the development of new approaches and new technologies in this area. This is that offsets should be allowed against landfill tax for investment made into research and development on how best to reduce landfill further. This would encourage companies to focus more on future ways and future technologies for reducing landfill rather than simply penalizing them for landfill as at present. This approach would be a carrot as well as a stick and therefore should be more effective.

British Metals Recycling Association (BMRA)
November 2007

Supplementary memorandum submitted by the British Metals Recycling Association (Waste 38a)

Introduction

The issues that we cover below are crucial to the future success of the UK metal recycling industry. These all relate to, yet are not covered by, the Waste Strategy for England 2007. In fact, notwithstanding that the Strategy introduces a new focus on materials and products, there is no reference to a strategy for metals other than to seeking to increase the reclamation of aluminium from household waste.

However, with large volumes of metal still being sent to landfill, and EU recovery and recycling targets, and the level of regulation imposed on the metal recycling industry, both continuing to increase, more must be done by the Government to help maximise the contribution made by the metal recycling industry.

International Trade Issues & Classification of Waste (Para 6–7, 13–20, 34–38)

A revised Waste Framework Directive was approved at second reading by the European Parliament on 17 June and is expected to be endorsed by the European Council on 20 October. This would allow a new Directive to become law before the end of 2008.
BMRA is pleased that the text agreed by the European Parliament specifies a waste hierarchy giving due priority to recycling, provides clear definitions of recycling and recovery, and recommends that comitology (with scrutiny) be used to determine the criteria for reclassifying waste as non-waste. The text further states that fully recovered metal should be among the first materials considered for reclassification once the criteria have been developed.

The comitology process will be informed by detailed work undertaken over the past two years by one of the European Commission’s research bodies, the Institute for Prospective Technological Studies (IPTS), into the possible criteria for determining non-waste status for recovered metal and other “wastes”. The IPTS report, which has been widely consulted upon and which will be published imminently, should help achieve an early reclassification for recovered metal.

We are grateful for the support received from Defra officials and UK MEPs in achieving this position. It is now incumbent on the Government to ensure that the remaining steps in achieving reclassification are taken as quickly and smoothly as possible, thereby allowing recovered metal to no longer be considered waste for the purposes of the recovery and recycling targets imposed under EU producer responsibility legislation, and releasing it from the shipment controls that are severely restricting the ability of the UK metal recycling industry to engage in legitimate international trade.

Off-Cuts (Para 39)

BMRA is pleased that the Environment Agency has recently issued guidance that clean metal off-cuts, such as factory arisings that result from metal manufacturing processes, can be considered by-product and not waste. The implication is that they can be reused without regulatory control, in line with guidance issued by the Commission in February 2007.

However, the issue remains under discussion with the Scottish Environment Protection Agency—we believe it fundamental that the ruling be applied throughout the UK if Scottish metal recyclers are not to be placed at a commercial disadvantage.

Packaging (Para 39)

The Packaging Directive stipulates that packaging waste exported outside the EU can only count towards a member state’s targets if there is sound evidence that recovery and recycling took place under environmental conditions broadly equivalent to those in the EU.

In response to the difficulties experienced by metal exporters in obtaining the necessary paperwork to prove broadly equivalent overseas processing, the Government approved amended regulations in July 2008 to ease the requirement on metal exporters to provide evidence and to grant the Environment Agency greater discretion in determining what constitutes sound evidence.

The amended regulations will help ensure that the UK does not fail in meeting its targets for the recycling of metal packaging by being unable to show that the recovery and recycling of metal has taken place.

Regulation: Environmental Permitting Programme & Sector Specific Guidance (Para 3, 4, 22) and the Review of Exemptions (Para 7, 23)

A survey conducted by the BMRA among its members in May/June 2008 found that an average large metal recycler faces 15–18 different strands of environmental regulation, whilst an average small, family-owned company must comply with at least 12. The consequence is that each weighbridge transaction lasts an average of five minutes—two minutes for the commercial transaction and three minutes for paperwork—a process that the average metal recycling site must repeat 300–400 times daily.

The Environmental Permitting Programme (EPP) introduced in April 2008, rather than alleviating the regulatory burden, will impose further costs on the industry. For example, metal recycling site managers will become obliged to obtain certificates of technical competence whilst the current design of standard permits, with limited provision for the acceptance of hazardous wastes and low tonnage limits, means that many recyclers will be forced to apply for bespoke licenses.

In addition, a consultation paper published in July 2008 on the review of exemptions proposes that the tonnage threshold to qualify for exemptions under “paragraph 45” be significantly reduced, meaning that around 100 BMRA members would no longer be able to benefit from a less onerous licensing system and be forced to apply for standard or bespoke licenses.

BMRA believes that there exists no substantive environmental evidence, both within the EPP and the review of exemptions, to justify changing provisions that have worked well for many years. In fact, whilst there have been 42 government consultations over the past two years relating to changes in UK and EU regulations that have required review and response by the metal recycling industry, not a single one has concerned the level of regulation imposed on the industry.
We would welcome such a review—streamlined paperwork and sector-specific guidance would reduce the regulatory burden on the industry and boost metal recycling in the UK.

British Metals Recycling Association (BMRA)

August 2008

Witnesses: Ms Lindsay Millington, Director General, British Metals Recycling Association, and Mr Graeme Carus, Director of Business Development, European Metal Recycling Ltd., gave evidence.

Q217 Chairman: May I thank those representing the British Metals Recycling Association for their patience during the divisions of the House. I welcome Lindsay Millington, Director General of the British Metals Recycling Association, and Graeme Carus, Director of Business Development, European Metal Recycling Ltd. Thank you for your written evidence. One of the things that is surfacing now under the current economic downturn is a reduction in the price of recyclable materials. As far as metal is concerned, is that the issue for you?

*Ms Millington:* It is certainly an issue at present. I refer to the international BIR conference that happened two weeks ago. The reports there were that the industry was bouncing along the bottom and that trade conditions were probably worse than anybody had previously seen. Perhaps one of the advantages of being metal recyclers is that we work in an industry that does deal with commodity markets and we are an industry that is very used to markets that are inherently volatile. We are already seeing some signs of consumers coming back into the market and medium to long term the prospects will be good. Metal ultimately is a recyclable material; it has always been recycled, in a market going way back to the Industrial Revolution. Because all scrap metal can be melted down and turned into new metal, and because that metal is needed for industrialised and industrialising nations, there will be a market and it will return. I think the whole of the industry is confident in that. One issue at present is that we have quite large quantities waiting in stock in yards but it is still being kept in stock in the yards, waiting for the market to pick up.

Q218 Chairman: One of the issues that you might like to expand on is the fact that you have just made it very clear that recycled metal is a valuable raw material, which can be re-used many times, and therefore it does draw into question whether it should be described as a waste or not. Does the Waste Strategy help you out of that dilemma?

*Ms Millington:* Not the Waste Strategy in itself; I think European policy as it is moving forward does. Perhaps I should say, first, that we would entirely agree with you that once metal is fully processed, it does have a market; it is a valuable secondary raw material and it should not be described as waste. If I can come back to our general comments on the Waste Strategy, we found that the Waste Strategy lacks a consideration of the need for a strategy for metals in a number of ways. As European policy through the Waste Framework Directive creates the opportunity for a re-definition of our product as product and not waste, we should like to see some more overt support from the UK Government in pushing that re-definition forward.

Q219 Chairman: One point you make in paragraph 7 of your evidence is: “Developing a new metals strategy and introducing sector specific guidance for the metals recycling industry . . .” Who should do that?

*Ms Millington:* I think it is a matter of industry and government working together. If I can talk about why we have asked for the sector-specific guidance: metal recycling is an industry and not just an established commodity market, but the European targets for recycling products, such as cars, WEEE, packaging, batteries, will not be met without the metal recycling industry. One of the effects of those two things is that since the mid-1990s we have had a steady stream of more and more regulation coming into what was already a pre-established industry. We now have around about 20 different strands of environmental regulation—I have a list of them here—that affect our sites. Even the very smallest family run sites are dealing with about 12 different strands of regulation. We have had something like 10 major regulatory changes in the last four years with the introduction of things like: End-of-Life Vehicle Regulations, Hazardous Waste Regulations, licensing of dock sites, WEEE, Transfrontier Shipment Regulations, et cetera, and I could go on. As an industry we have dealt—and I counted them up for another meeting recently—with something over 40 consultation papers on changes in regulation in the last two years. None of those related to the specific needs of metal recycling. What we need is an industry/government discussion about how the necessary regulation can be properly implemented in a commodity industry that is necessary to the UK to meet its targets. Out of that should come the sector-specific guidance that hopefully would both provide a streamlined administrative system for the industry and make it more straightforward for the regulator to direct its efforts where the risks are higher or where people are evading regulation.

Q220 Chairman: Can you explain something to me in my ignorance? What exactly is comitology? I gather it is a technique that is used to determine the criteria for classifying wastes as non-waste but what does it actually mean?

*Ms Millington:* I understand it is a process that Europe is planning to adopt in order to look at the situation of when waste materials cease to be waste. It is a process—I am not the biggest expert on this—

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that relies on experts that come from governments and industry, and provides an opportunity for the MEPs to put a view. It allows the decisions on end of waste to be made without the need for further directives.

**Mr Carus:** Effectively, that is done in a committee rather than in the Parliament. We are advised that is a much more rapid process than relying on these decisions having to be taken in Parliament.

**Chairman:** I am glad you have explained it is a procedure as opposed to a new form of waste recycling. I though it might be some new technique which I had missed out on.


**Q221 Lynne Jones:** The Environment Agency’s new Environmental Permitting Programme was intended to streamline waste regulation and cut costs, but you are critical and it does not seem to be achieving that, as far as your members are concerned. What evidence do you have of the difficulties your members are experiencing in the first six months of operation?

**Ms Millington:** We understand that environmental permitting has brought benefits for some people, perhaps those who deal with both waste management licences and PPC or people who are newly applying for licensing, but neither of those situations apply in any volume to our industry, which is generally very long established, particularly with some firm foundations in family-owned companies. What we have found in the first six months is that we are getting more rather than less bureaucracy. If I can come to two or three examples, we are in some protracted discussions about certificating the competence of managers. We have always had procedures for demonstrating, on an output-related basis, the competence of managers, but the new regulations require a certification process. The certification processes that are being developed are largely being developed for a more generalised waste industry. We are now into discussion about how those can be customised. Because it is a generic scheme, some decisions are being made about the risk banding of our industry, which we believe are inherently wrong—I am still in the technical competence area—but there does not seem to be anybody who can actually take the argument about risk and tell us why it was decided, because there are a number of different players. That is relating to competence. A second example is the standard licences which are being introduced as a simplified form of environmental permitting for straightforward operations. We have already had a lot of discussion with Defra and the Environment Agency on what goes into those licences. If I go back to April time when EPP came in, we had quite an unfortunate experience when it was deemed necessary to bring in WEEE standard licences in a very short period of time. They were produced without consultation. The new licence was sent out in a letter to sites suggesting to them that if they did not meet these new criteria or did not sign on the dotted line, they would not be able to continue to trade in a matter of weeks. We were able to put that right. We do have good links with the operations staff in the Environment Agency but we then went through a couple of other iterations. We have had a number of such problems with standard licensing where these are drawn up by the Environment Agency before consultation with industry about what should go into them. That causes us a lot of extra work and it can cause a lot of aggravation for the industry. My third problem is coming now with the review of exemptions. I am sure you are aware that we have environmental permitting, but we also have exemptions from what used to be Waste Management Licensing (Environmental Permitting), which is like a simplified licensing system. We currently have a situation where round about one-third of our members operate under an exemption. That system has been operating for a number of years—my colleagues can tell me from when—with very few problems. We have asked for evidence of any need for change; we have not been provided with any but we have been told that the exemption that applies to our industry is comparatively complex and so it will be better dealt with by moving into licensing and having a standard licence instead. That will bring quite a lot of extra bureaucracy to those companies in terms of requirements to get renewed planning consents, accept enhanced surrender conditions and other additional processes that they have to go through in order to get a new licence. There are two or three things there; maybe each of them in themselves is not massive but if we add them altogether with all the other regulatory things that are going on in the industry, it is generally regulation creep and more and more being put on an industry that is essentially a trading industry.


**Q222 Lynne Jones:** At the start of your answer you said something like “we have procedures”. Who is the “we” in that context?

**Ms Millington:** Can you remind me what I said?

**Q223 Lynne Jones:** You were suggesting that you already had procedures for testing competence and therefore it was unnecessary.

**Mr Carus:** The current way competence is assessed for site operators in the metal sector is by Environment Agency assessment whereby the Environment Agency officer comes out and goes through a process with the site managers to see if they are deemed competent to run that site, or by what we call grandfather rights where people have been running for a long number of years and they are deemed competent by dint of the period they have been running the site. The problem with EPP is that it is a standardised approach which will make life easier for the Agency and standardise decisions, but we feel we are going to be slotted in somewhere that classifies us at a higher risk level than we really are. We have tried over a period of time to get Defra and the Agency to tell us what criteria they are using to assess the risk associated with our industry and we have still not had a proper explanation of that. The upshot of raising this in terms of our risk assessment is that it brings with it then the idea that we need technical competence certified by some other group,
by NVQ or some other exam, that we need sites moving out of exemptions into standard licensing, where there will now have to be further consultation—harking back to the earlier evidence from the ESA—and that will bring with it a lot of issues about people not wanting to be neighbours with waste management sites and seeing that as an opportunity perhaps to restrict the activity of the recycling site. Although it is standardising life for the Agency, it moves us up the risk profile and it brings with it significant changes to the way we operate. Under the current process, where the Agency operates a risk assessment, we are one of the better performing sectors. In their own report, our performance statistics show that we are at the higher end of those that operate. We are questioning why it needs to change.

Q224 Lynne Jones: Are there any other sectors, apart from your own, which are affected by this or is it just metals?
Ms Millington: In relation to the exemptions review, our sites are considered comparatively complex if related to something like a bottle bank. The proposal to move them into standard licensing appears to apply to most of the businesses that are concerned with recycling materials.

Q225 Lynne Jones: Moving on now, you cite the EU Transfrontier Shipment Regulations as being one of the main regulatory barriers for UK companies in the international metals trade. What is the case for exempting the metals industry from such regulations?
Ms Millington: I would like to relate it back to the point that was made earlier about perhaps reclassifying the product that we are producing as the secondary raw material that it is. That is the longer term solution we are seeking, rather than the exemption from any regulation. May I explain that as an industry, within the UK, generally we are recycling round about 15 million tonnes of metal every year; it is a £5 billion industry. Because all of that metal we recover will go into being melted down to make new metals—as I say, markets at the moment are in the doldrums but there is long-term demand—and because we only have a certain amount of demand in the UK, we export round about 60% of what we collect. That makes us about fifth in the world in the amount that we export and we are far and away the largest exporter of materials from Europe. I want to cast that as the background. If we look at exports from Europe of recycled metals, and I give you the 2006 figures, in 2006 Europe exported about 10 million tonnes of recycled metals and 45% of that came from the UK. So, the export of recycled metals is very important for the UK, purely because 60% of what we have would end up in landfill if we were not exporting it. May I come back to your question on Transfrontier Shipment Regulations? In 2007 we had revised Transfrontier Shipment Regulations which came in as a result of lengthy European debate about the problems of people dumping problem wastes in third world countries. All the discussion that we have subsequently had with MEPs—and we have had a number of them—confirm their view, and this is MEPS on the Environment Committee, that they had absolutely no idea that those regulations were going to apply to a commodity market like metal recycling. We have found ourselves in the middle of some regulations that we can quite understand are sensible when dealing with material of untreated WEEE or materials like that; however, they are not at all sensible for a processed metal which is already meeting standards and specifications such as we have in our industry book, without which nothing will be traded. One way or another they are bringing barriers to trade. May I very quickly tell you what sort of barriers they are bringing in? We export to pretty well every country in the world from the UK. One of the requirements brought in by the new regulations is that when a country is outside the OECD, that country must write to Europe and specifically say if it is prepared to accept waste. If that country does not choose to reply to the Commission’s memorandum asking it to write in that way, then additional conditions apply, and special permission has to be obtained each time you want to export to that country. That has hit us quite a lot. There is also a form that was introduced. It is very sensible when talking about those problem wastes. There is a form now which must accompany your load stating where your material came from originally and who it is going to be eventually melted by or who it is going to be eventually processed by in its non-EC country. I think we all know about the London Metal Exchange. We all hear about prices on the Today programme in the morning. A lot of metals we are dealing with are traded on the London Metal Exchange. When you are dealing with a traded commodity and you are an established market that has been running for 150 years working through a chain of brokers, it is not commercially possible or sensible to write down on a sheet of paper exactly who all the people in that chain are. Those are just a couple of reasons why those regulations are not designed for us and they are not working for us. Also, because of our export position, it is a much bigger problem for the UK than it is for anyone else in Europe.

Q226 Chairman: These are not the regulations that affected the so-called ghost ships, are they, the ones that were brought to Teesside for dismantling? I do recall when we became involved in that there were some transfrontier issues surrounding things like the Basle Convention. Whatever rules pertained at the time were used to make certain that if those ships were going to be dismantled for their scrap value in the United Kingdom, they were done in a proper and fit manner. Is my memory playing tricks on me here?
Ms Millington: I think you may be into some similar regulations but I would suggest those ships were untreated material and not fully processed secondary raw material ready for a market.
Mr Carus: I think the question there was more about whether the facility they were coming to was properly licensed to accept them and treat them.
Q227 Chairman: That is true but I do recall the question when we did the inquiry: when is a ship waste? These rules did seem to affect it. You are talking about a semi-processed material.

Mr Carus: It is already furnace-ready scrap, really.

Ms Millington: I am talking about a fully processed material. We have specifications for all metals that are traded, which are fully agreed within the industry, between our own industry and the metal melting manufacturing industry.

Q228 Chairman: In other words, it is the state of the scrap before it goes off to the person who is going to melt it down?

Ms Millington: Absolutely, and that is how commercial contracts operate.

Mr Carus: What we produce is ready scrap. We take in old cars and waste electronics; we separate out the plastic and go over all the items that are not attractive to the metal recycler. We provide them with material that they put straight into their furnaces without any further processing.

Q229 Chairman: These are blocks of compressed materials?

Mr Carus: They can be bales or generally it is a fragmented loose metal. The issue is that it is commoditised; it is used interchangeably with pig iron or other forms of iron that they can use. Because it is commoditised, it is traded like all commodities through brokers and traders. It is no longer a waste in the sense that it does not have properties that you would normally associate with a problem waste. The whole essence of the Transfrontier Shipment Regulations is that you have a cradle to grave audit trail for problem waste streams. We are not a problem waste stream. We are a secondary raw material. We have specifications for all metals that are traded before it goes off to the person who is going to melt it down.

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Q230 Mr Williams: You have covered all the issues on the Transfrontier Shipment Regulations. The issue that you have just touched upon of commercial sensitivity is obviously a big one. To have to disclose or be able to disclose some of those facts is a difficulty as well and in terms of being able to establish that the final destination is equivalent to an EU facility. Sometimes, I understand, you have difficulty in getting that information.

Ms Millington: Sometimes it is actually physically difficult. We do have anecdotal information from quite a number of our members that they have lost orders in countries outside the OECD to countries such as the US, Russia or Japan, which are major exporters of recycled metals but which do not have the same laws. They do not treat recycled metals as waste, basically.

Mr Carus: From our perspective, we produce a commodity to a specification that is ready to go into the furnace. Because of the standard to which that furnace operates, they are not going to melt scrap; they are going to melt primary raw material. They are still going to operate and have the same influence. What concerns us is that because we have this waste tag, we have barriers in front of the recycling of metal, which is a very good thing both in environmental terms and in terms of carbon and re-use of resources, but it is a disincentive, if you like, when we should be providing positive incentives because of the overall position of what metal does. We do not want to attract the same constraints on selling primary raw material to furnaces around the world and yet somehow, because we have the waste tag in front of it and we have a regulation for being a problem waste stream which we are not, we then get barriers placed in the way of recycled metal.

Q231 Mr Williams: You say you bring it up to a standard that is acceptable within the industry, so to speak. It is not 100% pure. Could there be and are there sometimes some parts of the scrap cargo that could be deleterious or could be a problem in terms of waste? Is the standard one that the industry sets or one that the EU or the Environment Agency would set?

Mr Carus: It is set by the industry, by the consumers and the suppliers in the industry. It is not something that we impose. It has a very high metal content. We are shipping this material all around the world.

Q232 Mr Williams: What sort of content are you talking about?

Mr Carus: It is in the high nineties. If you were to see the ferrous product taken from a car, you would not see plastic, rubber, glass or foam but all metal. Not only is it all metal but it has to be low copper content too because the steelworks do not particularly want the copper. We go to great lengths to achieve material of an acceptable quality, a high quality, for the steelworks.

Mr Williams: I went down to see a very large waste metal processor in Newport Docks employing about 400 people, Sims, and saw quite an extraordinary demonstration of how to take scrap cars and get everything out.

Q233 Chairman: In terms of the capacity of our industry to perform recycling, do you have sufficient capacity for the future?

Ms Millington: I think we have sufficient capacity for metal recycling. The industry indeed has gone through quite a lot of its own restructuring over the last 10 years and is in good health. In its technology and developments it is certainly up at the forefront amongst its international competitors. We have insufficient capacity in terms of what we do with the wastes that remain after we have recovered the metals and, increasingly with the technologies that our companies are investing in, after we have also recovered plastics and other recyclable materials. There are particular areas I know you touched on in earlier evidence today about energy from waste
capacity, et cetera, which is insufficient for our industry’s need. I would also contend it is insufficient for the UK’s need in meeting its targets for Europe.

Q234 Chairman: I presume that because your industry is spread around there is no opportunity—for example our witness from the Greater Manchester Waste Disposal Authority quite clearly has found an industrial partner within relatively easy travelling distance of where the waste is. I guess your industry is dispersed and therefore the idea of centralising something for waste from energy is not possible and so you would have to ride it on the back of another facility.

Ms Millington: It is not geographically sensible to say the industry could develop its one facility or its two facilities.

Mr Carus: The answer is “yes and no” because of the competitive aspects in the industry but also regionally moving material around over long distances is not necessarily the best solution. If I can give you an example, our company takes in 6 million tonnes of waste product a year, be it cars, waste electronics or construction waste. We recover 5.5 million tonnes of recyclable metal from that which goes straight into a furnace. We have half a million tonne of residue. We started with a pure waste stream—all the materials are problem waste—and we recover over 90% of it and have 10% left. As Lindsay said, we have started in recent years to reach into that and to pull out some of the more recoverable aspects like glass and plastic. We have invested our own money to do that and it helps us with our targets on end-of-life-vehicle recycling, although they are not our targets because we are not producers but those of the car manufacturers. Nonetheless, we are providing a big part of the solution. To go to the next step, we are then left with that 10%, which in our case is one million tonnes for the whole of the UK. To reach into that, we do need access to energy from waste facilities and we do not have major capacity in the UK. Again, as was touched on with the ESA and their position earlier, other Member States have much more capacity and, given our position, find it easier to gain access to energy from waste facilities?

Q235 Chairman: In terms of materials that would create waste from energy from your sector, does that represent another source of income or a reduced cost of disposal?

Mr Carus: Most of the facilities at the moment, if you are talking about waste from energy, are predicated on matching the disposal costs through landfill, so it would be neutral in cost terms if it was made available. I am not just talking about energy from waste; we are also interested in some of the emerging technologies whereby you can produce alternative fuels—methanol, ethanol and things like that—or gasification processes. These might be more desirable in terms of the waste hierarchy because of the nature of the product they provide, but, as I say, the technologies are not yet sufficiently proven for people to back them with confidence and that is why we need some kind of incentive to help us take that step.

Q236 Mr Williams: I guess some of the materials that you are talking about as part of that 10% are things like fabrics. Is there a possibility, rather than going into the specific waste for energy, that that could be used for coal firing, for instance in coal-fired power stations, and be a renewable source, rather than looking the way you are at the specific facilities?

Ms Millington: I think, as Graeme has said, there is a variety of options. The problem is that none of those options are yet available in this country. If I could bring it back to the Waste Strategy, we were delighted to read the headline that said, “The Waste Strategy will be promoting energy from waste”, and then we read the second line that said “for municipal waste and wood”. What we are really calling for here is a discussion at the appropriate level; we need a strategy that actually looks at how we deal with this. Exactly as you say, there is a variety of different options. We are not locked into saying it has to be energy from waste. As a country, and this industry is very committed to hitting it, if we are going to hit the 2015 target to recycle, re-use, recover 95% of vehicles, we do need a solution of that sort because we will have residual wastes that cannot be economically recycled. It is important to understand that in this country, in contrast with some of our European neighbours, we run a system for re-using, recycling and recovering vehicles which is entirely commercially operated, and so we are running it entirely on what it is viable to recover. That is not the same in some other European countries where, for instance, they take a gate fee on new cars going on to the road and therefore there is a fund to pay for recycling things which it is not economic to do. We
are looking for a solution for those things at the end of the chain. We think that is a partnership responsibility between the country and the industry. We are looking for the way forward to work together on that and look at all the solutions.

Q237 Mr Williams: In that gateway, presumably the recovery is done by hand virtually rather than by machinery?

Ms Millington: You mean in the countries that move into the non-economic systems? It can move into that or equally certainly some of the countries appear to be recovering materials for which they have not yet developed markets and that is not too much of a problem for them. In the case of some of them, the media separation technology that they are using has been developed with all the capital costs met by the fund and so the business model does not have to accommodate any of the investment. Basically they are in a much more subsidised position than people in the UK.

Chairman: Thank you very much indeed and for your patience in waiting. This has been a useful session. Thank you for your written evidence and the supplementary written evidence; that was very useful indeed. If, as a result of this, there is anything further you wanted to send us by way of educating us as to the issues, please feel free to do so.

Further supplementary memorandum submitted by the British Metals Recycling Association (BMRA) (Waste 38b)

Information in response to supplementary questions raised by the Environment, Food and Rural Affairs Committee, November 2008

Question 1: What are the main barriers to expansion in infrastructure growth and are policy changes needed to overcome them?

This question was circulated to some BMRA members. The response was so wide ranging that it has not been possible to include all their comments here. It has been pointed out that the question has never been asked in any of the (over 40) government consultations that the industry has had to respond to in the last two years.

The Waste Strategy Chapter 4 (targeting materials, products and sectors) omits metals from the materials to be considered, other than an objective to develop “proposals (subject to further analysis) for higher packaging recycling targets beyond the 2008 European targets” in relation to aluminium. We have been told, by senior Defra officials, that this is because “the market will take care of metals”.

The policy change that is needed is senior level government commitment from a range of government departments to work with the metals recycling industry on a co-ordinated strategy to maximise metal recycling and the achievement of UK recycling and recovery targets, by removing these barriers to growth.

Some of the issues to be addressed are as follows:

1.1 Collection & Landfill

According to the Defra Waste Strategy (p.55) approximately 1.5mt ferrous metals and 0.5mt aluminium still go to landfill (no figures are given for other non-ferrous metals).

There is a well established global market for metals which could absorb more volume and the energy saving benefits of using secondary raw materials in metal smelting are well known. What is needed is a strategy for bringing the metals that are currently land-filled into this system.

1.2 Solutions for residual wastes

Meeting European targets for recovering End-of-Life Vehicles, WEEE and other complex products requires a coordinated UK strategy that doesn’t yet exist. Much of the 2015 ELV target to recycle, reuse or recover 95% of a car will be met by recycling metals (75%) and other materials recovered by post shredder technology. The metal recycling industry has invested heavily in driving this forward.

But there is no national strategy for industrial Energy from Waste or other recovery capacity to cope with the residues; nor is there sufficient overseas capacity. At present these residues have to be sent to landfill (approx 1 mt pa). Development and commissioning of appropriate recovery capacity to cope with these residuals will take seven to eight years—we need to start now if 2015 ELV targets are to be met.

[Solutions might include new build capacity and/or a requirement that municipal developments reserve (say) 10% capacity for such use.]
1.3 Local Infrastructure & Planning issues

Local waste structure inquiries rarely consult the privately-run metal recycling sector, with the result that necessary metal recycling capacity is frequently understated in plans. This results in:

- Near impossibility of opening new sites
  [which are required to maintain infrastructure, eg to replace family companies winding up].
- Established sites being threatened with compulsory purchase, to make way for housing.
- Established sites subjected to additional controls, such as reduced operating hours.
  [this happens particularly where the site was set up in an industrial or dockside area which is redeveloped for residential use].
- Unnecessary delays when established sites need revised planning consent (eg to obtain appropriate licences to comply with new Directives, such as ELV or WEEE).

1.4 “Producer responsibility” Directives

Many recycling developments are EU Directive driven. But UK Government tends be late in implementing such Directives. This hinders our preparation for capital expenditure projects, since companies cannot plan and invest until the “rules” are clear. It also prevents UK equipment manufacturers from benefiting from these new production lines. For example: there is no significant level of UK manufactured equipment in UK fridge recycling plants.

UK Government also has a tendency to “gold plate” EU Directives to a greater extent than other Member States. An example is the requirement for proof of “equivalent standard” of recycling when materials derived from WEEE products are exported to non-EU countries. This requirement rarely exists in other Member States (we can find only one example).

Changes negotiated by industry in respect of one Directive do not “read” across to others—which causes industry time, money and frustration. Thus Defra has recently amended the Packaging Regulations to recognise that it is ridiculous to make the assumption that metals (or other materials sold at relatively high values) will not be recycled. But there is no automatic extension of this thinking to WEEE.

1.5 Lack of joined-up government

a. Europe

Different EU Directives have a tendency to be mutually self-defeating. For example:

(a) the WEEE Directive necessitates the recycling of plastic from waste electronic goods in order for recycling targets to be met. But the RoHs Directive then puts limits on the content of these materials, making recycling significantly more difficult; and

(b) aggregates recovered from car shredders have been designated products under a WRAP protocol to facilitate their recycling and this has been achieved as the environmental risk from these good is infinitesimal. They then have come under the Reach Directive—which could divert them back to landfill due to their very low value.

b. UK

Some examples are:

(a) Escalating landfill tax (to encourage recycling) imposed on recycling streams that already have their recycling levels set by other legislation (ELV and WEEE).

(b) The 2003–05 End of Life Vehicle Regulations (BERR) require a joined up system of issuing Certificates of Destruction(CoD) when a car is scrapped. Businesses (metal recyclers or car dismantlers) authorised to issue CoDs must install costly depollution equipment (£50–100k per rig). But we do not yet have a watertight CoD system; DVLA is now addressing the need for change but needs legislation to achieve this.

Meanwhile:

— estimates have to be made to report figures to Europe; and
— metal recyclers who have invested in expensive depollution equipment are being undercut financially by unregistered operators who have not.

(c) The continuing number of illegal metal recycling sites allowed to continue without complying with environmental regulation. These provide a route for stolen metals. They also threaten legitimate trade. But police, HSE, Environment Agency and others are all under-resourced to tackle the problem, and generally focus on their own immediate priorities rather than working together.
1.6 Regulatory burden

The significant, and growing, regulatory burden on the metals recycling sector is a significant barrier to infrastructure development—since it increases the cost of day to day operation, and diverts the whole industry into dealing with a seemingly endless stream of consultation on regulatory change and implementation of new systems. This is exacerbated by:

— Continuation of illegal sites (see 1.7.b above).
— Lack of sector specific guidance to aid the operator and the regulator.
— Uneven application of regulations, which mitigates against best practice.
— Shoe-horning materials recycling into “one size fits all” regulation designed for the wider waste industry, or to prevent the overseas dumping of “problem” wastes.

Question 2: How has Defra responded to your suggestion that companies investing in research and development, on how best to reduce the amount of waste sent to landfill, should be allowed to offset this against landfill tax?

We raised the need to consider this issue in our response to the public consultation on the Waste Strategy submitted in May 2006. We raised the specific proposal of an offset against landfill tax in our policy paper Agenda for Change issued in April 2007, and in a meeting with Joan Ruddock (then Environment Minister) in June 2008. We have not yet received a response.

We have also raised the omission of a metals strategy from the Waste Strategy with Defra officials, on numerous occasions. The reply has been “the market takes care of metals”.

Question 3: What examples do you have of investment from your sector in this type of R & D?

Traditionally, the industry’s expertise lies in recovering and trading metals to internationally recognised specifications and standards. Significant investment has been made in recent years, in response to the UK’s need to meet European “producer responsibility” Directive targets—notably those concerning End of Life Vehicles and WEEE.

For small to medium sized companies, this has included:

— £50–100k investment for a depollution rig, in order to meet treatment requirements for end-of-life vehicles.

For all companies, this has meant:

— additional staffing and/or computer systems to cope with regulatory paperwork [estimated to increase weighbridge work per transaction from 2 to 5 minutes]

For medium and larger companies, very significant (often multi million pound) investment has been made into:

— developing new equipment to meet treatment requirements
  eg. development of ELV depollution equipment—not available “off the shelf”
— improving recycling levels
  eg. multi-million pound investment in shredder technology to ensure that maximum metal is recycled
  development of refrigerator recycling techniques
  development of WEEE recycling techniques
— developing new technologies for separating out recyclable non-metallic materials after shredding notably for plastic streams which have never previously been recycled
  several of the larger companies have multi-million pound developments in progress in this area, in which the UK is a European leader
— developing overseas markets for these materials
  newly recovered materials, such as hard plastics from fridges and computer equipment, do not have ready-made markets. This has required new trade to be established with businesses which, typically, can only be found outside Europe and the OECD.

Further information on specific developments is available on a confidential basis, but is not reproduced here for reasons of brevity and commercial confidentiality.
Question 4: Do you have an estimate of how much more investment could be incentivised by the carrot of a landfill tax offset

The landfill tax offset would help:

— maintain momentum in the current economic down turn, which is threatening progress in many developments in progress;

— medium sized companies, which are finding it hard to raise funds from traditional lenders such as banks;

— both large and medium sized companies to take the risks inherent in developing technologies which are entirely new and untried;

— redress the current position where companies in the metal recycling sector are refused consideration fora BREW or WRAP funding; and

— enable the industry to contribute fully to the national strategy on residual wastes proposed above.

At present we send approximately one million tonnes of residual waste to landfill.

The landfill tax payable on this is currently £32 million (\(\text{£32/t}\)).

By 2010 this will rise to £48 million (\(\text{£48/t}\)).

Over five years the cost to industry of this tax will be over £200 million.

Offsetting these funds to R&D would be a significant boost to meeting future targets.

British Metals Recycling Association (BMRA)

November 2008
Wednesday 19 November 2008

Members present

Mr Michael Jack, in the Chair

Mr David Drew  Miss Anne McIntosh
Mr James Gray  David Taylor
David Lepper  Mr Roger Williams

Memorandum submitted by the John Lewis Partnership (Waste 60)

The John Lewis Partnership (“Partnership”) has been invited to give oral evidence to the EFRA Select Committee in their examination of the Government’s Waste Strategy for England (2007). This note is intended to support that oral evidence.

1.0 EXECUTIVE SUMMARY

1.1 The John Lewis Partnership’s waste strategy is based on our ambition to divert our waste from landfill by reducing, reusing, recycling or recovering energy from all our commercial waste and packaging. This strategy is delivered in Waitrose and John Lewis through targets, Key Performance Indicators and a wide range of initiatives.

1.2 Waitrose is a signatory to the Courtauld Commitment, a voluntary agreement that supports initiatives which create less packaging and food waste ending up in household bins.

1.3 We fully support the Packaging Waste Regulations, and contribute over £1 million a year towards a recycling compliance scheme that invests in kerbside collections and public recycling centres so that customers can recycle the packaging they take home.

1.4 The Partnership is a signatory to the national Voluntary Code of Practice on Carrier Bags.

1.5 With WRAP (Waste & Resources Action Programme), the British Retail Consortium (BRC) and some other retailers we have agreed a standard recycling labelling scheme for packaging.

1.6 Waitrose is piloting both biodegradable and compostable packaging, but, due to the lack of industrial and publicly accessible composting facilities, do have concerns about a complete conversion to biodegradable sources.

1.7 Food waste is a top priority for Waitrose and is fully supportive of WRAP’s target to “Reduce the amount of food wasted in UK homes by 155,000 tonnes by March 2010, against a 2008 baseline”.

1.8 The Partnership is fully supportive of the Government’s commitment to anaerobic digestion. Five Waitrose branches have been successfully trailing anaerobic digestion and we plan to extend the trial to approximately 50 of our Waitrose branches, and to include our first Department Store trials at Oxford Street and Peter Jones.

1.9 We may need to utilise the most modern types of “energy from waste” plants if we are to divert all our waste from landfill. However, the existing level of “energy from waste” infrastructure is currently insufficient for the future requirements of the Partnership.

2.0 JOHN LEWIS PARTNERSHIP—BACKGROUND

2.1 The John Lewis Partnership comprises two of the UK’s leading retail businesses—Waitrose, John Lewis as well as a direct services company, Greenbee. We also own a production unit in the North of England and a farm in Hampshire. (This note only relates to Waitrose and John Lewis).

2.2 Like any business, the John Lewis Partnership is commercial and competitive, but it is also the UK’s largest and longest-lasting example of employee ownership. We believe our co-ownership business model gives us three significant advantages:

— It allows us to take a long-term view.
— It means we can maximise the value of employee ownership.
— It enables us to act in the interests of society.
3.0 **John Lewis Partnership’s Waste Strategy**

3.1 Our waste strategy is based on our ambition to divert our waste from landfill by reducing, reusing, recycling or recovering energy from all our commercial waste and packaging. In delivering that goal we have formulated a range of targets for both Waitrose and John Lewis. In summary:

**Waitrose targets**
- Recycle 75% of all Waitrose waste by year-end 2012.
- Reduce own-brand packaging by 2013 on a like-for-like basis, compared with 2005, and work with suppliers to encourage similar reductions.
- Apply packaging recyclability labelling to own-brand products by year-end 2009.
- Help to reduce the overall environmental impact of carrier bags by 25% by year-end 2008.
- Continue to explore ways to reduce food waste and provide practical information in-store and online to raise customer awareness of this issue.
- Continue anaerobic digestion trials.

In 2007–08, Waitrose achieved the following:
- Recycled 49% of all its waste.
- 36% reduction in packaging since 2000, relative to sales.
- Reduce carrier bag usage by nearly 26% this year—a reduction of around 52 million bags (as of September 2008).
- Rolling-out packaging material identification labelling to own-brand products.
- Nearly four million Bags for Life handed out (63% increase); trialling carrier bags with 33% recycled content; Bag for Life’s to contain 100% recycled material in the new year.

**John Lewis targets**
- Recycle 50% of all John Lewis waste by year-end 2010.
- Help to reduce the overall environmental impact of carrier bags by 25% by year-end 2008.

In 2007–08, John Lewis achieved the following:
- Recycled 39% of all its waste.
- Bag for Life introduced in March 2008.
- Plastic bags will contain 95% recycled content by end September 2008.

4.0 **Reducing our Packaging**

4.1 The Partnership created 117,000 tonnes of packaging last year (86% by Waitrose), and although packaging makes up only 4% of the waste going to landfill, it is an issue of particular concern to our customers and to our businesses.

4.2 Packaging is essential for the integrity and safety of our products, and protects them in transit, but over packaging has environmental and financial costs. We are keen to find a balance between reducing packaging and making sure it still protects our products in transit and on the shelf.

4.3 Our packaging also needs to display all the necessary information our Partners (our employees) need to merchandise the product and our customers to purchase it, as well as help stock rotation, improve product quality and extend shelf life.

4.4 Waitrose is a signatory to the Courtauld Commitment, a voluntary agreement between WRAP and major UK grocery organisations. This agreement supports initiatives which create less packaging and food waste ending up in household bins. Collectively, we have now achieved the first Courtauld target of delivering zero packaging growth, despite a sharp increase in sales.

4.5 Our latest packaging initiatives at Waitrose include:
- Reducing the weight of the cardboard sleeve of our breaded fish by 33%, salad bag film by 14% and Delicatessze range of plastic pots by 20% by removing the lid.
- Our strawberry punnets and lids now made from 100% recycled polyethylene teraphthalate (PET).
- Removing all the cardboard from our 2008 range of Easter eggs and using plastic with 40% recycled PET.
- Waitrose also looks for opportunities for reuse—its returnable transit packaging is used for around 40 million trips annually throughout our supply chain.
4.6 At John Lewis, a number of packaging initiatives are in place, including:

— Ensuring all new paper and card packaging uses either recycled or Forest Stewardship Council-sourced material.
— Reducing our use of plastic packaging, and replace PVC packaging with material with recycling potential.
— Aiming to introduce 50 new “lightweight” packaging lines a year.

5.0 OUR PACKAGING OBLIGATIONS

5.1 Under the terms of the Packaging Waste Regulations, we are obliged to recover and recycle up to 80% (depending on the material) of our product packaging. We fully support this legislation, and contribute over £1 million a year towards a recycling compliance scheme that invests in kerbside collections and public recycling centres so that customers can recycle the packaging they take home. The legislation has driven improvements in packaging recovery rates from 6% in 1997 to over 60% today.

5.2 CARRIER BAGS

5.3 Both Waitrose and John Lewis are signatories to a national Voluntary Code of Practice on Carrier Bags, which was agreed in February 2007. We have been working with WRAP and other retailers to reduce the environmental impact of carrier bags by 25% by the end of 2008. Our efforts have included:

At Waitrose:
— promoting our Waitrose Bag for Life—which costs 10 pence and is replaced free of charge when damaged or worn out, with returned bags being recycled into “plaswood” furniture, among other things, which we donate to good causes;
— selling a range of reusable jute bags including designs for Quick Check self-scan users;
— trialling bags made from 33% recycled material that carry stronger messaging about reuse and recycling;
— pilot schemes for bag-free “green tills” and making our Saffron Walden shop completely carrier-bag-free for two weeks;
— introducing prominent communication to customers in every shop prompting them to reuse their existing bags; and
— introducing carrier bag recycling facilities in all Waitrose shops.

At John Lewis:
— providing a variety of reusable bags;
— introducing a reusable Bag for Life in all shops in March 2008;
— using 25% recycled material in our standard plastic bags and following a successful trial, rolling out a bag made from 95% recycled content by the end of September; and
— trialling carrier bag recycling facilities in Sheffield, Newcastle, Norwich and Southampton.

5.4 As a result of the activities in Waitrose, as well as an increased focus on training of in-store Partners, we have seen a reduction in carrier bag usage of nearly 26% this year (a reduction of 52 million bags). Although feedback on green tills and bagless shops was positive, they have not brought the sustained reductions we need. We are therefore continuing to focus on Partner training and customer awareness which in trials have shown reductions in carrier bag use of between 45% and 60%. We are optimistic that we can achieve an overall 50% reduction by May 2009.

5.5 In John Lewis, the introduction of a Bag for Life and reusable jute bag have helped drive a reduction of 8% in free issue carrier bags. John Lewis are also working to introduce a wider variety of reusable bags to help drive further reductions in carrier bag usage.

6.0 BIODEGRADABLE PACKAGING AND COMPOSTING

6.1 We continually explore the environmental and technical feasibility of alternative materials, such as biodegradable packaging. Waitrose is piloting both biodegradable and compostable packaging for our organic range of pre-packed fruit and vegetables. Through these and similar trials, we can monitor the technical performance of biodegradable materials.

6.2 However, we do have concerns about a complete conversion to biodegradable sources: because there are still few industrial and publicly accessible composting facilities available, the vast majority of biodegradable packaging will be disposed of to landfill for the foreseeable future.
7.0 Recycling Initiatives

7.1 Our waste and recycling procedures continue to deliver substantial cost savings and a step change in our waste recycling, helping us towards our ongoing objective to recycle 75% of all Waitrose waste by the end of 2012 and 50% of all John Lewis waste by end of 2010.

7.2 In an attempt to maximise the recycling opportunities across the business, we have:

— introduced battery recycling and polystyrene briquette-making at our Waitrose store in Cambridge;
— teamed up both businesses to backhaul cardboard and polythene from our Waitrose store in Rushden each month by John Lewis vehicles to their Distribution Centre in Northampton, making the best use of lorry space and reducing our dependency on specialist contractor collections. A similar arrangement is happening between the Waitrose store in Comely Bank and the John Lewis department store in Edinburgh; and
— drawn up plans to send non-recyclable waste from the Waitrose head office in Bracknell to a purpose-built “energy from waste” incineration facility, due to be commissioned next year.

8.0 Food Waste

8.1 According to WRAP’s recent report “The Food We Waste”, we throw away around one-third of the food we buy in the UK, of which 61%—4.1 million tonnes—could have been eaten. That means that, in addition to the £1 billion it costs local authorities to send this waste to landfill, we spend £10 billion every year on food that is just thrown away.

8.2 To raise awareness of the issue with Partners and customers, we are supporting WRAP’s “Love Food, Hate Waste” campaign, launched in November 2007, by providing practical information both in-store and online. We also have a dedicated food waste page on the Waitrose website—www.waitrose.com/foodwaste.

8.3 We also work collaboratively with our suppliers to ensure our quality and delivery specifications minimise food wastage. We have also endeavoured to accept food that is cosmetically imperfect in order to support our suppliers in the event of unforeseen and difficult weather conditions. For example, last year, a large percentage of the UK apple crop was damaged by hail, but we accepted the fruit for sale and communicated this to our customers.

8.4 We are also working with our farmers and growers to reduce waste within the supply chain. For example, we have been working very closely with a group of 100 banana growers in the Windward Islands to look at how fruit is cultivated and transported with the aim of reducing wastage on selection in the UK. Our initial findings have shown that wastage from shipped fruit has reduced from an estimated 40% in 2002 to less than 3% in 2008.

8.5 Waitrose is also working with FareShare, a national UK charity supporting communities to relieve food poverty, to look at ways of utilising surplus “fit for purpose” products throughout our supply chain.

9.0 Leadership on Anaerobic Digestion

9.1 The John Lewis Partnership is fully supportive of the Government’s commitment to anaerobic digestion. A trial for the past three months at five Waitrose branches has been successful in sending food waste, both naked and primary packaged, to an anaerobic digestion plant in north Bedford. This has turned 71 tonnes of food waste into 14 megawatt hours of electricity—enough to boil 5,000 electric kettles for one hour.

9.2 Waitrose has been the first supermarket group to conduct a trial on this scale, and we now intend to extend the trial to approximately 50 of our Waitrose branches, and to include our first Department Store trials at Oxford Street and Peter Jones.

9.3 This initiative will see us routing approximately 25% of the Partnership’s food waste to electricity production—rather than to landfill. The cost to do so is neutral compared to the current collection method of transporting food waste to landfill. However, as landfill costs continue to rise, this approach will reduce our future costs.

9.4 In addition to the energy which is generated, the digestate residue from the process, which is high in nitrates, can be spread on the land at certain times of year as a fertiliser to grow crops—and no damaging methane gas is released into the atmosphere.

9.5 The only constraint, and where Government can do more, is that today the number of anaerobic digestion plants is very small as it is new technology to this country. As plants proliferate there is every reason to believe that all our food waste could be recycled in this manner.
10.0 The need for Additional Energy from Waste Facilities and Efficient Novel Technologies

10.1 The John Lewis Partnership is committed to implementing the waste hierarchy of—waste prevention first, followed by re-use and then recycle/compost. However, for those materials that cannot usefully or economically be segregated for recycling, we do believe that there is a role for modern “energy from waste” plants. They do divert waste from landfill and create electricity—both of which the country needs. Whilst we are aware of the controversy surrounding some previous schemes, we may need to utilise the most modern types of “energy from waste” plants if we are to divert all our waste from landfill (for example, Grundon waste management power station).

10.2 The existing level of “energy from waste” infrastructure is insufficient for the future requirements of the Partnership. As a result we are actively investigating a range of emerging technologies as a way of dealing with our waste.

11.0 Encouraging Customers

11.1 To help our customers to recycle more, we clearly identify the materials used in our own-label packaging where possible. We have also reviewed our back-of-pack packaging information and issued revised guidelines to ensure our packaging information is clear, consistent and easy to understand. As part of these guidelines, we have worked with WRAP, the BRC and some of the retail signatories to the Courtauld Commitment to agree a standard recycling labelling scheme for packaging.

11.2 This voluntary initiative will replace the current array of recycling symbols and messages with a single RecycleNow logo and an icon to indicate whether the packaging is:
- “widely recycled”—recycled by over 65% of local authorities;
- “check locally”—recycled by 20–65% of local authorities; and
- “not currently recycled”—recycled by under 20% of local authorities.

11.3 Our aim is to introduce the new labelling across all our own-brand products in Waitrose by 2009. John Lewis is phasing in the labelling when new packaging specifications are made.

11.0 Staff Training and Awareness

11.1 We recognise that good staff awareness, combined with clear procedures and infrastructure, is key to achieving current targets and stretching further our recycling ambitions. In 2007 John Lewis launched a “War on Waste” guidance document to aid management of the various waste streams in each branch, supported by an environmental awareness day in staff dining rooms. In 2008 this document is being updated to include information regarding the lifecycle of our recyclable materials, and national and local recycling solutions currently in place for John Lewis waste.

11.2 In Waitrose a “Green Day” is planned for 16 shops on 14 October to raise Partner awareness of recycling and energy efficiency opportunities in their own homes as well as at work.

11.3 During 2008 recycling articles have appeared in the Partnerships’ local and national weekly employee magazines, the Chronicle and Gazette. These articles gave an overview of the Recycling & Waste teams’ progress to date and future ideas as part of a communication plan to improve Partners knowledge of the topic and raise awareness of the part they each have to play.

11.4 Four different suites of recycling bins are about to undergo trials in John Lewis and Waitrose Partner dining rooms ahead of a Partnership wide rollout in 2009. These bins, along with clear signage, will introduce a uniform approach and make it easy for Partners to recycle their waste.

11.5 We have also supported the Environment’s Agency’s annual promotion of World Environment Day, encouraging Partners to make small lifestyle changes to protect the environment.

11.6 We have recently produced a Packaging and Waste Q&A for Waitrose shop Partners to help them respond to the high volume of customer enquiries they have on these issues. This is also used by our Customer Services team.

11.7 We also report on our performance in this area, through our John Lewis, Waitrose and Partnership CSR reports, our Partnership website and other CSR communications to Partners (eg Gazette and Chronicle articles, jlpnet, partnerconnect, posters, CSR DVDs etc).

The John Lewis Partnership

October 2008


**Witnesses:** Mr Julian Walker-Palin, Head of Corporate Policy for Sustainability and Ethics, ASDA; Ms Gemma Lacey, Project Manager, Corporate Social Responsibility, and Mr Arthur Sayer, Manager, Recycling and Waste, John Lewis Partnership; Mr Richard Whitefield, Production Manager, Brecknell Willis, gave evidence.

**Q238 Chairman:** Good afternoon, ladies and gentlemen, and welcome to a further evidence session in the Committee’s inquiry into the Waste Strategy for England 2007. Can I, for our first session, formally welcome from ASDA Julian Walker-Palin, who is the Head of Corporate Policy for Sustainability and Ethics, and from the John Lewis Partnership Gemma Lacey, who is the Project Manager for Corporate Social Responsibility, and Mr Arthur Sayer, who is the Manager for Recycling and Waste, and from a smaller company, Brecknell Willis, Mr Richard Whitefield, who is their Production Manager. You are all very welcome and thank you very much for your contribution in helping us to prepare for this session. As far as ASDA is concerned, I thought we could abandon ship on this inquiry when I read in the Daily Telegraph of 27 October a headline which said, “My plan to create a zero waste UK” under the authorship of Mr Andy Bond, the Chief Executive of ASDA. I thought, “Who is this man who is miraculously going to banish all waste from the United Kingdom and do it so quickly?” But then I realised it was a little bit more complicated, so for the sake of clarification this was perhaps not ridding the whole country of waste but just ASDA, is that right?

**Mr Walker-Palin:** Yes, that is right, in particular our operational waste from our stores.

**Q239 Chairman:** Right. It was a very ambitious and a very interesting idea which he put forward. In terms of sending zero waste from your business to landfill, perhaps you could just talk about that. First of all, how did you decide to do it, because by definition it must be feasible if you have made these very strong public statements on the achievability of that objective? Just take us through the thinking which led you to that conclusion.

**Mr Walker-Palin:** Okay. In 2005 Wal-Mart, the company which owns us, decided on three main environmental objectives they were going to head towards over the next few years and they were deliberately aspirational goals, one of which was to create zero waste. So we took away the aspirational goal of creating zero waste, took advice from our main waste contractors, who are Veolia Environmental Services, and said, “Actually, how do we translate that for the UK to make a real difference in terms of the amount we are sending to landfill and the carbon emissions from our operation?” We kicked around the feasibility of creating zero waste and believe that as things stand at the moment it is a very, very difficult aspirational goal to achieve. So we said, “We will take it in a number of stages;” and the first stage we took was to send zero waste to landfill from our operational business by the end of 2010. In order to achieve that we started to extend our network of what we call ASDA service centres, which are recycling depots around the UK, of which we now have eight, and the premise is that when a lorry delivers to our stores and it delivers the goods, it is then empty. So what we now do is we put the waste (certain types of waste so far) onto the lorry, which then drives back to its distribution centre, then next to the main distribution centres we built this ASDA service centres, these recycling depots. Therefore, they can offload the waste, go on to the standard distribution centre and fill up with goods for the next store, and so on. So we are able to actually backhaul waste without any additional carbon being produced. So when we had that backbone we said, “What are the materials that we need to go after first of all?” and we looked at a lot of cardboard and plastic which is used within our business for what is called retail ready packaging, which is to save productivity on the sales floor we have a lot of our goods which are within, for example, cardboard cases and you would remove the top of the cardboard case and slide the whole thing onto the shelf. It therefore gives you a display unit for the goods in a much quicker way and because we are serving at the moment 17 million customers a week we really need to get the goods on our shelves. But what that leaves you with is this shroud of cardboard or a shroud of plastic and we said, “Well, actually it’s no good putting that into the compactor and then sending it to landfill,” again for economic reasons as well as for environmental reasons, because these materials normally have a value. We are in a slightly strange situation at the moment where the values have dropped out, but they would normally have a value. So we worked out a process whereby we would backhaul, using the ASDA service centre network, cardboard and plastic and we then rolled that out across all of our stores with the exception of the south-west region, where we are still building our ASDA service centre. That will come online as soon as we finish construction there. We then looked at the different waste that we had around the store and we have a number of hazardous wastes. Where we have pharmacies, opticians or photo labs, we have a number of waste materials which you obviously have to be very careful of, which have certain legal requirements. So we brought Wastecare in to actually take those away on a store by store basis, but the idea is we would like to backhaul those again to the ASDA service centres. Then the real key in getting to zero waste was that at the beginning of this year we said, “Well, we are currently now with all of those processes 65% diverted from landfill.” We looked then at the majority of the waste which was going in our compactors and found that it was biodegradable waste, so it was bakery products which had not been sold as produce, ready meals, or that kind of waste. We extrapolated that if we were able to remove that from landfill, and obviously the enormous amounts of methane which are produced when it breaks down, that would get us up to 90% diverted. So currently in six stores we backhaul all the biodegradable waste to our service.
Chairman: I am glad you got your low price for our customers.

Mr Walker-Palin: No, I do not think that is true.

Chairman: And other policies did not actually have an influence on your company's policy?

Mr Walker-Palin: No, I do not think that is true. I think you have to look at the way that ASDA did to this problem?

Q241 Chairman: What is John Lewis's position on this? We are going to come on and talk about some of the very good things you have been doing, but do you have an overall approach and philosophy like ASDA does to this problem?

Mr Sayer: Yes, we do. It differs from ASDA, as I suspect you would expect it to from company to company. We have an aspiration to divert our waste from landfill to the extent of 95% by 2013, so perhaps not quite as bullish as my colleague's on my right, but the approach we take is to adopt a responsible approach to the waste that we are generating and I am in the post that I am in with one other colleague in the last year to obviously try and identify what fits the size and scale of our business and looking at how we can actually dispose of the waste which our operations generate. We do use the waste hierarchy. We support that in terms of reducing, reusing, recycling and then recovering. To actually get to the levels we want to aspire to of 95% from landfill will require energy from waste solutions to actually deal with the waste which we cannot recycle, which is difficult to do, but at the moment we do not see fully how you can get to 100% because there are some residues from these processes which still exist and are categorised as hazard waste. At the moment those solutions seem not to be there, but as they emerge—and hopefully they will in the next five years or so—then obviously that will help us get to those targets.

Q243 Chairman: From the small business sector, Mr Whitefield, what is your overall philosophy and approach?

Mr Whitefield: We have only been developing our management policy over the last two years and that is with the onset of having to take on ISO 14001, which is basically a requirement on us by our suppliers. So there is not too much external drive other than our customers on that. We had very modest targets to start with. We were looking to reduce landfill by 5% a year to start with. We are reducing it by about 40% per year at the moment. We have no defined ultimate target because we are not sure where we are going with it, but what we are trying to do is to have progressive targets as the years go on.

Q244 Chairman: Can you just for the record—because you are an electrical business, are you not? Mr Whitefield: It is mechanical engineering really.

Q245 Chairman: Right. Just give us a 30 second scenario of your business, because I think people know who ASDA and John Lewis are but they may not know your company.

Mr Whitefield: We are a design, manufacture and supply company. We produce conductor rail for the railways, namely new aluminium conductor rail which is going in on the Jubilee, Northern and Victoria Lines. We provide the shoe gear that collects the electricity from those rails. Overhead systems, the Dublin Lewis tram system we have recently installed, and pantographs which go on top of the trains and collect the electricity for all the UK trains. We are in Somerset and we are a company of around about 180 people.
Q246 Chairman: Very good. Can I ask our two colleagues from the retail sector, you have talked about what you are doing to minimise your own disposals to landfill over time, but what is your approach to minimising the incidence of waste itself in the first place? Do you want to start for John Lewis, Mr Sayer?  
Mr Sayer: Yes. In terms of minimisation, packaging is probably what you are referring to, I suspect, and my colleague, Gemma, I think is actually more informed on that than I am.  
Ms Lacey: Obviously following the waste hierarchy, then we are very much focusing on reducing the amount of packaging we produce, first and foremost. As part of our commitment to packaging reduction we look at not just opportunities where we can eliminate unnecessary packaging but also look at opportunities to introduce innovative new types of material. There are opportunities as well around lightweighting particular types of packaging and introducing recycled materials.

Q247 Chairman: Can I just stop you there so that we can be entirely clear, because all of us are customers of a product which is packaged, but I think you are talking about what comes in, if you like, from the warehouse end in which the product is either delivered to your stores or in the case of Mr Walker-Palin, who gave us a very clear indication, where you would have an outer container which can then ultimately be modified to go on display directly in a store?  
Ms Lacey: The approach is actually the same in terms of obviously looking at both the secondary and tertiary packaging, which would be in terms of what is actually delivered into our stores, but when I talk about, for example, when we are looking at eliminating unnecessary packaging then it is about looking at our product range and identifying areas where we can eliminate packaging which we consider no longer necessary. Examples of that within Waitrose are that we have been looking particularly at the fruit and vegetable range and also our meat, fish and poultry. So examples of that are where we have removed the outer sleeve from our breaded fish packaging, which actually results in a reduction of around 33% in the weight of the total packaging. There are also things around our salad bags, for instance, where we introduced lightweighting, again saving reductions overall. They are not always necessarily visible to the end consumer. We have also been looking at what alternative types of material we can use as well, from trialling materials such as biodegradable compostable types of material, but again it is very much obviously making sure that we have still got packaging which is fit for purpose and adequately protects the product both in transit and also on the shelves, and also carries all the relevant information we need for the customer from an information perspective. So it is really a balance of looking at opportunities across different areas, and what we are now looking to do, where we have focused on specific categories, is actually taking that learning and sharing that best practice through packaging forums with our buying teams and with our suppliers to look at further opportunities across the whole product assortment and the packaging around that.

Q248 Chairman: Okay. Mr Walker-Palin?  
Mr Walker-Palin: For our primary packaging, ie which is around our products, we look at it in three ways. We look at right sizing the packaging that is around there, we look at lightweighting for the packaging that is around it and we look at bringing in more recycled content where we can. We were one of the first members, as I believe John Lewis were, to sign up to the Courtauld Commitment of a 10% reduction. We looked at the 10% reduction of lightweighting of packaging and said, “Actually, we think we can set ourselves a stretch target on top of that,” so we have been working over the last two years to a 25% reduction by weight in our primary packaging and we are currently at about 24% and will hit 25 by either the end of next month or probably the first or second week of January. We started off looking at our Organics packaging range because we thought it is the kind of range where you can make some real differences and customers will work with you around those differences, so we could do some trials to see what worked and what did not work. Generally, the approach which we took worked there in terms of reducing the amount of packaging that is around it and then lightweighting the materials we are using. We are also one of the lead partners on WRAP’s light glass project, so we looked at particularly moving away from glass and into plastic bottles. A lot of our materials now have been lightweighted from materials like glass into plastic. The reason we have done that is that there are lots of efficiencies throughout the whole supply chain. If you can take the weight and the thickness of a piece of glass and replace it with plastic, you can then fit more of these goods on a trailer itself. The trailer is lighter, so therefore you are moving more goods for the same trailer at less fuel and we can fit more of these goods on the shelves, which helps in terms of availability to customers as well. We have so far removed about 40,000 tonnes of packaging from our products. What we are now doing, when we have done lightweighting, which we have done so far, is looking at what is next and one of the key challenges we have got is if you take lightweighting too far—and I think a block of cheese is a good example—if you have a prepared block of cheese which has a lightweight plastic packaging around it, as soon as the customer cuts that packaging it starts to go off, notwithstanding whether it is in the fridge or not, and probably if we just put the lightest possibly packaging around that a lot of that cheese would go in the bin and then turn into food waste and create a lot of methane. We believe it is probably better for items like that to put a zip lock on that piece of packaging and therefore you can re-seal it, it retains its freshness and all of the product can be eaten, but as soon as you start to do that the packaging then becomes heavier. So we have reached that point where we have done a lot of lightweighting and now...
need to look more across the whole lifecycle of the product to see what is actually the best direction to take from here.

Q249 Miss McIntosh: How much control do you have, Mr Walker-Palin, over the producers of the supplies on the type of packaging you are given? Can you virtually dictate how you wish the product to be packaged?

Mr Walker-Palin: What we have done is we have brought in an external consultancy to help us with this who are experts in packaging. To be really clear, our commitment is around our private label packaging, so it is around the ASDA packaging, not around branded packaging. In terms of branding, we do share a lot of information with our brand owners. I did a seminar with Unilever, for example, yesterday where I was talking about packaging and what we have learned and what we could pass on to them. In terms of the private label, the own brand product, then yes, we will sit down with the manufacturer and say, “We have this target to lightweight the packaging and we do require you to work with us on this. Let’s work together on what the appropriate solution is.”

Q250 Miss McIntosh: Do you see any evidence yet that the producer responsibility is working in terms of packaging?

Mr Walker-Palin: I think it is well-established that yes, it has worked so far probably, I would suggest, with the exception of mixed plastic packaging. What we have moved to very quickly, the whole retail sector, is that as part of the lightweighting work which has been done under the Courtauld Commitment, as I said before, more of these materials are now plastics which are very light materials, but the non-rigid plastics in particular, the things which are not generally bottle shape, are not usually collected by local authorities for recycling. So I think producer responsibility now has a role to play in looking at more of those materials and certainly we are part of the Packaging Recycling Action Group, which is a group of industry members—and I actually chair the group—which works with Defra on trying to find solutions to this. We are very pleased with the packaging strategy that Defra is working on at the moment to look at tweaking producer responsibility, to focus on some more of these materials, because we do get a lot of postbag from our customers saying, “Why have you given us this plastic packaging? I can recycle glass but I can’t recycle plastic. I don’t want it,” whereas actually we know environmental it is the right decision to take. But where we can, we need to close that loop and get that material back either to convert into energy or preferably closed loop recycling.

Q251 Miss McIntosh: I will come back to the energy question in a moment. Could I ask John Lewis how we can reduce the Primark factor and the throwaway society? Are you looking at ways of reducing that level of waste?

Ms Lacey: Again, going back to the waste hierarchy, I think it is about working across all the different areas and I think it is about working in all those areas in balance, so looking at both packaging and also product optimisation in terms of the materials you are using right through to then obviously putting in place the right infrastructures then to actually be able to use those products in a responsible way but also then deal with those products once they come to the end of their lives.

Q252 Miss McIntosh: Do you think price has a role to play in Primark?

Ms Lacey: Certainly from our perspective it is about providing quality products and as part of that I think we have got a big responsibility in terms of how we communicate the use of those products and in terms of the responsible use of those products.

Q253 Miss McIntosh: Can I ask Mr Whitefield on this point: is it difficult for small and medium sized companies to demand higher environmental standards from suppliers?

Mr Whitefield: Yes, but it depends on where the goods are coming from. We purchase an awful lot of aluminium, 2,000 tonnes a year, and if we are buying that from UK sources, meals in the UK, then it is very easy for us to use recyclable packaging, ie either aluminium or steel packaging. When we are buying it from abroad—and an awful lot comes from Germany—we find that there is a tendency to use wood packaging because the transport costs do not make it effective for us to reuse the packaging. So that is one of our main things, to try and get rid of wood packing with reusable steel packaging in the main. Our biggest waste is wood. We are throwing away 5 tonnes a month. We want to reduce that by introducing reusable stillages for our equipment and for some of the products which are coming in, but it is very difficult when you have got a supplier in Germany and you are trying to get them to actually come on board with that and also keeping the cost down, because it does have a cost implication on those goods.

Q254 Miss McIntosh: Are you able then to collaborate with other small companies from Germany?

Mr Whitefield: Not really. Because of the uniqueness of our product it is very difficult to do that. The other thing which does affect it is the transport that we are using from an environmental point of view is very much utilised in delivering that product to other areas of the world, so virtually every wagon that comes into our premises is re-booked again by our transport agents to take goods away. So that space is probably better utilised for than it is for transporting packaging around. But we have had contracts in Europe where we have had demands on us to return our packaging to the UK.

Q255 Miss McIntosh: Can I just return to something Mr Walker-Palin said? You take the packaging, the plastics, to Skelmersdale and you have a facility there where you go?
Mr Walker-Palin: Not in Skelmersdale. What we do is we take it back to Skelmersdale, where we bulk it all up. At the moment we have got it split into three way streams, so we have got animal by-products, bakery and then everything else, because we are looking to the future, hoping that animal by-products will probably go for rendering and therefore biofuels. Bakery will hopefully go to feeding animals and there are certain microbiological issues to resolve first. Then we are hoping the rest of it will go to an anaerobic digestion facility because we like the idea of getting electricity and digestate from these materials, but there is not currently sufficient infrastructure in the UK of anaerobic digestion so what we are doing is bulking it all up as one and then our waste contractor, Veolia, is taking it away to a facility, I believe in the Midlands, I think it might be in Bedford or Coventry, where it is then being burnt to create electricity. But that is our short-term solution. Our long-term aim is to have proper uses appropriate to the materials that we are bulking up, which is why the process we have got actually has the three streams rather than everything in one go.

Q256 Miss McIntosh: Does your company own the Birmingham facility?
Mr Walker-Palin: No.

Q257 Mr Drew: It was just on the plastic and glass issue that I wanted to come back to Mr Walker-Palin, and maybe Ms Lacey as well. I remember from years ago and I still see in a lot of European supermarkets customers returning their empty bottles to the supermarket and back, presumably to the supplier for re-using. Have you looked at the feasibility of that, the practicality of that, and indeed the environmental issues involved? Is it something which could be re-introduced and ought to be re-introduced?
Mr Walker-Palin: I think from ASDA’s perspective we are looking at this from two angles. One is the general “bring bank” facilities we have in our stores where customers can bring those kinds of materials back. We do not believe they are probably as attractive as they ought to be. However, almost all of these “bring banks” are operated by the local authority in which area the store resides, so we do have a process where next year we are hoping to roll out more and more to engage with the local authorities to spruce up these facilities. In fact, we are running a competition with schools in Leeds and schools in Bristol at the moment to say to the schoolchildren, “Have a look at these facilities and how would you encourage your parents and parents that you know to use them more?” As part of that we are saying, “Do we need to bring more different types of recovery within those facilities?” One of the difficulties is that if the local authority does not collect that material for recycling, they then will not collect it from the bring bank facilities because they are serviced by the local authority. But we believe that is something we need to focus on more next year, and we will do so. Then in terms of reusable packaging, we certainly see a place for certain types of products. What we are trying to work through at the moment with a company called Easyserve is on the liquid detergents. We like the idea and we tried it about eight years ago and we want to dust it off and have another go with new technology, whereby customers would click in a reusable pouch for their washing detergents and then by reusing the pouch we can give them money off at the checkout as well. There is a lot of cash which needs to go into making that work. I think it was something like £150,000 in terms of R&D costs, which is a huge amount of money to get to the position to put this machine in, but it would also have productivity savings in terms of merchandising on the shelves as well, so we are motivated to try to make it work. For us, it is probably about six to 12 months away before we get to that point.

Q258 Chairman: Could I just take you back to the line of questioning which Anne McIntosh was pursuing on this question of a so-called Primark effect. Let me say at the outset this is not an attack on Primark as a brand, but it was the language which was used when we visited a waste site in Croydon. The operator commented that they had seen a significant increase in the amount of textile waste which was being disposed of. Five years ago it constituted 7% of the waste stream and now by weight it was up to 30%, and it was presenting them with real challenges because these materials were not easily recyclable, in other words it was either landfill or burning them. It does raise a rather more fundamental issue about sustainability because I suspect from the John Lewis Partnership, a point which you were making, Ms Lacey, you concentrate on perhaps the longevity of life in terms of the clothing offer, whereas, with no disrespect to ASDA, the price points are going to be lower. You have a different appeal. How much do these sustainability arguments influence, if you like, the type of textile goods you are selling, bearing in mind they now seem to be occupying an increasing proportion of the waste stream with difficulties for ultimate disposal and so some quite serious questions on sustainability are being raised?

Mr Walker-Palin: We have textile recycling facilities in all of our stores, so customers can recycle textiles through us. I think it is important to look at it from the angle that we are there to give our customers the product they demand from us, and what is really interesting in terms of the kind of fast fashions and people buying clothes and then disposing of them that we might have seen in the past is that we did a survey with our customers at the beginning of this year and said to them, “What do you like about our ranges? Do you think we turn them over fast enough? Do we freshen the designs fast enough?” What they actually said to us is that they are making product choice decisions now around quality and value for money. They are shopping for wardrobe essentials rather than impulse buys, which fast fashion tends to be. So we have now completely changed our brand offer on our George clothing to reflect that and are moving away from the so-called “fast fashion”. We have done that in three areas. We
have brought three new brands in. We have brought in a brand called Moda for the ladies and we have brought in Boston Crew for the gentlemen and G21 for the younger customers, and G21 are the kinds of customers who in the past would have gone for cheap, fast fashion, and we have moved them away from the disposability of goods to the durability of the textiles they are purchasing. In certain areas, footwear being one, we have completely moved away from fast fashion. We have a stable range of footwear. Generally as a whole business we have reduced the number of clothing options available to our customers by 20% and it is our strategy to actually fall in line with what our customers are demanding, which is yes, the right price, but also clothes which will last them for a considerable period of time because they do not have a huge amount of cash in their pockets. They want to buy something, invest in it and then use it longer than perhaps they have in the past.

Q259 Chairman: Now, Ms Lacey, in the interests of proper retail balance, having had a very good commercial for three new brands from ASDA, is there anything you would like to add to what you said earlier?
Ms Lacey: I think it comes back to the point you made in terms of what our brand offer is about and I think within the terms of the John Lewis Partnership and John Lewis and Waitrose brands it is about offering quality products which offer value for money. I think it is all sorts of ethical issues. Our customers will have an expectation that as a business we make all those sorts of considerations, so there is much greater interest in terms of where our products come from, how they have been sourced, the relationships we have with our suppliers, what materials they contain and also in terms of providing good information about what they are actually buying and how they can get the best and the most from that product.
Chairman: Okay. We are going to move on. We have got a lot more questions to ask and it probably will mean that not each one of you will have the opportunity to comment on the question simply because, with no disrespect, we could be here all afternoon. So if you are not asked to respond it is not because we do not want to know what you say, but those who are asking the questions will have decided who, in their judgment, might be the most appropriate person to answer them.

Q260 Miss McIntosh: I think, Mr Walker-Palin, you said that it was the level of the landfill tax which allowed you to make the business case for developing the disposal policies that you have. Are there any other main drivers for your company’s policies on waste?
Mr Walker-Palin: Yes. We as a business in terms of Wal-Mart globally are trying to make ourselves more sustainable, so one of the drivers is reducing the amount of waste and therefore the carbon emissions from that waste. That is why we invested something like 4 to £5 million in the ASDA service centre network to allow us to backhaul the waste without creating additional carbon with lorry units on the road. So for us it is about taking inefficiencies out of our business. On a landfill escalator it helps on that one, but also it is about doing the right thing by the planet, and something like waste we have not seen a conflict between the two, actually they work very well together.

Q261 Miss McIntosh: That is good. I think you mentioned, Ms Lacey, about the customers expecting a certain environmental responsibility. You are a partnership. Do your employees encourage you to take action, or do they expect you to take action on waste?
Mr Sayer: Yes. I do, and I was going to mention that because there is an expectation from our customers in terms of the reputation we have. They are expecting us to do certain things. We are a co-owned business, as you correctly imply. We have got 69,000 partners or employees and because it is their business there is a pressure from them every day to be seeing their business doing the right thing as well. So it is a combination of those factors and, yes, the legislation with landfill tax which actually drives action.

Q262 Miss McIntosh: Mr Walker-Palin, just on this point, would stronger regulation banning certain waste from landfill or imposing high national recycling targets drive your company actually faster?
Mr Walker-Palin: I do not think it would drive us faster because the speed we are moving at is incredible in terms of zero waste to landfill by the end of 2010, but I think it would be a helpful marker to the whole market on moving the whole industry forwards, yes.

Q263 Miss McIntosh: Mr Whitefield, you have obviously got a very impressive record in your company. What is preventing other companies of your size achieving your rate of recycling?
Mr Whitefield: I think it is time with a lot of them. I think the business case for small engineering firms is getting their product out of the door and unless there is a huge incentive on it—I mean, with the amount of waste that we have got on the product that is going through it makes commonsense for us to do the actions that we are doing, but for a lot of people it is actually just finding the time, their own resources and time. If you have got a manager then, you know, he is looking at what he is getting out the door really. If there is a financial impact, then obviously they would take that on board, but generally it is not that significant and in what they are doing their time is better put to other things really.

Q264 Miss McIntosh: So you do not get the same impetus from the employees, perhaps, with larger companies?
Mr Whitefield: Not at all. It is probably harder work with our employees to get them to recognise our waste streams and use those.
Q265 David Taylor: Mr Whitefield, you are one of WRAP’s star performers, but how crucial to your undoubted success has been any advice programmes they may have been able to provide?

Mr Whitefield: I think advice programmes are useful and it enables you to understand that you are going in the right direction and where you are going. It is very difficult to benchmark a company like ours against other companies because of the diversities. I think comparing it with other engineering initiatives, MAS have come in and worked very well with engineering companies on actual workshops and getting things done. What I tend to find on the environmental side, because there is lots of advice, everybody will tell you to turn the lights off, every piece of paper you pick up tells you that you can do this and you can do that, and it is all commonsense and I am sure everybody in our line of business understands that and knows that. It is actually putting the systems in place and having the time to deal with that. I think there is a lot of duplicated advice around and some of that money, that time and effort could actually be put into practical solutions. There is a lot of things that we face in our company, how we deal with wood. Is the wood dirty? Can it be reused? Can it go to landfill? I am sure there are hundreds and thousands of companies having the same problems, yet trying to find the solutions is so difficult sometimes. You could almost do with some help on that, for somebody to come along and say, “This is the way to do it.”

Q266 David Taylor: You may be aware that WRAP does face some cuts in central funding?

Mr Whitefield: Yes.

Q267 David Taylor: It sounds an obvious question, but I will ask it anyway. How difficult do you think it will be for other companies to follow the Brecknell Willis route with a shrunken WRAP, with less advice or support services available to them?

Mr Whitefield: It depends how much they are aware and how much they are involved with it. I think companies can get on on their own very well. We have a couple of local groups where production managers and directors get together and talk about our issues. One such issue we are having in one of our groups at the moment, the manufacturing south-west group, is talking about environmental issues and sharing those thoughts. So I think it actually works a lot better where you have got local groups of manufacturers and work with those rather than the individual company so that you have got a common goal.

Q268 David Taylor: Can I broaden the question to link into the Waste Strategy’s declared objective of widening the active participation of businesses, including and indeed especially retailers? I wonder what support, say, JLP have received from Defra funded programmes, and if you have received that support how do you rate it? Then I will put the same question to ASDA.

Ms Lacey: The Waste Resources Action Programme, as you mentioned, is one organisation we have been closely involved with and we have been working with them both from a packaging perspective as part of the Courtauld Commitment in terms of identifying opportunities within our own business for packaging optimisation and obviously advice and guidance on that area. Another area in which I think WRAP has been particularly good is in terms of the whole food waste debate and pulling together all the information out there, because it is a huge topic, and actually pulling that into a sort of concise report which provides a good steer in terms of actually what the issues are and what the priorities should be for us as a business in terms of where we can focus our effort, not just in terms of managing food waste from our own operations in terms of what we generate and how we can reduce that but also in terms of the consumer communications and also employee communications perspective. I think through the support of a campaign like “Love food, hate waste” it enables us to collectively campaign on a particular issue and obviously you have got the support and the weight behind it from WRAP and Government but also collective action across retailers.

Q269 David Taylor: ASDA, what support do you have from either Defra or indeed Defra funded programmes?

Mr Walker-Palin: I would not disagree fundamentally with what my colleague from the John Lewis Partnership said. A point I would make about Defra is that they have been very open and receptive to new ideas and to supporting us in our thinking, and we certainly thank them for that. In terms of WRAP, I think it would be a shame potentially if they were to lose funding because they have done a lot of work in this sector. I would not underestimate the Courtauld Commitment in terms of bringing together like minded people to share expertise with WRAP at the centre of that to help then stimulate the debate and share that knowledge. One of the things WRAP is able to do that we cannot get together and do as retailers is that we cannot get together under competition rules and have detailed discussions about what we are going to do on specific policies generally, whereas we can feed into WRAP and then WRAP can pull that out as policy advice. I think that is really useful.

Q270 David Taylor: Briefly, ASDA Wal-Mart is an international company. Are you able to draw on best practice ideas from the USA in what you are doing, or are you given fairly free rein from the international HQ, as it were?

Mr Walker-Palin: We work very closely with Wal-Mart on all aspects of our sustainability. I have personally spent probably about a third of my time on global issues with Wal-Mart and about two-thirds on ASDA issues, and certainly if you look at something like packaging Wal-Mart is focusing on branded suppliers, so they are putting a good clear steer onto the branded supplier market around what is expected from them,
Q271 David Taylor: Staying with you on my next question, you said a moment or two ago there were insufficient facilities for anaerobic digestion and you would like to see more. Are there any other infrastructure gaps or weaknesses you can identify which would help increase the recycling and minimisation of waste, either within your own company or on a broader scale?

**Mr Walker-Palin:** I think the biggest gap, to touch on what I said earlier, is around helping customers to recycle more. If you look at the “bring bank” facilities in our stores being serviced by local authorities, I think you have the same issue where customers want to recycle more. They want to recycle more at kerbside level, or they want to recycle more at store level. Generally both are serviced by the same local authority and we are really passionate, which is why we work very hard with the Packaging Recycling Action Group to try and come up with solutions to that and to try and be part of the solution rather than part of the problem. I think any work which can be done on developing a standardised number of materials which are collected nationwide for recycling would be very, very helpful. Immediately then in one measure you could communicate nationally around what you can and cannot recycle and how you need to put it out for collection. We all now have a metric on our pack; we have a logo on the back saying, “This is what it is made of,” and then using that data how easy it is to recycle that pack. What we are aiming towards is to get more uniformity of these materials for recycling, to then use that label to make it very easy for customers to then recycle it. That is in terms of our customer waste. In terms of our own operational waste, the big gap at the moment is around anaerobic digestion facilities, in particular anaerobic digestion facilities which can de-package a product at front end. At the moment there is only one facility in Bedford which does that and we are going to need many more of those facilities around the country. What we would also like to see is more investment in some of the new technology coming forward like gasification or pyrolysis where you can take biodegradable waste with the packaging and turn it into energy and digestate. Certainly Wal-Mart is doing a lot of work on bringing forward models in the US on that and if feels to us like that is probably the future. You have got anaerobic digestion immediately and then you have got the next stage, and we would be really keen on trying to develop that next stage and Government funding. I guess, would help a lot with getting the market to develop that.

**Chairman:** Just before we leave that point, David Drew wanted to come in, so can you work together on this anaerobic digestion?

Q272 Mr Drew: Could I just ask you—and I do not think it is a provocative question—how much does the wider waste debate matter to you? Clearly there is this issue which is concerning me in my area about moving from landfill to energy from waste, ie incineration. Does it matter to you that there is a wider context to waste and do your customers say, “Well, you know, if this is going for incineration then I want to know about it”? Is that something you engage with?

**Mr Walker-Palin:** I think from ASDA’s perspective we engage with minimising waste because it is about our operational model. So our operational model is around everyday low cost gives us everyday low price. Waste is a cost within our business. In terms of our customers, they expect us then to minimise the waste. However, I have not had any conversation with them around whether energy from waste versus recycling is a good or bad thing. My gut fear would be that people generally think recycling is better but they also probably think around, you know, old-style burning facilities rather than some of the new style combined heat and power and energy from waste facilities. I think there is still a perception there that is probably a few years old.

Q273 Mr Drew: Given the amount of consumer interest there has been in food per se, is waste something you think you should be engaged in directly with your customer base—and perhaps you might want to say something about that—or is this just too artificial?

**Mr Sayer:** In the Waitrose branches where we have been doing anaerobic digestion for the last few months we have actually used local publicity in those branches to tell the customers what we are doing in terms that the food waste is actually producing electricity. So we are engaging with them and telling them what we are doing as best we can. I think there is an expectation from the customers that we will be doing the right thing. Whether they perceive that right thing to be anaerobic digestion or avoiding landfill, I am not sure.

Q274 Miss McIntosh: On the trials that John Lewis has been doing, do you think customers understand the importance of reducing food waste? Do you think we are well enough informed as customers?

**Mr Sayer:** We have been informing our customers and giving them some advice with portion control and things like that to actually educate them, and on food storage and the best way to do that. We have advice that we have given out on that. I think it is true to say it is never enough because obviously there is a lot of food waste in the country at the moment.

Q275 Chairman: So I suppose you have a little label saying, “If the lights go out, you’ve got it right!”
Ms Lacey: Certainly in terms of the research we have done with our consumers, packaging and waste recycling is top of their agenda amongst all the broader CSR issues although I think from the food waste perspective this is a lesser priority. They are probably more focused on the packaging side of things, but I think it is more about wanting to understand things around portion control and also linked in, I guess, with the packaging, how we can get the right balance in terms of making sure the packaging is right, in terms of reducing that from an environmental materials perspective, but also making sure that any packaging we do use does not have an impact on food wastage as well, so it is looking at more innovative ways of using that packaging too.

Q276 Miss McIntosh: Does ASDA have a similar policy? Do you think, being brutally frank and provocative, are we doing it to move food off the shelves more quickly so that if people throw out the waste at home they are going to come and buy new products?

Mr Walker-Palin: I think it is an interesting one and I guess one of the key elements, apart from education—learning how to cook, learning how to store food and all the rest of it—is around the promotional strategies we use in our stores. We do not use “Buy one, get one free,” that is not part of our promotional strategy. What I find really interesting is that one of the key areas which I think is highlighted in terms of food waste is the short coded food that you cannot freeze, most of that being produce, fruit and vegetables, those kinds of foods. We did a big customer panel of over 200 customers at the beginning of this year and we said to them, “How can we get you to eat five a day? How can we get you to eat more healthily?” because we do want more of these fruits and vegetables to cook with at home. However, we don’t have a huge amount of money spare in our pockets so we do need you to do some promotional activity around fruits and vegetables to make it easier for us to get the five a day.” They did say to us at the time, at the beginning of the year, that some of our promotional strategies were leading to them being left with food at the end of the week that they had not been able to eat and could not freeze. So in June we changed our entire promotional strategy for our short coded food products and said, “What we are not going to do any more is to do two for £2, for example, on lemons or oranges, so you get too much of one product that you then cannot eat,” and we changed our promotional strategy to be around meal deals. So now we say, “You can have two for £2 across the whole of citrus and apples,” for example, or across the whole of prepared vegetables, potatoes and sweetcorn, for example, and our customers have responded to us by saying, “That’s exactly what we wanted you to do and we’re now disposing of less food, if any.”

Q277 Miss McIntosh: John Lewis, you are working on extending the anaerobic digestion plants across the stores. Are you able to say anything about the cost benefits of reducing food waste in this way?

Mr Sayer: It is proven in the trials we have done to be cost neutral to us compared with the time we were on disposing of food waste before we had done the anaerobic digestion trials. So we have not faced a cost penalty, but it is cost neutral, so it is not something which precludes us from doing it and indeed we like the solution of anaerobic digestion. It is ticking lots of boxes in terms that it is producing energy, it is avoiding landfill, and so I would support what my colleague has said. Obviously, what we really want to see is a greater proliferation of these facilities around the country because it is a good solution for that particular waste stream.

Q278 Miss McIntosh: Have you identified any barriers to rolling further on down and any solutions to overcoming those barriers?

Mr Sayer: I do not think it is barriers that we directly have faced, but for the private investors, who obviously want to actually build these facilities, my understanding from the position we are in is that they obviously face barriers in terms of getting planning permissions to actually build these plants, so anything Government can do to actually find a way through that faster now will obviously enable these plants, hopefully, to appear sooner rather than later.

Q279 David Taylor: We have been hearing about ASDA’s aspirational goals. Our Government here has downgraded some goals to aspirations, but I did not realise there was a sort of halfway house. It is good to know that and I shall certainly be heading for the nearest ASDA store in about three or four months’ time to see if you can get the waste material down on your Easter eggs, which seem to be perhaps the most wasteful in the product range! For my last question I want to return to where I started, to Mr Whitefield. The regulatory framework for the commercial sector and the municipal sector are out of kilter, are they not, in this area for the expectations and obligations of local authorities? Would you think it would be a good idea—and MPs sometimes get this from small firms—for local authorities to allow small and medium sized enterprises—for instance very small firms—for local authorities to allow small and medium sized enterprises—to overcome those barriers to rolling further on down and any solutions to getting planning permissions to actually build these facilities around the country because it is a good solution for that particular waste stream.

Q280 David Taylor: Often any commercial waste which could be recycled, if in a white van with a trailer on the back, many community sites will turn
those away because it is commercial waste. Ought there to be a means or a system of licensing to allow SMEs to dispose of waste in that way?

Mr Whitefield: Yes, most definitely. We have got several smaller streams, glass is probably one, plastic is another, where it is not economically viable for us to do it anyway. We do not get any feedback from it. There is a commercial recycling place across the road in our retailers next door, which you could use, and I daresay some of our employees do use, but it becomes inconvenient and you then start having certain products which we have, certain waste streams, ending up going as hazardous because it is the easiest way for us to get rid of it, because there is no specific way of dealing with that particular waste. Yes, I think there is definitely a requirement for that for the smaller companies. We have got sufficient streams where it does not create a problem for us, but I can imagine companies half our size having real difficulties with it.

Q281 Mr Williams: When packaging is reduced there comes a point where you need a certain minimum amount of packaging in order to protect the product either through transport or at point of sale, or indeed when the consumer is taking it home. At that stage, is it better then to put more emphasis on making the packaging more easily recyclable rather than trying to drive down bit by bit the amount of packaging?

Mr Walker-Palin: I think from our perspective, yes. I look at the example of Wal-Mart which has just done as well. But to us it feels like increased recyclable content is definitely the right way to go.

Ms Lacey: I think we started out exactly that issue and said, “Customers don’t understand type 1, type 2, type 3, type 4, it’s too complicated, but they do understand that recycling generally is a good thing to do, so how can we help them to move towards a recycling route but make it simpler?” That is when we decided as a whole retail sector, “Let’s put some more clearer logos, and standardised logos for everybody on our packaging which says, for example, ‘Sleeve cardboard, tray plastic, sleeve film,’ for example, and then put a coloured symbol above that which says, ‘Across the UK that is widely recyclable, check locally,’ or, ‘Not recycled,’ and then link them to a website where they can go and put their own postcode in.” We think that has helped a lot in moving consumers forwards. The next step, I believe, is getting more uniformity of the material types so that we can up the widely recycled range and...
then it will make it far simpler for consumers to then recycle those materials. They do want to do so. We do get a lot of post saying, “We want to recycle more of these materials.”

**Q284 Mr Williams:** A constituent suggested to me that rather than having a little number on the different types of plastic we should have a colour coding which would make it easier for people to find themselves involved in this and in trying to make a real contribution.

**Ms Lacey:** I think this will really help because retailers will be using standardised labelling, so in terms of looking at our packaging, and ASDA packaging, consumers are going to see the same set of symbols, which will just make it much simpler. As you say, there is kind of colour coding and a greater visibility in terms of what the material is, and also what action consumers should actually be taking with that material. I think it will help us then to collectively communicate what we are trying to do about tackling some of those materials which consumers are not currently able to recycle.

**Q285 Chairman:** Can we conclude our session at the moment with some questions about carrier bags, which has become the sort of lightning conductor of good practice as far as retailers and waste are concerned? ASDA has got an enviable record of 30% reduction, I am advised, in terms of the number of carrier bags it has handed out, but Mr Bond again strikes an interesting note in which he is not exactly supportive of the measure which is contained in the Climate Change Bill, which effectively precursors the possibility of a carrier bag tax. I hope that is a fair summary of where you are and the evidence which John Lewis kindly supplied to the Committee indicated that you had had a 25% reduction in the number of bags carried out. I think it would be quite interesting to hear your respective experiences about how you have achieved that and what your customers’ reactions have been to longer life, sometimes material based, carrying bags as opposed to the plastic bag. Mr Walker-Palin, do you want to start?

**Mr Walker-Palin:** I guess probably in terms of our current strategy around reducing carrier bag usage started around this time last year, where we said, “Let’s take some trial stores over Christmas, the busiest time of the year for us, and let’s look at ways of changing customer behaviours to using carrier bags.”

**Mr Walker-Palin:** Initially we are working towards a voluntary agreement, again with WRAP, around a 25% reduction in the environmental impact of the carrier bags which we were giving out. I think it is fair to say subsequently we have moved a lot further than that, but this time last year that is what we were aiming towards. There is a common misnomer around carrier bags that we want to give them out. Well, actually we do not, because again it is a cost to our businesses. So it is good business practice to not give them out also, but we need to take customers with us in the right way, which will make a permanent behavioural change in the use of carrier bags. So last year we took a very bold step over Christmas in six stores to remove carrier bags from our checkouts, place them out of view and put them under the control of the cashier. Then the cashier was encouraged to have a conversation with the customer, to say, “Have you brought your own bags with you today? If not, do you want to purchase one of these sustainable bag ranges?”—and all of our sustainable bags are sold at cost, we make zero profit from them. If the answer then was, “No, I don’t. I want a carrier bag,” they would them give them the number of carrier bags appropriate to the shop they have done that day. We did this last Christmas across different demographic stores to try and understand are there harder parts of the country to reach on this and easier parts? What was really surprising to me was the lower demographic stores got behind it much more than the higher demographic stores and I think probably we extrapolated from that—we did some customer research—that it allowed people who did not have a huge amount of spare disposable income to make the right choice around the planet and be seen to be doing their bit. So it was almost an entry point, again in a similar way to recycling, I think, to greener behaviours. We then looked at what other barriers are there in existence and we decided our sustainable bag range was not very trendy. People probably did not really want to be seen with it walking down the street. So at the beginning of this year we completely revamped it. I am told it is a really trendy range now, according to the people who designed it. I think it is certainly much better. We moved the sustainable bags to the front of our stores, so you could buy them when you were standing at the checkouts, and then in June this year, to coincide with National Recycling Week, we took carrier bags off our checkouts, placed them out of view. We had points of sale for a month around our stores and the strap line we used for customers was, “Saving the planet one bag at a time.” The reason we said that was that it might only be one bag to you, but if 70 million customers all used one bag less, actually that really starts to add up then into making a real difference. We did a lot of messaging in our customer magazine, which is the most widely read free magazine in the country. We did messages on ASDA FM, which you can get on the Internet and in our stores. We did lots of communications in different ways to our customers, and in particular to our store managers to get them involved, and our front end managers who are responsible for the standards at the front end. We have now reached a 30% reduction and we are about to go again between now and Christmas to put some more messages up at the front of our checkouts, similar to what the Government has done on “Act on CO2” to make the link between prices, cost and the behaviour and activity you want to drive. We promised that any savings we make from carrier bags will go back into lowering prices for our customers. So we are saying to them, “If you come...
forward on this and make this permanent behavioural change, you will see a benefit and prices will lower within our stores.” We think that will be very effective. We are aiming now towards a 50% reduction by next Easter. We are going to roll out more permanent hanging boards at the point of sale at the front of our stores. We are introducing a new bag into our range. Again, they are all sold at cost. What we are seeing is that so far customers use about six bags per shop and most customers have got three, four maybe, sustainable bags. So they are starting to make that switch. But what we are seeing is more behavioural change. It is not a one-off, they are actually remembering to do it. There are certain areas where they are still forgetting, one of which is when they get out of the car and they leave it in the boot of the car and get inside the store and think, “Oh, forget it. I can’t be bothered to go back for them.” So we are going to put some big banners in our car parks saying, “Are your bags in the boot? Don’t forget to bring them with you.” So some simple things which we really think are going to help drive this forward. By making that kind of approach, the behavioural change rather than a punitive levy on carrier bags, we believe will make a permanent change with customers as opposed to that we have seen in the Republic of Ireland, where the levies had to be increased and it could be argued, “You haven’t made that behavioural change.” It has not really got into customers’ minds to change fundamentally how they shop.

Q287 Chairman: Right. John Lewis?
Ms Lacey: I think in terms of our philosophy it is similar in terms of saying that actually it is about making sure that we drive long-term and sustained change in consumer behaviour on this issue. We introduced a “Bag for Life” back in 1999, so it has been part of our culture in terms of promoting the messages of reuse and, like ASDA, we have promoted this “Bag for Life”. We have removed carriers from our checkouts.1 We have invested a huge amount of time and effort, mainly at the request of our partners in terms of partner training and what we are trying to do in this whole area, and again communicating and having much more of an active dialogue with our consumers on this particular issue. Again, looking at our reusable bags and those offers and making them more attractive to consumers, sitting alongside the “Bag for Life”.

Q288 Chairman: Just to pick up on the point Mr Walker-Palin made, because if we think particularly of the Waitrose part of your business by and large I guess the people who shop in Waitrose perhaps do not fall into the category of the slightly more hard-pushed ones in Mr Walker-Palin’s example. But have you found, amongst your customers across the range of stores, any differences in the positive uptake of longer life bags?
Ms Lacey: We have. Last year we actually saw an increase of 63% in our sales of our “Bag for Life” which equates to around four million “Bags for Life”, so I think we have seen a shift in behaviour. I think you are right in saying we do have a kind of more informed customer base and they are very vocal on this particular issue and very supportive of the actions we have taken in store to raise awareness of the issue and make it easier for them to reuse their bags.

Chairman: Okay. For those unfamiliar with the procedures of the House of Commons, the division bell has now sounded and so we will have to disappear. As we have just about come to the end of our questions, can I take the opportunity of thanking all of our witnesses for a very positive and quality input to our inquiry. Can I thank you for your written evidence. There may be the odd question which we might want to just refer back to you in writing, but thank you very much for coming this afternoon and helping us. Thank you.

The Committee suspended from 4.14 pm to 4.33 pm for a division in the House.

1 Clarification by witness: Mainline checkouts are visibly clear of carrier bags.

Witnesses: Mr Andrew Kinsey, Senior Sustainability Manager, Bovis Lend Lease, and Mr Jon de Souza, Director of Member Services, Constructing Excellence, gave evidence.

Chairman: Can I welcome Bovis Lend Lease in the shape of Mr Andrew Kinsey and from Constructing Excellence Mr Jon de Souza, the Director of Member Services. You are both very welcome and our questions are going to be started by David Drew.

Q289 Mr Drew: Can I start with something which in a sense has been a critical background to my entry to this? The reclamation industry, is that your equivalent of recycling and do you see it as such? Do you badge it as such? The reason I ask is because I have got a friend who is making rather a lot of money in reclamation and he is adamant that the building industry can reclaim much more than it does at the moment. Where do you see reclamation?
Q290 Mr Drew: So given there is some reservation still in the building industry about the degree which can be reused—we are talking about demolition and we will come on to perhaps the more mainstream in a minute—what is it that the building industry needs to actually be encouraged to reuse more of its material?

Mr de Souza: There are some examples of organisations out there which are designed to help the sector and other sectors for reuse of materials, and I believe it has come up in a previous evidence session, the National Industrial Symbiosis Programme, which looks to match up material coming off a particular site, for example, or from other industries and find examples of where that material may be used, to stop it going to landfill essentially, and that does not just operate in construction, it operates across sectors and there are some very good examples of where that approach has been used with our industry for particular materials to be used in, let us say, community work. So if a great deal of timber is coming off a construction site, they will find a local use for it nearby. So that is an example of good practice. I think one of the issues may be that some of the opportunities which are out there for the reuse of materials are not well-known or well-publicised.

Q291 Mr Drew: Could you take us through those, because obviously what we are interested in is how do you bulk up the recycling in this industry, what are these methods, because clearly the alternative is landfill currently? We might come on to a third one, but let us say the main alternative is landfill. What other ways are there of recycling building materials other than putting it into landfill, the alternative for landfill? Let us put aside burning it and whatever else. Let us look at recycling first.

Mr de Souza: There are things like the opportunities for crushing materials for use on, let us say, road aggregates, the opportunities to refill trenches.

Mr Kinsey: I think from our perspective the problem is normally time. If you have got time to identify what those materials might be and then be able to have something to do with those materials, then we are able to recover them much more successfully. Again going back to the example of Unilever House, we did a sort of pre-demolition audit, which is quite a rare thing. I think, in the industry but it enabled us to identify what wastes were likely to crop up. Normally in a typical situation the problem is we need to get rid of it tomorrow, or probably even yesterday, and there is not the time or the space to be able to find either a user or a market for that material.

Q292 Mr Drew: One of my major sites is being redeveloped at the moment. The developer made a great play to me to say that there were very few lorry loads of material which actually left the site. They have reused virtually all the material. They said a lot of it was messy and had to be treated. Why is that not more commonplace?

Mr Kinsey: I think it is down to the whole way the construction industry works and the planning of the projects. You have to understand how we get involved in different contracts. Sometimes we are involved in, say, PFI or projects like the one I am involved in currently where we are much more involved in the design processes and we have a little bit more time.

Q293 Mr Drew: So who should be being lent on in a sense to make sure the contracts do take account of your skills? We know that the costs of landfill are rising.

Mr Kinsey: It is not necessarily who, it is the point in time when it needs to be addressed and in lots of contract types we come in far too late in the process. The design is done and we are there effectively just procuring that as a sort of construction management type of operation. You have very little influence at that particular point in time to do anything, so it is at the appropriate sort of RIBA stage and it needs to start with the design team really about designing out waste, and we have conversations with our design teams when we are involved with those sorts of processes about some of those principles, the principles of design for deconstruction and eliminating waste at the design process. That is the good practice sort of approach, to not even produce the waste in the first place. It follows the waste hierarchy. So I think the client probably could get a lot more involved in this. At the moment we have Site Waste Management Plans. The client has to require us to produce one of these things, but that is probably about as far as it goes. When we come into the projects a bit later on, if we have not had that involvement in the design then a lot of that waste is going to occur.

Q294 Mr Drew: So without putting words in your mouth, it is crucial that the client and the contractor work together from the onset of a site which is obviously going to be cleared and reused?

Mr Kinsey: Yes, and the design team as well, and having some of those early contractor involvements as well, because it is the trades ultimately that create the waste. They manage the sorts of problems. Those problems are all designed in. They can either be designed in or designed out, so it is linking those things a lot better together.

Q295 Mr Drew: On that, we all use the paraphrase “brownfield first” but what is the tax regime in terms of making that a sensible way to develop our country and how should it be changed to make it even more advantageous for you to use existing sites with existing materials?

Mr Kinsey: I was involved in the redevelopment of a brownfield site for a hospital in Romford not long ago and we did benefit from Landfill Tax exemptions, but I have to say it was not an easy process.
Q296 Mr Drew: But you can get those. Take us through quickly the process.

Mr Kinsey: We have to obviously identify the fact that the site was contaminated and what extent the contamination was, and prove that the excavation or the treatment processes that we were carrying out were not just going to happen anyway because of the works that were going on but that they were being done to remediate the site. So we use a technique called cement/lime stabilisation, which helps to save the material on the site and it cost us about, I think, £30,000 but we estimate there was a quarter of a million pounds saving by not having to excavate and dispose of that material somewhere and then bring some new material back in. So there are some cost benefits, but again it comes back down to time. Some contaminated sites are very difficult to treat and if it needs, say, bioremediation we may not be able to have time in the programme to wait around eight weeks, or 12 weeks, or however long that process takes. The cost of that time is more than the cost of taking it away and landfiling it effectively. So the Landfill Tax is an interesting kind of regulatory regime and the increases we have seen recently are starting to focus minds a little bit more.

Q297 Mr Drew: Do you welcome that?

Mr Kinsey: I think it is the right kind of thing. Maybe historically it has been a bit too low. It was interesting that in 2005, when we had the Hazardous Waste Regulations introduced that saw a lot of the hazardous waste landfill, supply of that hazardous waste landfill, rapidly diminish and that increased prices substantially as well. So all these things, I think, come into play to help us as an industry recover, recycle. It makes the economic argument a lot stronger.

Q298 David Lepper: Just a small point. As it is social enterprise we have to put in a plug for the excellent wood recycling project based in my Brighton constituency, which won awards for its work! Would a relatively small project like that serving a local area figure on your radar? Is it part of a network that you would be aware of?

Mr de Souza: We are a member-based organisation. We have 268 members from across the supply chain and they tend to come from the leading edge companies, so they tend to be the large/medium sized contractors, larger design practices, national client bodies. We do have also a network of regional partners who work very much at a regionally based level, one in each of the English RDA regions, and they would be probably aware of something at that sort of level.

Q299 Mr Williams: Nowadays many products are actually designed with the end of life in view so that they can be easily recyclable. Is the construction industry looking at that in any way, designing buildings? I pick up the point made by David Lepper about wood. So much wood is not recycled because it has been treated with such noxious compounds that it is almost unsafe to handle, whereas if a little bit of thought had gone into it, it could have been treated with something which would have achieved the purpose but without making it difficult to recycle. Are you designing buildings with end of life in view nowadays?

Mr Kinsey: We do not necessarily design buildings ourselves. We work with design teams which do that and they either work for the client directly or in some cases we are effectively the client, so that is an important distinction. I think certainly projects where we have PFI involvement, where we have got this responsibility for the building in its life cycle, those things are certainly starting to be looked at a lot more. Some of the more forward thinking clients we work with are quite keen on those processes as well. They are not just interested in the capital cost of the product but the end of the life cycle and how long it lasts. I think tools like BREEM or the Code for Sustainable Homes now are quite useful and they have some aspects of lifecycle. I am not sure it is entirely correct yet, but at least those tools are out there. So I think these things are becoming more and more on the agenda. It depends on the designers at the end of the day to specify the materials correctly. We kind of look at it from two aspects. One is a sort of prohibited and referable materials list, things we either ban or would like to be banned but not because of various materials. Sometimes these are materials which are the only thing to use, but we are trying to avoid the use of those products. There is also a sort of green list, if you like, of materials, things we would like to promote such as FSC certified timber, for example, or materials with a high recycle content. On the project I am working with we have worked previously with WRAP on looking at the percentage of recycled content by the value of the building and the client on my current project has a target or an aspiration to achieve 20%. So we are responding to those sorts of things.

Mr de Souza: Absolutely. In our membership we have seen design for deconstruction rather than demolition, which gives opportunities then for further use for recyclable materials. I would just like to echo Andrew’s point about procuring materials on a whole life basis rather than a lowest capital cost basis. Two of my colleagues gave evidence to the BERR Select Committee on construction and actually the final message they both put across to that group was that they would like to see an increase in clients procuring on a whole life cost basis, on a whole life value basis, and I would like to echo that point myself.

Mr Kinsey: I think another important point is that we can only really speak for our particular position in the industry and we work particularly a lot with repeat clients, who are in the main blue chip organisations who have quite a strong interest in this. What you have to remember is that there is a whole realm of the industry out there which works for one-off clients. I have been one of those myself when I had a house extension and I talked to the contractor about waste and I could have been talking Japanese, quite frankly. He really could not understand why I was interested in reducing waste, “Well, it just goes in the skip, doesn’t it?” So there is
a whole conversation and awareness raising at that kind of level of the industry which I think needs a bit more action.

Q300 Mr Drew: The numbers are actually quite scary. Construction produces a third of all the waste stream and you have got this ambition of a 50% reduction in landfill by 2012. That leaves an awful lot of landfill needing to be found. Are you ambitious enough as an industry?

Mr Kinsey: It is a good question and we debated and we used the UK Government’s strategy to try and inform our own sustainability targets. We have a series of targets on various things and one is waste, which looks at achieving certain targets by 2010. In the case of waste initially we had proposed a 50% reduction, so we were aiming to beat that strategy by two years. Having had that debate internally amongst our project teams, they felt that was not challenging enough and we wanted to go a bit further. Actually, when you think about it, in the position we occupy in the industry that is probably about right because we should be able to go beyond whatever that kind of average figure is, if you like, if that takes into account all the rest of the industry. So our considered opinion is that probably the target is kind of about right. Some will go a little bit beyond that and we have signed up to the WRAP half waste to landfill construction commitment, but some other parts of the industry are going to struggle with some of that. It is also down to the fact that perhaps some of the contractors out there, unlike us—we are a national player—are more regionally based and we find a great variation in our ability to recycle depending upon where we operate in the country. We produced in 2007 around about 600,000 cubic metres of waste on all of our projects and about 60% of that currently got recycled last year. So by reducing that by 70% we are aiming to only landfill then around about 12%.

Q301 Mr Drew: So if you can do it, other people can do it as well?

Mr Kinsey: Yes, I think we have to aim for that, otherwise we are not going to get anywhere. So our considered opinion is that probably the target is kind of about right. Some will go a little bit beyond that and we have signed up to the WRAP half waste to landfill construction commitment, but some other parts of the industry are going to struggle with some of that. It is also down to the fact that perhaps some of the contractors out there, unlike us—we are a national player—are more regionally based and we find a great variation in our ability to recycle depending upon where we operate in the country. We produced in 2007 around about 600,000 cubic metres of waste on all of our projects and about 60% of that currently got recycled last year. So by reducing that by 70% we are aiming to only landfill then around about 12%.

Q302 Mr Drew: In terms of who is monitoring this—you immediately smile. That would suggest that this is not an area of great success, because that is what we are led to believe. Defra has a role. Who else has a role?

Mr Kinsey: There is a variety of regulators in the environmental industry or the environmental field, are there not, and I suppose the principal ones would be the Environment Agency and possibly some local authorities. The reason I smiled was that I think I have been working for the company for just over nine years now and I have probably only seen an Environment Agency officer on our sites less than four or five times, that sort of figure.

Q303 Chairman: They will be round now!

Mr Kinsey: We have a regular dialogue with them on my current job! We have spoken to them about Site Waste Management Plans and showing them what we are doing and I am quite staggered really at their lack of interest in that.

Q304 Mr Drew: Why are they not interested?

Mr Kinsey: I am not too sure. I think perhaps they have got other things they are looking at, water pollution, and they obviously deal with some aspects of waste, for example, waste exemptions on our sites. There is a whole series of complicated pieces of laws which need to be policed.

Q305 Mr Drew: The reason I say that is—and I have said this before to the Committee—I have walked the waste chain and we looked at the dismantling of motor vehicles, and I have to say that meeting some of the people who do it they were pretty clear that the Environment Agency was helpful, engaged, and that people were not cheating any more because it just was not worth it. I am not saying there is not some cheating, but given that you can recycle about 97% of a vehicle now and there is money in it, you would be daft not to.

Mr Kinsey: Sure. I did not say that they were unhelpful. They are very helpful when we see them. It is just that if we compare them with the regime we have in health and safety, we have much more regular inspections on health and safety because the construction industry is deemed as a dangerous industry. I think there is, quite rightly, a good focus from the Environment Agency on the sorts of organisations you have just described because they are at the coalface of dealing with waste issues and waste companies which we use as waste contractors, and transfer stations are not routinely audited by waste companies. My point was really that we do not see them in construction. Maybe this is because Site Waste Management Plans, et cetera, are quite a new piece of legislation. We may well start to see them regularly on our sites, I do not know, but I am just telling you the historical picture.

Q306 Mr Drew: My final question: in terms of monitoring and measurement this is self-enforced to a large extent?
**Mr Kinsey:** In our company, I believe so. We have quite a good regime now and it is a good lever for us to improve the reporting. We use the BRE SMARTWaste system, which is an online tool, so we have got a good visibility of what is going on on all of our projects. BRE is the Building Research Establishment. It is a former government agency.

**Q307 Mr Drew:** But again, this is a worry in the sense that it is not necessarily that clear what the figures really are?

**Mr Kinsey:** I think it is still early days, to be fair, and we do not know quite how it is going to pan out.

**Mr de Souza:** One of the concerns which has been put across by our members is that actually there is a number of different ways of actually measuring site waste. They say it tends to be four different measures which are used, which are based on volume and weight, by project value or by floor area, so a two by two matrix, and there is not that consistent methodology across the industry to enable proper benchmarking of performance and to really ascertain the current level of performance in the sector. For us, I think the most sensible approach would be to measure by volume, but then there is a disconnect with the way the Landfill Tax is charged. There actually may be a key role for Government as a client, because the Government is responsible for about 40% of construction spend in the country, to actually mandate or strongly suggest one of those methodologies above and beyond the others. We are working currently with WRAP, the Construction Confederation, which brings together contracting bodies, the Construction Products Association and other key industry stakeholders to work to suggest an industry approach to measurement of site waste which can be adopted across the board, but it will only be really truly adopted if strong client leadership is shown to actually ensure that those measures are the ones adopted across their projects.

**Q308 Chairman:** Can I just be clear from my own understanding to put in context what you have said? Site Waste Management Plans, are these formal documents which have to be drawn up before you start developing a site?

**Mr Kinsey:** Yes. There was some new legislation earlier in the year which requires that the client must require one of these things and it is up to the principal contractor, which is normally ourselves, to then develop that. There are different formats for these things. I mentioned that we used the BRE SMARTWaste, which is one form, but equally WRAP has another form and there is nothing really to stop you developing your own word document, if you like.

**Q309 Chairman:** But are they rigorous in the sense that sometimes you have these statements of what I call “best endeavours”, “We will do our best to recycle X per cent,” or are they quite detailed documents which act as a benchmark to the successful recycling or minimisation of waste in the context of a particular project?

**Mr Kinsey:** Again, I can only speak from our company’s experience and we are trying to very much do the latter, which is to make them a rigorous sort of process, and that involves forecasting the amount of waste we think we are going to create—and that is a pretty challenging process at times because people have never been asked that question before—but then also to monitor against that requirement as we go along with the project. Another important aspect is to ensure that we have full legal compliance with the duty of care to make sure we know where our waste goes. That, incidentally, sometimes causes us problems when we are looking at these sorts of smaller recycling outlets because we cannot always be sure. Sometimes the legislation seems to get in the way of some of that duty of care legislation. We would like to reuse and recycle products, but we are being told that that is now waste and therefore it comes under waste management legislation.

**Chairman:** That is helpful.

**Q310 David Taylor:** Waste prices are notoriously volatile, or can be. I can think back over the years to having garages full of newspapers that nobody wanted for weeks and then all of a sudden off they went. I saw in the Evening Standard a fortnight ago that council collection companies are struggling to shift mountains of paper and plastic, and so on. I will put this question to Mr Kinsey first. How much of a problem are falling prices for recycling within your industry?

**Mr Kinsey:** I think it can be a problem. It does vary so much that it is difficult to talk about specifics because it will probably be different next week, but we tend to work with specialist waste companies and do deals with them on specific waste materials.

**Q311 David Taylor:** Do you sell forward in some ways? Do you ever get a committed price which they committed to six months ago or twelve months ago, or is it just the market price on the day?

**Mr Kinsey:** The waste contracts are dealt with on a project by project basis at the moment, so we do not have a coordinated approach company-wide. That is something we have looked at, but because of the nature of our work and the different types of projects we get involved with we need to be flexible, basically, and a lot of the waste companies tend to be quite regionally based rather than nationally based, as we are. We are also looking at the supply of those materials, so that is outside of our direct supply chain, but last year and the year before we were involved in developing a recycled plastic product that takes waste plastics, mixed chemical waste, and we have been trialling that as a hoarding board, which we are very keen to use, and the company is about to set up a full production of that in the London Borough of Newham, I believe, in the very near future. So we are exploring all these avenues all the time, but the main way we interact with the waste industry is through a waste company which tends to take that material and then recover it for recycling. In some cases it will be direct to landfill, but it is done
Mr de Souza: Yes.

Q316 David Taylor: Have you had contact with NISP over the years?
Mr de Souza: Yes, we worked with them on this CoRE project.

Q317 David Taylor: You work with them all the time matching producers of materials where there is a demand?
Mr de Souza: Yes.

Q318 David Taylor: Do you agree that the construction industry could make more use of NISP? I do not think NISP has always had the continuity of support from central government and if you agree that it does not make sufficient use of it, what can be done at the centre to encourage that?
Mr de Souza: Firstly, yes, I completely agree that more businesses within the construction sector could be using the services that NISP offers and I think there are two approaches to increasing the uptake. Firstly, I think there is still work to be done in the market that service because I do not believe many as a percentage of companies in our sector are aware of what they do. Secondly, I think there is an opportunity for the actual service which NISP offers to be tailored more to our sector where at the moment it relies upon a certain quantity of waste coming off a particular site from a particular waste stream before NISP is actually able to put that through the system and if we can find some way within a local area of looking at a number of sites all producing similar waste which can be collected in some sort of milk round, then I think more companies within our sector would take up that service.

Q319 David Taylor: This is an add-on question before I pass you back to the Chairman. In relation to the biggest construction project in Britain, I believe in Europe, the Olympic site, have special arrangements been made by the ODA or any other organisation for the waste streams arising from that site?
Mr de Souza: Can I pass that over to Mr Kinsey?
Mr Kinsey: I am actually not directly involved with the ODA, although I do work on the Athletes' Village, but for various commercial sensitivities –

Q320 David Taylor: All right. Within that project are there special arrangements?
Mr Kinsey: I think generally, yes, there will be, or there are. Yes, for sure, and that is very much along the lines of best practice that you will have seen from Terminal 5 in terms of consolidation centres and all that kind of stuff.

Q321 David Taylor: Have you put the billion pounds for the Athletes' Village in place yet?
Mr Kinsey: I am not at liberty to say!

Q322 David Taylor: Have you worked on the Media and Broadcasting Centre for £400 million as well?
Mr de Souza: Mr de Souza: We have had a strong response from our members who put in a response to the consultation and the feeling from within that membership is that they welcome the proposal to increase the use of exemptions for low risk activities, so actually resource can be put into looking at the higher risk activities as a priority, but that in the proposal for the exemption level to be at 500 cubic meters the material is far too low and is likely to increase the use of virgin material. Our membership has suggested that if the figure was about 10 times that, 5,000 cubic metres, it would be about right. At the moment there are insufficient details on what would actually be required to obtain a permit so the true cost implications of achieving the permit are unknown as yet and our members have suggested that there needs to be far more consultation with our sector to understand the drivers from our sector and the particular types of waste and approaches to waste management which are adopted.

Q324 Chairman: Could I persuade you, perhaps, to write to us a little more fully on that because I have to say that is somewhat beyond my experience and understanding, particularly when you are talking about the size of parcels of material which would be in and would be out? That is out of my range of experience, but it is obviously an important point so if you could write and just give us a little background note to it and explain it a bit more that would be very helpful indeed.

Mr de Souza: Yes, absolutely.

Q325 Chairman: One of the things which the Committee has had as a consistent theme through evidence in this area is the general desire to see a real down on fly-tipping. I think particularly from the point of view of landowners, who have the unfortunate and expensive task of cleaning up after other people have taken advantage of just dumping on their premises. There has been a lot of comments about the resource which is available for enforcement, in other words is the Environment Agency well enough equipped and resourced on that? I suppose a lot of constituents who we all have to deal with might blame the small jobbing builder as the person who drops the odd parcel here, there and everywhere. Of course, you represent the responsible end of the trade. That is not to say that all jobbing builders are not responsible, but how do you see the situation in terms of fly-tipping? I suppose the worry one has is that as the economic situation becomes more difficult and people look for ways of saving money, the temptation to dump grows.

Mr de Souza: Firstly, we would welcome an increase in enforcement action. I think that is certainly required. There is a perception, and I get this from discussing it with colleagues in the Environment Agency, that it is the smaller constructors, the micro businesses, that are most guilty of waste crime, fly-tipping. But hand-in-hand with any increase in enforcement action I think there do need to be some positive steps to make it easier for those micro businesses, the smaller constructors, to actually dispose of their waste properly.

Q326 Chairman: Such as? In what ways would you like to see easements?

Mr de Souza: We have had a pilot scheme working in London in partnership with Wolseley, the builders’ merchant, to try and make one of the Wolseley sites down in East Dulwich actually available for small builders for their customers to bring back some of their waste and to segregate it on that Wolseley site. There are certain concerns over the actual licensing issues for the small builders to be able to do that.

Q327 Chairman: You mean from the Wolseley point of view?

Mr de Souza: And also for any of their customers who are bringing back their waste to that site, who would then need a waste carrying licence and there is a cost attached to that, obviously, and that would put people off. Secondly, just to echo one of the points which came out of the previous session from the gentleman from Somerset, there is an opportunity, I think, for us to look at some of the local authority sites to see if it is possible to use them for small amounts of trade waste coming from very small businesses.

Q328 Chairman: Is it a cost issue which lies at the heart of it in terms of the small builder responsibly disposing of waste material, because when we walked the waste chain I was quite impressed by the amount of material which, if you like, to my layman’s eye I would have considered rubble off a demolition site which seemed to be able to be picked over and ultimately reused, or where appropriate recycled?

Mr de Souza: I think there are two things. There is a perception of cost which still sits within certain sectors of the industry and really all that happens is that that cost is passed on to the end client. Secondly, I think it is the time/hassle factor. So if things can be done to make life easier for small builders they are more likely to be able to do positive things to segregate waste, for example.

Q329 Chairman: So not to put words in your mouth but at a time when clearly the construction industry is feeling a lot of economic pressure, your message perhaps to us would be that Defra should look again
at this area, taking into account the current environment, to do all it could to make it easier for responsible disposal rather than irresponsible?

Mr de Souza: Absolutely.

Mr Kinsey: I would agree with that because one of the concerns, although we generally welcome the fact that the Landfill Tax is there to help us encourage recycling, is that the flip side of that coin is that it encourages fly-tipping, does it not? The economic conditions that we are currently in as well kind of promote that potential activity. So the regulatory regime needs to be pretty robust to make sure this is not going to happen. We certainly make a lot of effort and spend a lot of time talking to potential waste companies or trade contractors who end up dealing with their own waste to try and make sure they are legally compliant. We go and visit transfer stations and check out duty of care transfer notes and all that sort of stuff. So there is quite a lot of resource we put into policing it ourselves, if you like, but that is no substitute for the real thing, the real policemen, if you like.

Q330 Chairman: From the industry's standpoint have you done any work calculating what the deficit is in terms of resource for enforcement? Have you taken a cockshy at that, or is it just a general message that you would like to see more of it?

Mr de Souza: I am not aware of any work that has been done.

Mr Kinsey: I am not sure. All we can just generally relay is the fact that we do not see much of these guys.

Chairman: Gentlemen, thank you very much indeed for your contribution to our inquiry and, Mr de Souza, thank you also for volunteering to write a little more fully on the penultimate point we raised. Thank you both for your contribution.

Memorandum submitted by Constructing Excellence (Waste 66)

About Constructing Excellence

Constructing Excellence is the single organisation charged with driving the change agenda in construction, housing and regeneration. We exist to improve industry performance in order to produce a better built environment. We are a cross-sector, cross-supply chain, member led organisation operating for the good of industry and its stakeholders.

Our mission is to improve industry performance resulting in a demonstrably better built environment.

Our formation came in the mid-nineties following a wide spread recognition of the need for the construction industry to improve the service it provided to its clients while also ensuring future viability for the wide range of organisations that operated in the industry.

In response to Sir Michael Latham’s 1994 report “Constructing the Team” and Sir John Egan’s 1998 report “Rethinking Construction” a number of cross industry bodies were formed to drive change. These included:

- Reading Construction Forum
- Design Build Foundation
- Construction Best Practice Programme
- Movement for Innovation
- The Housing Forum
- Local Government Task Force
- Rethinking Construction
- Be
- Construction Clients’ Group

Significant progress has been made in driving these initiatives into the practicing industry with many examples of projects that have been run in accordance with the fundamental principles. In order to streamline the effort involved, all the above cross industry bodies have now been united as Constructing Excellence to form a powerful, influential voice for improvement in the built environment sector.

Following a cessation of government funding in March 2007, Constructing Excellence is now a member-led and predominantly member-funded organisation. In total we currently have 265 members from the built environment sector who have prioritised four key areas for improvement:

- Integration and collaborative working
- Leadership and people development
- Sustainability
- Value
KEY POINTS ON CONSTRUCTION AND WASTE

Data/Performance Measurement

There is a real need for a consistent method of measurement for site waste in order to enable proper reporting and benchmarking of performance.

There are currently four methods of measuring waste:

- Volume of waste by £100,000 project spend
- Volume of waste by project floor area (m$^3$)
- Tonnage by £100,000 project spend
- Tonnage of waste by project floor area (m$^3$)

The most sensible option of these four to CE is volume by project value.

However, there is then a disconnect with landfill tax which is charged by weight.

Government as client could play key role by mandating one methodology across all its procurement (40% of construction spend).

Targets

Target setting—all targets are currently voluntary.

Constructing Excellence’s members welcome the half waste to landfill target being delivered by WRAP. Constructing Excellence has promoted the target to its members.

We recognise that there is a definite need for better data across industry.

The target of JW2L by 2012 is a sector based target and so relies on leading edge companies achieving a better performance than is targeted. Many leading edge companies are taking positive steps to go beyond the targets as they see it as a differentiator in the market.

There is also increasing recognition in the sector that actually good waste management is an opportunity to save money.

However there is still a perception within some sectors of the industry that waste management is a cost to bottom line and where this is the case it is simply recharged to the client.

Government agencies

There is currently confusion over the differing roles of the various government agencies that interact with the construction sector and whose remit includes the improvement of environmental and specifically waste performance.

We would not suggest that there should necessarily be any fewer agencies—some degree of specialism is welcome. However, what is lacking is a means by which industry can understand which organisation will best meet their needs (for instance something like a simple web portal).

We do welcome the links that have been created between WRAP and Envirowise.

Constructing Excellence delivered the CoRE (Construction Resource Efficiency) programme in London between September 2005 and March 2007. This LDA/BREW funded pilot brought together a number of agencies (many of which are government funded) together at a regional level in order to provide a simple means by which the right environmental support for construction industry bodies could be provided. Since the end of that programme, despite numerous attempts, we have not able to pass the learning that was gathered in managing over for others to use.

There is concern over the role of Business Link as the sole broker of business support brokerage. There is a feeling that they do not have the expertise required to be able to properly support the construction industry on waste and other sustainability issues and do not understand the improvement landscape.

We are sorry to see the cut in funding for organisations such as WRAP who are doing some very good work with our sector and the disappearance of the regional Business Resource Efficiency and Waste Programme which was a very useful mechanism for funding regional pilot programmes.

Best practice

There are some excellent sources of best practice for waste in our industry.

The Constructing Excellence Demonstration Programme has worked with 550 projects in 10 years. A growing number of these are concerned with waste.

WRAP manages its own exemplar programme.

The Committee chairman may be interested to know about the Cleveleys Coastal Defences project near his constituency which is itself a waste exemplar.


**Site Waste Management Plans**

Our membership welcomes the Site Waste Management Plan legislation although it is a bit too early to really determine the impact.

Initially competing tools to help companies produce SWMPs were developed but these are now being aligned (e.g., WRAP and SMARTWaste). This alignment can only have benefit for the industry.

The level of £300k is about right. Our suggestion during the consultation was £250k which our membership felt would be the point of cost neutrality.

Obviously the level at which point SWMPs are mandated means that a large number of projects and companies are not affected by the legislation. The unaffected projects will also tend to be those for which it is more difficult to successfully segregate waste on site because of their scale—smaller sites means less space for different skips.

There is a huge problem that there has been little enforcement of SWMPs to date. One of our members has stated that none of their 700 projects to date since the legislation came into force has had any sort of enforcement visit.

There is a missed opportunity to increase client responsibility for SWMPs, such as happened with the CDM (Construction Design and Management) regulations in 2007. However, any increase in client responsibility would need to be drafted in partnership with clients. There would also be an implication for occasional clients from any such increase who would not necessarily have the expertise to properly fulfil any SWMP responsibilities.

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**Waste crime/fly-tipping**

Constructing Excellence would welcome any increase in enforcement action.

There is a perception, and this has been borne out from colleagues in the Environment Agency, that it is mainly smaller constructors that are guilty of waste crime. Unfortunately we are not aware of any statistical evidence to back this up.

If the level of enforcement action were to increase, we would like to see this go hand in hand with investment in positive opportunities for micro-businesses to better manage their waste.

For example, Constructing Excellence is working with the builders’ merchant Wolseley to set up a take back scheme in East Dulwich for its SME customers. There have been difficulties in launching the scheme because of licensing issues, not only for Wolseley but also for its customers who would need to invest in waste carrying licences.

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**Strategy for Sustainable Construction**

We would like to congratulate BERR on the Strategy for Sustainable Construction. What is especially pleasing is that this a joint industry and government strategy that has brought together a number of government departments that have traditionally engaged with the construction sector in a disparate way.

It is too early to assess the impact of the Strategy but there are concerns that the Strategy has possibly not been promoted as widely as we it should have been—especially to SMEs.

The Strategy was launched at the same time as the Construction Commitments which are best practice standards for the sector and which signpost the Strategy itself. The Construction Clients’ Group (part of Constructing Excellence) has Client-ised the Commitments and has included a client target to reduce waste.

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**Impact of market downturn**

Anecdotally, when there is a market downturn, the first things to be cut back on within projects budgets are investment in training and sustainability.

However, there is a growing recognition in the construction sector that waste is an opportunity not a cost. Unfortunately our sector has a long tail and so there is still a perception amongst the late majority and laggards that waste management is a cost to the bottom line.

The year on year increase in landfill tax is welcome and has focussed minds on being able to reduce waste.

The main danger will be the risk of an increase in waste crime/fly-tipping as smaller companies will want to avoid landfill charges.
Waste infrastructure

The change in designation of some landfill sites and the closure of others, following the 2005 Landfill Directive, has focussed minds in our industry somewhat. However, there are concerns within our membership that there is currently insufficient coverage for hazardous waste. The closest relevant landfill sites to North West London for example are either Redhill in Surrey or Swindon.

There are also concerns from within our membership that there is insufficient monitoring and enforcement of waste handlers and management companies.

One vital message

Core to the work of Constructing Excellence is the promotion of integration and collaborative working. The performance of the Constructing Excellence Demonstration Projects has shown that those projects that embrace collaborative working and have early involvement of key supply chain partners are more likely to reduce waste to landfill. As such, the successful management of waste is as much about up front planning as it is about good on-site practice and we would urge government to ensure that procurement within central government continues to be collaborative even in the current market downturn.

Review of Waste Exemptions—Overview

Constructing Excellence is a membership organisation which represents 261 organisations from across the built environment sector. Our membership are largely supportive of the proposals put forward in the Consultation on Revised Waste Exemptions from Environmental Permitting as they believe it will result in a simpler process. They support the proposal to increase the use of exemptions for low risk activities as they recognise the importance of low risk activities being given greater freedom to operate without unnecessary regulations. They feel that removing current exemptions from higher risk activities allows for greater regulatory focus on activities which are more likely to negatively impact on the environment. However, they would like it to be noted that without improved policing, there will continue to be a large number of sites that require exemptions but do not register as is the case under the present regulations.

General Comments

Our membership opposes the revisions to the activities requiring exemption, and would like to highlight the much lower limits on quantities of materials that can be used/stored. Constructing Excellence is supportive of the Strategy for Sustainable Construction target to reduce construction, demolition and excavation waste to landfill by 50% by 2012 and feel that requiring projects to obtain a permit for reuse of more than 500m³ of materials will encourage the use of virgin materials rather than the reuse of waste materials onsite. They feel that construction sites strive to re-use waste material on site where possible and to utilise materials legally imported to site. In some cases, specifications and designs are changed throughout the construction process specifically to maximise the re-use of suitable waste materials. The proposals would make it more time effective and cost efficient for projects to purchase virgin materials rather than apply for a permit to re-use waste.

Our members are often required by regulators to apply for exemptions for the storage of material that they have already declassified as waste and have demonstrated that the material will be reused as part of the finished scheme. For example, materials that can be declassified as waste through the use of Codes of Practice (such as Definition of waste: Development Industry Code of Contaminated Land: Applications In Real Environments (CL:AIRE © 978-1-905046-14-)). Where there is material that is declassified as waste and suitable for reuse in line with these codes of practice, the suggestion from our membership is that the regulations or accompanying guidance are explicit on when a permit or exemption is required and when it is not.

Proposals for Individual Exemptions Provided in the Draft Regulations

Many large construction sites will import topsoil and subsoil (17 05 04), crushed glass (17 02 01), and crushed concrete (17 01 07) in large quantities for construction works, for use as playing fields for schools, bedding under landscape areas, and general fill under roads and floor slabs, and the construction industry is being encouraged to use more. The Constructing Excellence membership accept the case of the Impact Assessment that the term “unlimited” has been open to abuse, they feel that the limit of 500 tonnes is far too low if we want to increase the use of these materials in the construction process. They feel that many construction sites will not go to the expense and inconvenience of obtaining a permit and will therefore revert back to virgin aggregates if the process is too complicated. They feel that the justification for the 500 tonnes per year limit has not been as clearly articulated or based on empirical evidence from the construction sector. There seems to have been a lack of research into the average reasonable quantities of material that can be excavated and be reasonably reused or the length of storage required for a typical construction programme. In some instances, the storage of up to 50,000 cubic metres of soil has been stored under exemption and has had positive environmental and economic benefits. With a desire to minimise landfill, and maximise our
reuse of uncontaminated material, it seems that the impact assessment has listed only a handful of negative incidents arising from the “unlimited” exemption, but no review of the positive use of the exemption. They propose that the limit for this low risk activity remains unlimited.

If this is unacceptable, a suggestion was made of a limit of 5,000 tonnes per year which would tie in roughly with the existing regulatory requirements, and would give a reasonable amount for the project to work with before having to apply for a Permit. It would also allow more waste to be deposited on larger contracts that will generally run for longer. Where a permit will be required, this needs to be a simplified process and would need to include the following EWC codes: 17 02 01 Wood, 17 02 02 Glass.

Constructing Excellence

November 2008
Monday 24 November 2008

Members present

Mr Michael Jack, in the Chair

Mr David Drew
Lynne Jones
David Lepper
Miss Anne McIntosh

Dr Gavin Strang
David Taylor
Paddy Tipping
Mr Roger Williams

Memorandum submitted by the Campaign to Protect Rural England (Waste 61)

1. CPRE is a charity that promotes the beauty, tranquillity and diversity of rural England. We advocate positive long-term solutions for the countryside, and have almost 63,000 supporters, a network of regional groups, and a branch in every English county.

2. We were invited to provide a formal response to the Terms of Reference of the Committee’s inquiry, from the perspective of our Stop the Drop campaign against litter and fly-tipping in the countryside. This response focuses on that campaign and does not go into detail on broader aspects of the Government’s Waste Strategy.

3. Stop the Drop aims to provide short and long term solutions to the problem of litter and fly-tipping in England’s countryside, although the campaign is also relevant to urban areas. We aim to do this through a combination of lobbying, liaison and direct action with national and local government, statutory bodies, industry and the general public.

4. This submission will address the following aspects of the Terms of Reference for this inquiry:
   — The role for and implementation of regulations, and their enforcement.
   — The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.

5. More information on the scope and focus of CPRE’s Stop the Drop campaign can be found in the two documents accompanying this submission—our Parliamentary Briefing of September 2008 and Fieldwork, CPRE’s newsletter for campaigners.1

6. The Stop the Drop campaign fully supports the role of and need for effective regulations to reduce waste with a view to reducing litter and the incidences of fly-tipping.

7. The campaign recognises that the UK has a relatively robust regulatory framework with regard to these issues, most recently strengthened by the Clean Neighbourhoods and Environment Act of 2005. CPRE supports the use of financial penalties and, in some cases imprisonment, to tackle the crimes of littering and fly-tipping.

8. However, as the Waste Strategy recognises, regulation can only be effective if it is complied with and, where necessary, properly enforced.2 Data collected by Defra show that in 2006–07:
   — 62% of the fines issued for dropping litter (based on a total of 43,624 fixed penalty notices) were handed out by only 25 of the 354 English local authorities;3
   — 72 local authorities issued no fines at all;4 and
   — of the 2.6 million cases of fly-tipping, there were only 1,796 successful prosecutions,5 suggesting a one in 1,450 chance of being brought to book in these cases.

9. This evidence demonstrates that there is considerable progress to be made with regard to existing regulatory powers being exercised consistently and with vigilance across England. It also shows that there are local authorities that are taking their responsibilities seriously, and that they can set an example for others to follow. Through our Stop the Drop campaign we will work with a range of bodies across the public sector to ensure local authorities share best practice and develop comprehensive, effective and geographically consistent systems for dealing with litter and fly-tipping.

1 Not printed. Please see http://www.cpre.org.uk/campaigns/stop-the-drop
3 http://www.defra.gov.uk/environment/localenv/legislation/fpn/fpn-apr06mar07.xls
4 ibid.
5 http://www.defra.gov.uk/environment/localenv/flytipping/flycapture-data.htm#regional
10. Our Stop the Drop campaign recognises that it is not only local authorities who have a duty to use their regulatory powers. Bodies such as Network Rail, the Highways Agency, the Environment Agency, National Park Authorities and the Forestry Commission all have a significant role to play in tackling the problem of litter and fly-tipping. The campaign has already begun to approach these bodies and will exert pressure on them where necessary to ensure their duties to prevent and collect litter and fly-tipping from their estates are enforced.

11. In addition, CPRE believes that manufacturers have a part to play in reducing litter and fly-tipping and as such supports the initiative to have “improved design of products and use of materials to increase resource efficiency and reduce waste”. We will continue to develop our links with bodies such as the Industry Council for Packaging and the Environment to ensure the direct link between products and their production and litter and fly-tipping is addressed. Depending on progress with this, we may decide to call for improved regulations with regard to producer responsibility.

12. Finally, under our Stop the Drop campaign we have begun to explore the efficacy of reverse vending and bottle deposit schemes as a significant method of reducing litter. Internationally, bottle deposit schemes have had some notable success in encouraging consumers to return drink containers. We have found that in Sweden deposit systems have been in place since 1982, with a 4p deposit on cans and a deposit on single use plastic bottles of 8p, achieving a return rate of 86%. In South Australia, the deposit is 3cents (2.5p). Under this scheme, consumers can obtain their refunds at the point of sale (1%) or from depots (99%). The scheme achieves a return rate of 74% for plastic bottles and 86-92% for cans.

13. The Government has commissioned new research from the ERM consultancy to determine how feasible reverse vending and bottle deposit schemes would be for the UK, both in terms of effectiveness with regard to waste minimisation and the cost of a national implementation, maintenance and public awareness programme. This research follows two earlier studies commissioned by Defra in this area, by Oakdene Hollins (2005) and Perchards (also 2005, this was a review of the Oakdene Hollins study). The original Oakdene Hollins study was positive about the potential of deposit laws to reduce litter, but the Perchards review was more sceptical. We hope that the ERM study will be able to give the Government the clear steer that it needs in this area, and that it will back a deposit scheme which all the available evidence suggests would have a significant positive impact on litter levels.

14. We would welcome the opportunity to expand on this written submission.

October 2008

Memorandum submitted by ENCAMS (Waste 59)

About ENCAMS and Litter

ENCAMS

ENCAMS stands for “Environmental Campaigns” and it is the charity which runs the Keep Britain Tidy campaign. It is part funded through Defra and receives other funding through consultancy work and sponsored projects.

The organisation originated in 1954 with a resolution from the Women’s Institute to “Keep Britain Tidy”. We still engage their 205,000 members to take action.

The remit of the organisation is to improve local environments by campaigning to change the public’s behaviour, providing advice and skills to those who manage local environments, and promoting action and excellence.

Under its Keep Britain Tidy brand, ENCAMS currently runs around four campaigns a year focusing on different litter items. Recent campaigns saw a 35% decrease in fast food litter in targeted areas, and a 23% reduction in smoking related litter in the campaign hot spots.

Its latest campaign, The Big Tidy Up, was launched on 1 September and seeks to harness the good will of the English public and encourage them to organise local tidy ups. At the time of writing in mid-September over 6,300 groups have signed up and 3,200 bags of rubbish collected. The target is to work with 10,000 groups across England. To find out more visit www.thebigtidyup.org.

All ENCAMS work is research-led to ensure that we understand the issues and can target our message to the right audience, at the right time and place. This involves use of market research techniques in order to understand public attitudes and behaviours.

ENCAMS works with land managers to share best practice, provide advice, support and new thinking to the area of local environmental quality. Its Cleaner Safer Greener Network works with over 140 local authorities and housing associations, delivering training, awards and problem solving.

ENCAMS runs Blue Flag for beaches with 82 Blue Flag currently flying on the English coastline, driving up standards on our beaches. A further 82 beaches which are well managed, but unable to meet the highest standards of water quality, have been approved for Quality Coast Awards.

ENCAMS also runs an international sustainable schools programme called Eco-Schools with over 10,000 schools in England signed up. Schools are required to engage pupils and to undertake continuous improvements linked to the curriculum and, after evidencing sustained delivery of a school action plan, are awarded a coveted green flag.

The organisation carries out the Local Environmental Quality Survey of England (LEQSE) on behalf of Defra which is the only detailed survey of its kind measuring the state of local streets and public spaces where we live, work and play.

Litter is not only a result of individuals dropping it. Businesses failing to properly manage their sites and activities (skips, vehicles, yards) also contribute to the problem. Poor storage and collection of both business and domestic waste also contribute to the litter problem. Wind and heavy rain can spread packaging and other debris from such premises.

In a number of places ENCAMS supports local authorities and business improvement districts in running tidy business award schemes, with considerable success.

Fly-tipping is closely related to littering and arises from both householders, businesses and “cowboy” operators.

**Why litter is a problem**

Litter is unsightly, unhealthy and gives the impression that no one cares for an area. Poor local environments often suffer from wider social issues such as anti-social behaviour, drug misuse and lack of commercial investment.

Poor local environments are a significant depressor of people’s quality of life, being the highest ranked factor outside immediate family wellbeing.

The litter problem is not getting any better (nor, over the past 10 years, much worse) because a significant minority of people don’t seem to have pride or take ownership for where they live.

It is costly for owners of land to clean up.

**Facts and Figures**

In 2006 the overall level of litter dropped for the first time in five years. This does not give cause for complacency, however, as the improvement is minor and does not yet indicate a general trend. The standard could easily fall back again.

It costs council tax payers £547 million a year just to clean the streets of England; there are additional costs to them for dealing with related problems such as fly-tipping, graffiti and vandalism. Whilst accurate figures are hard to come by, we believe the total cost is not far short of £1 billion.

This is without the costs to private landowners and other public bodies.

In 1963, that bill stood at just £13 million.

A quarter of areas we survey are blighted with fast food rubbish; 25% of people admit to dropping food rubbish.

It is illegal to drop litter anywhere, whether public or private land, under the Environmental Protection Act 1990 and the Clean Neighbourhoods and Environment Act 2005.

You can be fined up to £80 on the spot for dropping litter or if the case is taken to the magistrate’s court fined a maximum of £2500 by the court.

Under the Clean Neighbourhoods and Environment Act 2005 (section 19) local authorities can set the level of their fines for dropping litter. Where no amount has been specified by the authority the fixed penalty shall be £75.

Last year there were 45,000 litter prosecutions.

Discarded food litter attracts rats and is contributing to an increase in the rat population (Source: British Pest Control Association 2002).
Cigarettes and gum always were classed as litter but are now officially so, with certain ambiguities having been removed by section 27 of the Clean Neighbourhoods and Environment Act 2005.

Smoking related litter is the most prevalent form of litter. Our surveys show that it has doubled since the smoking ban was introduced in July 2007.

Throwing litter out of the car window is Britain’s biggest driving annoyance—with over 90% of road users finding it irritating (2003). We are planning a campaign focused on this problem next summer.

HOW CAN THE LITTER PROBLEM BE IMPROVED?

Communities

ENCAMS Big Tidy Up, launched 1 September 2008, is the biggest ever nationwide clean-up and has attracted a massive response. This indicates to me that:

(a) Given the right encouragement and support people will do something to help themselves on this issue.

(b) Keep Britain Tidy has to go “back to its roots” and really focus on its fundamental core purpose of making the country cleaner and a more pleasant place. This will require education and the re-establishment of a national awareness campaign in order to alter people’s values and behaviours.

(c) That we can achieve a critical mass of people willing to do something, we can turn the tide and make the litterers a tiny minority—there will always be some, but they should be minority who know that what they’re doing is unacceptable.

We must also make it easier for individuals, householders and small businesses to “do the right thing” by making it simple, clear and consistent about how to handle and recycle materials and how to dispose of items appropriately.

Volunteering

There are many examples of clean-up projects which “adopt” an area, park, or beach. They are very widespread in, for example, North America and Australia. We have and do run some successful regional initiatives including Rivercare, in partnership with Anglian Water, where volunteers adopt and maintain stretches of local waterways. However, ENCAMS has never centrally run such a scheme in England, concluding that the difficulties of doing so preclude it as a solution. Volunteer action is becoming more widespread, encouraged by government initiatives and funding, we wish to explore the case for a formal network of clean-up groups.

Unpaid Work (Community Sentencing)

Community sentences can include a “punishment” element where amends are made to the community (or to victims). Removing graffiti or cleaning up litter/fly-tipping are ways in which compulsory unpaid work can be completed. An estimated 20 million hours of unpaid work have been undertaken over the last four years (Ministry of Justice 2008). This form of unpaid work in the community is not well understood and only patchily utilised, although we are aware of some Probation Services undertaking significant amounts of this work. I would like to see more “joining up” of areas in need of cleaning-up with this unpaid workforce (alongside the other elements of Community Sentencing for offenders such as education, treatment, supervision, behaviour-change and rehabilitation).

Working in Partnership

For the Big Tidy Up, the support we and our partners provide is a vital component. BTCV, CleanUp UK, Waste Watch, and CPRE who we are sharing this platform with today, Thames 21 and others like the Women’s Institute, and over 200 local authorities have all contributed greatly to its success.

In future I intend to place much more emphasis on ENCAMS achieving results through being a partner organisation. For instance, we should have a stronger “green” element to our work to encourage better maintenance of landscaping, use of parks, green open spaces and improved access to, and cleanliness of, the countryside. This would be best achieved by partnering those organisations who are already experts on managing green space, horticulture and landscaping.
**Land Managers—Local Authorities**

Local authorities have the main responsibility for keeping our public places litter free. The powers of local authorities to take enforcement action have been considerably extended. In many areas, the standard of management of cleansing and street scene services has much improved in recent years. We welcome the inclusion of National Indicator 195 in the set for Local Area Agreements and also the fact that 72 areas have adopted this indicator this year.

But there is still much to be done and one of the main challenges facing local authorities is keeping costs down whilst maintaining a satisfactory cleanliness standard.

**Other land managers**

However, the public do not distinguish between “public” and “private” land and if private land is fly-tipped or litter strewn it makes the whole area look uncared for.

A key challenge is what help can be given to private landowners who do not have the means or the interest to clean up their land.

There are also public or public/private sector landowners who need to be held responsible. These include, to name just a few, The Highways Agency, Railtrack and Registered Social Landlords.

**Conclusion**

Perceptions about the quality of our public spaces—whether they are clean, safe, green and attractive—are crucial to whether people are satisfied with their local area.

There’s no room for complacency on litter but nor is it all doom and gloom either. As mentioned previously, the national litter survey shows a fairly steady picture overall of no dramatic worsening in litter but no great improvement either (this is, of course, a generalisation because there are pockets where things are very unsatisfactory indeed). But I want to use that levelling off as a starting point from which to launch a brand new era of litter reduction, efficient collection, excellent services and management and, most challenging of all, public commitment.

**Phil Barton**

Chief Executive
ENCAMS, the national charity responsible for the Keep Britain Tidy Campaign

*September 2008*

Witnesses: *Ms Samantha Harding, “Stop the Drop” Campaign Manager, and Mr Neil Sinden, Policy Director, Campaign to Protect Rural England; Mr Phil Barton, Chief Executive, and Mr Mike Phillips, Chairman, Encams, gave evidence.*

**Q331 Chairman:** Good afternoon, ladies and gentlemen. Can I apologise to members of the public and our witnesses especially for the delay in starting. When we arranged this evidence session we were not briefed by the Chancellor that he was going to have the Pre-Budget Report today. Can I formally welcome from the Campaign to Protect Rural England Samantha Harding, who is the “Stop the Drop” campaign manager, and Mr Neil Sinden, who is their policy director. From Encams we have Mr Phil Barton, their chief executive, and Mr Mike Phillips, their chairman. My first question is addressed specifically to Encams. Perhaps you would like to tell us how bad England’s litter problem is. Where is it worst? Why and what can we do to get on top of it?

**Mr Barton:** We have now been conducting surveys over a seven year period and in that time we have monitored more than 10,000 sites across England. Each year that we have done that with the exception of one, the standard has been categorised by us as unsatisfactory. The one year it just tipped into satisfactory, but that is a very sweeping statement and of course there are wide variations between different areas and different parts of the country. The surveys measure only the presence or absence of litter, not how much is dropped or by whom. Litter is not caused only by individuals dropping items of litter; it is also made up of items falling from vehicles, from construction sites, blown around, from flooding or resulting from households, businesses and agricultural waste.

**Q332 Chairman:** Does this Government’s Waste Strategy do anything to stop us being such a messy lot?

**Mr Barton:** I am not here primarily to talk about the Waste Strategy which does not cover litter. That is an interesting issue. We have been working with the government. You asked me whether it was getting worse or not. In terms of the regions, the variance between the cleanest region, which has been fairly consistently the south west, and the dirtiest, which is the north west, is only about nine percentage points. In the worst performing areas, we have been taking initiatives. We have established the North West Liveability Foundation which is looking specifically at trying to address that.
Standards is a project which most of the London boroughs are working with us and the Assembly on, there is clear evidence that concerted action can have an effect. Even so, it has moved London from one of the poorest to one in the middle of the pack. Remember we are talking about the public realm in our survey, not private land. Those that consistently come out the cleanest are transport facilities, railway stations, bus stations, that sort of thing, rather than the track or the roads, public open space and town centres. Those which come out the worst are consistently non-main and non-rural roads. In other words, suburban roads of one sort or another, high density housing areas and suburban and out of town retail areas. In terms of the problem, it is quite patchy and quite variable. Overall over the last seven years, it has been pretty consistent and unsatisfactory. Therefore, there is a substantial challenge to us all to take it forward.

Q333 Chairman: We seem to have lots of potential lines of enforcement both for litter and indeed for fly tipping, but enforcement seems to be inconsistent. Why is that?

Mr Barton: It is inconsistent. We have been doing a lot of work with local authorities and other land owners on training for enforcement. The Clean Neighbourhoods and Environment Act 1995 gave new powers to local authorities and other land owners and I think it did take some time for the implications of that to filter through. It is very difficult also for local authorities. They get very unfair and mixed criticism from the media. On the one hand there is a strong line which says Britain is dreadful. We must do something about it. Local authorities, you are not doing enough. On the other hand when they do, we have stories about what we call Sausagegate, where somebody’s child dropped a sausage roll in Hull. There was a course of action taken and the council was vilified by the media. A care worker was fined for throwing chips from her car and a schoolgirl was fined £75 for leaving a wooden ice-cream stick on the wall. There is a very confused message coming from the media. I think that is quite a major challenge for local authorities but nonetheless there ought to be more consistent enforcement action by more of them.

Q334 Chairman: To the CPRE, I mentioned the question of fly tipping which is a serious problem in some parts of the countryside. What is your organisation’s view of fly tipping, enforcement and deterrence?

Mr Sinden: We think it is a growing problem. We believe that enforcement is not sufficient and deterrents arguably are not sufficient to deter those who are involved.

Q335 Chairman: Why is that?

Mr Sinden: There are loopholes in the law, in the legal framework. There are big issues about how one can deal with fly tipping on private land. That is an issue we need to explore in more depth. In terms of other areas where litter has become a growing problem, we were startled by a statistic revealed to us by the Marine Conservation Society a short while ago which reported a 90% increase in beach litter since 2004. One of the reasons why Bill Bryson, our new president, is interested in this is because he perceives, I think quite correctly, that in many parts of the countryside, particularly along rural roads and along some of our railway tracks, litter is a growing, very significant problem.

Q336 David Lepper: You said suburban streets were among those with some of the worst problems. Have you looked at whether there is any correlation between areas where the local authority uses wheelie bins or container bins in the streets for household refuse collection and those where it is still black, plastic bags, or does it not make a difference?

Mr Phillips: Very early on when wheelie bins were starting to become popular, research was undertaken by Encams which showed a significant reduction in refuse in those areas where wheelie bins were being used. Animal damage to black sacks, people leaving sacks open and so on all contribute and it is a significant problem still with waste management in terms of trade waste.

Q337 Paddy Tipping: You talked about fly tipping on private land. I was on the urban fringe of Nottingham yesterday to see derelict cars and rusting fridges on the edges of a farmer’s field. I have the impression you have some proposals on this. What are they?

Mr Sinden: I think it is worth reflecting on the very low levels of successful prosecutions against fly tipping. We think it needs to be made easier for local authorities to take action where fly tipping is taking place and there is a problem. We also believe that the loophole—

Q338 Chairman: You say it should be made easier. How? Why is it difficult now?

Mr Sinden: It is difficult to track down people who are responsible for dumping the waste. We have been looking at Defra’s illegal waste tipping action plan, which is itself looking at how the Environment Agency can be given greater powers to track and bring to court cases where there is clear evidence that fly tipping is being carried out by particular individuals or those using particular vehicles.

Ms Harding: In relation to how we can catch people or how we can ensure that laws are enforced, that is difficult in rural areas. Short of putting CCTV cameras in every layby, it becomes very difficult. Colleagues that we are meeting through the National Fly Tipping Prevention Group are saying that there are broader issues around landfill tax. Even the dreaded fortnightly bin collections have been cited in increasing household waste and recorded by the Defra flycapture statistics about what is constituting the fly tipped waste. There are also issues that came through the Jill Dando Institute about the fact that some people who are involved in waste disposal have very low levels of literacy and a lack of access to computers for instance, so the legislation around how you can register yourself to deposit waste legally is inaccessible to some people.
Mr Sinden: One of the other areas we would like to look at is how it can be made possible for local authorities to remove fly tipping from private land through better relations between local authorities and land owners who are suffering from this problem on a regular basis.

Q339 Paddy Tipping: With a recharge basis?
Mr Sinden: That could be done but we are also aware that in some parts of the country local authorities have undertaken to remove fly tipped waste from certain parts of land, where the land owner is able to move it from the dumping place to a place which is more easily accessible by local authorities.

Mr Phillips: As an ex-senior local government officer, I can briefly comment on that because I believe there is a significant problem there. You have to show that people are knowingly allowing this refuse. We have cleaned up private land at council tax payers’ expense but I have twice been on government groups and there has been a marked concern by the relevant governments of the time about action to deal with private land. The obligations are there in terms of public land. There are now powers local authorities can use in terms of litter on areas of private land, retail or industrial estates etc. They are not as well used perhaps as they should be and I would admit that. We have in Encams a Cleaner Safer Greener network and through that we have identified there are a number of authorities who are using those powers to ensure good practice. We want to disseminate that good practice more widely to other authorities. There are some powers there but there was and still is this resistance about enforcement on private land.

Q340 Chairman: Is that a resource problem or is it an “it is a bit too difficult to do” problem?
Mr Phillips: At the moment the obligation is the Environmental Protection Act 1990 and now the Cleaner Neighbourhoods and Environment Act and they put obligations on public bodies to keep their land clear of litter and refuse. I think there is a concern about applying that. It may be it is enforcement powers, particularly in relation to fly tipping, but I firmly believe that there should be stronger powers about litter on these retail and industrial parks.

Mr Barton: We have been doing a lot of work and I think it is still true that both local authorities and small businesses and the public at large find it difficult to get reliable advice on the implication of a law that does exist. We know of examples where local authorities’ own legal departments have advised against taking action because they see dangers of the authority being exposed.

Q341 Chairman: Why is it difficult to get advice?
Mr Barton: It is quite a complex picture. We run an advice line and it is constantly in use. We have tried to bring together some of the legislation into some easily understood guides, but still they are quite long and quite chunky. We are very keen to make it easier to do the right thing. Whilst there are those who deliberately exploit the situation, I think there are still a lot of members of the public and small businesses who are ignorant of what the rights and wrongs are.

Q342 Paddy Tipping: You have a guide?
Mr Barton: Yes.

Q343 Paddy Tipping: Can you let us have it?
Mr Barton: Yes.7

Q344 Mr Drew: Is not the problem where different local authorities do different things? My own authority picks up large amounts of waste but Gloucester City does not so there is a greater percentage of people coming from Gloucester City to dump it all in Stroud.

Mr Sinden: What this demonstrates to the CPRE is the critical importance of Defra maintaining its strategy for disseminating what works, sharing best practice amongst local authorities within individual regions, so that we can avoid the problem that you are suggesting. We have been quite encouraged by what Defra have been able to do by way of organising regional seminars to educate and inform local authorities about what can be achieved, but this is a programme that needs to continue. It needs to be in place for a few more years before we can see the full effects and achievements that the new legal framework can deliver. I think there is a huge divergence, from CPRE’s study of the figures, between the best authorities and the poor authorities. There are very few authorities that we would be comfortable describing as good in terms of having made an improvement.

Q345 Mr Drew: I should have declared my membership of the CPRE. Could I look at the issue of education and public awareness? The public on the one hand say they are very much in favour of anti-litter campaigns, but one supposes it is the public who create the problem because in the main we are all members of the public. What should be done to put some oomph behind anti-litter campaigns which everyone is favour of, but rarely does it seem to make a huge amount of difference?

Mr Phillips: I believe very firmly, despite the legislation and despite being involved in these litter programmes for quite a while, that we have a fundamental task still in this country to change behaviour.

(The Committee suspended from 5.29pm to 5.36pm for a division in the House)

Q346 Chairman: Mr Phillips, you were in the middle of your answer.

Mr Phillips: I was going to tell you that one of my pet concerns or passions is that I believe sincerely that in this country we have got a lot more to do to change behaviour and what is not acceptable behaviour. It seems to me that there are significant sections of the population that just do not see that dropping litter is

7 Encams guide to legislation and Government guidance relating to litter is available at the following website: http://www.encams.org/knowledge/litter/legislation/leg.pdf
antisocial behaviour. Having worked in a local authority in an area of the Lake District National Park, I have seen people coming in their cars and parking up and admiring the view and then emptying their ashtray or their litter bin into the car park, or takeaway food. We have got a key task in this country to shift behaviour still.

Q347 Chairman: But, given that that is the situation,—and, Mr Sinden, do by all means respond in a moment—from the time when you were Keep Britain Tidy through to your new nomenclature there have been so many campaigns and one is left wondering what else should we be doing to try and address this. I think your analysis is correct but what do we have to do to make a sea change in attitude?

Mr Barton: If I could just answer that one specifically, what we now know is a lot more about people’s attitudes and within the population who it is that drops litter. We know that something like 80% of the population when asked know it is something that they should not do but we also know that a significant proportion of those then, when you go on to talk to them, have dropped litter in the last month or two months, depending on the particular survey. What we also know is that we can do very successful campaigns focused on particular target groups which have really quite a big impact in that they will reduce the amount of littering over the period of a campaign in an area by an average of about 25%, but it is not sustained. We have been doing a major piece of work. We run the Eco-Schools Programme and approaching 11,000 schools in England are members of that programme. We focus very much on litter as one of a number of aspects of citizenship around sustainable development, and again we know that young people going through the school system, until they get to about their mid teens, are very alive to that, and then they go AWOL from the system and come back to it in their mid twenties. We understand a great deal more about the problem now but as yet, I have to be perfectly honest, we have not come up with a solution. We can focus on it for a period in an area and make a difference but self-regulating behaviour all the time within each individual is something that still escapes us and we are particularly interested in working to try and tackle that because obviously we do not want in another 50 years’ time to be saying we are in the same position that we are in here with the problem still being a major one.

Q348 Chairman: Mr Sinden?

Mr Sinden: I was just going to say that CPRE was actively involved in the creation of Keep Britain Tidy campaign 50 years ago. Looking at the situation in recent years, we saw both an opportunity and a challenge, an opportunity with the Clean Neighbourhoods and Environment Act to raise the game and a challenge, given, as I was saying earlier, the perception that these problems have been growing quite significantly in many rural areas. CPRE has launched the Stop the Drop campaign in order to enhance and support the ongoing efforts of Encams and Keep Britain Tidy and to work through our branches and field network to try and raise awareness of the problems and the solutions, through schools and all sorts of other local groups—parish councils and so on. I would like to make two points, coming back to David’s question. One is that it would be wrong to distinguish as entirely separate the issues of public awareness and enforcement by local authorities. I think we need to address these issues hand in hand precisely because of the problem that David drew attention to, that local authorities’ performance varies quite widely even within one region. Therefore you need to look at both. Also, I think there are opportunities, in view of the latest evidence that Encams have uncovered about the growing problem of cigarette litter, to develop targeted campaigns focused on particular forms of litter and people who are involved in littering in that way. Sam will have something to say about the cigarette problem.

Ms Harding: There was some research by Encams which showed that litter from cigarettes, or smoking materials, as they are termed, were found to be at 78% and there was additional research that showed since the smoking ban had come in instances of smoking-led litter had doubled. If the Committee is asking what could be done to catch that zeitgeist, there is a specific litter campaign that could be run focusing on the fact that cigarette butts are actually litter. We have some anecdotal evidence coming through the research report we are working on with Policy Exchange that indicates that many people do not consider cigarette butts to be litter. They may not drop a cigarette packet, they may not drop a crisp packet, but they would drop their cigarette butt without thinking about it.

Mr Barton: We run a regular series of campaigns focused on different issues and we have run two now on smoking and smoking litter, and I can certainly feed through if it would be helpful the results of those two campaigns. It is an expensive activity. We agree each year with Defra through the grant that we receive from them the areas that we will campaign on, but each of them costs about £200,000–£300,000 and for that money we can only run it in about 10 to 12 local authority districts, so when you take the £300,000-odd around the country it is clearly only touching a part of the problem. The advantage of those local campaigns is that we then can monitor them very carefully and we know the difference they are making. The disadvantage is that for the resource that is available to us we can only reach a very limited part of the population. We would be keen to do more of this campaigning and we know that it works but we would want to try and tie it in with what we were talking about before, which is trying to make sure that the messages stay internalised in people’s behaviour going forward.

Ms Harding: I would just like to add to that that there is evidence through the Chewing Gum Action Group which Defra chairs on which there is a combination of NGOs and government and corporate involvement where they are able to run, via funding through the corporate sector, localised awareness campaigns around what you should do...
with your chewing gum when you have finished with it, and they have found again that the rates of response are very good but then, of course, their funding shifts to another area the next year so it is very difficult to have a sustained presence, if you like, to encourage behaviour change.

Q349 Mr Drew: Given that we know that about 15% of litter comes is connected to cigarettes; that was a figure, I think, in a parliamentary question some years ago.

Mr Barton: It has probably gone up a bit.

Q350 Mr Drew: Okay, so it has gone up since then. Given that we know who causes it, should there be a levy on the cigarette manufacturers?

Mr Barton: In a whole number of littering areas there is a question as to whether that should be the case. I am always quite taken by the fact that the producer responsibility legislation applies to white goods and computers and the like but it does not apply to packaging and waste and I think there is something in there about the responsibility of those who produce packaging, not just those who then subsequently mistreat it. We have been doing a lot of work with the pubs and the restaurant industry and so on to make sure the right receptacles are there again to make it easier for people to do the right thing, and certainly our hope is that the pattern will be similar in Ireland where they introduced the ban somewhat before us, that you have a big peak after the ban and then it has been slowly falling, and I believe it is partly educational and it is partly giving people the facilities at the point they need them to stub their butts out in the right place.

Mr Phillips: What is interesting though is the fact that smokers have recognised the legislation in terms of smoking in public places, et cetera, but not the fact that they are creating litter by throwing away their butts. It is in that area that there is a lot more work to be done, as Phil and CPRE are saying. Encams ran a major campaign on dog fouling. It has been an area where there has been a significant shift in public behaviour and you ask yourself why on that subject and not on the rest of litter? It is a conundrum, is it not? What has made the difference on the dog fouling compared with the other ranges of litter? I go back to my opening comments and Phil’s reinforcement about behaviours. That is fundamental. Local authorities rightly have obligations on cleaning and cleaning to standards and enforcement, as you say, but enforcement and education come together. What a difference it would make if we had an attitude of mind which was fundamentally different in this country in terms of cost and value for money.

Ms Harding: I just wanted to address a point that David made which is about putting a levy on tobacco manufacturers. I am not sure whether the levy would be a good idea or not but ironically the packaging around a cigarette box which currently hosts a health warning could be used to promote litter messaging as well.

Q351 Dr Strang: In June of this year the Government announced this “recycle on the go” initiative. Is it having an impact on recycling and litter levels or is it too early to say? Also, are there enough bins for recycling and litter in public places at the moment and could you say something on the proposal for a deposit on plastic bottles which I think the CPRE are in favour of?

Mr Sinden: We can perhaps start with “recycle on the go”. We think it is too early to be clear as to how successful the scheme is. I think the signs are encouraging inasmuch as we are aware of them. Our local tube station to the CPRE’s offices in Southwark has such a scheme and it is clear just from visual evidence that it is having an impact, which is beneficial, so we hope that when the time comes to review those schemes they will be more thoroughly producing real evidence that they can make a difference, not just in relation to public transport but also in relation to events where such an approach has been shown to have quite a beneficial impact. In relation to the bins, the only issue I would like to raise there is that it is important that we do not clutter our streets with unsightly litter collection devices in a bid to solve the problems of people dropping litter where they should not be dropping litter. That is an important issue for us and anyone concerned about the visual quality of the built environment, whether it is in town or country. On the deposit law, CPRE does favour a non-reusable bottle return scheme in order to reduce the significant problems attached to the littering associated particularly with plastic bottles. We use, I think, something like 15 million plastic bottles a year in the UK. We believe, in terms of the producer responsibility agenda and waste minimisation, that in the interests of waste minimisation it is absolutely critical that Defra takes a much more objective and critical look at how you can introduce schemes which can have the benefit of reducing waste at source but also a benefit in terms of encouraging recycling and reuse of materials. We have not been encouraged by what we have learned about Defra’s approach to this issue in recent years. It seems to be taking advice from people who are far too close to the packaging industry to be coming up with objective and appropriate solutions to this problem. We very much hope that the study that is currently under way, which is shortly to be concluded by Defra, will come up with a new, more positive agenda towards introducing such deposit and return schemes.

Mr Barton: We do support the “recycling on the go” pilot and we agree it is too early to tell, but there are some practical issues. It does very much depend on the member of the public actually understanding and putting their piece of litter or rubbish into the right hole and if it gets mixed the whole lot then has to go into mixed waste. I think there is quite a lot of work to do on the design of these receptacles and the messaging, again, public awareness, public education around them. In terms of the numbers of bins generally, we support there being a lot and in some circumstances more, but only if it is part of a properly thought through management strategy
because there is nothing worse than a bin that then gets over-full and the litter starts to float around the place and attracts more, so it can only be if there are the resources there to manage the collection properly. On the deposit scheme, we are in favour of anything which helps the problem. We do not have a strong view either way on deposits. There are other possible mechanisms that might work and we look forward to the Defra study. We are keen that all reasonable steps are taken to explore what is possible and if it has worked elsewhere we would support a pilot here. The evidence is not there as yet for us to take a firm view.

Chairman: I am sorry we have to stop now. Thank you very much indeed for coming and for your written information.

Memorandum submitted by the British Retail Consortium (Waste 41)

SUMMARY

1. The retail sector is supportive of the Government’s Waste Strategy and is working to deliver significant reductions in resource use, packaging and food waste, improvements in recycling and, when appropriate, to promote the use of compost on agricultural land.

2. The retail sector generates around 4.5% of all waste and is working both to reduce its own waste and to support customers in reducing and recycling theirs. There are many misconceptions about the importance of packaging in reducing food wastage and the relative environmental impact of plastic and paper bags. The sector is working to maximise waste reduction and minimise overall impacts.

3. Key achievements, going beyond statutory requirements, by the retail sector include:
   — Action to reduce the environmental impact of carrier bags by 25% by 2008;
   — Ambitious packaging reduction targets of up to 25% as early as 2008 from a number of major retailers;
   — Widespread provision of recycling facilities on supermarket premises;
   — Trialling of portable battery take-back schemes in advance of legislation taking effect;
   — Use of recycled materials in plastic bags, bottles and thermoformed trays;
   — A large number of pilots and investigations to enable greater recycling, composting and other waste reduction strategies in the future.

4. However, retailers can only contribute to solving part of the waste problem. Customer behaviour is important in determining outcomes and, while retailers promote recycling and responsible consumption, other parties must also support consumers by making it as easy as possible for customers to “do the right thing”.

5. Local authorities have an important role in providing recycling and re-use facilities for a wide range of products and in home collection recycling. Action by and in schools should help to achieve a culture shift through wider society. Manufacturers have a responsibility to take back durable products at the end of their lives.

INTRODUCTION

6. The British Retail Consortium is the lead trade association for the UK retail sector and the authoritative voice of the industry to policy makers and the media. We represent the whole range of retailers, for the large multiples and department stores through to independents, selling a wide selection of products through centre of town, out of town, rural and virtual stores.

7. The retail sector is acutely aware of the need to reduce waste in order to contribute to lower greenhouse gas emissions and to reduce landfill volumes and natural resource usage. The sector, which represents 6% of GDP, generates around 4.5% of all waste.

8. The BRC and its members are undertaking the following initiatives to reduce their own waste and to help customers to reduce theirs:
   — Retailers representing 90% of the UK grocery market are signatories to the Courtauld Agreement, which will lead to new packaging solutions and technologies to reduce retail-related household waste;
   — Individual retailer initiatives to promote the use of bags for life and incentivise lower use of carrier bags;
   — Careful design of food packaging to reduce wastage;
   — Encouraging consumer recycling, and committing to use a higher proportion of recycled material in packaging;
— Take-back of electrical goods;
— Trialling of battery take-back schemes;
— Working with regulators and stakeholders on safe use of compost;
— Reduction of landfill usage.

9. This response covers those aspects of Defra’s Waste Strategy for England that most affect the retail sector or where the sector can contribute significantly in delivering the desired improvements.

PACKAGING

10. Retailers support the Government’s objective to decouple waste growth from economic growth and to put more emphasis on waste prevention and re-use.

11. Defra statistics show that packaging contributes 18% of household waste which represents about 3%—by weight and volume—of landfilled waste. Packaging volumes in the UK have increased by less than 4% from 8.5 million tonnes in 1999 to 8.8 million tonnes in 2004. Household consumption rose by 20.5% over the same period.

12. Improvements in packaging design and in production techniques have resulted in significant reductions in material use:
   — One pint glass milk bottles are 65% lighter than in 1940;
   — 275ml glass beer bottles are 61% lighter than in 1970;
   — One litre plastic detergent bottles are 58% lighter than in 1970;
   — Cardboard box outer packs are typically 14% lighter than in 1970;
   — 400 gram metal food cans have been reduced by 39% in weight since 1950;
   — 330ml steel drinks cans have been reduced by 63% since 1950.

13. Marks and Spencer are reducing non-glass packaging by 25% by 2012 and Tesco aim to reduce all packaging by 25% by 2010. Wickes is working with WRAP to identify opportunities to reduce packaging waste on DIY products. Argos has trialled re-usable transit packaging for upholstered furniture, and B&Q has conducted similar trials on kitchens. John Lewis has undertaken a feasibility study on re-usable packaging for large kitchen appliances.

FOOD WASTE

14. Retailers are acting to minimise waste from food products. Packaging plays an important role in reducing food waste through preventing damage and avoiding more waste than generated by the packaging. In the UK, packaging used for fresh produce accounts for less than 2.6% of all sales packaging, equivalent to 0.4% of household waste. Under-packaging has ten times the environmental impact than the same amount of over-packaging. Once in landfill, food breakdown produces methane, which is 23 times more powerful as a greenhouse gas than carbon dioxide.

15. A new edition of the BRC’s Global Standard for Packaging and Packaging Materials, is due to be launched early in 2008. Principally aimed at achieving high standards of food hygiene and reducing spoilage, changes include improved auditor qualification verification. A high priority is placed on senior management commitment and continual improvement is required through comprehensive management reviews. Certification against this new standard will begin in the summer of 2008.

16. A number of retailers have already taken action to reduce food packaging:
   — Sainsbury has cut plastic waste from ready meal and organic food packaging, moving to compostable packaging materials, and set a 25% packaging reduction target for fresh produce by May 2008;
   — ASDA has set a 25% reduction target for its own label food products by 2008. Salad bags have been redesigned, reducing the thickness of plastic by 15%, and cardboard sleeves have been removed from a selection of ready meals;
   — Waitrose has cut packaging waste growth by 15% in 2006 and set a target to keep future packaging levels below those of 2002;
   — Marks and Spencer has implemented new film sealing systems for salad products, keeping produce fresher for longer and reducing the amount of plastic used;
   — Somerfield is redesigning its ready meal packaging to extend shelf life and cut food waste.

17. Most supermarkets do offer both pre-packed and loose fruit and vegetables, providing consumers with choice where they would prefer to purchase unpackaged foods. ASDA is trialling the withdrawal of 60 pre-packed items of fresh produce in two stores in north-west England.

18. The recent addition of nine major food manufacturers to the Courtauld Commitment will assist in waste reductions beyond own brands. Retailers welcome this collaborative approach with suppliers.
Carrier Bags

19. As acknowledged in the Government’s Strategy, the UK Retail sector is taking action with the Government and WRAP to reduce the environmental impact of carrier bags by 25% by the end of 2008. This will be achieved by:

1. reducing the environmental impact of each individual carrier bag;
2. encouraging customers to significantly reduce the number of carrier bags they use and to re-use bags;
3. enabling the recycling of more carrier bags where appropriate.

20. The sector will review achievements by the end of 2008 together with the Government and WRAP to determine how further reductions could be achieved by 2010 to deliver real reductions in environmental impact.

21. Action by individual retailers includes:
- Marks and Spencer’s pilots of charging for carrier bags, using the proceeds for environmental projects;
- Sainsbury’s reduction of the raw plastic content of carrier bags by 43% and provision of in-store plastic bag recycling or take-back for online deliveries;
- Waitrose’s trials with “green tills” which were carrier bag free in 14 stores as well as an entirely bag-less store, together with increasing the recycled plastic content of their carrier bags;
- Wickes’ introduction of a smaller carrier bag and reduced bag thickness;
- Aktfast, a small retailer in Lincolnshire, is participating in a buying group initiative to reduce the use of HDPE carrier bags, promoting bio-degradable bags and bags for life.

22. Paper bags have a higher environmental impact than equivalent plastic bags through greater consumption of water, emissions of greenhouse gases and eutrophication of rivers and lakes. Paper bags take up 4–5 times more volume than equivalent plastic bags, resulting in an increase in the number of deliveries to store (with consequent emissions, congestion and social impacts) and greater impact on landfill where consumers do not recycle bags.

WEEE and Take-back Schemes

23. Many retailers participate in the Valpak scheme negotiated through the BRC which funds the development of WEEE collection facilities throughout the UK. This meets their obligations under the WEEE Directive to provide for the take back of electrical and electronic equipment. Retailers’ contributions are calculated on the basis of their sales of electrical products in 2006. Categories of products covered include household appliances, IT equipment, lighting, electrical and electronic tools, toys, leisure and sports equipment.

24. Retailer take-back trials for (portable) batteries were originally launched in Eastleigh and Swansea at the end of October 2006 and were later extended to Perth & Kinross. The trials include 33 stores from a consortium of retailers including Home Retail Group, B&Q, DSG International and Tesco. Householders can take their unwanted batteries to drop-off points in participating stores. To date over 6 tonnes of portable batteries have been collected and materials recycled.

Recycling

25. Retailers support the Government’s objective of extending the recycling culture by ensuring facilities are available in places they visit away from the home. Local authority recycling collection schemes also have a very important part to play in making it easy for customers to recycle, particularly those without private transport or who chose to use shopping delivery services.

26. UK recycling rates are catching up fast with other European countries. Almost 60% of used packaging was recovered in 2005—up from 27% in 1998 (at a cost to industry in 2005 of £105 million) and this is increasing year on year (Source: Defra). A significant amount of packaging could be recycled but is currently sent to landfill often due to a lack of facilities in most UK local authority areas.

27. Many retailers provide facilities for recycling a wide range of packaging at larger stores, adding convenience and avoiding additional journeys. These facilities are invaluable in local communities, particularly where customers cannot recycle through their local authority’s schemes, and demonstrate retailers’ commitment to help customers be responsible and environmentally conscious consumers.
28. Recent trials, co-ordinated by WRAP and involving Tesco and Sainsbury’s, set out to radically change the image and capacity of recycling facilities by improving their appearance, locating them closer to the store and providing consumer incentives. These have increased recycling levels. ASDA launched the “Big Recycle” initiative with the television character Bob the Builder to encourage greater recycling of cardboard packaging, glass, cans, mobile phones, printer cartridges and old clothes by customers. Other recycling initiatives include:

- Tesco has committed to labelling products to show whether they can be reused, recycled or composted;
- ASDA recovered and recycled 140,000 tonnes of cardboard and 5,500 tonnes of plastic packaging in 2006, having opened four purpose built recycling facilities the previous year;
- Argos encourages customers to recycle their old catalogues by using local kerbside collection schemes or returning them to their nearest Argos store for recycling;
- Alliance Boots has increased recycling levels from its manufacturing and retail operations from 44% in 2002–03 to 55% in 2006–07;
- Wickes stores recycle cardboard packaging, timber, metal wastes and aggregates. The company is currently considering extending plastic packaging recycling from distribution centres to stores.

29. The BRC and its members are also in the process of developing an initiative in partnership with WRAP that will produce a consistent approach to the provision of recycling information on consumer packaging across the UK retail sector. The ultimate aim is to help more consumers recycle more packaging, more often.

30. Research shows that consumers are increasingly frustrated that they do not know which packaging can be recycled, or where they can find local facilities. Consumers are looking for better on-pack information to enable them to understand and act as, at present, a number of symbols and messages are used to encourage recycling.

31. Marks and Spencer and Alliance Boots have participated in trialling the use of up to 50% recycled plastics in bottles and thermoformed trays, providing an outlet for recycled products. Sainsbury launched a bottled water product earlier in 2007 that uses 25% post-consumer recycled plastic and intends to extend this once material and manufacturing capacity becomes available. In 2008 Wickes will be increasing the proportion of recycled content in their carrier bags.

**Composted Food Waste**

32. Retailers recognise the environmental benefits of making wider use of composted food waste and support the application of compost to agricultural land as long as scientific evidence is available to ensure food crops are safe for consumption and animal health is taken into account.

33. The BRC is working with WRAP, the Assured Food Standard and Quality Meat Scotland to address some of the gaps in the current scientific knowledge that need to be filled before composting is feasible on a much wider scale. McDonalds and a number of leading supermarkets are also interested in exploring anaerobic composting. ASDA diverts 70% of the waste from its Canford Heath store to composting.

**Disposal**

34. The retail sector fully supports the need to dispose of waste responsibly and is compliant with the Producer Responsibility Obligations (Packaging Waste) Regulations 2005. In 2006 the sector accounted for about 2.5 million tonnes of the UK’s packaging waste obligation.

**Reducing Landfill Usage**

35. Retailers fully support the Government’s objective of reducing commercial landfill usage and are working to deliver this through the initiatives outlined above. Alliance Boots has reduced the proportion of waste going into landfill from 54% in 2002–03 to 40% in 2006–07. Home Retail Group has achieved a reduction from 78% landfill usage in 2004 to a targeted 60% in 2007.

36. Retailers are very mindful of landfill targets and the landfill tax escalator and will continue to work to reduce waste to landfill while maintaining a competitive cost base. Retailers segregate waste for recycling and recovery to meet pre-treatment requirements—indeed some small retailers such as Aktfast undertake separation and on-site treatment of waste packaging despite being below the 50 tonne/£2 million thresholds.

British Retail Consortium

November 2007
Memorandum submitted by the British Soft Drinks Association (Waste 16)

1. SUMMARY

The British Soft Drinks Association is the national trade association representing the interests of the UK’s manufacturers, factors and franchisors of soft drinks. Member companies make up over 90% of the industry, with annual retail sales in excess of £10 billion.

Below is the BSDA submission to the EFRA select committee focusing on the issues that are most relevant to the Soft Drinks Industry in relation to the Waste Strategy.

BSDA members have always supported measures to protect the environment which are based on sound evidence. They recognise that preventing and managing waste is a significant issue, one which requires an integrated UK approach. Members are committed to reducing the impact of waste and packaging but do not believe that there should be disproportionate focus on packaging relative to wider waste issues, given that it only accounts for a small part of all waste arisings.

2. THE PROPOSALS FOR FINANCIAL INCENTIVES TO INCREASE HOUSEHOLD WASTE PREVENTION AND RECYCLING

2.1 We believe that it is necessary to encourage households to minimise waste and increase recycling and we agree that financial incentives may help to increase rates. However, we think that variable charging for non-recyclable waste may lead to an increase of fly-tipping, resulting in greater environmental damage and leading to significant clean-up costs.

2.2 Recycling schemes need to be clear and consistent to ensure they both engage the public and encourage recycling. Having consistent schemes should increase public awareness and interest in recycling, and should cause an increase in recycling volumes. It should also help develop markets for recycleate and ensure that this material can be put back into products within a closed loop system.

2.3 We are concerned that there continues to be a heavy focus on the quantity of recycled material with very little regard to the quality. If we are to achieve greater amounts of recycled material used in packs and products it is essential that recycling streams produce very high quality materials, either by keeping streams separate or by appropriate sorting techniques.

3. THE APPROACH TO WASTE MINIMISATION AND REUSABLE PACKAGING SCHEMES

3.1 Waste minimisation

3.1.1 We believe there is too much focus on packaging when considering the impacts of waste. Packaging accounts for only 3% all waste in the UK.

3.1.2 The current focus on waste minimisation and in particular packaging does not reflect the work that has previously taken place. Significant achievements have been made in light-weighting soft drinks packaging for many years. For example compared to 20 years ago:

- 2 litre PET plastic bottles have been reduced by more than 50%
- 330ml cans have been reduced by more than 20%
- 330ml glass bottles have been reduced by more than 10%

3.1.3 Soft drinks’ manufacturers are continually seeking technical advances to reduce further the weight of packaging. However, it must be recognised that due to the work that has taken place in the past it is unlikely that significant further reductions in packaging of soft drinks will be achieved.

3.1.4 Reusable packaging

3.1.5 We believe that it does not make commercial or environmental sense to introduce mandatory re-useable packaging schemes in the UK.

3.1.6 From a commercial point of view there would be a need for greater land for collection and storage, there would be significant costs to industry for new equipment and processes, and innovation and choice would be restricted.

3.1.7 An estimate of Capital costs to the Soft Drinks Industry (undertaken in 2003) to move to re-usable packaging:

<table>
<thead>
<tr>
<th>Action</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convert/renew 160–250 production lines at £15–20 million</td>
<td>£2.4–5.0 billion</td>
</tr>
<tr>
<td>20–30 new soft drinks manufacturing sites totaling 400 hectares at £20–30 million each</td>
<td>£400–900 million</td>
</tr>
</tbody>
</table>
4. The Potential for the Proposals in the Waste Strategy to Tackle the UK’s Contribution to Climate Change, in Particular through the Reduction of Methane Emissions from Landfill

4.1 It is our belief that reducing waste, increasing recycling and utilising recyclate instead of virgin material can make a positive contribution in terms of climate change, however there is perhaps too much reliance on the extent of the benefit to the climate in dealing with waste.

4.2 In terms of emissions from landfill we would like to emphasise the positive role of packaging in reducing biodegradable waste to landfill. Food and drink packaging helps to preserve the contents and ensure high quality and is, therefore, important in preventing spoilage and waste which would contribute to climate change through methane emissions in landfill.

5. The Adequacy of the Existing Infrastructure

5.1 We would welcome any action between national and local government that would ensure consistency in operating cost effective and successful recycling schemes.

5.2 We believe that the current disjointed waste collection and recycling schemes are inadequate because they are too varied both across the country and within local authority areas.

British Soft Drinks Association

October 2007

Witnesses: Ms Jill Ardagh, Director General, and Mr Paul Smith, Chairman, BSDA Environment Committee, British Soft Drinks Association, and Ms Jane Milne, Director of Business Environment, British Retail Consortium, gave evidence.

Chairman: Can I welcome our next set of witnesses from the British Soft Drinks Association, Jill Ardagh, their Director General, supported by Paul Smith, Chairman of the Association’s Environment Committee, and Jane Milne from the British Retail Consortium. She is the Director of Business Environment.

Q352 David Lepper: You have already heard some discussion this afternoon about litter associated with drink and food packaging. I wonder if you could tell us what your two organisations are doing to try and help reduce the huge amount of litter that does come from those sources.

Ms Ardagh: Just to put it into context, looking at Encams’ figures for litter, the litter generated by soft drinks containers accounts for less than 1% of total litter, so it is a very small part of the problem. I think, as has been discussed, it is a behavioural and social issue which needs tackling perhaps through education. What the industry is doing the whole time is seeking to minimise and reduce its packaging. It has been doing so for many years, the weight of packaging, for example, reducing materials. Bottles also on the whole carry recycling logos so that people know that the packaging material, plastic, can be recycled, and they also have the Encams, the old Keep Britain Tidy, logo on them as well, so there are messages on the packaging for the consumer. Those are the main things that the industry has been doing.

Ms Milne: Retailers also for their part have been, particularly on own brand packaging, following the same approach. We, of course, do an awful lot to provide recycling facilities in supermarket car parks, et cetera, providing opportunities for customers to get rid of their litter on the spot as well if they need to, and through our involvement in things like the business improvement districts and other town centre management making contributions towards improving the overall look of the public realm because we know that a high street that suffers from a lot of litter is not an attractive place for people to shop.

Q353 David Lepper: As David Drew said earlier on, I had better place on the record, Chairman, that I am a life member of the Association of Town Centre Management. What about the issue of what is called “food and drink on the go” that we have already talked about as well? You have talked about the packaging and the bottles and the messages on them but I think there is a lot of evidence alongside roadways and so on, as people drop things out of cars, discard their bottles, discard their packaging, that there is a continuing problem?
Mr Smith: A number of our members have actively supported “on the go” recycling schemes, in fact some are being run by individual members of BSDA, to encourage recycling on the go, as you say, and those are happening in a number of locations across Britain, mostly as pilot schemes, as has been said. They are happening in places like town centres. There are a number happening in theme parks and other places where you find a lot of the likely recyclables that these soft drinks containers are. I think it is true from a manufacturer’s point of view that we would like to see these recycled because they are fully recyclable packages.

Q354 David Lepper: Also can I ask you to say something in a bit more detail about the issue that we also discussed earlier with the previous witnesses about the plastic bottle deposit scheme because I think the British Soft Drinks Association has estimated capital costs of between £4.25 and £7.35 billion for the industry to move to a reusable packaging scheme?

Ms Ardagh: That would be a reusable scheme. We were asked a few years ago to research the costs and mechanics of a reusable return system and those were the figures we calculated for that. What has arisen more recently would be, for example, deposits on non-refillable bottles. Those types of capital costs would not be the same. However, a system of deposit and return would be very expensive to set up when you think about the take-back systems that you are going to have, particularly on the retail side, and what you would be doing is diverting waste from, say, the household collection scheme and reducing the value of that for local authorities. We would argue that it is better to strengthen and improve household collection schemes and recover your waste that way rather than have a separate scheme with its environmental impacts because obviously you have to have transport to collect the waste, people have got to get to wherever the bottles are taken back, maybe they will walk but they might be using their cars, so there is an environmental impact of having return schemes as well as the costs of them.

Q355 David Lepper: With reusable packaging, and I hear what you say about the costs of introducing schemes involving reusable packaging, are there not later savings for producers in terms of not having to source new packaging?

Mr Smith: Undoubtedly if you use a reusable system you do not have to keep on buying the packaging, but the problem with reusable systems generally is that you have to have two extra systems. You have to have a reverse logistics system, so you have to bring, say, the bottles back and that means that you have all those bottles brought back as empties and these days most loads that manufacturers have are not empty loads; they are backfilled with other goods. The second thing is that you have a transaction for the deposit which is very expensive in itself to transact, so both of those two things are problematic. A third thing is that in terms of distinguishing your products you end up with basically a generic bottle or container, so it is very difficult to create anything that the consumer really likes to see because you need to have the same container brought back again and refilled.

Q356 David Lepper: Are you really saying that consumers need different kinds of bottles for different kinds of drinks? Are you not underestimating the consumer?

Mr Smith: Consumers buy products and consumers will make a choice about what sort of products they want to buy. We have found that consumers will choose products which they like the look of, so if you provide them with a generic container which is only differentiated by a label then generally speaking people will prefer to buy something which is in more distinguishable product packaging. A further thing that you find about refillable packaging is that you have to keep that refillable packaging exactly the same for many years. It is not really possible to change it because as a generic piece of packaging it does have to stay the same. So you are basically institutionalising the technology which is chosen and that tends to last for not years but decades and therefore you tend to find that the float, as it were, the bottles that keep going around, have to stay the same and you cannot minimise the weight over time.

David Lepper: So you cannot persuade people to buy more by changing the packaging rather than the contents, as happens at the moment?

Q357 Lynne Jones: People seem to be buying a lot more wine.

Ms Ardagh: It is a question of innovation as well. You get stuck in an ossified system. The other big problem with taking back refillable bottles is the amount of space which you need for empty bottles. The retailer would need additional space. Factories would need additional space because they would need washing lines, they would be using hot water, caustic soda. Also, in the storage area there is a question of hygiene, vermin. You need extra bottles for the summer months which you have to store, so the cost of that space is very prohibitive.

Q358 Dr Strang: Retailers and manufacturers have obviously been reducing waste from packaging for some time. Do you think that that process has now reached as far as it can go through a voluntary approach? Can I also ask you about the so-called Courtauld Commitment, the second stage which involves an absolute reduction in waste packaging by 2010, how do you see that being achieved?

Ms Milne: As you say, over the last couple of years retailers, initially joined by manufacturers have made some real strides in reducing packaging, and indeed have brought packaging growth to a standstill as measured by WRAP and announced this summer, so that is the first significant step, if you like, and many retailers are taking significant action by their own brand packaging in the hope that they can push that down further. There are, of course, tensions between reducing the weight of packaging and maximising the amount of recyclable materials that you might use. Those two things might pull you in different directions, and one of the things that we need to be
Q359 Dr Strang: Moving quickly to the issue of carrier bags, do you see us achieving a reduction in single use carrier bags or will it require a ban or some sort of levy to help achieve that? We have received evidence—and I think this seems pretty self-evident—that paper bags are more environmentally friendly than plastic bags. Would it make sense to encourage people to use paper bags at the expense of plastic bags?

Ms Milne: In fact, paper bags are far less environmentally friendly than plastic bags. They have a far greater environmental impact both in their manufacture and in their transport to the shop, and indeed, once they are buried well into landfill they take just as long to decompose as plastic bags, so I am afraid that that is not the right route to go. We have been involved for a couple of years now with government with a commitment to reduce the environmental impact of single use carrier bags. Originally that agreement was to reduce it by 25% by the end of this year and when measured at the end of 2007 we were over halfway towards that target and confident of reaching it. Since then we have had discussions with ministers about how we might go further on that original agreement and I am pleased to say that I wrote today to the Minister to offer a new agreement whereby supermarkets would reduce the number of single use carrier bags by 50% by spring of next year. That is, I think, a very significant achievement and we are open to discussing with government what we can do together because this will take a much wider debate, changing consumer behaviours and helping consumers to make that extra step—many of them tell us, “Yes, we know about bags for life. It is just that we forget to put them in the car when we are going to the supermarket”—to get that figure beyond the 50% mark.

Q360 Lynne Jones: Both your organisations have expressed some frustration at the variation in local authority recycling schemes which makes it difficult to send consistent messages to consumers about what they can recycle. Have you any suggestions as to how consistency could be improved?

Ms Milne: I think it is extremely important that consumers do get those consistent messages. We have a proposal that our board will be looking at this week to go into a joint venture with the Food and Drink Federation to launch an on-pack labelling scheme that will provide consumers with advice about whether the material is easily recycled across most local authorities, could well be recycled or cannot currently be recycled, in order to help get over that messaging and hopefully persuade local authorities to join with us in providing a more consistent service.

Q361 Lynne Jones: But a lot of local authorities do not collect much in particular of the plastic waste that is produced. How is your industry working with waste infrastructure providers to ensure that their needs are met because the local authorities say there is not the infrastructure to support all but minimal amounts of plastics recycling, for example?

Ms Milne: Of course, every year we make very significant contributions through the PRN system to help finance the infrastructure. I think there are a number of issues around that. It is not just finance, it is not just regulation; it is also getting the planning system able to build recycling plants and get the infrastructure in place, but we have been engaged, and indeed as a sector have led, a cross-industry forum precisely to sit down with local authorities and others in the whole waste sector to try and iron out some of these problems and make some progress.

Q362 Lynne Jones: You are not alone in having identified the planning system as an obstacle here. Is there any way that your organisations can help make this kind of infrastructure more acceptable to the public, perhaps through information that you could provide on packaging or whatever?

Ms Milne: We are engaged in an awful lot of communication with consumers but it comes back to the same point I was making around single use carrier bags, that this is public policy. Yes, we have an important role to play in this but we cannot deliver the whole of Defra’s environment policy for them. They need to put some resources behind it as well and help us on this. We see it very much as something that we are part of a partnership on.

Chairman: Thank you very much indeed. We have the Minister coming next so she can tell us what this policy is all going to be about. We shall all be better advised and educated. May I thank you very much indeed for your contribution. I am sorry it is a little curtailed by today’s events but we very much value your views.
Supplementary memorandum submitted by the British Soft Drinks Association (Waste 16a)

As time was limited for BSDA to give evidence I thought I would send the BSDA position on deposits for single use drinks containers, ie on-refillable. The original submission already contains the position for refillables. Also I would like to add the following points:

1. Drinks Related Litter
   - Soft drink only for a small percentage of litter—less than 1% (ENCAMS report for INCPEN Litter Composition Survey 2004).
   - Litter is a cultural issue.
   - Deposits may increase litter as people are known to rummage through litter bins to find containers.
   - A number of companies are now working on recycling on the go initiatives for example, Recycling zone.

2. Deposits
   - The drinks containers likely to be subject to a deposit represent only a very small proportion of total litter—0.9 % in England in 2004. (ENCAMS report for INCPEN Litter Composition Survey 2004).
   - Deposit systems would be excessively expensive to set up and operate and have environmental impacts of their own.
   - There would be difficulties with infrastructure in retail outlets—particularly small shops and cafes etc.
   - Additional space, energy and transport would have an adverse affect on the environment.

3. Waste Minimisation
   - Soft drinks manufacturers have been committed to minimising packaging for many years.
   - Cans and plastic and glass bottle have seen significant reductions in weight over many years.
   - Drinks cans for example are 25% lighter since the 90’s and over 70% lighter since the 70s.
   - A number of large companies have signed up to the Courtauld commitment to reduce packaging reaching the home.
   - Achieving further and significant reduction in soft drinks packaging unlikely and costs to reduce small amounts are expensive.
   - Consumer packaging is less then 1.5% of all waste in UK (ACP communications task force report).
   - In 10 years GDP has risen by 28% but packaging only by 8% (ACP communications task force report).

4. Recycling Infrastructure
   - Manufacturers and retailers contributed £1.5 billion over the last 10 years towards recycling and recovery.
   - Soft drinks packaging is recyclable. Can and bottles can be recycled back into drinks containers.
   - Companies are increasing the amounts of rPET in bottles.
   - WRAP figures consistently show increasing bottle recycling at home now at over 35% and are expected to go up to over 70% by 2010.
   - Packaging is 18% of household waste per week and 60% of this is recycled (ACP communications task force report).

Stuart Small
Environment Executive
British Soft Drinks Association

November 2008
Annex

BSDA POSITION ON THE USE OF MANDATORY DEPOSIT SYSTEMS ON SINGLE USE DRINKS CONTAINERS

1. SUMMARY

1.1 The soft drinks industry supports measures to protect the environment when these are based on comprehensive environmental investigation and is committed to sustainable consumption and production.

1.2 Where packaging is concerned, studies have not produced definitive answers to the vital questions asked of mandatory deposit schemes, i.e. do they improve the environment cost effectively? It would be unwarranted to implement a system that does not have a desired environmental outcome.

1.3 Many principles risk being compromised with the introduction of deposit schemes, namely the capacity of such measures to:
   — undermine kerbside collection;
   — divert valuable material away from Local Authority waste collections;
   — cause unnecessary environmental impacts;
   — disproportionately increase costs to consumers, manufacturers and retailers;
   — discriminate unfairly against soft drinks; and
   — restrict the free movement of goods within the EU.

1.4 The British soft drinks industry firmly believes that the introduction of mandatory deposit schemes would be an ineffective and counter-productive method of reducing the environmental impacts of packaging. It is convinced that the solution lies with multi-material kerbside schemes that address all waste streams. BSDA also supports efforts to provide for recycling out of the home.

2. SOFT DRINKS PACKAGING AND SUSTAINABILITY

2.1 The nature of beverage packaging has changed dramatically over the years. Many decades ago drinks were solely packed in glass bottles. Cans were then added followed by cartons and plastic bottles. There is now a much greater variety of shapes, sizes and material types than ever before.

2.2 Packaging continues to be a major cost for the industry, both from a financial and environmental perspective. Members have historically looked for ways to reduce the amount of packing used and have made significant achievements.

2.3 The primary function of packaging is to maintain the safety and quality of the product, ensuring it reaches the consumer at the same levels as when it was first produced and throughout its shelf life.

2.4 Soft drinks manufacturers have always sought to address environmental concerns in relation to packaging:
   — Light-weighting of all formats of packaging has been carried out for decades and drinks manufacturers and packaging suppliers continue to seek further opportunities to lightweight.
   — Soft drinks packaging is amongst the most recyclable of all materials collected. It is easily recognised, sorted and is also of high value.
   — Manufacturers have been using varying volumes of recycled materials in their packaging for many years and at present companies are overcoming technical challenges to work towards significant increases of recycled PET in their plastic bottles.

2.5 Members recognise that there is still further work to be done to address packaging and sustainability while maintaining the primary function of packaging.

3. UNDERMINING KERBSIDE COLLECTION

3.1 According to WRAP, 35% of plastic bottles in the household waste stream are now being collected for recycling whereas in 2001 this figure was just 3%. This is predicted to increase to 50% in 2008 and 71% in 2009. These figures indicate that the efforts of local authorities in developing kerbside schemes have been enormously successful and this has been complemented by WRAP’s work to communicate recycling messages to consumers.

3.2 European Directives to increase recovery and decrease landfilling of waste are comprehensive in their application. They do not target one particular waste stream and aim to reduce all wastes to landfill. This stimulates recovery and reprocessing industries to adapt and grow to meet demands.

3.3 Effective kerbside collection schemes are considered by many to be the best environmental option in addressing the recycling and recovery of packaging. The 2001 RDC/PIRA Study demonstrates that, combined with achievable recycling rates, kerbside schemes deliver optimum environmental benefits.
compared to other packaging recovery scenarios. A deposit system on drinks containers would only tackle a small percentage of household waste. Kerbside collection captures far higher volumes of waste across all material categories.

3.4 Mandatory deposit schemes would therefore undermine the success of local authority kerbside collection as they would divert the most identifiable, easily sorted and valuable materials away from cost effective materials collection by local authorities.

4. **Deposits: An Expensive Way to Recycle**

4.1 Data collected in the US have shown that kerbside collection schemes cost around $100–$200 per tonne of material collected, whilst deposit systems cost $500–$800 per tonne of recycled material. Experience in Germany suggests that the cost of collecting materials through deposit schemes is three-times that of kerbside collection.

4.2 Kerbside collection schemes offer the following advantages:

— They focus on a range of materials not just a subset of cans and bottles, thus achieving greater economies of scale.

— Most recycling schemes manage materials by commodity type (eg glass, PET, paper), rather than pack type, size or brand, which minimise handling and sorting costs for the supply chain and allow for an increasing number of pack types to be recycled.

— The operation and collection of materials are managed by the waste industry and Government, rather than the food distribution and retail chain, which are not well suited to handling materials for recycling.

4.3 Mandatory deposit systems will result in increased prices to the consumer and throughout the supply chain. Returned beverage containers must be counted, sorted and stored requiring additional infrastructure, planning and resources. The burden on small retailers would be even greater. For example:

— They would have to collect and store containers and refund deposits on behalf of the manufacturer.

— A regular CTN would struggle to do this even with a small number of product lines.

— The impulse buy sector does not have the square footage required to operate such a scheme.

— Such a measure would be impractical to manage and would severely disadvantage corner shops and garage forecourts.

— There would be a significant increase in vehicle movements as pick-ups would be needed on a regular basis for retail outlets. This would add to congestion, hinder efforts to improve air quality and would be counter to efforts to reduce climate change impacts from transport.

5. **Discrimination without Environmental Reasoning**

5.1 Deposit systems operate randomly across Europe for different drinks’ packaging. For example:

— in Finland the deposit system covers beer and carbonated soft drinks only; and

— Denmark levies a deposit on all soft drinks other than milk.

5.2 The final goal of any deposit scheme is a comprehensive reduction in environmental impact. There is no logic in singling out certain products and not others.

5.3 Complex redemption systems can lead to increased environmental degradation. For example, in Sweden, used single trip containers are returned to the point of fill where they are counted individually. Designed to achieve a high rate of recycling, the additional transport costs and energy required to complete this process far outweigh the benefits.

5.4 In Germany deposits were added to drinks containers in 2003. The main objectives of the schemes were to reduce litter and to reduce the overall contribution of carbon dioxide emitted due to packaging. A study in 2007 showed that there had been no significant reduction in the amount of litter or cost to local authorities in dealing with litter and the reduction in carbon was also negligible. The cost of the German scheme was assessed to be over €900 million per year.

6. **Deposit Fraud**

6.1 Potential for fraud and misuse is a serious concern for the single trip/deposit market. Deposits create an incentive to redeem containers that do not bear a charge. This increases consumer prices. Each redeemed container imposes a cost for redemption, collection, and reprocessing. If a pack is returned fraudulently the refund is a direct cost to the distributor.

6.2 US studies into the use of reverse vending machines have suggested that 7% to 30% of drinks cans returned in this way were on non-deposit bearing items, despite the refund being paid.
7. Barriers to Trade

7.1 Deposit schemes may restrict the free movement of goods within the European Union (Article 28EC).

7.2 Despite achieving recovery and recycling rates under the European Directive, some member states impose deposit systems to further increase recovery levels.

7.3 Importing goods into a member state operating a deposit scheme requires packaging that adheres to each country’s requirements. This may include specific labelling, bar-coding or exclusive marking to identify the package as “recoverable”. In addition, contributions to the cost of a deposit return system are required. These costs may be significant, even more so for smaller producers.

7.4 Deposit systems go beyond the scope of the EU Packaging Directive. They could be considered protectionist, favouring local producers, and represent a clear barrier to trade.

8. Achieving Further Improvement in Recycling Rates: Alternatives to Deposits

8.1 The BSDA believes the simplest, cost effective and environmentally sound way to increase recycling rates is through effective kerbside collection schemes as opposed to deposit schemes. These are already well established and run alongside municipal waste collection.

8.2 The success of local authority collection schemes across the UK has been significant in recent years. WRAP data has shown that in 2001 recycling of plastic bottles was just 3%, by 2007 this had risen to 35%. WRAP expect the recycling of plastic bottles to reach over 70% by 2010, while estimates have shown that deposits schemes might retrieve 80% of the containers with deposits on them.

8.3 To improve recycling out of the home, the government and local authorities, with the help of WRAP, should continue with the strategy for “recycling on the go”: manufacturers are becoming involved in such schemes. It is important that consumers have the opportunity to recycle out of the home. This will not only improve recycling rates but is also likely to help reduce all forms of litter.

8.4 In conclusion, BSDA argues strongly that there are no valid economic or environmental reasons to impose mandatory deposits schemes on single use drinks containers.

Memorandum submitted by the Department for Environment, Food and Rural Affairs (Waste 45)

Introduction

DEFRA welcomes the opportunity to provide evidence to the Environment, Food and Rural Affairs Committee inquiry into the Government’s Waste Strategy for England 2007.

This evidence will summarise key elements of the Waste Strategy and provide an update on significant progress in delivery since its publication in May 2007.

1. Summary of the England Waste Strategy Messages and Objectives

1.1 As a society, we are consuming natural resources at an unsustainable rate. The most crucial threat is from dangerous climate change. Each year, we generate about 100 million tonnes of waste from households, commerce and industry. Most of this ends up in landfill where the biodegradable part generates greenhouse gases. Our goal is to move towards sustainable living and reduced greenhouse gas emissions. Reducing waste is an important contributor to this goal.

1.2 Government’s aim is to reduce waste and improve resource efficiency with measures to prevent waste, more re-use and recycling of products and materials, more energy from waste and less landfill. This approach is enshrined in the “waste hierarchy” which prioritises waste management measures.
1.3 The Waste Strategy sets out five objectives to help achieve its aims:

— decouple waste growth from economic growth and put more emphasis on waste prevention, and re-use;
— meet and exceed the Landfill Directive diversion targets for biodegradable municipal waste in 2010, 2013 and 2020;
— increase diversion from landfill of non-municipal waste and secure better integration of treatment for municipal and non-municipal waste;
— secure the investment in infrastructure needed to divert waste from landfill and for the management of hazardous waste; and
— get the most environmental benefit from that investment, through increased recycling of resources and recovery of energy from residual waste using a mix of technologies.

2. Recent Data

2.1 An analysis of the evidence base is set out in the Waste Strategy. Summarised below are data about waste outcomes that have been updated since the Strategy’s publication.

*Total Household Waste*

2.2 Household waste is growing significantly less than consumption expenditure, particularly in more recent years.

![Household final consumption expenditure and waste arising, UK 1990-2006(p)](image)

*Landfill Allowance Trading Scheme*

2.3 The Environment Agency’s annual report this year on the Landfill Allowances Trading Scheme estimates that waste disposal authorities in England landfilled 11.6 million tonnes of biodegradable municipal waste (BMW) in 2006–07. This is a reduction of 0.8 million tonnes from 2005–06 and 2.3 million tonnes from 2004–05. Therefore England is now within 0.4 million tonnes of the 2010 EU landfill directive target of 7.5 million tonnes.
Residual household waste per head

2.4 There has been a continuous decrease in residual household waste; in 2006–07 this decreased by 4.2% from 2005–06 to 17.9 million tonnes or 352kg per head.

![Graph showing residual household waste per head from 2000/01 to 2020.](image)


2.5 Targets for household waste after reuse, recycling and composting are set at 310kg per head in 2010, 270kg in 2015 and 225kg in 2020; reductions from 2000–01 of 32% to 2010, 40% to 2015 and 50% to 2020.

Household Waste Recycled

2.6 The proportion of household waste recycled (including composting) has continued to increase, rising from 26.7% in 2005–06 to 30.9 per cent in 2006–07.

![Graph showing household waste recycled from 1996/97 to 2020.](image)


2.7 The England Waste Strategy 2007 set targets for household recycling and composting at 40% in 2010, 45% in 2015 and 50% in 2020.

3. Recent Developments

3.1 The Waste Strategy sets out the policies, commitments and proposals by which Government will deliver our objectives. The Strategy also flags up where we will give consideration to furthering the scope of our ambitions.

3.2 This section updates the Committee on the most important developments that have taken place since the publication of the Strategy.
**Waste Infrastructure**

3.3 The Waste Strategy confirms Government’s commitment to using PFI to encourage a variety of energy recovery technologies to increase the minimisation of waste through recycling and to ensure unavoidable residual waste is treated in a way which provides the greatest benefits to energy policy. The recent Comprehensive Spending Review settlement has provided Defra with around £2 billion through PFI credits which will be available to help local authorities invest more sustainable waste management options. This will see a rise from £280 million in credits in 2007–08 to £600 million in 2008–09, £700 million in 2009–10 and £700 million in 2010–11.

**Household Incentives for Waste Minimisation and Recycling**

3.4 Proposals for a small number of local authorities to pilot incentive schemes for waste minimisation and recycling were announced on 15 November 2007, with legislative proposals included in the Climate Change Bill (also published 15 November). A maximum of 5 local authorities will be allowed to pilot the schemes. Councils will be able to come forward with their own proposals for pilots to fit local circumstances. This approach will allow us to monitor the impacts of the pilots and report back to Parliament before a decision is made whether to roll them out more widely. Schemes will be based on a rebate for households producing least waste. Under some schemes those producing most waste could be required to pay more. Rebates, and any charges, may be integrated with the council tax system. We have established requirements that local authorities must have a fly-tipping prevention strategy and good recycling service in place before being authorised to run a pilot scheme; and that they must take account of disadvantaged groups in designing a scheme.

**Regulation**

3.5 Full implementation of the Waste Electrical and Electronic Equipment (WEEE) Directive started in July. Local authorities in England are providing collection facilities for this equipment and 40 industry schemes have been established to enable producers to meet their obligations under the Directive.

3.6 New pre-treatment requirements for landfilled waste came into effect on 30 October.

**Packaging**

3.7 The Waste Strategy included a proposal to review the UK targets for recovery and recycling of packaging waste. A formal consultation was launched on 11 October which proposes increases for the published targets for 2008–10 and proposes new targets for 2010–2012. These are higher than the EU minimum target, both in order to reflect the UK’s exclusion of small producers from the obligation and as a signal that we expect continued increases in levels of recycling.

**Changing public behaviours**

3.8 Detailed proposals have been launched for consultation on the provision of recycling bins in public places. Also WRAP launched their ‘Love Food, Hate Waste’ campaign on 1st November to raise public awareness and provide information on what simple steps individuals can take to reduce their food waste.

3.9 The Waste Strategy 2007 set the Government’s objective to make free, single-use carrier bags a thing of the past. The Prime Minister announced on 19 November that the Government would convene a forum of the supermarkets, the British Retail Consortium and other interested groups to urgently assess how to eliminate single-use disposable bags altogether, and how quickly this could be achieved.

**Local Authority Performance**

3.10 The new local authority performance framework, announced on 9 October, will included 4 indicators on waste closely aligned to the waste strategy—household recycled waste, municipal waste to landfill and household recycling and composting levels, and fly-tipping.

4. **Other Activity**

4.1 This section addresses in more detail specific issues of interest to the Committee in the order set out in your terms of reference.
Implementation of the Waste Strategy

4.2 The Waste Strategy will be delivered by all parts of society sharing responsibility for waste. To drive implementation the Government has established a Defra-led Waste Strategy Board to provide leadership within and across government. To date the board has already met twice and has recently appointed two non-executive directors to broaden the composition of the board, bringing impartiality and expertise to help drive policy.

4.3 To enable effective stakeholder engagement the Government has also established a Waste Stakeholder Group with membership drawn from across the waste sector. There has been considerable interest from many different sectors in joining the group and with over thirty organisations now representing a wide range of stakeholders, Defra is confident the group can add significant value to the delivery process by providing advice, challenge and assistance.

4.4 Progress on delivering the strategy is being assessed using national level indicators and progress reported against the key outcomes and targets. The strategy is being kept under review, using the developing evidence base to evaluate and revise the policies set out within the strategy as circumstances change.

The Role of Regulation

4.5 The Strategy provides a framework to ensure waste regulation plays a proportionate and cost effective role in encouraging resource efficiency by business and ensuring sound environmental and public health protection.

4.6 Since publication of the Strategy:

— Illegal waste activity—Government has worked with key stakeholders to consider a review of waste controls—including the registration of waste carriers, the duty of care and registration of waste brokers. A list of policy proposals has been identified following the first stage consultation and further policy development is currently taking place.

— Construction waste—A consultation on the proposed introduction of mandatory site waste management plans (SWMPs) for construction projects exceeding a certain size took place from April to July 2007. 75% of respondents supported statutory SWMPs. The intention is to bring regulations into force in April 2008.

— Inert waste—In response to the recommendations in Lord Davidson’s review of the implementation of EC legislation, Government has continued to work with the Environment Agency and the industry on options for the regulation of inert waste. We intend to publish a joint discussion paper on current actions and possible proposals next month.

— Landfill—On 30 October 2007, Government and the Environment Agency completed the implementation of the pre-treatment requirement for non-hazardous waste and the ban on the landfilling of non-hazardous liquid waste. Early feedback from the Environment Agency indicates that the implementation is proceeding smoothly.

— Possible future restrictions on landfilling—Work has begun on considering the possibility of imposing further restrictions on the landfilling of biodegradable and recyclable wastes. Any decision on the need for and the nature of further restrictions will be based on the evidence emanating from the analysis of the seven priority waste materials identified in the Waste Strategy. Government intends to consult on any further proposals in 2008.

— Better Waste Regulation—Exemptions from waste permitting are a useful tool for the regulation of low risk waste management activities. The exemptions review is looking to update the exemptions provided in England and Wales in order to regulate more proportionately, based on the risk posed by activities. We will consult on proposals for new exemptions in early 2008 with the aim to introduce revised legislation in April 2009.

— The Revised Waste Framework Directive—Extensive revisions to the EU Waste Framework Directive are currently under negotiation. The Environment Council reached Political Agreement on the proposal in June 2007. The Council’s Common Position is expected to be transmitted to the European Parliament at the end of the year, so that the Parliament’s Second Reading can take place in March 2008. The proposed revisions to the Directive would, amongst other things, require member states to put in place waste prevention programmes setting out measures to break the link between economic growth and the environmental impacts associated with the generation of waste, and to develop benchmarks, targets or indicators to monitor progress.

Definition Of Waste

4.7 Government will shortly issue a public consultation on draft guidance on the interpretation of the definition of waste. The definition’s interpretation is now the subject of a body of case law by the European Court of Justice. The guidance will also fulfill the recommendations of the Davidson Review on the implementation of EU legislation.
Government is also participating in the work, led by the Environment Agency, on the preparation of protocols to clarify the point at which specified waste streams have been fully recovered and cease to be waste.

**Financial Incentives**

Proposals for introducing pilot schemes for local authorities to introduce incentives for waste minimisation were announced on 15 November 2007. More detailed is provided above (para 3.4).

**Composting**

The composting of biodegradable municipal wastes is playing, and will continue to play, a key role in reducing the amount of municipal waste and diverting biodegradable municipal wastes from landfill. The Waste Strategy set higher national household recycling and composting targets to reach at least 50% by 2020.

The Waste and Resources Action Programme (WRAP) is working to build composting capacity and develop sustainable markets for quality compost. Together with the Environment Agency it has produced a Quality Protocol for compost made from source segregated biodegradable waste. This clarifies the point at which compost has been fully recovered and has ceased to be waste for the purposes of the Waste Framework Directive. This is a significant development in opening up markets for this material.

**Waste Prevention**

The Waste Strategy notes the primacy of waste prevention in the waste hierarchy, placing much more emphasis on waste prevention than previous strategies. The focus on waste prevention will be monitored through a new target to reduce household residual waste per head by half by 2020 compared with 2000.

A number of measures, both direct and indirect, are set out in the Strategy to help drive waste prevention including economic incentives, regulation and voluntary and awareness measures. Several in both categories are sector-specific. In the category of measures which directly target waste prevention are the proposed new powers for local authorities for financial incentives for household waste minimisation and recycling (para 3.3), site waste management plans (para 4.6). Examples of other direct measures are:

- A range of voluntary targets set in the retail and food areas. The Courtauld commitment, for instance, sets specific targets for reduction of retail packaging by 2010 and includes a commitment to identify ways to reduce food waste; and the Food Industry Sustainability Strategy contains a target of reducing the food manufacturing industry’s waste by 15–20% by 2010. The Waste Strategy also sets higher packaging recycling targets for 2008 and beyond.

- Work funded by the BREW programme to encourage waste minimisation among businesses and stimulate re-use of products which would otherwise fall into the waste stream. Many local authorities also have explicit waste prevention policies, especially in relation to household waste.

Among the main ways in which Government is indirectly targeting waste prevention are: through raising the costs of landfill the landfill tax escalator; landfill regulation including pre-treatment requirements; and the Landfill Allowance Trading Scheme.

**Waste and Climate Change**

Current UK recycling levels save 18 million tonnes of CO₂ each year, the equivalent of annual emissions from 5 million cars, and waste treatment in England currently reduces net greenhouse gas emissions by 7.2 million tonnes. However landfill has a significant negative impact: landfill gas not captured will generate about 11mt of CO₂ equivalent emissions. The Waste Strategy targets savings of at least 16.5 million tonnes CO₂ equivalent in 2020 These savings will be from waste diverted from landfill to other treatments.

**Anaerobic Digestion**

Government wants to see greater use being made of anaerobic digestion to treat agricultural and food wastes. The Energy White Paper (May 2007) recognised the contribution of anaerobic digestion to renewable energy generation, with the accompanying consultation on reforming the Renewables Obligation proposing a significant increase in support under a banded Obligation. Anaerobic digestion has carbon and energy benefits and is particularly cost-effective for separated food waste—one of the Strategy’s priority waste streams. It is also a viable means of mitigating methane emissions from livestock manures.

Anaerobic digestion technology is being supported by Defra’s New Technologies Programme (for its application to municipal food waste) and the Carbon Trust’s InSource Energy, which is working with the food industry. WRAP is currently trialling separate food waste collections with 17 local authorities—key to
capturing suitable feedstock for plant—and continues to support anaerobic digestion through its organics capital support programme. The Environment Agency aims to have an operational protocol for anaerobic digestate by Spring 2008, which will be a crucial step towards opening up markets for this material.

Waste Infrastructure

4.18 The Waste Strategy recognises the capacity of existing infrastructure is currently insufficient to meet Government’s targets. The Strategy aims to stimulate new investment in waste treatment facilities that maximises the cost effective reduction of greenhouse gases, and other environmental impacts, from residual waste that cannot sensibly be recovered recycled or reused. Defra has therefore developed the Waste Infrastructure Delivery Programme (WIDP) to support Local Authorities to deliver their chosen waste management infrastructure solution—such as anaerobic digesters, combined heat and power plants, and energy from waste facilities. The support is comprehensive but does not dictate any particular technology or financing solution. The recent CSR settlement has provided Defra with a significant PFI allocation (£2 billion) for waste management infrastructure, but WIDP support extends to all major developments (whether PFI funded or not). It should be stressed that the delivery of such infrastructure is in no way intended to undermine the efforts being made to increase recycling.

4.19 In addition to the WIDP programme the Waste Implementation Programme (WIP) is delivering the New Technologies Demonstrator Programme (NTDP). The programme aims to demonstrate innovative waste treatment technologies as possible alternatives to landfill by assessing the economic, social and environmental viability of each selected technology.

Department for Environment, Food and Rural Affairs

November 2007

Witnesses: Rt Hon Jane Kennedy MP, Minister for Farming and the Environment, Mr Daniel Instone, Senior Responsible Owner, Waste Programme, and Mr Roy Hathaway, Head of Waste Regulation and Business Waste, Defra, gave evidence.

Q363 Chairman: Can we for the record formally welcome Jane Kennedy, who is Minister for Farming and the Environment. We know you have to be away by seven o’clock so we will try and be crisp with our questions and I know you will be the same with the answers.

Jane Kennedy: I will try.

Q364 Chairman: Can we thank Defra for its written evidence. Let us go straightaway to the Waste Strategy 2007. A lot of people have welcomed this, particularly with reference to focus on the waste hierarchy, which is on page 9 of the Waste Strategy 2007, but most of the detailed actions and targets focus on the bottom of the hierarchy in terms of recycling. Can you tell us where we can find a detailed action plan for minimising waste producing?

Jane Kennedy: In the Strategy?

Q365 Chairman: That is a good place to start.

Jane Kennedy: The Strategy is, as you say, a very well received document that has set out the programme for not only Defra and Defra’s organisations that work in helping local authorities and other stakeholders in achieving our targets but it is also a developmental piece of work. A lot of work is going on right across the piece in terms of new technology being tested. All of that forms part of very much an active piece of work. If you cannot find it in the Strategy then the specific document you are referring to I am not aware of.

Chairman: No, nor are we. That is why we are asking. We want to know what is the plan for minimising the production of waste because, as you say, we cannot find it in there.

Q366 Miss McIntosh: The Packaging Directive.

Jane Kennedy: There are a number of organisations that work with all of the various parts of the waste production chain, if you like, WRAP being just one of them. BREW has been working very hard with business right across the piece although their work has come to an end just recently. A lot of the work they are doing will be continuing through funding that Defra is providing and therefore there is not a specific written strategy that I can point you to.

Q367 Chairman: You said this was a continuing piece of work and it is encouraging that more work is being done, but in terms of working with the excellent organisations that you have just mentioned can we expect to see something that pulls together a strategy which has minimisation at its heart as opposed to dealing with it once it is produced?

Jane Kennedy: My response would be that the in terms of Waste Strategy and the policy development within Defra the way in which waste is produced is very complex. It is produced in a whole series of ways and there are a number of work streams within Defra that are seeking to deal with the various points of production of waste. You will be aware of the work that has been done around packaging, you will be aware of all of the work that local authorities are doing in various projects and pilots to enable householders to think about how their waste is produced and there is a comprehensive range of work that has been undertaken with business, including the construction sector and others, to look at the way in which waste is produced and to see how that waste can be treated as a resource rather than simply a product for depositing.
Q368 Chairman: Is Defra going to pull this together into, if you like, the equivalent of the Waste Strategy but dealing with minimisation?

Jane Kennedy: It is not something that I have had proposed to me. If it is an idea that comes out of your report as a result of recommendations that you have received from organisations then it is something that will be prepared to consider, but at the moment as I see it this is a complex area where a lot of work is going on right across the piece.

Q369 Chairman: The reason I ask that question is that when we walked the waste train down in the London Borough of Sutton, one of the things we came across was a very interesting figure—five years ago textiles had a waste stream of 7%; now it is up to something like 30%, and this was indicated, as the witnesses put it, as the “Primark effect.”8 In other words, here we were with a new generation of fashion clothing at very affordable prices that has suddenly created almost a new part of the waste stream. It was the reverse of waste minimisation. I suppose the question is, if we are talking about sustainability in the same context as waste, what is Defra doing to deal with developments like that?

Jane Kennedy: There is a whole piece of work being done on the way in which industry produces products called the Sustainable Products Work. That is looking at every sector and, as I have said, it is a very wide-ranging piece of work.

Q370 Chairman: So when is it going to be finished?

Jane Kennedy: We are working with industry to look at products and services right across their whole cycle. Because there are a number of different streams of work that will be continuing and I understand we have published a progress report on sustainable products and materials and that sets out our overall approach to improving product sustainability. The unit within Defra that is doing this work was set up in 2007 and it is involved in a range of work as well as progress by many others in government.

Q371 Chairman: Perhaps I could ask you, Minister, if you and your officials might be able to put together for us a supplementary submission which lays out in some detail for us exactly what work is going on on the question of the minimisation and the origination of the waste in the first instance and when we might see some further public visibility of the work on that.

Jane Kennedy: We are piloting 10 products, road maps, to demonstrate how industry can give consideration at the point of production when new products are being developed to how that product can be used sustainably. The product range goes from milk through to clothing, as you have chosen clothing as an example. Those road maps are in production.

Q372 Chairman: Okay; we will look forward to learning more in detail about those. The Waste Strategy contains a detailed action plan but mainly it relates to actions in the period 2008–09. What happens in 2010?

Jane Kennedy: The work that the Waste Strategy sets in train is work that will be ongoing but there are a series of targets, as the Committee will be aware, and target years over the next 15 years up to 2020 at which point various targets have to be met. Those targets are partly set by the British Government, partly set by the European Commission and some of those targets are being developed at a local level by local authorities and their partnerships. Those are the targets that will drive behaviour and the way in which waste is dealt with over the next five, 10, 15 years.

Q373 Chairman: You produced a year-on report which, if you like, gave quite a glowing review, unsurprisingly, about what you had done, but are you proposing on a continuing basis to produce updated reports and to draw conclusions and amend the Strategy as you develop it? I see lots of nodding behind you so that must be going to happen.

Jane Kennedy: You have referred to the event that we published on in July. There is also progress on delivering the 94 commitments that we set out in the Strategy. There are a number of areas in which, as you have said, data is showing that good progress is being made and that work is something that is going to continue in the future.

Q374 Chairman: Somebody is providing you with a further answer now. I do not want you to miss out from telling us this new truth.

Jane Kennedy: I am advised that we are committed to producing roughly annual progress reports. You had one in July and the work is continuing, as I said.

Q375 Chairman: Does that mean also when those reports come out that you as Minister are going to take stock and, if necessarily, update policy to take into account the messages coming from these annual reviews of how the strategy is going?

Jane Kennedy: It would seem to me a sensible thing to do.

Chairman: It would; jolly good.

Q376 David Lepper: The Strategy includes some pretty impressive evidence, it seemed to me, about reductions in household waste over the period since 2000, and I think the Environment Agency in November said that England is already within the 2010 target for 25% reduction in biodegradable household waste going to landfill. In view of that evidence there have been calls from some organisations for the Government to be a bit more ambitious in its target setting within the Waste Strategy. Do you think they make a good case, and in view of progress made so far should the Government be more ambitious in setting targets for the future?
Jane Kennedy: I think there is a case for us keeping the target under review. As a Minister I have always felt it was important to do that. However, we have got a number of priorities. We are making very good progress particularly in the area of household waste. In my view we need to put just as much effort and just as much commitment into driving down the amount of waste going to landfill and the carbon impact of that on the commercial and individual sectors too. There is work going on and Defra and WRAP are working with stakeholders to develop a broad vision for the long term for packaging. There is more work—you will have heard of the 3R Action Plan. In May 2008 the Environment Ministers meeting in Kobi at the G8 agreed a 3R Action Plan. We are now working to implement that, again through follow-up action of the Waste Strategy. There is the EU Waste Framework Directive. There are discussions around the definition of municipal waste. There is a range of work going on. I am not in a position to commit now, and I would not want to, to new targets and more ambitious targets. I think as well it would be sensible to make sure that any changes in targets were achievable and supportable by those involved, stakeholders right across the piste. There might be stakeholders in some sectors that are pressing for more ambitious targets and yet others in another part of the waste chain and the recycling chain that might be the cause of some anxiety.

Q377 David Lepper: It looks as if perhaps one or two of your predecessor ministers at the department were looking earlier this year at a 60% recycling target for those applying for PFI funding. There is something recorded in the minutes of the Waste Strategy board meeting in July about that. I take the point that you make about targets but if that is being considered is there not enough evidence to support a target of 60% for household waste recycling by 2020?

Jane Kennedy: I have not seen any advice to that effect. That is the straight answer. If the Committee comes up with arguments in favour I will always consider the points the Committee makes seriously.

Q378 David Lepper: You mentioned in passing just now issues about landfill. The Waste Strategy, I think, did propose a consultation on banning certain wastes from landfill but I believe that consultation has not yet happened. If that is so, do you know the reason for the delay?

Jane Kennedy: Is there a particular type of waste? I know there was concern around gypsum. Is it gypsum that you have in mind in particular?

Q379 David Lepper: Yes.

Jane Kennedy: I am advised that we are doing some research on it first before launching any such consultation.

Q380 David Lepper: Okay, so the consultation has not been launched yet?
Jane Kennedy: And I have sought to answer it.

Q387 Chairman: Jolly good but that is where it came from. Minister, you have an array of talent behind you here. Would they like to come and sit here? Would it be easier rather than turning round behind you here. Would they like to come and sit near here? Minister, you have an array of talent where we get them from. And I have sought to answer it.

Jane Kennedy: One other aspect of this is improving the quality of the waste which obviously would make it more useful to potential users. Has that been looked at? Obviously it varies from place to place but we have seen that some of the materials recycling centres are not quite so effective as others.

Jane Kennedy: The issue of the quality of recyclates has been an issue for a short period of time, not just in the last few weeks but over the last couple of years. One of the requests that we have had from representatives of the various recycling industries is for easier storage rules. They have acknowledged that the Environment Agency has already helped with this. They have asked for a moratorium on regulatory changes to help with some stability over this period. They have also asked for proactive help from government in finding new buyers and alternative outlets both in the UK and overseas. Thus their primary concerns were finding the new buyers. I know there has been some comment about that publicly recently but both WRAP and the National Industrial Symbiosis Programme were working on this and there is a dialogue going on around that to see what can be done to assist.

Q388 Chairman: Yes, tell us who are they, we would love to know that!

Mr Hathaway: I am Roy Hathaway, and I am Head of Waste Regulation in the Department.

Mr Instone: I am Daniel Instone and I have oversight over Defra’s waste programme.

Chairman: Excellent. Do chip in because we are interested in the facts. With no disrespect, Minister, in the nicest sense we do not mind where the information comes from; it is the information that counts. Lynne Jones?

Q389 Lynne Jones: I am glad that you mentioned the National Industrial Symbiosis Programme because that is run by International Synergies Ltd which is based in my constituency, and I have to say they are an excellent organisation with 9,300 industrial members. Of course, a big part of the Waste Strategy is, as you have said, waste as a resource. Could I ask you how you are working with councils and the recycling industry to ensure that the current materials’ price volatility does not undermine public or investor confidence in recycling materials reuse?

Jane Kennedy: You will have seen that we have been monitoring very closely the impact of the current economic climate on price. Defra, and in fact probably my two colleagues here, was instrumental in convening a meeting with the Environment Agency, with WRAP and with NISP, to consider precisely what the impact of the current price was. Bearing in mind that we have had a year of very high prices in recyclates, a statement was put out by the organisations concerned, and if you have not seen that statement we can supply it to the Committee. The statement set out a number of objectives. Amongst those objectives was continued monitoring. It also suggested that consideration would be given to any requests for increased storage facilities and issues of that nature, but the Environment Agency advise us that at the moment there is no demand for such extra storage. My response really is that we are very aware of it, we are keeping it under close review, and it is being actively followed by the organisations that take an interest.

Q390 Lynne Jones: What role does Defra see for funding these programmes because they have had big cuts this year, even though some of them—and again I mention NISP—are delivering really well and have a lot of potential for expansion and are seen as world leaders in actually linking up what has been described as waste not being waste but “resource in the wrong place”? Jane Kennedy: Some of the criticism that the Department has received about our landscape has been that it is complex and that it can be difficult for businesses to navigate, and whilst the individual organisations themselves have done exemplary work and something over £650 million has been invested in these programmes of work there is always, I am sure, a case for improvement, and that is what I will be wanting to consider when the report comes up to me for consideration in the next few weeks.
Q393 Lynne Jones: Do you consider this as something that is worthwhile for Defra to support or are you keen to get out of this area of work believing that it should be the responsibility of the private sector?

Jane Kennedy: All organisations across government have been under a duty placed upon us being a responsible government to make sure that the work that we do is within the budgets that we are set. All of the organisations with whom we are working are working within budgets that were determined under the most recent CSR. Some have had their funding cut. WRAP in particular took a very significant reduction in their budget. Nonetheless, they have achieved very significant good work. They have been applauded at virtually every public event that I have attended and been pointed out to me as an example of very good investment of public money. We are not going to be pulling out of funding these bodies. However, we do think that where business in particular can start to see some environmental benefits from recycling and using waste in a more effective way, and using waste as a resource rather than a drain upon financial resources, and actually seeing income coming into the business, then there is a good case for government stepping back.

Q394 David Lepper: There has been a lot of on-going debate, Minister, about the idea of councils being allowed to charge or reward householders in relation to recycling or reducing waste. As I referred to earlier, there does seem to be evidence that household recycling is already being achieved at a reasonable pace. Do you think councils need powers to charge or reward householders to help them to meet targets and are councils actually asking for those powers?

Jane Kennedy: These are the incentive schemes and my view is that the commitment to enable a number of pilots is there. We have upon Royal Assent of the, what is it, the Climate Change Bill—

Q395 Chairman: So easily forgotten; so recently passed. I cannot believe it!

Jane Kennedy: Because it is not the Finance Bill—

Q396 David Lepper: It is a different department.

Jane Kennedy: Because there is a clear commitment to enable pilots, we will now undertake a period of time in which local authorities may come forward and seek pilots. We are not going to press-gang local authorities into doing it. The range of powers that we have made available to local authorities have come about largely from on-going discussion with the LGA, local authorities and others as to what they believe would be useful powers to enable them to improve their performance, so it has been very much in response to the requests from local authorities, but it is very much a matter for them and we will wait to see what pilots come forward.

Q397 David Lepper: As you rightly said, the powers are there now in the Climate Change Bill and the proposal for pilots is there in the Climate Change Bill. Have any councils come forward yet clamouring to be amongst the first five pilot schemes? I know it is early days perhaps but were there indications while the Bill was going through Parliament that there were councils waiting for the opportunity?

Jane Kennedy: There certainly is some interest. Whether that interest will convert into actual bids for pilots remains to be seen. It is still very early days yet so I do not want to prejudge the outcome of that.

Q398 David Lepper: Whenever a local council changes its local strategies for collecting waste there is usually an outcry from residents and local media, particularly over things like alternate weekly household refuse collections. If Defra believes that there is a good case for switching to, for instance, fortnightly rather than weekly collections, is Defra doing enough to promote the positive aspects of that kind of change? It often seems to be left to the council to try and defend what it is doing.

Jane Kennedy: I think that is the way it should be. I think local authorities are the best people to decide how their waste management strategy should be implemented. It is a matter for local determination. That is where there is local accountability and I do not think we should be in the position of dictating what local authorities should do.

Chairman: David, just before you go on David Taylor just wanted to come in.

Q399 David Taylor: Just on that point, it seems to some seasoned observers of the political scene that the Government may be putting up local authorities to take the bullets for them from the Daily Mail and Daily Express journalists. Do you have some sympathy for that point of view?

Jane Kennedy: No, it feels the opposite way round, to be perfectly honest. It feels very much as if the Government is being put in the dock for proposing new ways of incentivising, which is the language that we use for this, but I very strongly believe that it is a matter for a local authority to determine how it wants to maximise its efficiency and its ability in recycling locally. Local authorities would be very much influenced by the abilities and the capability of local communities that it represents to be able to respond to such schemes. It will be a matter for local determination.

Q400 David Taylor: A final observation, Chairman: should the Government be doing more to promote a positive perspective on the changes that it would like to see local authorities make?

Jane Kennedy: The Government does encourage local authorities to promote—

Q401 David Taylor: Yes, but go direct to the newspapers that are at the root of the problems that we see nationwide when significant changes are mooted by local authorities?

Jane Kennedy: Mr Taylor, if you could suggest a way that we could persuade the Daily Mail—
Q402 David Taylor: You are the Minister!

Jane Kennedy: If you could find a way of persuading the Daily Mail to report in a way that we would believe would be responsible—

David Taylor: You get omniscience and omnipotence with your position.

Chairman: Mr Taylor was simply volunteering to be an incentivised person to re-use his rubbish! Paddy on the same point and then back to David.

Q403 Paddy Tipping: To be fair, Jane, you have taken powers in this Act to promote waste incentives. You have got a good record with local authorities, and let us not minimise what has been achieved, but I do not think you are showing leadership as a Department on, as they say, “pay to throw”. Five pilots really is not an adequate way of going forward.

Jane Kennedy: It was either the Chairman or Mr Lepper who said such schemes can cause an enormous amount of controversy locally, and given that, the people who quite rightly need to weigh that in the balance are the local representatives of those communities. It is for local communities to determine what is the best way forward for them. If you looked at Merseyside, the Merseyside Waste Authority is doing very very good work in improving recycling rates, but there would be a very wide range of very strongly felt opinion if some of the incentives that are now in the Bill, and are powers that local authorities can take were being proposed locally on Merseyside. It is a matter very much for local people to determine and that will be reflected in how local politicians decide how they are going to take it forward.

Q404 Paddy Tipping: But there is a national principle here and the national principle is if you create waste you ought to pay for it. I think the tone of the discussion in the Committee is that the Government is putting all the emphasis on local authorities and I think there is a case for stronger, firmer leadership from the Department.

Jane Kennedy: I hear what you say. I think taking the discussion in the Committee is that the Government is putting all the emphasis on local authorities and I think there is a case for stronger, firmer leadership from the Department.

Q405 David Lepper: Just before we leave that aspect of it, Chairman, I just wonder whether Defra has undertaken any research, either in this country or elsewhere, about the impacts on the amounts going to landfill and on recycling and so on of different patterns of household waste collection. Most of us are used to the weekly collection from the doorstep of residual waste. Has Defra undertaken any research as to whether that is the most effective way of doing the job? If so, is it doing anything to publicise the results of that research?

Jane Kennedy: In preparing for today there were two projects that I looked at because I am interested in this element of the work. One was a study on the Health Impact Assessment of Alternate Week Waste Collections of Biodegradable Waste and the other one was one written jointly by Enviros Consulting Ltd and the University of Birmingham, a Review of the Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes. Because we have not got the bids in and we have not got the pilots up and running, it is far too early yet to say what the impacts of the pilots might be but, as you say, there are a number of local authorities that are running alternate week collections. I do not know if my colleagues know of specific research along the lines that you are suggesting and whether these are public documents.

Mr Instone: What is true is that WRAP has undertaken various pieces of analysis about the best and most cost-effective ways in which local authorities can collect waste. Alternate weekly collection is just one part of that. They provide an on-going service to local authorities through their organisation which provides such advice with the acronym of ROTATE.

Q406 Chairman: Can you tell us what that stands for?

Mr Instone: I cannot tell you exactly but that is what it is commonly known as.

Jane Kennedy: I am not going to duck this one as Minister because I have found this perhaps one of the most challenging aspect of our policy and I have been following, even before I came into the Department, the debate about the impact of alternate weekly collections on local communities. I have debated with officials the impact on fly-tipping and whether the allegations about increased fly-tipping are true. One of the findings of the research on the Health Impact Assessment said that: “There is no evidence in the literature”—this is a review of the available literature—“to suggest that rodents or flies will necessarily increase with an alternate week collection, provided the waste is stored in an appropriate container.” My sense is that there are some wards within some of our communities where this sort of approach is not going to work or would only work with a very high degree of support and encouragement. Here I am not suggesting that financial incentives would necessarily be appropriate. This is why I believe that if a local authority wants to use some of the powers or a range of the powers that we have now provided to them, they should feel free to do so, and we would be willing to see a pilot run, but I do not think it is something that we should and that certainly I as a Minister should be enforcing from the centre.

Q407 Chairman: Let us move on to commercial and industrial waste. It is noteworthy that the annual progress report of the Waste Strategy does not appear to have any information on key indicators as up-to-date information on commercial and industrial waste is not available and it does not seem to be there in a timely fashion. Given that those two types of waste make up nearly a quarter of all wastes
arising in England, why are there so few specific targets and levers for tackling waste from this section?

Jane Kennedy: The most recent survey was done in 2002–03—

Q408 Chairman: Hang on, we are now in 2008.

Jane Kennedy: --- which I accept is quite some time ago.

Q409 Chairman: Why has it taken so long?

Jane Kennedy: We have set targets for certain sectors and certain waste streams. The Waste Strategy proposed a target for halving construction, demolition and excavation waste to landfill by 2012. There are also targets for packaging waste.

Q410 Chairman: Has that now been agreed because the actual words in the 2007 target were: “The Government is considering, in conjunction with the construction industry, a target to halve the amount of construction, demolition and excavation.” Is that now agreed?

Jane Kennedy: That has been agreed.

Q411 Chairman: When was that?

Mr Hathaway: It was agreed in the Sustainable Construction Strategy published by the Business and Enterprise Department earlier this year.

Q412 Chairman: So the Business and Enterprise Department published it, not you?

Jane Kennedy: Yes.

Mr Hathaway: They published a Sustainable Construction Strategy which is not just about construction waste.

Q413 Chairman: When did that creep out on to the bookshelves?

Mr Hathaway: It did not creep out; it was well publicised.

Chairman: So well it has not reached us, so there we are!

David Taylor: It is on notice boards all over Whitehall.

Q414 Mr Drew: It is being recycled at this moment in time!

Jane Kennedy: There are also targets for packaging waste of 72%, which was published in 2008, rising to 74% in 2010, so there are targets that have been published.

Q415 Chairman: You published the target but you said in your opening response that the data in this area went back to 2002, so what are you doing to get more up-to-date data? When we walked the Waste Chain we were told that people every day were busy filling in returns and sending them off to the Environment Agency. I think they were basically saying all of this data seems to be available about what business and commercial waste is actually being disposed of. I appreciate from the private sector point of view that there may be some difficulties but if you are going to set all these targets and your data is eight years out of date, it is difficult to know whether you are getting anywhere near it or not.

Jane Kennedy: This comes back to what I was saying earlier, there are some problems with current administrative systems for collecting the data.

Q416 Chairman: So how are you going to solve them?

Jane Kennedy: We are not complacent about it. I do not know if you want to say one or two words about what you are doing working with the Environment Agency and the waste industry to improve and extend the data?

Mr Hathaway: Perhaps I could just explain that the reason why there has not been another full survey of commercial and industrial waste since 2002–03 is that that survey was very costly and it cost about £3 million, and it was also quite time-consuming for businesses because it asks them questions about waste arising which they do not fill in as part of their normal returns to the Environment Agency, which are about—

Q417 Chairman: Hang on a minute, there are all these people out there in the waste business recording data, that is what they told us when we went.

Mr Hathaway: That is what I am coming on to, Chairman.

Q418 Chairman: Good.

Mr Hathaway: There is a Waste Data Strategy which is examining two possible ways forward. One is to move away from five-year periodic surveys to get this data on commercial and industrial waste towards using an on-line system whereby when a company applies to the Environment Agency for a licence to run either a landfill site or some sort of waste facility that data will then be logged as part of the information base on commercial and industrial waste. However, we have to recognise that the data you get from just using the Environment Agency’s regulatory process only captures part of the story. It will not capture all of the detail that you might want about waste arising.

Q419 Chairman: If you cannot capture all the data, how on earth are you going to know whether you are hitting the targets?

Mr Hathaway: As I think you said yourself earlier on, Chairman, we have not actually set a numerical target for commercial and industrial waste; we have only set the numerical targets for construction and demolition waste where we do have the data and for municipal waste where we do have the data.

Q420 Chairman: When is that target deficit going to be remedied?

Mr Hathaway: First, Chairman, we need to remedy the data deficit, then we can remedy the target deficit.

Q421 Chairman: When is all that going to be done? Give us a timetable.
Mr Hathaway: There is a pilot data project which WRAP is helping us with which will be going on in the early part of 2009, and if we think that that methodology of capturing the data looks promising on a wider scale, then we will need to see if we can get together the resources to carry out another full survey.

Q422 Chairman: So it looks like a decade on from the last time you looked at it you might actually be up-to-date?

Mr Hathaway: I am not saying that.

Q423 Chairman: No, I am saying that. I would not expect you to commit yourself to such a dastardly point of criticism but that is the way it is looking from here. Time is bearing down on us and there is going to be a vote in a minute and this might be the last we see of the Minister, so I would be grateful if we could have a comment from you, Minister, about one problem: there has been a lot of suggestion that there should be a better marriage between local authorities as the collection agents and the job that they do with household waste to put it also with commercial waste. For a fee they are able to collect commercial waste but they seem to interact with difficulty with the system of landfill allowance trading and their allowances. Thus where you might want an integrated service you may not be able to have it because of the problems in terms of the landfill allowances that individual authorities have. Just take me through how your Department sees the role of local authorities in dealing with business and commercial waste and whether there is effort going to be made to try and rationalise and improve those collections without the local authorities bearing a penalty?

Jane Kennedy: The former Mayor of London said that he believed that some of the London boroughs were stopping collecting commercial waste and simply saying to the producers of the waste, “Go and find a private company that will do it for you,” and thereby getting out of that as it no longer formed part of their overall weight in terms of waste, and they were achieving their targets simply by doing that. I do not believe that any hard evidence was ever provided to Defra that that was the case, but I have heard this criticism from other sources and I want to spend some time looking at and listening to particularly those in the recycling industries to see where the rubbing points are from their point of view. I think that the LATS allowance trading scheme is a very good scheme and it appears to work very well and there is no evidence that local authorities are failing dramatically and therefore having to rely on others to perform extremely well in order to keep the overall balance. There is also no overall evidence of a dramatic increase in the amount of waste going through local authorities to landfill. In fact, the contrary is the case but, nonetheless, I have heard the criticism and therefore I want to take time to talk to those who are involved in this, those who operate the big waste recycling centres, those who are doing it as a business, as a trade. I know that they make representations to the Department but sometimes it helps to have the Minister exposed to these arguments too, and that is what I intend to do in the next few weeks to hear what the case is against to the current system to see where we could perhaps take steps to make it work more effectively.

Chairman: You mention provision of facilities and I am going to move on to David Drew who wants to talk about infrastructure in the last remaining moments.

Q424 Mr Drew: We had a very interesting informal session last week with the Audit Commission where basically they were saying short term the Government can meet its targets, certainly the 2010 target, but that the 2013 target was questionable. The interesting thing is—and obviously we are going on to talk about this and you know that incineration was borne out by the various representatives of the industry that we have seen. However, sticking with the 2013 target to begin with, what difference can you make to ensure that the 2013 target is met?

Jane Kennedy: I do accept that it will be challenging to meet the targets if the infrastructure that we need is not in place, and that is why the Department has been working very hard to enable the development of the landscape. There is a whole number of projects which I have in the brief here which will provide that landscape going forward. I know that there are concerns run around the use of BFI—

Q425 Chairman: We are going to have to either stop or adjourn because there is now a division in the Commons. Minister, you have to go at seven?

Jane Kennedy: I am afraid I do, yes.

Chairman: We do have a number of other questions that we will write to you about. Thank you for your oral evidence. This session stands adjourned, or even ended.
Supplementary memorandum submitted by the Department for Environment, Food and Rural Affairs (Waste 45a)

HOUSE OF COMMONS ENVIRONMENT, FOOD AND RURAL AFFAIRS SELECT COMMITTEE INQUIRY INTO THE WASTE STRATEGY FOR ENGLAND 2007

A RESPONSE FROM DEFRA TO REQUEST FOR SUPPLEMENTARY EVIDENCE

Q1 Despite good progress on the 2010 landfill diversion target, there remains a question mark over meeting the 2013 target. How is Defra ensuring infrastructure is developed at the necessary pace?

A1 To accelerate the building of the infrastructure needed to treat residual waste without compromising efforts to minimise waste and support increasing recycling levels, Defra established the Waste Infrastructure Delivery Programme (WIDP). WIDP provides Local authorities with high quality procurement support and generic guidance.

Defra supports infrastructure development though Private Finance Initiative (PFI) credits; by supporting the demonstration of new technologies (New Technology Demonstrator Programme); and through the Waste Infrastructure Capital Grant (£185 million 2008–09—2010–11) to local authorities in recognition of the need to get front-end waste infrastructure.

Q1a Is the current economic downturn causing Defra to re-evaluate assumptions about the pace of infrastructure development?

A1a The economic downturn poses some new challenges for those managing waste, especially because of volatility in markets; and we are keeping a very close watch on the situation. We are also aware that banks are looking carefully at what they can finance in current circumstances, including PFI proposals for waste infrastructure. However, given the credit standing of local authorities, waste infrastructure under PFI should generally stack up well for them.

WIDP maintains a projection of the likelihood of meeting the landfill diversion targets in 2010, 2013 and 2020. This looks at the expected growth in waste arisings (“demand”) and the forecast treatment capacity (“supply”) that will be available to deal with it. The demand forecast relies on economic modelling (including the effect of the economic downturn on waste growth), on forecast recycling rates and on an assessment of the proportion of household waste that is biodegradable. The supply forecast is based on an assessment of the likelihood of timely operational delivery of treatment plants being procured by local authorities, and the estimated technical/operational efficiency of those plants. These forecasts will help WIDP determine how best to match PFI funding with delivery of the appropriate treatment capacity. Based on its initial assumptions Defra expects to meet the 2010, 2013 and 2020 targets. These assumptions will be kept under review in discussion with stakeholders.

Q1b Should the Government provide the industry with greater certainty for investment by setting out long term plans for landfill tax levels now?

A1b The Government is giving certainty regarding the level of the standard rate of landfill tax, which will enable businesses and the waste management industry to make investments in more sustainable waste management options. Decisions on rates beyond 2010–11 will be taken nearer the time, although the Government has stated that it expects the standard rate of landfill tax to continue to rise after 2010–11.

The evidence shows that the Government’s policies to tackle waste, including the landfill tax, are having a positive impact, encouraging waste producers to explore ways of minimising, re-using and recycling waste. Figures show that since 1997–98, the volume of waste disposed to registered landfill sites has fallen by almost one third. It is having an effect, but it needs to have more. That is why the Government has given plenty of notice that the standard rate of landfill tax will significantly increase over the next few years.

Q2 The Committee has had extensive evidence that the planning system provides a barrier to timely development of infrastructure. What can Defra do to ensure that the planning system works to deliver the right infrastructure at the right time?

A2 The planning system is, of course, the responsibility of CLG. It was significantly strengthened in mid-2005 with the introduction of a new Planning Policy Statement for waste (PPS10) which reinforces the duties on all participants in the planning system to make adequate provision for waste in Regional Spatial Strategies and Local Development Frameworks. We are now in an implementation phase, and by no means all authorities have yet implemented the reforms introduced in 2005, with the result that waste planning is yet to reap the full benefit. Defra shares CLG’s view, however, that the planning system is fundamentally sound in the way it deals with the great majority of waste projects. The very largest waste projects will benefit from the reforms to major infrastructure planning introduced by the Planning Act 2009.
Delays may happen because local decision-takers are reluctant to publish Local Plans which identify sites for unpopular development, or to support those developments when they are put forward. Such problems are a reflection of political responses to public perception of waste facilities as undesirable neighbours. It is not clear that further changes to the planning system would assist with this problem.

Q3 Is the Government’s use of the PFI process effective in ensuring the delivery of waste infrastructure which will meet the longer term needs of communities?

A3 Waste Disposal Authorities have statutory responsibility for arranging for disposal of municipal waste. They are best placed to plan and deliver necessary waste infrastructure for their communities. This includes how best to manage waste and landfill allowances, to meet targets set in the Waste Strategy for England 2007 and to consider whether PFI or a different type of procurement is most effective for their needs. Defra requires all local authorities applying for PFI credits to explore the options of working with their neighbours to avoid any inefficiencies that might arise if each authority procured independently.

Applicants are required to show how their project will move them up the waste hierarchy at all relevant levels. Whilst Defra does not specify preferred technologies we do insist that no new infrastructure proposals should be at the expense of reduction, reuse and recycling of waste (as illustrated by the waste hierarchy in the Waste Strategy for England 2007). All projects are expected to consider the carbon footprint of their technology choice, and are encouraged to achieve the greatest carbon benefits through combined heat and power (CHP), where feasible.

Q3a Is the PFI process too inflexible to enable authorities to respond to changing waste management needs?

A3a A common criticism of long term waste PFI contracts is that they are inflexible and potentially “crowd out recycling”. This is based on the argument that because the cost of the assets will be incurred regardless of whether the service is used, which could potentially provide a disincentive to recycle. However, it is important to note that it is standard practice to protect against this risk by including contractual incentives for the contractor to exceed expected recycling rates and by providing financial incentives to promote the substitution of other waste into the facility to make up any shortfall from the local authority.

Q4 Given the divergent views on energy from waste plant, do we need a national debate about the number and location of new facilities? Do other government policies, such as planning and energy strategies, have sufficient regard to the fact that energy from waste facilities could be a key element in delivery of waste strategy objectives?

A4 Defra is carrying out work to draw up strategies for renewable energy and heat, and plans to maximize the yield of renewable energy from waste food and waste wood will feature strongly in these plans. Our Waste Infrastructure Development Programme is also developing a market in Secondary Recovered Fuel, which will enable energy to be derived from residual waste by energy-intensive industrial users in an efficient way.

Q5 Do we have the regulatory framework right to ensure that maximum use is made of heat produced by energy from waste plant? What is Defra doing on this?

A5 Overall responsibility for policy on heat rests with DECC, and the issues involved in making sure waste heat from, say, incinerators is utilised are no different from those associated with any other large combustion process. DECC’s Heat Strategy is considering, for example, the scope to use such heat in district heating schemes, as already happens with the incinerators at Sheffield and elsewhere. Defra is working closely with DECC on these issues.

There are, in addition, some waste-specific issues in heat policy. In particular, Defra officials are liaising closely with their DECC counterparts to ensure that the design of the proposed Renewable Heat Incentive takes appropriate account of the nature of waste processes, many of which use a steam cycle for which realistic efficiency criteria need to be set.

Q6 The Environmental Permitting Programme aims to cut costs and burdens on businesses but we have evidence from some sectors that it is doing the opposite. What is Defra’s assessment of the impact of EPP in its first six months of operation?

A6 The new Environmental Permitting system came into force in England and Wales in April 2008. It is too early to draw definitive conclusions about the extent to which the system is delivering the benefits which the published Regulatory Impact Assessment anticipated would accrue over a number of years. A post implementation review to address this question is scheduled for April 2010, by which time sufficient evidence should be available.

Transition to the new system has proceeded relatively smoothly. Guidance is in place and staff training is complete for Local Authorities and the Environment Agency (EA). Initial anecdotal feedback from EA regulated industry suggests that a number of those with experience of the previous systems regard the new
arrangements as a welcome improvement in several respects. Defra and the EA will continue to monitor the experience of regulated industry in operating the new system and will consider any adjustments that might be necessary in the light of feedback received.

Q6a Isn’t there a case for looking again at the thresholds to ensure that smaller scale activity is exempt from the permitting system?

A6a We have just consulted upon proposals to revise the exemptions from environmental permitting. The consultation included proposals for new exemptions as well as amendments to the thresholds of some existing exemptions. The aim is to deliver regulatory control that is proportionate to the risk posed by waste operations. Defra seeks to encourage lighter touch regulation of small scale low risk waste recycling and recovery operations through exemptions and at the same time ensure the Environment Agency regulates larger scale and higher risk waste operations through environmental permits. It is anticipated revised exemptions will be in place by October 2009.

Q7 What is Defra’s estimate of the costs of enforcing waste regulation borne by its agencies and local authorities? Is there a funding shortfall?

A7 Local Authority expenditure on waste management is insufficiently disaggregated to be able to provide an assessment of their expenditure on enforcement of waste regulations. Revenue payments from central government to local government are paid via the Revenue Support Grant (RSG) and include provision for waste services. The Revenue Support Grant settlement is not ring-fenced and not hypothecated, maximising the freedom and flexibility of local authorities to allocate these resources according to the priorities in their area.

The Government worked closely with local authorities during the Comprehensive Spending Review (CSR07) in order to identify the pressures on waste over the next three years and the ways that they can be managed. The Local Government Finance Settlement provides a fair and affordable settlement for councils in a tight financial climate and allows authorities to deliver effective services, including those in the area of waste management.

The costs the Environment Agency are estimated in the following extract from their Corporate Plan 2008–11

2008–09 (budget)

(A) Total Waste Regulation expenditure: £117 million

(B) Funded by:

Income from Waste charges (including Hazardous Waste) £67.3 million
Grant in Aid (Defra and WAG) £46.9 million
BREW (see below) £2.8 million

(C) Of which, some £20 million GiA is spent on Waste enforcement.

However, these amounts do not take account of charges raised for regulation of landfill sites, as these are regulated under IPPC and so not included as waste income in the Environment Agency’s Corporate Plan resources summary.

The Environment Agency will receive £2.8 million funding from Business Resource Efficiency and Waste (BREW) programme in 2008–09.

On top of this the Environment Agency has received £1.3 million from BERR to tackle “WEEE freeriders” and £1.3 million from Defra to cover the enforcement of Green List transfrontier waste movements during 2008–09.

Q7a Should regulation be paid for by fees and charges on the regulated industry of is there a case for using other funding resources?

A7a Government policy is to encourage the Environment Agency to recover its costs of regulation. This is largely achieved through a system of fees and charges for determining applications for environmental permits and the inspection and assessment of permitted activities. Charging operators of waste management facilities in this way is consistent with the European Waste Framework Directive’s “polluter pays principle” and means that the burden properly falls on those disposing of waste.
Q8 Are the powers and duties set out in legislation strong enough to tackle the litter problem?

A8 Yes. The powers available to local authorities to tackle littering were recently enhanced by the Clean Neighbourhoods and Environment Act 2005. That legislation was introduced following extensive consultation including with local authorities who requested some of the changes brought in by the Act. Defra continues to work with local authorities to explain the range of powers available to them and has produced extensive guidance on their use.

Q8a Only 25 out of 354 English Local Authorities handed out 62% of fines for dropping litter. Is enforcement of these powers being taken seriously enough by bodies such as local authorities?

A8a Defra will continue to encourage local authorities to improve their performance. Some 233 out of 354 authorities in England issued at least one fixed penalty notice for littering in the year 2006–07—an increase from the 197 authorities issuing fixed penalty notices in 2005–06. Overall in 2006–07 over 43,000 fixed penalty notices for littering were issued, up from 33,000 in the preceding year. It is down to local authorities to determine the most appropriate way to use the powers available to them to tackle the problem of litter in their area. Defra supports local authorities through its third sector delivery partner ENCAMS which provides advice, guidance and training and opportunities to share best practice.

Q8b Are other bodies such as Network Rail, the Highways Agency, the Environment Agency etc using their powers sufficiently?

A8b The Environmental Protection Act 1990 identifies several bodies as designated statutory undertakers. This includes rail and road, river and canal undertakings. The Act does not provide the power for these bodies to issue fines for littering but they have similar duties to local authorities to keep their relevant land clear of litter and refuse. Recent reports of the Local Environmental Quality Survey of England have shown comparatively good results on litter for transport infrastructure areas (eg platforms and bus shelters). The picture for litter on main and other roads is unsatisfactory. Roads can present particular difficulties for cleansing, with health and safety considerations a primary concern. Defra is funding ENCAMS to run a campaign on littering from vehicles in summer 2009.

Q8c Should there be increased government funding for anti-litter campaigns or for a more formal network of volunteer action?

A8c Defra already spends some £1.2 million each year through ENCAMS on behaviour change campaigns which include campaigns on fast food litter and The Big Tidy Up to get communities involved in cleaning their areas. A further £0.7 million, funded by the chewing gum manufacturing industry, is spent on campaigning against the irresponsible disposal of gum. These campaigns are evaluated and are consistently shown to be effective in the areas in which they operate, however, sustaining the improvement after the campaign ends is a challenge.

Q9 What practical steps is Defra taking to ensure that growth in composting does not compromise soil quality or animal health? Will any of these constrain the ability to develop composting markets?

A9 Composting, as a waste treatment process, is governed by the Waste Framework Directive and regulated by Environment Agency who must also apply the Animal By-Products Regulations (ABPR) where catering or household waste contains meat products. The objective of these controls is to ensure that the composting of waste is carried out in a way which protects the environment, as well as human and animal health.

WRAP supported the development of the revised BSI PAS100 (2005), which is the recognised standard for good quality green waste compost. This covers the range of materials used to make the compost, their quality and traceability, the minimum requirements for the process of composting and the quality of the end product. It has also worked with the Environment Agency to develop a Quality Protocol for the production and use of quality compost from source segregated biodegradable waste. Finally, it has also supported development of a quality protocol for digestate, the compost-like residue arising from anaerobic digestion, which can also be used as a soil fertiliser. Development of this protocol is now advanced; it will mandate limits on harmful contaminants and require producers to specify nutrient content. All these quality standards will improve market confidence in the quality of compost, encouraging higher levels of composting.
Q9a  How could education work such as WRAP's “Love food, hate waste” campaign, be supported with wider practical measures to change behaviour (such as food waste collection by councils, development of markets for compost)?

A9a  Trials offering separate collections of food waste to over 94,000 households have shown high levels of public support for diverting food waste from landfill. Following these trials, some local authorities have already decided to roll out these collections on a permanent basis. Consumer surveys conducted by WRAP showed 78% of residents were satisfied with the collection service they received and in around half of the areas where participation monitoring was conducted, 70% of households were taking part in the service. The collected food waste was either composted at in-vessel facilities or treated by anaerobic digestion. The results of these trials show that if consumers are given the right tools and support, they will participate in initiatives to cut waste being sent to landfill. Development of markets for compost and digestate has been one of WRAP's core activities for several years.

Q9b  Should Defra work with retailers to improve information on “use by” and “sell by” dates to stop consumers being over cautious about using up food whilst eating safely?

A9b  Defra agrees that action is needed. Consumers need to be well informed about the different date marks so that they can make a proper decision about the risk of consuming a food product. We are discussing the nature of this action with WRAP and the Food Standards Agency.

Q10  If minimisation of retail packaging has now gone as far as it can, should more effort now be going into making it easier to recycle packaging?

A10  There are many examples of companies who have minimised the packaging used on specific products. However, that is not to say that packaging has, as a whole, been minimised as far as possible. It is debatable whether on their own market forces sufficiently drive businesses to make full use of innovation in technology or materials to minimise packaging.

WRAP has developed a “best in class” database which shows the spread of weight for specific packaging product and pack sizes used for food and drink on UK supermarket shelves. It shows that there are very significant differences in the weight of packaging which fulfils the same function.

We believe that moving towards the “best in class” product weights has many advantages for businesses as well as the environment, including minimising the use of valuable resources, reducing costs and reducing energy consumption. So, in line with the waste hierarchy, we should continue to focus on source reduction.

To deliver this, WRAP will over the next few months’ scope out a programme of work to identify priority sectors and work with Government, trade organisations and key business partners to negotiate the next generation of voluntary agreements to reduce packaging.

Turning to recyclability, the forthcoming packaging strategy will address this issue and explore ways to ensure that more of the packaging is designed with re-use, recycling or recovery in mind.

Q11  Has the retail sector done enough to minimise use of single use carrier bags?

A11  Not yet, but many of them have announced very ambitious plans to do so. We are optimistic that this level of minimisation will soon be reflected in a much tougher voluntary agreement to succeed the existing one.

Q11a  How will Defra now take forward the power to impose charges?

A11a  We have always been clear that we would only use the powers if retailers were not prepared to take voluntary action on a sufficient scale. The progress which retailers are currently making and planning to make—especially in the current economic climate—looks extremely encouraging and we do not, as a result, expect to be making early use of our powers. But we will keep the issue under review.

Q12  Considering that the construction industry is responsible for a third of overall waste arising, should the targets in the Sustainable Construction Strategy for a 50% reduction in Construction, Demolition and Excavation (CDE) waste by 2012 sent to landfill be more challenging?

A12  Although Construction, Demolition and Excavation waste accounts for around a third of overall waste arisings over half of the hardcore waste is reused or recycled as aggregates, including on site of production. Nevertheless, it remains an uncomfortable fact that around 25 million tonnes of CD&E waste is disposed of in landfill every year.

The 2012 halving waste to landfill target was confirmed in the Sustainable Construction Strategy as a stepping stone towards a longer-term ambition of ending the disposal of CD&E waste in landfill (except for the limited waste types where landfills remain the least environmentally damaging option). The 2012 target is ambitious but realistic. Further work over the next few years on, for example, life cycle assessments,
increased capacity and alternative disposal options, will allow the government and industry to assess better how much more ambitious we could be beyond 2012 and how close we might get to ending the disposal of CD&E waste in landfill in the longer-term.

During the Minister’s evidence session, the Committee asked when the Sustainable Construction Strategy was published. The Strategy was published on 11 June 2008. It was launched at an event opened by BERR Minister, Dame Shriti Vadera, and attended by 150 leading members of the construction industry. There was good coverage of the event in the trade press. Copies of the Strategy were placed in the Libraries of the House and can be found at: www.berr.gov.uk/whatwedo/sectors/construction/index.html.

Q12a How is progress against the targets being monitored and who is ensuring industry compliance? Do the targets need to be backed up with more rigorous powers of enforcement?

A12a Measurement of the overall volumes of CD&E waste going to landfill will be conducted by Defra, drawing on a range of available data sources including landfill operator returns and, potentially, on-site surveys. Under the Strategic Forum for Construction umbrella, sector level organisations will monitor progress against their own commitments and targets, collating aggregated data from individual businesses where appropriate. Similarly, the Waste & Resources Action Programme (WRAP) will co-ordinate individual companies’ progress against the halving waste to landfill target.

The halving waste to landfill target is a collective industry and government commitment. While the target itself will not be “enforced”, the introduction in April 2008 of a mandatory requirement for construction projects costing over £300,000 to have a Site Waste Management Plan gives local authorities and the Environment Agency an important new tool for ensuring that individual companies are looking at the minimisation and sustainable management of CD&E waste in England.

Q13 Will Defra provide a detailed supplementary note on the overall strategy for waste minimization and how the detailed work streams contribute to this, together with information on plans for the publication of further information on this?

A13 The Waste Strategy establishes the primacy of waste prevention in the waste hierarchy, placing much more emphasis on waste prevention than previous strategies.

The UK is already producing less waste per head than some of our European neighbours, as shown in chart 1 for municipal waste, but, as the Strategy recognises, we have progress to make.

![Chart 1](image-url)

**MUNICIPAL WASTE COLLECTED (KG PER HEAD) (2006)**
Government can secure reduction in waste through a number of measures, both direct and indirect. The Strategy sets out a very wide range of these measures to help drive waste prevention including economic incentives, regulation and voluntary and awareness measures. Several in both categories are sector-specific. In the category of measures which directly target waste prevention is the new national household residual waste reduction target which is strongly reflected in the selection of local area agreement targets by local authorities. Also on household waste reduction there are the proposed new powers for local authorities for financial incentives for household waste minimisation and recycling, and site waste management plans for construction waste. Examples of other direct measures are:

— A range of voluntary targets set in the retail and food areas. The Courtauld commitment, for instance, sets specific targets for reduction of retail packaging by 2010; and the Food Industry Sustainability Strategy contains a target of reducing the food manufacturing industry’s waste by 15–20% by 2010. On food, we have been focusing strongly on raising awareness of the need to reduce household food waste (see table below).

— Defra is providing around £45 million funding for business support on waste minimisation and resource efficiency through WRAP, NISP, Centre for Remanufacture and Reuse, and the BREW Centre for Local Authorities.

— WRAP target for 2008–09 to stop 8 million tonnes of waste materials from the household, industrial and commercial waste streams going to landfill.

— NISP target to deliver 750,000 tonnes of diversion from landfill in 2008–09.

— BREW Centre for local authorities will fund 12–16 local authority projects between £30,000 and £210,000 in 2008–09.

Many local authorities also have explicit waste prevention policies, especially in relation to household waste such as home composting, publicity campaigns to minimise food waste in the home and encouraging re-use.

There are also several broader measures which have an important indirect effect on waste prevention. Waste prevention is being achieved through: raising the costs of landfill the landfill tax escalator; landfill regulation including pre-treatment requirements; and the Landfill Allowance Trading Scheme.

Our focus on waste prevention will be partly monitored through a new target to reduce household residual waste per head by half by 2020 compared with 2000.

We will be publishing further information and plans as and when appropriate, for example in relation to further development of the specific policy measures set out below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>How it can contribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill tax escalator</td>
<td>This increases the cost of waste disposal so, for waste that cannot easily be recycled or recovered, provides an incentive for businesses to minimise waste.</td>
</tr>
<tr>
<td>Landfill allowance trading scheme (LATS)</td>
<td>Provides an incentive for councils to encourage waste prevention in their area in order to reduce amount of waste needing to be diverted from landfill and reduce costs of treatment.</td>
</tr>
<tr>
<td>Performance targets for councils</td>
<td>Local authorities have a set of three waste indicators which they may include in their local area agreements. 38 local authorities have selected the residual household waste indicator and have set a target which requires waste minimisation.</td>
</tr>
<tr>
<td>Allowing councils to incentivise recycling and waste prevention including through revenue-neutral financial incentives</td>
<td>This provides an incentive for the householder to reduce or re-use waste.</td>
</tr>
<tr>
<td>Zero Waste Places</td>
<td>We are supporting six places in England to test solutions to achieving zero waste to landfill. A report on the evidence these places gather will be published in 2009.</td>
</tr>
<tr>
<td>Implementation of EU sectoral directives:</td>
<td>For waste that is relatively expensive to recycle the recycling requirements in this Directives will indirectly drive waste minimisation.</td>
</tr>
<tr>
<td>— End of Life Vehicles</td>
<td></td>
</tr>
<tr>
<td>— Waste Electrical and Electronic Equipment</td>
<td></td>
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<tr>
<td>— Batteries</td>
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<tr>
<td>Measure</td>
<td>How it can contribute</td>
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<tr>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Packaging</td>
<td>Courtauld Commitment—set a target to reduce growth in retail packaging by 2008, which it has hit, and is now working on a target to reduce packaging waste by 2010. Also working to secure a voluntary agreement to cut the amount of food wasted in the supply chain and the home. New legislative packaging recovery targets for the UK—these indirectly encourage prevention for waste that is relatively expensive to recycle. WRAP work with retailers to support efforts to lightweight packaging.</td>
</tr>
<tr>
<td>Food waste</td>
<td>The Courtauld signatories and WRAP are working to secure a voluntary agreement to cut the amount of food wasted in the supply chain and the home. WRAP’s “Love Food: Hate Waste” campaign highlights the amount of food we throw away and encourages householders to avoid food waste. WRAP are also supporting local authorities in trials of separate food waste collection and in promoting home composting, both of which measures will reduce food waste.</td>
</tr>
<tr>
<td>Direct mail</td>
<td>We have a voluntary agreement with the Direct Marketing Association, to allow opt out from receiving direct mail plus a commitment to increase recycling of direct mail to 70% by end 2013. Since promotion of the mailing preference service opting out has risen from about 1.1 million to about 4 million people.</td>
</tr>
<tr>
<td>Site waste management plans</td>
<td>Mandatory for construction projects over £300,000, these encourage minimisation and better management of waste throughout the design and construction process.</td>
</tr>
<tr>
<td>Guidance and awareness measures</td>
<td>More visible recycling facilities in public places, activities with schools etc. These will encourage waste prevention, including through stressing resulting economic gains and through behaviour change.</td>
</tr>
<tr>
<td>Government product procurement targets</td>
<td>Waste prevention is included in the targets for sustainable operation of the government estate; in addition the SOGE has targets for recycling which provide indirect stimulus to waste prevention for waste that is relatively expensive to recycle.</td>
</tr>
<tr>
<td>Research</td>
<td>Over the last four years, Defra’s Waste and Resources Evidence Programme (WREP) has commissioned a comprehensive portfolio of research projects exploring household waste prevention. The scope of work has varied from understanding consumer behaviour, through evaluating how different local initiatives work, to the development of technical solutions. Details about ongoing and completed projects, and reports already published are available on the Defra website at <a href="http://randd.defra.gov.uk">http://randd.defra.gov.uk</a>.</td>
</tr>
</tbody>
</table>

Q14 *What are the reasons for the delay in publishing a consultation on further restrictions on the landfilling of biodegradable wastes or recyclable materials?*

A14 The Government stated that a decision to consult on further restrictions on the landfilling of biodegradable and recyclable waste would be subject to further analysis as to whether such further restrictions would make an effective contribution to meeting the Waste Strategy 2007 objectives.

Consultants are currently carrying out a series of case studies into how other Member States have imposed restrictions, including their practical application and perceived benefits. The consultants’ draft report is scheduled for early 2009 and we will discuss their findings with stakeholders. Once the report has been assessed Defra will decide whether to formally consult on proposals for further restrictions. The Waste Strategy 2007 also stated that any consultation will be linked to further work on priority waste materials, which is ongoing.

Department for Environment, Food and Rural Affairs

*December 2008*
Written evidence

Memorandum submitted by Mrs Angela Ellithorpe (Waste 01)

I understand that the EFRA Committee is enquiring into the Government Waste Strategy published by DEFRA in May with a view to determining if more should be done to promote Anaerobic Digestion (AD) in farming. I have worked in various roles in the AD industry for several years, much of it pertaining to farm digesters, and I strongly believe that Government should provide impetus for farmers to use this technology.

My interest in AD started when I became a shareholder of Organic Power; however, I was very disappointed in Christopher Maltin’s inability to build a single working digester. One of several contacts I made in this industry was James Murcott, who has designed and successfully built more than 70 working digesters in the UK & Ireland over the past 30 years. A significant number of these digesters were on farms, thus making him, as far as I am aware, the leading on-farm AD expert in the UK and someone who I feel should be contacted as part of your enquiry (contact details below).

In addition to trying to obtain planning permission for several on-farm digesters, I also undertook a contract to do a survey of farm digesters for Glasu, a rural development initiative who provide, amongst other things, support for farmers in Powys. Several points became very clear:

1. Organic wastes, such as manures/slurries, are a major pollutant and cause of greenhouse gases.
2. Farmers who used AD reported significant cost savings because
   (a) they used much less chemical fertilisers
   (b) they reduced their reliance on fossil fuels, because the methane produced by AD was used to heat houses and farm buildings.
3. The AD plant promoted rural diversification, e.g. where the farm took in local organic wastes (thus reducing the road miles of these wastes to landfill/centralised processing) or by selling electricity or soil conditioner for use on gardens.
4. Most farmers commented that whilst they needed no monetary help to build digesters 15 years ago, today they would not be able to and have not been able to build these plants without huge government grants because
   (a) of the huge amounts of money needed to get through planning and other regulatory restrictions (I know of a £100,000 capital project which needed an estimated extra £100,000 to consult more than 20 councils, organisations and other legislative “stakeholders”, many of whom were unable to make a decision because it crossed legislative boundaries)
   (b) they had previously been able to write off the capital costs against farm profit and there are now no tax incentives for them to use the technology.

My vision is to see a huge “internet” of on-farm digesters, using their own wastes and taking in local organic wastes to produce fertiliser for crops, gas for vehicles/electricity production and waste heat for heating buildings. This would truly be renewable energy from the “grass roots” and I urge you to promote the use of AD in this area. I understand your committee visited CAT to investigate solutions to climate change—I would urge you to consider speaking to me or Mr Murcott and possibly even visiting an on-farm digester in order to see how good this technology really is.

Angela Ellithorpe (Mrs)
August 2007

Memorandum submitted by the Industry Council for Packaging & the Environment (INCPEN) (Waste 02)

INTRODUCTION

INCPEN welcomes the Committee’s review of the Waste Strategy and would like to respond to:

— item 6 in the Committee’s terms of reference:
  The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.
— the proposal in the Waste Strategy for a new policy to reduce excess packaging for example by setting optimal packaging standards for a product class (WS2007 page 51)
— the proposal in the Waste Strategy to extend the Courtauld Commitment to non-food retailers (WS2007 page 52)
SUMMARY

INCPEN welcomes the Waste Strategy focus on developing waste policy in the context of overall resource management and its plans to recover more material and energy from waste.

INCPEN members’ are committed to optimising the use of materials and energy, reducing waste from products and used packaging, and maximising the recovery of value from waste— as materials, energy and compost.

However, the strategy should not stress waste reduction at the expense of causing other environmental problems, such as increasing carbon footprints. While we have the knowledge and ability to manage waste safely and efficiently now, we do not know if we can control or manage the environmental effects of global climate change.

Holistic approach

Packaging can only be judged in the context of the protection required by the product, its design and manufacture, the demands of the supply chain and consumers’ needs, all of which dictate the differing functions required of packaging. An advantage of such a holistic approach is that it opens the potential for finding better ways to meet the needs of society.

INCPEN members’ sustainability strategies seek to minimise waste alongside reducing their carbon footprints.

Waste minimisation

The only “bad” packaging from an environmental point of view is at the extremes:

— Under-packaging is disastrous (because of damage to products and wastage)
— Over-packaging is illegal (packaging is controlled via a number of regulations and voluntary codes of practice)

Since the 1970s the packaging industry has consistently reduced the amount of packaging needed to protect a unit of product.

The amount of packaging used in the UK increased by less than 4% between 1999 and 2004—an increase more than accounted for by factors outside of industry’s control, such as the increase in population and number of households.

Packaging in a Market Economy

A respected independent UK research organisation (UK CEED) has stated that:

“the general public pays disproportionate attention to packaging as an environmental issue. This in turn leads to a serious over-estimation of the contribution of packaging to the waste stream and often to inaccurate assertions that products are packaged in a wasteful and excessive way”.

Choice of materials

No material has a monopoly of environmental virtues and to deliver a sustainable future industry needs to be able to use all appropriate materials.

Recycling versus minimisation

A focus on recycling and the use of materials that are simple to recycle should not override the progress made over the past 20 years to reduce packaging by using lightweight materials and laminates (thin layers of mixed materials).

Their use is one reason why the UK consumes less packaging per person than most other large EU countries—171kg in 2004 compared with 188kg in Germany and 200kg in France.

Used packaging

DEFRA statistics show that used packaging makes up 18% of household waste and 3% by weight and volume of waste sent to landfill.

The amount of used packaging sent to landfill has decreased over the last 10 years. UK companies have contributed £700 million since 1998 to increase recycling of used packaging to nearly 60%.
Optimal packaging standards

INCPEN is opposed to optimal packaging standards because thousands would be needed to match each particular set of circumstances for each product in each supply chain. In addition, standards may discourage companies from innovations in packaging design or supply chain efficiency.

Courtauld Commitments

INCPEN supports the waste minimisation objectives of WRAP’s Courtauld Commitments and sees no reason why they should not apply also to non-food categories.

However, minimising waste is not enough. INCPEN members have committed to adopting cradle-to-cradle thinking in developing packaging and product supply chains that make a positive contribution to social, environmental and economic development.

INCPEN Response

Waste minimisation

1. Waste has been top of the environmental policy makers’ agenda for well over 15 years, often with the focus on used packaging. The packaging chain has responded not only by funding recycling schemes but also by designing to reduce materials and energy throughout the supply chain.

2. Packaging in general already makes a positive contribution to sustainable consumption, distribution and production and the packaging chain continues to seek improvements.

3. From an environmental viewpoint the only “bad” packaging is at the extremes:
   - Under-packaging is disastrous
   - Over-packaging is illegal

4. The packaging industry has in the last 20–30 years greatly reduced the amount of packaging needed to pack and protect a unit of goods. For example, washing up liquid bottles in the 1970s used two and a half times as much plastic as is used today.

5. Similarly in the 1970s:
   - Drinks and soup cans used twice as much metal
   - Glass beer bottles used two and a half times as much glass
   - Yoghurt pots used two and half times as much plastic
   - Carrier bags used twice as much plastic

6. One major manufacturer estimates that in each of the last ten years its packaging has been reduced by between 5% and 10%.

7. In general, packaging prevents far more waste than it generates. Under-packaging is typically ten times worse for the environment than the same amount of over-packaging. Research by Dr J M Kooijman showed that the resources used to produce packaging are typically only 10% of that needed to produce, distribute and use the products.

8. In some areas packaging cannot be reduced further without increasing food spoilage and product damage. However, as new technology or new materials are developed, companies will seek opportunities to make further improvements to reduce material use for both environmental and commercial reasons.

9. The amount of packaging used in the UK has increased by less than 4% since 1999 (8.5 to 8.8 million tonnes, in 2004—excluding wood). This increase is more than accounted for by the increase in population and demographic shift to more people living alone and has been kept down to this level because industry has continued to reduce the amount of material used per pack.

Integrated packaging systems

10. Packaging is just one part of the production, distribution, use system and the only way to decide how much packaging is enough is to assess it in this context.

11. Most products need to be packaged in sales or primary packaging to protect them from damage and spoilage. The primary packs are grouped in secondary packaging and then put onto transport packaging. All three levels together protect the product and it is important to assess them together so that a reduction in one layer is not over-compensated for by an increase in another.
Packaging in a Market Economy

12. The UK Centre for Economic and Environmental Development (UK CEED) carried out a study for INCPEN Packaging in a Market Economy that analysed the relationship between the functional, economic, social and environmental aspects of packaging for four very different products—fish, a computer monitor, a liquid detergent and a luxury cosmetic.

13. The study concluded that the desire to minimise costs optimises the use of packaging and that it would “defy economic logic for a company to pack a product purposely in excessive material”. However there were some “market failures” in each market sector that could lead to too much, or too little packaging being used.

14. These include:
   — the expense of setting up new production lines to accommodate wholly new packaging acts as a strong disincentive to alter packaging design in the short term, so short runs to test consumer demand may be inappropriately packed.
   — standardised secondary packaging works well where products are of uniform dimensions, but for products which vary in size and shape or for mixed loads of smaller densities, standardised packaging may be larger than the products require.
   — information on the performance of packaging in the distribution system often does not flow back to the producer.
   — emphasis on single environmental issues may lead to inappropriate packaging eg too much emphasis on recycling fails to take account of energy use and the relationship between packaging and product loss.
   — large retailers have limited ability to check all in-coming goods individually. This can result in entire lorry loads being returned to the supplier, even if only minor product damage is observed. In response, packaging may be over-specified to satisfy other requirements of the chain, but may be justified by the manufacturer if the economic and environmental costs of returned loads are greater than the costs of extra packaging.

15. The study also concluded that while some incorrect packaging choices may be made, many criticisms of packaging are, in reality:
   — a criticism of the market system, and, by implication a criticism of the behaviour and lifestyles of consumers;
   — a failure to recognise the role packaging plays in providing consumer choice;
   — based only on consideration of environmental or end use criteria;
   — in ignorance of the consequences of under-packaging, in terms of wastage of resources and environmental impact.

16. Broadly, the study concludes that the general public pays disproportionate attention to packaging as an environmental issue. This in turn leads to a serious over-estimation of the contribution of packaging to the waste stream and often to inaccurate assertions that products are packaged in a wasteful and excessive way.

17. Despite this there are excessively packaged goods. We propose a possible solution in para 24.

Packaging and Food waste

18. Packaging helps limit the vast amounts of food waste being generated by:
   — protecting products throughout the supply chain
   — extending the shelf life of food
   — providing sensible portion sizes

19. For example, before the introduction of Modified Atmosphere Packaging up to 25% of meat would become waste in the store. Today it is much lower. Similarly, a tiny piece of plastics wrapping weighing 1.5 grams extends the shelf life of a cucumber from 3 days to 14 days.

20. Eliminating packaging from fresh fruit and vegetables can lead to increased product waste. A study that compared apples sold loose with four in a shrink-wrapped tray showed that there was 27% more waste of all sorts (bruised apple and used packaging) from orchard to home from those sold loose.
Drivers to reduce packaging

21. As well as commercial considerations, there are other powerful drivers that influence manufacturers to minimise packaging:
   — The Producer Responsibility (Packaging) Regulations
   — The Packaging (Essential Requirements) Regulations
   — The Responsible Packaging Code of Practice
   — Best Practice Guides from Envirowise and INCPEN

22. Packaging has grown less in the 2 European member states (UK and France) that enforce the Essential Requirements Regulations than in the rest of the EU-15.

23. Despite these drivers, some products are excessively packaged, particularly items purchased over the internet for home delivery, and electronic and electrical goods, including toys, usually imported from the Far East. At least 35% of packaging is on goods that are imported. These are designed for a global market and UK manufacturers have little influence on how they are packaged. The Government needs to decide how to handle this issue.

24. However, excessive packaging is the exception. Most products are packed in the minimum amount of material to meet the needs of transport, hygiene, storage display and use.

25. To address goods that are excessively packaged in the UK, INCPEN would like the government to establish a multi stakeholder forum. This could be set up jointly with industry, and include local government, NGO’s and the supply chain. It could act as a watchdog for consumers concerns about packaging and provide consumers with reliable, consistent information about packaging, waste and sustainability. It could also be a sounding board for Trading Standards Officers on matters concerning enforcement of the Essential Requirements Regulations.

Choice of Material

26. Some people say they don’t want packaging, but they do want food and goods in good condition. They take for granted the fact that they could not live the way they do without packaging. They also think some materials are environmentally good—glass and paper, for example—and others—plastics—are bad. They are generally confused about environmental issues and they complain that they do not know what they can and cannot recycle.

27. Retailers are in the firing line for responding to these views and are doing so by asking their suppliers for a mixture of measures—more light weighting, recycled content, biodegradable plastics, and reduced carbon emissions. None of these, per se, means that a product and its packaging will be delivered with less environmental impact, and some of them can be mutually exclusive (eg biodegradable plastics and recycled content).

Recycling versus minimisation conflict

28. Often there is a conflict between the aim to increase recycling of used packaging and the aim to reduce total packaging.

29. To make packaging recyclable often requires the use of single materials, where the same job could be done as well, or better, with two or more thinner layers of different materials—often called laminates—with a resulting reduction in total resource use.

30. We need to be careful that the focus on recycling and using materials that are easiest to recycle does not override the good work that has been done over the past 20 years to reduce packaging by using laminates.

31. Use of lightweight laminates and other lightweight materials is one reason why the UK uses less packaging per person than most other large EU countries—171kg in 2004 compared with 188kg in Germany and 200kg in France.

32. Competition between materials has been one of the key drivers in helping companies innovate and optimise the use of energy and materials. Companies need the widest possible choice of materials.

33. Laminates may be more difficult to recycle but meeting the global aim of carbon reduction means that making packaging recyclable should not take precedence over resource (and carbon) reduction.

Re-use

34. Re-use relies on local supply and distribution if it is to offer benefits. Further, attitudes and lifestyles limit re-use opportunities.

35. The Body Shop for example offered a 10% price reduction on products if the customer returned containers for refilling. It discontinued this service in 2002 when less than 2% of customers were returning containers.
36. The supply of goods is based on national and even global supply chains. The argument for a reverse flow of materials (either for re-use or for other “take back” schemes) ignores the fact that there may be insufficient empty transport capacity running back up the supply chain. There are far fewer empty lorries on the roads today because retailers and their suppliers have improved their logistic systems and now often share distribution services.

37. Apart from this, re-use will also increase transport requirements because returned materials can seldom be re-used directly by the supplier of goods. The supplier would have to transport the used materials back to the packaging manufacturer or to a reprocessor for cleaning and reprocessing.

38. However, where it makes environmentally and economic sense, industry makes wide use of re-usable systems, especially for transport and display packaging.

39. Despite a price difference of 43p per pint for doorstep compared with 27p per pint from retail outlet in 2003, 15% of household milk was still supplied via doorstep delivery in refillable bottles. This is declining because of factors outside of industry’s control.

Used Packaging

40. DEFRA statistics show that used packaging is 18% of household waste and 3% by weight and volume of waste sent to landfill.

41. Kitchen and garden waste accounts for 23% of the weight of household dustbin waste, newsprint and magazines 16%. The largest category of used packaging is paper and card at 6% of household waste. White flint glass is 4%, steel food cans 3%, plastics film 2%, and all other packaging is less than 2%, including plastic food packaging 1.2%, liquid food cartons 1.1% and aluminium drinks cans 0.4%. See Annex 1 (not printed) for composition of typical kerbside collected dustbin recyclables and residual waste. (Note that this excludes recyclables collected via bring banks and waste and recyclables taken by householders to civic amenity sites.)

42. The amount of used packaging sent to landfill has decreased over the last 10 years. UK companies have contributed £700 million since 1998 to increase recycling of used packaging to nearly 60%. That’s 5.5 million tonnes, 1 million tonnes of which came from households.

Optimal Packaging standards

43. INCPEN is opposed to the introduction of optimal packaging standards because it believes that there would need to be thousands of standards to match each particular set of circumstances for each product in each supply chain.

44. For example, a major drinks manufacturer introduced a lighter weight glass bottle for a product that was sold in all parts of the UK. It was suitable for use on the mainland but too high a percentage of bottles were broken when transported across the Irish Sea. So a standard that specified the lightweight bottle would produce more waste from lost product. Only the product manufacturer has sufficient knowledge of all the stresses and strains that will be imposed on the packaging to be able to choose an optimum pack.

45. Standards may also discourage companies from trying to improve further and may therefore restrict innovation.

46. As well as protecting the product, choice of packaging depends on a huge range of other factors, including speed of filling/packing line, height of stacking in a warehouse, temperature and consumers’ needs and preferences. Packaging also performs other less obvious functions such as helping prevent shoplifting.

47. Loss of goods by shoplifting cost the UK retail sector £2 billion last year. Every individual pays an average of £90 a year in increased prices because of shoplifting. Without measures by packaging manufacturers to deter shoplifting, that sum might be much higher.

Courtauld Commitment

48. INCPEN supports the waste minimisation objectives of WRAP’s Courtauld Commitments and sees no reason why they should not apply also to non-food categories. However, minimising waste is not enough.

49. INCPEN members have committed to adopting cradle-to-cradle thinking in developing packaging and product supply chains that make a positive contribution to social, environmental and economic development.

50. This means design that considers the entire lifecycle of packaging in the context of the product and the supply chain with the aim of optimising materials and energy use, minimising waste of product and used packaging, and maximising recovery of value from waste—as energy, materials or compost.
51. This broader approach ensures that waste is not reduced at the expense of causing other environmental problems, such as increasing emission of climate change gases or water use. We currently have the knowledge and ability to manage waste safely. We do not know if we can control or manage the environmental effects of global climate change. We should therefore err on the side of caution and make reduction of climate change emissions the top priority.

Industry Council for Packaging & the Environment (INCPEN)

September 2007

Memorandum submitted by the Waste Recycling Group Ltd/FCC (Waste 03)

1. INTRODUCTION

1.2 FCC (Fomento de Construcciones y Contratas) is a leading international construction and services company with operations in Europe, South America and the United States. With annual sales of €9.4 billion in 2006 and 92,000 employees, the group brings a wealth of expertise to the UK market.

1.3 FCC, operating in the UK through its wholly owned subsidiaries Waste Recycling Group Ltd and Focsa Services (UK) Ltd, offers longstanding technical and management expertise, a strong operational infrastructure and an innovative and service oriented culture to help customers develop sustainable approaches to resource management. Through its purchase of Waste Recycling Group in 2006, FCC now has a strong investment platform in the UK.

1.4 The FCC Group has been working with municipal customers for over 100 years. Internationally, it has a strong track record in large scale infrastructure projects. In the UK, it has a growing portfolio of Private Finance Initiative (PFI), and Public Private Partnership (PPP) contracts, including major infrastructure and collection contracts.

2. THE WASTE STRATEGY FOR ENGLAND

2.1 In our view the Waste Strategy for England is now a broadly helpful document in mapping out the route to achieve the short to medium term objectives that are currently being applied by legislation emerging from the European Union and, in particular, the Landfill Directive. While there are still some deficiencies in the strategy—mainly around funding for the necessary waste management infrastructure and the pace of development required—these we feel are recognised by Government and should not stop the targets being met.

2.2 However, this strategy is all about meeting targets and society must accept that in doing so there may be a cost associated with it. For example, we believe there will be a real risk of short-term redundancy being built into the decisions on certain technologies and there will be a financial cost to this. This is inevitable when the agenda is driven by the need to meet short timescales and this should be recognised.

2.3 Therefore, we have to ask the question whether the strategy addresses the long term management of resources and materials flows, energy and carbon at a European level. We believe it does not (it is not its intention) and much more now has to be done.

2.4 The Government should now be looking beyond meeting statutory waste targets and should be initiating a public debate about addressing longer term sustainability needs. We are, in fact, encouraged that Defra’s Neil Thornton has been given the brief for Sustainable Consumption and Production (SCP), which recognises that waste is just one part of understanding society’s full impact on the planet.

2.5 Thus far the public debate has been dominated by the simple imprecation that recycling is good, landfill is bad. The Government has been successful in encouraging a wider acceptance of this simplistic message, which we accept has been necessary to change public attitudes quickly. However, as the strategy begins to deliver, the weaknesses of this crude message are beginning to show.

2.6 For the UK in particular, the main target of a waste prevention and recycling strategy should be to reduce the volume of untreated waste that goes to landfill and divert it to recognised waste treatment facilities for recycling and/ or energy recovery. Existing end-of-life legislation should encourage the development of all recovery options by setting indicative targets for waste streams and material-specific recovery rates. Such an approach would be consistent with the EU’s Thematic Strategy on the Sustainable Use of Natural Resources, since waste should be considered as a significant element of Europe’s energy and material resources.

2.7 For materials such as glass and ferrous metals, mechanical recycling is the only possible recovery option. While a material-specific target might be meaningful for some materials of this group, for others, such as glass, an overall material target is not appropriate due to the fact that container glass and flat glass, for example, are separate products serving different markets, with completely different material requirements. This means that target setting could encourage recycling in areas that have no economic or viable market.
2.8 Organic materials such as paper, wood and textiles offer, in principle, the opportunity for two recovery options, namely recycling and energy recovery. Paper, for example, which is readily available in a homogeneous form and for which sustainable and sufficiently large recycling markets exist, overall recycling targets may be useful.

2.9 Materials such as plastics, however, are another matter. PlasticsEurope says\(^1\) that plastics offer a great diversity of incompatible product types and numerous applications in complex products, and they are found in a multitude of waste streams: “Separate collection, or separation for recycling, is often not justified from an eco-efficient point of view.”

2.10 PlasticsEurope goes on to say that when the whole life-cycle of a product is taken into consideration, recycling targets can even be detrimental to the overall environmental impact. If a car manufacturer replaces a plastic part with a heavier alternative in order to achieve a higher specific recycling target, then this will be at the expense of fuel consumption and associated climate change, due to higher weight during the use-phase. It is estimated, that plastics as lightweight materials in cars reduce CO\(_2\) emissions by more than 30 million tons per year.

2.11 PlasticsEurope, therefore, see the recovery of energy from plastics waste as an important option for the management of the resource locked up in the material. In 2005 29% (ie 6.4 million tonnes) of post consumer plastics waste was recovered as energy in the EU25 plus Norway and Switzerland.

2.12 It is the balancing of these complex issues concerning resource flows that go beyond the boundaries and remit of the current Waste Strategy for England.

3. BEYOND WASTE MANAGEMENT

3.1 The UK’s “catching up”, in terms of meeting recycling targets, is a transitional period. The EU identifies Sustainable Consumption and Production (SCP) as one of the key challenges to be addressed in the context of its long-standing commitment to meet the overall challenges of sustainable development. A raft of EU policies now provide the building blocks for this strategy, including its Thematic Strategy on Waste Prevention and Recycling.

3.2 The history of UK legislation affecting waste management over the past 15 years shows that this has been driven from the EU. The UK must recognise this and engage in the next round of EU policy setting for sustainable development—something that is bound to change our environmental legislative landscape over the next 25 years.

3.3 The next step for the UK is to examine the role of whole life-cycle thinking for products and material streams, so that we can better judge the environmental impact (including that of carbon). By increasing understanding we can improve the decisions and choices we make for the management of, and final treatment of, waste streams.

3.4 A clearly stated goal of the EU is to decouple resource use from economic growth and, at the same time, decouple environmental impact from resource use. The Government should develop a “resource map” for the UK that tracks the flow of both natural and recycled resources. This work would then link naturally, in our opinion, with the EU’s strategic panorama for sustainable development across Europe and beyond.

3.5 Ultimately, the Government should position itself to set and drive the European resource management agenda and through which it can take the lead in developing the systems, processes and technologies that would encourage positive economic development in the UK.

Waste Recycling Group Ltd/FCC

September 2007

Memorandum submitted by Paul Whittlesea (Waste 04)

I have a short contribution to the debate. I am a policy officer in the Department for Communities & Local Government, but I’m on paternity leave, so writing in a personal capacity but with some knowledge of local government policy developments.

I have recently become a father again and having attended a refresher birthing course at St Thomas’s hospital I was struck that while the information table in the room and leaflet carousel had a variety of leaflets from Lambeth, Southwark and Lewisham councils on things like breastfeeding and domestic violence it had nothing to highlight alternatives to disposable nappies. This is a case of councils definitely missing a trick. I am aware of the rather unhelpful report from the Environment Agency a couple of years ago which indicated that they may not be as environmentally friendly as disposable nappies, but that was presuming that people would wash them at 95 degrees—totally unnecessary in our experience—60 degrees is fine for the “Fuzzibunz” nappies we used.

\(^1\) PlasticsEurope’s comments on material specific recycling targets as proposed in the Communication Towards a Thematic Strategy on the Prevention and Recycling of Waste (COM (2003) 301). www.apme.org
It would be good to think that councils and PCTs & NHS trusts will start to think a bit more creatively on reducing things like nappy waste—perhaps under the duty to agree targets in Local Area Agreements being set in statute in the Local Government and Public Involvement in Health Bill. If tomorrow’s Spending Review retains “reward grant” for exceeding targets in LAAs, it may be worth highlighting in your report that different local players could think more creatively in sharing targets on reducing (nappy) waste and benefit financially as a result.

Paul Whittlesea
October 2007

Memorandum submitted by the Salvation Army Trading Co Ltd (SATCoL) (Waste 05)

EXECUTIVE SUMMARY

1. Depending on the collection receptacle second hand clothes may be classified either as waste or a donation. This has nothing to do with Article 1(a) of the Waste Framework Directive which provides that: “waste” is “ . . . any substance or object . . . which the holder discards or intends or is required to discard.”

2. It has been conclusively reported that the re-use of clothing in CO2 terms is more beneficial than recycling. Since moving to “sorting original clothing abroad” significant improvements to the environmental, social and economic objectives have been observed.

3. The potential consequences of the inappropriate application of the current definition of waste could be the cessation of textile collections in the UK unless significant subsidies were to be made to the industry.

4. We would ask that genuine “original” charitable donations of clothing collected from recycling banks or door to door bag collections are not classified as waste. The arguments and statistics given clearly provide the evidence for this.

5. SATCoL’s requests for good quality wearable clothes are identical on bags and banks.

6. The public believe they are donating useful clothes to a “good” cause not discarding waste.

7. Our processing regime removes “contras” which are not clothing.

8. Exporting “original” clothing prior to sorting:
   (a) significantly benefits the environment
   (b) achieves social objectives
   (c) realises economic intentions

9. Moving to this more equitable approach will encourage a greater diversion of clothing from landfill.

INTRODUCTION

10. In HM Treasury Sustainable Development Action Plan we read:—“action to protect the environment must take account of wider economic and social objectives.” Rick Haythornthwaite (chair of the Better Regulation Commission) wrote in the Guardian in July this year:—“We all believe that recycling is good for the environment, so it seems obvious that making use of waste rather than just getting rid of it should be encouraged . . .. Yet it is often far from easy to do so because of regulatory controls. A balance is needed between protective controls and over regulation that may inhibit any new ideas and the progress of re-use/recycle.”

11. It is from these stand points as well as the need to maintain a profitable enterprise, which conforms to but is not restricted by regulation that we make this submission.

12. This submission only concerns the classification of waste so far as textiles and clothing is concerned.

13. Confusion is widespread at present. According to information received from the Environment Agency clothing placed in a recycling bank is waste, yet that placed in a plastic bag on the doorstep is considered a donation!

CONSIDER THIS SCENARIO

14. A member of the public fills a bin liner with clothes. Their wish is that it will be put to use helping others. Within the bag there is an heterogeneous mix of garments—some excellent quality, some less so—however, the householder rightly believes that the industry experts will use all of them to the best of their ability. The bag is taken to a Salvation Army charity shop if it is a donation. Unfortunately for the donor the shop is overflowing with contributions and has no more storage room. The shop staff, therefore, direct

the benefactor to a Salvation Army clothing bank about 100 yards away. During that short journey the
clothes mysteriously transform into waste. Nothing has changed. The donor’s intentions remain the same;
the only difference is in the receiving receptacle—a recycling bank rather than a shop.

15. Interestingly the requests from The Salvation Army charity shops and on the plastic bags and clothing
banks that we use are identical:—“Please provide good quality men’s, ladies and children’s clothing
including underwear & accessories.”

16. This is the first area of confusion.

**CO₂e BENEFITS**

17. Referring to the Salvation Army Trading Co Ltd, NIRI, Oakdene Hollins Ltd report entitled
we find that so far as CO₂ is concerned that *reuse* is of greater benefit than *recycling*.

![Figure 1: CO₂e Benefits of Closed Loop Recycling / Reuse compared to Landfill Disposal](image)

18. This, then, leads to the second area of confusion.

19. Which is better for the environment—to sort in the UK or in the developing world where more items
are reused?

**SORTING RATIONALE**

20. For many years second hand clothing has been exported to “developing countries”. When this unique
humanitarian trade started, environmental issues had not even been thought about let alone discussed. We,
in the UK, collected the clothes—often the residue from charity shops after our own citizens had bought
what they wanted—and then sorted them before sending them overseas. In those days most of the exports
got to the African continent, and naturally, due to their climate, they only needed the “light” weight items.
The “heavy” garments were then sent to the flocking and shoddy processors (recyclers) in the UK. Some
were also turned into wiper cloths for British industry; indeed The Salvation Army manufactured their own
brand—Wipeouts!

21. At the end of the 1990’s the statistics for a typical sort were 63% re-usable, 30% sent for recycling,
and about 7% sent to landfill—mainly coat hangers, plastic bags, single shoes and so on.⁴

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⁴ *Ibid.*—page 34.
Times and Fashions have changed!

22. The east and the west are developing free trade. The quality of clothes is decreasing. The manufacturing base has moved eastwards. New markets with differing needs are opening. The environment, and it’s protection, is of major concern.

23. As a responsible company we evaluated the emerging conditions. We noted that the “eastern” bloc needed winter as well as summer garments. New jobs needed to be created in these embryonic nations. Due mainly to the decline in UK plc manufacturing base recycling of the un-wearable clothes, in the UK, was in rapid decline.

Table 1: Breakdown of the UK recycled textile market

<table>
<thead>
<tr>
<th>Application</th>
<th>Volume (Tonnes/yr)</th>
<th>Market Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mattress/Upholstery</td>
<td>41,000</td>
<td>66</td>
</tr>
<tr>
<td>Carpet Underlay</td>
<td>6,800</td>
<td>11</td>
</tr>
<tr>
<td>Automotive</td>
<td>5,400</td>
<td>8.7</td>
</tr>
<tr>
<td>Other</td>
<td>8,800</td>
<td>14.3</td>
</tr>
<tr>
<td>Total</td>
<td>62,000</td>
<td>100</td>
</tr>
</tbody>
</table>

A solution was found!

24. Our procedures would be modified as follows:

25. Firstly, so far as we are able, we ensure that all humanitarian needs for clothes both at home and abroad are satisfied. Happily, we receive much more than we can use in this way and so after supplying our charity shops the remainder is transported to our central transfer facility in Kettering. Here, each donation is processed to remove bric-a-brac, books, & any waste or soiled items; the rest of the garments are then re-packaged and loaded onto trailers for transportation by sea and road to new markets to begin their second life of clothing people. The funds raised are then used to help finance the work of The Salvation Army in the UK.

Table 2: Initial Processing of Clothing Donations to The Salvation Army prior to Export

<table>
<thead>
<tr>
<th>Donations collected</th>
<th>July 2007 Kgs</th>
<th>August 2007 Kgs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing</td>
<td>2,541,990</td>
<td>3,010,620</td>
</tr>
<tr>
<td>Books</td>
<td>45,290</td>
<td>56,050</td>
</tr>
<tr>
<td>Total Collected</td>
<td>2,587,280</td>
<td>3,066,670</td>
</tr>
<tr>
<td>Contras—recycled in UK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metals</td>
<td>970</td>
<td>1,329</td>
</tr>
<tr>
<td>Glass</td>
<td>50</td>
<td>51</td>
</tr>
<tr>
<td>Pallets</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Bric-a-brac</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>WEEE</td>
<td>510</td>
<td>1,120</td>
</tr>
<tr>
<td>Total Contras Recycled</td>
<td>8,030</td>
<td>9,000</td>
</tr>
<tr>
<td>Discards (inc soiled clothes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unusable</td>
<td>63,290</td>
<td>49,400</td>
</tr>
<tr>
<td>Total available for Export</td>
<td>2,515,960</td>
<td>3,008,270</td>
</tr>
</tbody>
</table>

The results!

26. The “sort” statistics have improved significantly; today in the Ukraine (one of our main export markets) 83% is reused as clothing, 14% turned into wipers and only 3% is deemed unusable.7

27. Although this activity occurs abroad the benefits to the global environment are legion.

28. Jobs, too, have in total increased—many thousands are now employed processing the clothes in their own countries and of course, here in the UK, our collection work force has expanded to cope with the extra clothing placed in our clothing banks and collection bags.

29. Interestingly, the improved efficiencies this has brought to our organisation have helped reduce our overheads and thus contribute even more funds to be used by The Salvation Army for its social work in the UK.

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5 Ibid.—page 85.
6 Internal records.
7 Personal communication.
30. This satisfies all 3 objectives defined in the HM Treasury Sustainable Development Action Plan 2007.

Figure 2: Fate of Donated Clothing in 3 different countries

![Figure 2: Fate of Donated Clothing in 3 different countries](image)

LINE OF REASONING

31. It is our contention that as an organisation we are acting in the true spirit of sustainable development. In all situations unless every single item is examined—and this is very subjective, what is wearable to one person may not be to another—it is impossible to ensure that they are all of wearable quality. However, a balance needs to be struck between what is economically viable, the effects on the environment, and the needs of people. We believe that our approach provides, in today’s “climate”, the most realistic and sustainable methodology to ensure that this balance is obtained and maintained.

POTENTIAL ADVERSE CONSEQUENCES

32. The consequences of classifying collected second hand clothing as waste rather than donations could be catastrophic to UK plc as well as to The Salvation Army.

(a) More clothing will be landfilled—c.f. the sorting statistics of the late 1990’s to those of the Ukraine in 2006—Figure 2 above.

(b) Sorting in the UK will increase the processing costs at least x2 thus:
   i. significantly adversely effecting profitability and possibly leading to employee “lay offs” or
   ii. requiring significant government subsidies

(c) Deprive the “developing nations” of large quantities of wearable/usable items. What to us is unwearable is still of use to someone who has nothing.

PROPOSAL

33. Second hand clothing collected and processed in the manner described should not be classified as waste. The public believe that they are making a useful donation to our organisation to be used to help others less fortunate than ourselves. Treating such items as waste is an incongruity.

34. We would propose that genuine original charitable donations of clothing are not classified as waste given the arguments and the “sort” statistics provided in this submission.

Salvation Army Trading Co Ltd (SATCoL)

October 2007

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INTRODUCTION

1. Sea & Water was set up in 2003 to provide a representative voice for the inland waterways, short sea and coastal shipping industry, and to promote water freight as a viable alternative to the movement of freight on the UK’s roads. Sea & Water provides information to its members and supporters, communicates the case for modal shift to other stakeholders, highlighting its benefits to the environment, economy and society, and addresses the barriers that prevent the greater take up of water.

2. Sea & Water is funded by a grant from the Department for Transport and annual subscriptions and sponsorship from its supporters, who are mainly drawn from the water freight industry in the UK.

3. Amongst the benefits of inland waterways and short sea shipping is that by comparison to road transport it is considerably less carbon intensive. Domestic water transport emits 80% less carbon dioxide per tonne kilometre than road, and also 35% less nitrogen oxide. Water also relieves congestion: a single 300 tonne barge takes up to fifteen lorries off the road.

4. These environmental benefits are of course recognised by Government—as is, for example, demonstrated by its support for Sea & Water. However, we are concerned by how often transport issues, and particularly the benefits of water freight, are not considered by Government departments other than the DfT when formulating policy. We strongly urge Defra to put that right in this case, and include concerns about freight transportation in the Waste Strategy 2007.

5. We are therefore delighted to submit evidence to the Environment, Food and Rural Affairs Select Committee. The focus of our evidence is Question 7 of the Committee’s terms of reference, relating to the potential for the waste strategy to contribute to reducing the UK’s contribution to climate change.

6. We would be very happy to amplify any of the points we make here either in a supplementary memorandum or in oral evidence to the Committee.

THE WASTE STRATEGY 2007: NOT LIVING UP TO ITS POTENTIAL

7. The Waste Strategy aims not only to address the question of whether waste is recycled or brought to landfill, but also the broader issue of how to alter patterns of production and consumption. One key “proposal for action” is to “target action on materials, products and sectors with the greatest scope for improving environmental outcomes”.

8. To this end, the Strategy recommends the following measures:
   — Retailers will have to source and market products that are less wasteful;
   — Consumers should be given more opportunity to purchase products and services that generate less waste and reduce environmental impacts.

9. However, another way of intervening in the product-consumption-waste cycle is overlooked: freight transport. Sea & Water strongly believes that producers, retailers and consumers should devote more attention to the carbon emissions resulting from transporting products in the first place. However, in this submission we focus on the environmental impact of transporting waste to recycling plants or to landfill.

10. The majority of waste in the UK is transported to landfill or to recycling facilities by lorry, which is the most polluting mode of freight transportation. For example, according to a Report by the Mayor of London (2003), approximately 2.7 million tonnes of waste were transported out of London in 2001–02. Of this:
    — 27% was transported by rail;
    — 27% was transported by barge on the Thames;
    — The remainder was moved by road.

11. In paragraph 3 of this evidence we have spelt out the environmental benefits of water freight when compared to road transport. After all it is entirely possible that waste transported by barge to landfill will emit less carbon over the whole cycle than waste taken by lorry to a recycling facility. Therefore, it is vitally important that the whole impact on greenhouse gas emissions of dealing with each item of waste is considered, and thus that waste transport is included in Strategy papers such as this one.

WASTE STRATEGY 2007: CONCLUSIONS AND RECOMMENDATIONS

12. Sea & Water does not call for subsidies for the water freight sector. However, given the goals set for in the Waste Strategy 2007, to make waste management environmentally friendly and sustainable, we believe that Government must ensure that less carbon intensive transport modes for waste, such as water freight, are encouraged.
13. The Strategy says that, to help UK climate change goals to be met, the Government will intervene if voluntary arrangements are judged insufficient to reduce waste and environmental damage. We believe that there is a case for intervention to encourage the transport of waste by the most environmentally sustainable mode available.

14. Government could, for example, provide further support for investment in infrastructure to make water freight transportation a more viable and attractive option. It could also promote short sea shipping as part of the proposed campaigns for “awareness and action on reducing waste”.

15. And if, as indicated in the Strategy, retailers will have to source and market products that are less wasteful, they should be encouraged to source and market products that are transported from production points to retail outlets and then on to waste management and disposal facilities using modes of transportation that are more sustainable and environmentally-friendly, such as water.

17. Furthermore, if consumers are to have the opportunity to purchase products that generate less waste and reduce environmental impacts, then they should be given information about the transport mode on which their products have reached the store, and by which they will go to recycling or to disposal. One method of providing consumers with such information could be through systems of environmental labelling.

Sea & Water

October 2007

Memorandum submitted by the Association of Charity Shops (Waste 07)

EXECUTIVE SUMMARY

Introduction

1. The Association of Charity Shops is a member organisation which represents, supports and acts for charities which operate charity shops. In 2007, the Association has around 270 member charities, ranging from the very largest national charities to local hospice charities. Together, they operate over 6,700 charity shops across the UK. In 2007, charity shops will raise more than £110 million for vital charitable causes. Over 91% of charity shops’ income derives from the sale of donated, second-hand (ie reused) goods.

2. Charity shops play a key role in waste minimisation—over 250,000 tonnes of textiles and other goods are reused or recycled through charity shops each year. Goods sold through shops or passed on for reuse elsewhere do not enter the waste stream. Given this role, and the wide geographical coverage of charity shops, the sector plays a significant but often unrecognised role in sustainable waste management and promotion of waste reduction.

Key issues

3. On the definition of waste, we strongly believe there is a fundamental flaw in the Waste Framework Directive and, to a lesser extent, subsequent UK policy, in that they effectively exclude the reuse of non-waste as a component of any waste reduction strategy. The charity shop sector in the UK has demonstrated over many years that this is an effective means to stop waste arising. The Directive, on the other hand, only recognises reuse in terms of the reuse of waste.

4. On proposals for financial incentives to recycle, as a key player in waste reduction, the sector welcomes measures to further reduce waste. However, the Government’s proposals are not workable, may prove to be counterproductive and may damage the charity shop sector. In particular, we believe these proposals will lead to an increase in flytipping, with direct effects on charity shops. Charity shops are already used by some as a convenient “dumping ground” for their waste, under the guise of “donations”. This will merely increase if there is a financial incentive to reduce waste put out for collection.

5. On approaches to waste minimisation, we believe the pan-European approach in the Directive does not recognise the value of reuse of goods (as opposed to waste) in preventing waste, and that the aspiration of creating a “recycling society” is short-sighted. The UK has the resource available to take the lead in promoting a culture of reuse, through the charity shop network.

6. There are over 7,000 charity shops in the UK, on virtually every High Street. The UK is unique in having such a network. Staff and volunteers in charity shops have unparalleled expertise in promoting reuse and in separating waste for recycling. The role of charity shops in waste reduction is often unrecognised, particularly by both central and local Government.
MEMORANDUM BY THE ASSOCIATION OF CHARITY SHOPS

Introduction

7. The Association of Charity Shops welcomes this opportunity to contribute to the debate about the waste strategy for England. The Association of Charity Shops is a member organisation which represents, supports and acts for charities which operate charity shops. In 2007, the Association has around 270 member charities, ranging from the very largest national charities to local hospice charities. Together, they operate over 6,700 charity shops across the UK. In 2007, charity shops will raise more than £110 million for vital charitable causes. Over 91% of charity shops’ income derives from the sale of donated, second-hand (i.e., reused) goods.

8. In addition to raising funds, charity shops offer key learning and development opportunities through volunteering to many who might otherwise remain socially excluded. Charity shops are supported by over 120,000 volunteers nationwide.

9. Charity shops play a key role in waste minimisation—over 250,000 tonnes of textiles and other goods are reused or recycled through charity shops each year. Goods sold through shops or passed on for reuse elsewhere do not enter the waste stream. Given this role, and the wide geographical coverage of charity shops—on more or less every High Street, and easily accessible by the overwhelming bulk of the population—the sector plays a significant but often unrecognised role in sustainable waste management and promotion of waste reduction.

10. The Association broadly welcomed the Strategy’s re-enforcement of the widely-accepted “waste hierarchy” (below), and the commitment that “most products should be re-used or their materials recycled.” However, we were very disappointed that the reuse of goods which have not become waste seems, in fact, to have an almost negligible role in the Government’s proposals. This omission—which is also seen on the wider EU stage, in the Waste Framework Directive and CEC’s Thematic Strategy for the Prevention and Recycling of Waste—represents, in our view, a missed opportunity to reduce waste arisings in the first place.

<table>
<thead>
<tr>
<th>Waste prevention</th>
<th>Re-use</th>
<th>Recycle/compost</th>
<th>Energy recovery</th>
<th>Disposal</th>
</tr>
</thead>
</table>

Consideration

11. There are three key areas in the Committee’s terms of reference to which we would like to contribute: the definition of waste, proposals for financial incentives to recycle and approaches to waste minimisation.

Definition of waste

12. Waste is defined as “any substance or object . . . which the holder discards or intends or is required to discard.” This definition, and the types of substances covered by the definition, are very wide indeed, and have been interpreted as such by the European Court of Justice. The ECJ has concluded that this definition does not exclude an intention to immediately reuse a good.

13. In its last correspondence with the Association, the Environment Agency for England & Wales confirmed that it considers that donations to charity shops are not waste.

14. We strongly believe that the focus on waste is so pervasive in the Directive that it can only consider reuse in terms of the reuse of waste. This effectively excludes the reuse of non-waste as a component of any waste reduction strategy. The principal debate about waste, therefore, becomes what to do with it, and the focus is recycling.

10 In, for example, Zanetti et al., joined cases C-206&7/88 & C-359/88.
15. We—of course—welcome measures to reduce waste, and recycling has an important role in this. However, an overriding focus on creating what the Commission describes as “a recycling society” will not, in our view, address key issues of preventing waste and avoiding additional environmental costs. Recycling does not provide incentives to reduce waste arising, and many recycling processes are costly and resource intensive (to the extent that it is widely accepted that—in the waste hierarchy—there may be circumstances where energy recovery is preferable to recycling). Reuse of goods through charity shops, on the other hand, does prevent waste being created in the first place, does not involve significant “recovery” operations, and provides the opportunity and incentive for consumers to reduce demands on raw materials through their purchasing decisions. Re-use of clothing saves 29kg CO2e per kg of clothing compared to recycling and 33kg CO2e compared to disposal.

16. Reuse of goods which have not become waste, such as through charity shops, sits right at the top of the waste hierarchy, straddling “prevention” and “reuse”. As such, it is—by definition—to be preferred to reuse of waste and to recycling as a waste reduction tool. We believe that the absolute focus on waste in the Directive means that opportunities have been missed to promote a culture of reuse of goods at the European level, and are concerned that this opportunity should not be missed at national level.

Incentives to recycle

17. The Association made a response to DEFRA’s consultation document Incentives for recycling by households earlier this year. Given charity shops’ role in promoting ethical and environmentally sound shopping, we would welcome workable and complementary measures to address waste issues in the UK. However, we had, and still have, significant concerns about the unintended consequences of the Government’s proposals. Firstly, we are concerned that—if there is a perception that “incentives” are in fact charges for waste services—there will be public and political pressure for additional charges for other waste streams (such as for chargeable household waste). Given that charity shops already pay reasonable charges for the collection of their waste, any such increase would be unfair and counterproductive, given the vital role shops play in promoting waste reduction, reuse and recycling, not to mention damaging to shops’ principal purpose, which is to raise vital funds.

18. Secondly, there is no incentive in the proposal for householders to increase recycling—rather, the incentive is to reduce what is put out for collection. We are concerned that this might be achieved by displacement of waste, rather than by efforts to reduce it. The Select Committee on Communities and Local Government’s report on Refuse Collection noted that other countries with similar incentive schemes experienced periods of increased flytipping, albeit sometimes on a short term basis. However, no other nation has the same network of charity shops that the UK has (as the Strategy itself notes on page 96), and therefore the potential for flytipping under the guise of “donating” to a charity shop. This “flytipping by stealth” already exists, and might be exacerbated by a scheme which introduces a financial incentive to displace waste. The Jill Dando Institute for Crime Science noted that three times as many people had considered flytipping as had actually done so. And our members already suffer from “dumping” of unsaleable items outside their premises despite clearly stated messages and posters that donations should only be made during shop opening hours.

19. Any increase in this flytipping will impose costs on shops having to sort, arrange for and pay for this waste to be collected. Flytipping by stealth may also harm public perceptions of shops, because of potential waste “mountains” accumulating outside shops. At the same time, some local authorities are already reluctant to meet their duty of care and participate in clearing up this waste, and dealing with an increase in this waste may further strain shops’ relationships with their Waste Collection Authorities.

20. We believe the Government’s proposals, as drafted, will—at least in part—create an incentive to displace, rather than reduce or recycle, waste and that charity shops will be a focus for an increase in “flytipping by stealth”.

Approaches to waste minimisation

21. As noted above, we believe effective waste prevention measures must include the promotion of the reuse of goods which have not become waste.

22. There are over 7,000 charity shops in the UK, and the Association’s members operate over 6,700 of these. It is the only sector able to truly claim to have a “shop on every High Street”. More than 120,000 volunteers and 10,000 paid staff in charity shops have unparalleled experience and expertise in promoting reuse of goods and materials. This is a huge sector—in terms of numbers of volunteers, the sector is larger than the entire social economy network of reusers and recyclers throughout the rest of Europe. We believe the contribution shops make to reuse should be recognised more widely and encouraged as a key plank of any waste reduction strategy.

23. Encouraging reuse via charity shops has a range of advantages and benefits:

- There are no costs to residents
- Donated goods will be reused through shop sales, or—if at all possible—passed to responsible recyclers
- There is key added value to charities from the sale of donations
- The carbon footprint of reuse through charity shops is negligible
- Charity shops are conveniently located on most High Streets
- Some charities carry out planned house to house collections, and all will be happy to arrange to collect
- Donations passed on for recycling could count towards LA recycling targets
- Of donations made to charity shops, very little ever ends up in the municipal waste stream

24. We firmly believe that reuse of goods and materials that have not become waste should be seen as a key mechanism to minimise waste. The network of charity shops in the UK is well placed to make a significant contribution to this.

CONCLUSION

25. Charity shops exist to raise vital funds, principally through the sale of donated goods. This means they play a major role—on the High Street and accessible to all—in promoting the value of reuse of goods and materials. The Association of Charity Shops, and our members, are keen to continue to provide an environmentally and ethically friendly way of shopping, which raises vital funds for charity. We will be happy to provide further information or clarification.

Association of Charity Shops

October 2007

Memorandum submitted by Professor Chris Coggins (Waste 08)

INTRODUCTION

In reviewing the responses, I hope the Committee will bear in mind the need for ascertaining the robust evidence supported by sound science which should underpin such a waste strategy for England. Too much attention is often given to unsubstantiated media comments and arguments based on out-of-date science and data—especially with reference to the energy from waste debate and thermal treatment of residual waste. All the available scientific evidence points to dramatic reductions in the emissions of dioxins from such plants since 1990—in the UK, elsewhere in Europe and in the USA—and yet there have been proposals in September 2007 for a UK Without Incineration (UKWIN) Network. This network opposes waste-burning plants and these using refuse derived fuels.

Government should take a more proactive role in linking waste and energy strategies, based on robust scientific evidence, with energy from waste playing a role in securing a more diverse and secure energy supply-base at reasonable prices. This also includes taking leadership on planning issues, balancing national priorities and local decision-making.


Q1. How policies proposed by the waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management

1.1 There must be clear policies to allocate waste producer responsibility on both businesses and households, but also on Local Authorities and public bodies/organisations in setting examples of good practice.

1.2 There is a clear need to abandon the two-tier system of Local Authority waste management in England. This creates anomalies in terms of responsibilities for different waste policies (eg kerbside recycling targets for WCAs, LATS targets for WDAs).

1.3 Evidence shows that Unitary Authorities can be more cost effective and deliver efficient and effective public services.

1.4 The alternative would be to make waste management the fourth utility alongside gas, electricity and water and take waste management out Local Authority direct control, and the problems often posed by local elections creating major changes in waste management policies at the local level. Public accountability and
local democratic views can still be retained, as with the example of police authorities. Creating waste utilities could also help in the implementation of separate charging or incentives for waste—apart from where water meters are not installed the other utilities payments are based on the quantity of the resource used, placing use responsibility on individual households.

1.5 Scale of waste facilities is a key issue, and a more robust debate is needed on the comparative advantages and disadvantages of local, regional and national waste management facilities and associated transport implications.

1.6 It is frustrating that in a week in May 2007 when waste and energy policies were published that there was very limited “joined-up thinking” between them. At a national level, why not have a Department of Resources and the Environment, bringing together waste and energy and also covering climate change?

Q2. The role for and implementation of regulations and their enforcement

2.1 Regulations must be fair and proportionate, and where voluntary agreements are deemed appropriate they must be underpinned by such regulations. Without such underpinning, free-riders will always find ways of abusing the system—fly-tipping and “waste displacement” from one managed waste stream to another must be policed and not allowed to cause unnecessary problems.

2.2 Beyond regulations, the courts must apply the most rigorous of penalties.

Q3. The classification of waste

3.1 This has been a well-worn problem for many years. Inconsistencies between UK and EU definitions of Municipal Solid Waste (MSW) have not been dealt adequately by successive governments, leading to confusion, evasion and lack of transparency and accuracy in waste data management.

3.2 The Defra Consultation on MSW definition and LATS over the summer of 2007 simply adds to the confusion.

3.3 Another major issue arose with the Waste Strategy for England 2007 is that the text refers to waste protocols, and in some instances household waste protocols. This is a profound retrograde step in the since early 2006 WRAP, the Environment Agency and Defra have been working to develop Quality Protocols, as to when waste ceases to be waste and can be regarded as a secondary raw material. The Compost Quality Protocol was published in March 2007.

Q4. The proposals for financial incentives to increase household waste prevention and recycling

4.1 The focus should be on transparent charging, with households charged on the amount of residual waste they dispose of, and should be set at realistic rates to reflect increasing costs (investment in infrastructure, increased landfill tax).

Q5. The role of composting

5.1 This question needs to considered alongside Q 8, with anaerobic digestion being an additional option to those discussed here.

5.2 Home composting has many advantages in terms of household behaviour and reducing the amount of biodegradable waste being set out for kerbside collection. If a model can be developed which is robust and transparent (such as the one developed by WRAP), then home composting should play a role in helping Local Authorities meet their LATS targets—subject to such a model being approved by the EU.

5.3 Community composting can be very significant in some local neighbourhoods, being very dependent on keen activists with support from the Local Authority and the Environment Agency.

5.4 With Best Value performance Indicators for composting, many Local Authorities introduced kerbside collections of garden/green waste. Whilst contributing to a composting target, overall tonnages increased thus offsetting some of the gains.

5.5 Traditional windrow composting can now only be used with inputs which do not contain animal by-products, requiring very careful monitoring and control, both with reference to household behaviour and receipt and processing at the composting site.

5.6 For garden/green waste containing animal by-products, the only option is to use in-vessel composting (IVC) systems—with greater capital cost and less practical experience in the UK. In addition to processing household food waste, a number of companies now promote the use of IVC by food handling-processing businesses, ranging from bakeries to restaurants and large retail outlets.

5.7 Collecting food waste has led to considerable media interest in potential problems (smells, flies, rats) where such waste is collected on alternate weeks. WRAP now advises that food waste should be collected weekly.
5.8 With reference to food waste, at least one Local Authority (Hereford and Worcester\textsuperscript{13}) has decided to pursue an alternative option, that of kitchen waste sink digesters or macerators. In the USA c.50\% of household have such systems, whilst the figure in the UK is only 5\%. Household are being offered rebates of £80 to install such systems. UK water companies have come out against their introduction, quoting greater water use, problems with sewer blockages, smells, rodents and impacts on sewage treatment plants (especially screens). The high carbon content could, however, complement the high nitrogen content of sewage sludge.

5.9 Apart from home and community composting, increased quantities of compost or compost-like outputs will require markets. A Quality Protocol for Compost was published in March 2007, but there have still been concerns as to the quality and potential end-uses. It is likely that brownfield sites and regeneration offer more opportunities than agricultural land.

Q6. The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable and return schemes

6.1 To begin with, it is frustrating to see the term “minimisation” used—for fire, crime and health the term “prevention” is used. Minimisation is a woolly term which is difficult to substantiate and quantify.

6.2 For packaging, there are the Essential Requirements Regulations—in existence since but with its powers rarely used, partly due to the intended role of Local Authority Trading Standards Officers. It would have been better if the Environment Agency had responsibility for these Regulations, in addition to their role with producer responsibility and packaging recycling/recovery.

6.3 Lightweighting has long been practised in packaging, and will no doubt continue.

6.4 Two recent case studies announced in September 2007 concerned PET lightweighting, by Coco-Cola Enterprises (500 ml bottle reduced from 26g to 24g, while maintaining its iconic shape) and Easterform Packaging (500 ml bottle reduced weight by 20\% and two-litre bottle by 5\%).

6.5 Other industrial reactions to the packaging debate include shipping wine into the UK in bulk and bottling it here, and switching from glass to plastic bottles.

6.6 Although returnable packaging is used elsewhere in Europe, it would take a major change in behaviour supported by appropriate infrastructure and advertising for such systems to be re-introduced to the UK.

Q7. The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

7.1 The generation of methane from landfill is a very small component impacting on climate change. With the Landfill Directive this will continue to decline, as methane emissions from landfills in the EU have declined dramatically over the last 20 years—quoted to be by 49\% since 1990.

7.2 Whilst very high profile, there is still debate over appropriate methodologies and robust scientific evidence to underpin the calculation of carbon footprints, and how different waste and energy strategies and options impact on climate change—especially in contrast to other impacts from transport, household and industry.

Q8. The promotion of anaerobic digestion for agricultural and food waste

8.1 Linking “agricultural and food waste” is possibly an incorrect link to make, as the generators are subject to very different regulatory and administrative pressures.

8.2 As a waste management option, anaerobic digestion has numerous advantages: ability to process animal by-products, generation of a gas and the production of solid and liquid digestates. The quality of the digestates can vary, and A Quality protocol for solid digestate is due to be published in c. March 2007. The gas can be used to generate electricity, but may need to be cleaned and there limited opportunities for utilising any surplus heat during the process.

Q9. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

9.1 A report funded by Defra *Economies of Scale—Waste Management Optimisation Study by AEA Technology Final Report* was published in April 2007 which supports the (economic) need for large waste management facilities. Modelling was based on 11 million tonnes of residual waste to be managed in 2010, assuming 20% is diverted organic waste and 25% diverted dry recyclables, and capacity refers to individual local authorities. However, the report focuses on economics and limited attention to carbon agenda.

<table>
<thead>
<tr>
<th>Practical Optimal Scale</th>
<th>Local Authority Capacity 2012</th>
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<tr>
<td>(thousand tonnes pa)</td>
<td>(percentage below optimal scale)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy from waste (2007 : 5 open/planned are at this scale or above, with 20 below this scale)</th>
<th>400</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBT/RDF (2007 : 9 open/planned at 200, 20 at 100, 10 at 50)</td>
<td>200</td>
<td>60</td>
</tr>
<tr>
<td>Windrow composting (2007 : 5% open/planned at 50, 20% at 20–39, 75% &lt; 20)</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>MRF (2007 5% open/planned at 100, 35% at 40, 60% &lt; 10)</td>
<td>50</td>
<td>70</td>
</tr>
</tbody>
</table>

9.2 Apart from MBT/RDF, these are traditional waste management infrastructure options. Energy recovery either directly or using RDF could offer small but significant contribution to the diversity and security of UK energy supplies.

9.3 The Government has funded eight New Technology Demonstrator Projects, four are already operational with four due to begin operations in 2008. Full monitoring and evaluation studies will not be completed until 2009, and such new technologies may not be able to play a leading in the UK until well after 2010.

9.4 A report by Juniper Consultancy Limited in September 2007 evaluated a wide range of waste management technologies (300 processes in 25 countries) and concluded that all 35 energy from waste (incineration) processes were rated fully proven\(^{14}\) or proven, just over half of MBT/MHT processes and almost 75% of anaerobic digestion processes.

9.5 In terms of efw (incineration) at October 2007 in the UK, a replacement plant has opened in Sheffield (225,000—Veolia), new operating/under construction are Hampshire (2 x 165,000, 1 x 90,000—Veolia), Allington (500,000—Focsa, was WRG), Lakeside (400,000—Grundon + Viridor).

9.6 Approved/signed include Belvedere (585,000—Cory), Hull (240,000—Viridor). Newhaven (240,000—Veolia), Exeter (60,000—Viridor), Dublin (600,000—Covanta), Perth + Kinross (60,000—Sita), Shropshire (Veolia—90,000).

9.7 Announcements have been made for new plants in Cornwall (240,000—Sita) and Nottinghamshire (180,000—Veolia).

9.8 Commitments have been for made to include efw (incineration) in starggeies for dealing with residual waste by Buckinghamshire (200,000), Dunbar (450,000),include Leeds, Plymouth, Shropshire and Cardiff.

9.9 In August 2007 SEPA announced that modern efw technology will play an important role in managing residual waste and diverting such waste from landfill, effectively giving the “thumbs up” to Scottish councils to look at a new generation of clean, efficient incinerators. This followed an announcement by the Convention of Scottish Local Authorities (COSLA) in August 2007 that “EFW is a safe, tried and tested way to deal with waste that cannot be recycled and is commonly used across Europe”.

\(^{14}\) Fully proven means more than one full commercial reference site that has been operating for at least two years on a particular feedstock at a relevant scale.
9.10 The UK Government is urged to make similar a commitment to efw (incineration), and other technologies, for treating residual waste. All available scientific evidence shows that emissions (including dioxins) have fallen since the early 1990s and such plants offer little threat to human health and the environment. The Health Protection Agency published a definitive Position Statement stating the same in November 2005. This will require leadership and confronting opposition from various environmental groups.

9.11 Also, as many as possible must be combined heat and power technologies, to generate electricity (including increased demands for cooling with climate change forecasts) and also allow surplus heat to be captured. These plants would then meet EU criteria as recovery operations, but issues of facility location to maximise heat recovery and use of local grid networks will need proactive policies, support from planning committees and relevant access to investment. Whilst most large waste facilities are being planned using PFI and long term contracts, Lakeside is the first “merchant” facility taking waste from a number of Local Authorities and Buckinghamshire proposes to access funding via Prudential Borrowing.

9.12 In terms of the UK having the capacity to process materials collected for recycling, there a number of major problems.

9.13 Re-processing capacity has not matched the growth in recycling activity, despite the role of WRAP and a number of regional market development organisations (most operating under the name of ReMade).

9.14 There is an established and expanding global trade in resources (but not wastes). Based on HM Customs and Excise figures, a Parliamentary answer on 12th July 2007 quoted for 2006 8 million tonnes of metal scrap were exported, 4 million tonnes of paper, 441,000 tonnes of plastic and 136,000 tonnes of glass cullet.

9.15 For paper and plastics collected for recycling the following table shows the growth since 1999.

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
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<th>2002</th>
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<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>6,812</td>
<td>13,468</td>
<td>694,355</td>
<td>1.23m</td>
<td>1.99m</td>
<td>2.56m</td>
<td>3.28m</td>
<td>3.95m</td>
</tr>
<tr>
<td>Plastic</td>
<td>48,227</td>
<td>81,293</td>
<td>86,919</td>
<td>109,543</td>
<td>195,888</td>
<td>441,000</td>
<td></td>
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</tr>
</tbody>
</table>


9.16 Exports in 2006 amounted to 50% of UK mill capacity, with China accounting for 24%, and most exports have been at premium prices. Since 1999 six paper/board mills have closed in the UK, eight in 2006, with a combined capacity of 600,000 tonnes per annum. For plastics, 75% of that collected is exported.

9.17 Public Sector Procurement is needed to stimulate demand for recycled paper and also investment in new capacity. SEPA has set a target of at least 50% recycled paper content for public organisations in Scotland, and 100% target for tissue paper.

9.18 At a broader level, the ability of manufacturing industry in the UK to use recycled materials as secondary raw materials has been undermined by the decline in manufacturing capacity.

- manufacturing as percentage of GDP in 1960 was 38%, by 2003 it had fallen to 15%
- manufacturing jobs in 1960 were 9 million, falling by 2006 to 3 million (compared to 5.8 in the public sector)
- off-shoring of manufacturing capacity to countries with lower labour costs
- manufacturing trade balance was always in surplus before 1983, by 2006 it was £60 billion in deficit
- UK exports to China in 2005 were £2.8 billion, whilst imports from China were £16 billion
- for every 10 containers entering the UK, 1 container leaves

Professor Coggins
October 2007

Annex 1

Consultations Papers and Research Reports published in May 2007

Waste, Energy, Biomass, Planning

Focus on targets and less on delivery strategies:

- Goodhart’s law in economics: “As soon as the government attempts to regulate any particular set of financial assets, these become unreliable as indicators of economic trends”
- modified by Strathern and Hoskin: “When a measure becomes a target, it ceases to be a good measure”
- targets should be servants and not masters
— weight-based recycling/composting targets dictate/become policies, and can compromise quality and sustainability : need for audit trails—BVPIs, LATS, Basle Green Waste
— would “valorisation” of “wastes as resources” be better, or “outcomes”
— should the waste reduction target be per household rather than per person ?
— consideration of a greenhouse gas emission PI for Local Authority performance on waste

**Increasing recycling collection rates and maintaining quality:**

— contamination of co-mingled kerbside collected material can be over 10%, hence the emergence of the Campaign for Real Recycling. Greater attention needs to be paid to education and publicity. The issues surrounding AWC need to clarified
— residual waste at MRFs sent to landfill can be more than 20% : can technology improve compared to hand-sorting
— contamination at major re-processors can be high : quoted as an average of 2% at Aylesford Newsprint in Autumn 2006, but can be 14%
— why have “Quality Protocols”, to determine when wastes cease to be wastes, been changed to “waste protocols” and “domestic waste protocols”
— no Quality Protocol for SRF, yet SRF quoted in WIDP leaflet—“Raise awareness amongst industrial intensive users of the merits of Solid Recovered Fuel (SRF) as an energy source”
— implementation of EU By-Product recommendations, and expansion to include other materials (eg pulverised fuel ash)
— reference to food waste collections as “the new frontier”, there is no mention of bioaerosols and potential health impact on households and/or collection operatives
— more waste displacement: household/commercial, fly-tipping

**Concerns over re-processing infrastructure in the UK:**

— manufacturing as a proportion of GDP has fallen from 38% in 1960 to 15% in 2003
— manufacturing jobs have fallen from 9 million in 1960 to 3 million in 2006 (public sector = 5.8 million)
— the manufacturing trade balance had always been in surplus before 1987 : in 2006 the balance was £60 billion in the red
— for every 10 containers entering the UK, 1 container leaves
— quality recyclables are traded globally as resources
— 50% of paper and 75% of plastics collected for recycling are currently exported : some concerns as whether all shipments can be classified as Green Waste under Basle Convention, TFS notification v. confidentiality
— “piggy-backing” of kitchen waste food waste with agricultural anaerobic digestion
— extra paper collection for recycling will have to be exported in the “short to medium future”

**Concerns over delivery of new waste infrastructure:**

— NIMBYism and planning (see later)
— 2,000+ new waste facilities will be needed : 15 million tonnes of new waste processing capacity + capacity to deal with residual waste
— the Environment Agency must be more pragmatic, whilst managing risks to the environment and health through modern regulation
— the cost will be in excess of £10 billion
— timescales : permission, construction, meeting targets
— PFI and long-term contracts or “merchant” facilities ?
— WIDP is concerned with residual waste infrastructure and PFI
— integration with “new-build” : housing, commercial development, eco-towns
— further clarification of the greenfield/brownfield debate
— is the efw threshold at 50 MW too large ?
— national policies are need for smaller waste facilities
— resource and energy recovery parks + reverse-chain logistics
Concerns over particular policies:

— whilst Annex H covers waste and resources research, are policies based on existing robust scientific evidence?
— role of government leadership in using such evidence to promote policies, and counter adverse media coverage
— limited details on delivery of waste prevention
— transparency of methods for charging households for collection of residual waste (see later). . . . who pays for delivery of waste policies, landfill tax escalator, LATS, infraction
— will charging households “. . . drive waste reduction throughout the chain”
— over-emphasis on Anaerobic Digestion + focus on farming AD having spare capacity
— lack of clarity on dealing with residual wastes and balance between small energy from waste plants (no reference to Decentralised Energy and local grid networks) and large CHP plants (better for WID)
— can voluntary producer responsibility policies, voluntary agreements and voluntary codes succeed without safeguards
— failure of essential requirements legislation to minimise packaging
— biggest pressure is on Local Authorities: to introduce incentives, pressure from landfill tax escalator and LATS, siting of new infrastructure
— how to balance national goals, local democracy and business interests
— how can behaviour change be implemented?

Conclusions

— more detailed than anticipated, but:
— an opportunity has been lost to integrate the sustainable management of resources, energy, and the environment, together with planning: carbon, sustainability, quality of life
— referring to “waste” protocols, the “Waste” Strategy Board and the “Waste” Stakeholder Group is a retrograde step in terminology
— can the waste industry deliver: capacity, skills, funding, new entrants
— enhanced roles for the Third Sector and SMEs
— more Consultation Papers: Household Incentives, definition of MSW for LATS, promise to consult on further restrictions on landfilling biodegradables and recyclables

Professor Coggins

Memorandum submitted by Biffa Waste Services Limited (Waste 09)

1. COMPANY BACKGROUND

Biffa Waste Services is one of the largest waste management companies operating in the UK and can justifiably claim to be the most diverse in terms of its spread of interest in industrial/commercial and domestic collection, landfill, liquid waste and specialist hazardous waste management systems, and has a turnover of just under £800 million at a current annualised rate. We have over 150 operating centres throughout the UK and handle 14 million tonnes of material that is treated, landfilled or recycled on behalf of an extensive customer base exceeding 85,000 in the public, commercial and industrial sectors plus collection services to 1.3 million households.

2. POSITIVE STEPS

2.1 The 2007 Strategy is a definite improvement and advance on prior versions insofar as it is now addressing more detailed specifics of policy mechanisms rather than simply being a mere collation of aspirational objectives which lack reference to how those expectations can be delivered on the ground.

2.2 The second major breakthrough is to place the Waste Strategy in the context of the resource efficiency and climate chaos debate. Historically those connections were not being made, and DEFRA are to be congratulated on establishing the waste debate in this far broader canvas, no doubt as a consequence of

15 There still appears confusion over whether charging or incentivising will go forward.
16 The Mayor of London has set a target of 25% for Decentralised Energy in London by 2025.
reflecting on European assessments. In advocating the application of the carbon agenda to waste resources, DEFRA are now establishing a transparent basis of measurement for prioritising policy instruments in a more meaningful way.

2.3 The association of solutions and priorities with different strategies appropriate to different supply chains (as opposed to across the board catchall policies) is a welcome development. We have, for years, advocated a policy framework built on such a basis given the monopsonistic structures of different supply chains. The mass and composition of waste streams is strongly influenced by procurement and design decisions vested with relatively small numbers of major brands in the UK and European economy, many of which are only on the threshold of whole lifecycle thinking for their product base. Such major brands hold the key to a managed and efficient switch toward the so called externality accounting framework once they are given correct medium and long term economic, and regulatory stimuli, a process which has started in the form of Integrated Product Policy (IPP), but is still in its infancy.

2.4 The recognition that there is a shared responsibility between government, supply chains, the traditional waste sector and individual citizens is a welcome development. Whereas previous Strategies were high on aspirations, the most recent is far more explicit on the integrated package of instruments intended to act on these different audiences.

3. Issues for Development

3.1 Whilst DEFRA has been far bolder in enunciating specific policy instruments (regulatory, fiscal, budgetary and other), they are presented much as a pot pourri of collective solutions. It would have been useful to include much more detail at a second level analysis of the phasing and economic implications for different supply chains (in the case of supply side solutions) and inflationary pressures on demand side activities (municipal refuse, the conventional waste industry, recycling sectors, et al). Reluctance to do so is understandable given that this may be regarded as a Treasury prerogative—if that is the case then the Treasury should have been obliged to commit to greater levels of support for the final document in terms of their projections on these impacts. There is a sense that this Strategy is very much a DEFRA/Environment Agency document which, like many of its predecessors, still embodies much editing by Ministerial colleagues in the Treasury, DBERR and Communities & Local Government, in particular.

3.2 A similar temerity in seeking to widen the boundaries maybe detected when considering the boundaries placed on the welcomed inclusion of waste resources in the carbon debate. It is something of a mystery that the document is light on information relating to the operational emergent interplay between waste resource management and the issues around renewable energy, electricity supply deficiencies around 2015, and the probability of compositional changes in the tonnage and nature of agricultural arisings (as a result of probable long term shifts in food and biofuel production practices). These latter inter-relationships are likely to impact significantly in terms of technology and locational decisions for the future generation of end life reprocessing facilities.

Similarly, there is little context of how waste processing technologies and operations might inter-react with the water industry as far as effluent (digestion processes), flood prevention (manufactured soils) and other climate chaos implications are concerned. These omissions seem to reflect no-go boundaries drawn within established “chimneys” of government departments which may not be strictly relevant to the more cross cutting environmental and material flow debate.

3.3 The Strategy is light—if not entirely silent—on the subject of developing an integrated and rational structure of information technology data capture systems relating to the mapping of material flows through the economy from point of entry, through supply chains to point of exit as gaseous, liquid and solid wastes. Much of this data is extant but across a scattered and diverse constituency of providers. DEFRA and the Environment Agency have already embarked on the commissioning of data systems which communicate with each other (in relation to hazardous waste and municipal material flows, for instance). In other areas they most definitely do not (electrical and electronic goods, packaging materials, and disposals to landfill from commercial and industrial sources). This approach seems to typify the regulatory rather than information bias required in moving to 21st century solutions at a time when an holistic approach by government would deliver immense benefits for the quality of policy delivery and evaluation in decades to come.

Allowing the development of an incoherent series of such databases now will frustrate and slow implementation in coming years. For more than a decade we have championed the case for such an integrated data capture approach as an important pre-requisite to sounder environmental policy development, part of which involved expenditure of over £10 million of landfill tax credits into over 60 in-depth studies by trade associations and academic bodies into the concept of material flow accounting. Had these recommendations been adopted, we would not be in the position we are today where the EA find it difficult to track potential frauds on an exception basis acting on sound knowledge and double-entry accounting approaches.

3.4 As a consequence of 3.3 the Strategy makes few references to the mechanics of moving to achieving a transparently priced resource strategy which incorporates agreed externality costs for carbon. Establishing a national accounting data set for material flows is the first step on the road to mapping “carbon equivalent”
flows through the system utilising BSI type standards of lifecycle accounting appropriate to different materials at different points of use. Reaching that position would then enable public and private sector corporations to model their personal impact in relation to the so called carbon economy. Whilst the price of carbon in 2007 is somewhat depreciated as a result of inconsistencies in the European allocational system, those obstacles will be ironed out during development phases II and III of the EU ETS scheme. The paucity of references in the Strategy to these issues is somewhat inexplicable given the 2007 consultation on the proposed extension of the Carbon Commitment Reduction Programme in 2011 to all major energy users in the public and private sectors.

It is also worth noting that DEFRA have commissioned LCA carbon accounting work in the form of the PAS 2050 standard in the expectation that there will need to be a standardised approach to boundary setting for evaluating so called “carbon footprints” in both public and private sectors. Failure to develop such a transparent standard will otherwise lead to the chaos and misrepresentation which has characterised the carbon offset debate and the question mark over the integrity of the different service providers.

4. THE TIMING AND SCALE OF FACILITIES REQUIRED

4.1 It would have been useful for the Strategy to devote a single consolidated chapter to an updated understanding of the range and scale of facilities they perceive to be needed, much along the lines of that contained in Appendix i of “Future Perfect” which we published in 2002–03. The Strategy could have been far more hard hitting on this subject for the benefit of media and Cabinet colleagues in emphasizing that between 1,000 and 3,000 facilities are required for the UK to become compliant with international treaties by 2013. Effectively, this amounts to a construction programme of at least 4 major facilities per week over the next 5 years or up to 12 per week of smaller (and possibly geographically more distributed) facilities. A detailed working through of the implications of this programme in terms of costs, construction schedules, skills and primary material requirements in a consolidated chapter could have been extremely useful in driving the urgency of the end life material message home to planners, architects, the construction and civil engineering sectors.

BiBa Waste Services Limited

October 2007

Memorandum submitted by Friends of the Earth (Waste 10)

Friends of the Earth is:
— the UK’s most influential national environmental campaigning organisation
— the most extensive environmental network in the world, with around 1 million supporters across five continents, and more than 70 national organisations worldwide
— a unique network of campaigning local groups, working in more than 200 communities throughout England, Wales and Northern Ireland
— dependent on individuals for over 90% of its income.

EXECUTIVE SUMMARY

Sending waste to incineration or landfill is a waste of valuable resources and contributes to climate change. In order to tackle climate change we need a strategy that promotes reuse, recycling, and composting of waste and discourages landfill and incineration.

We therefore welcome the Government’s renewed commitment to recycling and composting in the new Waste Strategy for England—particularly the promotion of weekly food waste collections for anaerobic digestion and the proposal to give councils the opportunity to reward those who recycle more.

However Friends of the Earth was very disappointed in the proposed recycling and composting target of 50% by 2020, when the Government’s own analysis has shown that a rate of 60% by 2020 would be much better for the climate.

We consider that the proposals to deal with business waste are too weak, and too focused on voluntary measures. In particular, we believe that a ban on the landfill and incineration of reusable, recyclable and compostable waste would encourage more sustainable waste management within companies.

We welcome the plan to set targets for local authorities to reduce residual waste. However, the waste levels suggested are too high—we can recycle, compost and prevent more than is proposed, as the proposal only assumes 50% recycling and composting and a stabilisation of waste quantity.
Friends of the Earth would like the Government to prevent the amount of total waste produced from rising beyond 2010 by introducing a target for waste prevention. This would require action to cut down on avoidable waste such as excess packaging and wasted food.


RESPONSE TO TERMS OF REFERENCE

1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste. Localisation as opposed to centralisation of waste management.

   1. We would like to make the following key points regarding this examination.
   2. We consider that waste policy should be aiming towards two overarching goals:
      — the phase-out of residual waste, waste that is not reused, recycled or composted.
      — waste prevention
   3. In order to promote waste prevention, we believe that the government should adopt waste prevention targets:
      — Zero growth of all waste by 2010, and by 2008 the Government should identify a waste prevention target for all waste for 2020
      — A reduction target for municipal waste of 1.5% per year
   4. The Government’s own research shows that a higher recycling rate would be more environmentally beneficial. In our view we should be aiming to recycle or compost at least 75% of waste by 2015.
   5. The Government displays a touching faith in voluntary initiatives, which is not backed up by any evidence base. Environmental improvements over the last few decades have been led by improvements in regulation. Yet the strategy makes clear that it is not proposing any new regulation on business. Friends of the Earth believes that this is a mistake, and that regulation and fiscal measures will be the most effective methods of driving improvement in the environmental performance of business.
   6. Additional regulations are required in order to address the current unsustainable situation, including:
      — A phased introduction of ban on landfilling or incineration of recyclable or compostable material
      — Additional producer responsibility legislation, including a move towards use of recyclable and compostable materials

2. The role for and implementation of regulations, and their enforcement.

   7. We would like to see a phased ban on the landfill and incineration of recyclable and compostable materials to be introduced. The Waste Strategy has proposed a future consultation on a ban on landfill of these materials, with no time line. Such a ban was also proposed five years ago in the “Waste not want not” report, yet is still not in place. We view this as an effective tool to maximise recycling and composting (particularly of commercial and industrial waste), though to be effective there should also be a ban on the incineration of such materials.
   8. Friends of the Earth is very disappointed in the proposed municipal waste recycling and composting target of 50% by 2020, when the Government’s own analysis has shown that a rate of 60% by 2020 would be much better for the climate. We therefore believe that council recycling targets should be set at levels that will exceed the Waste Strategy’s 2010 average recycling target of 40%. Cambridgeshire County Council already recycles over half its waste, whilst Bristol has recently passed 37% and Flanders in Belgium recycles nearly three quarters. We believe that the UK should be aiming for 75% recycling by 2015.
   9. We believe that the Government should introduce an incineration tax to discourage the incineration of waste which could be recycled or composted and to ensure maximum recycling (as is done in Flanders).
   10. We also believe that there needs to be a lower level of landfill tax for non-biodegradable waste from mechanical biological treatment (MBT) facilities, which we view as the preferred interim, flexible, residual waste treatment technology, based on a detailed analysis of the climate impacts of different residual waste technologies. This approach makes sense from a climate and a resources point of view. Work carried out for the Treasury has shown that an incineration tax is justified in environmental and social terms.

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   11. The classification of waste is determined at European level in the Waste Framework Directive. In this context, Friends of the Earth has been arguing against proposals to provide a new definition of by-products, and for “end of waste” to be defined through directives or regulations (eg a Biowaste Directive), rather than through the undemocratic “comitology” process.

   12. For more information about Friends of the Earth’s views on the review of the Waste Framework Directive, see our recent briefing: http://www.foe.co.uk/resource/briefings/stopping_the_waste.pdf

4. *The proposals for financial incentives to increase household waste prevention and recycling.*

   13. We support the concept of providing financial incentives for people to minimise the residual waste they generate and we broadly welcome what the government is proposing. We have submitted a response to the Government consultation on this issue, available here: http://www.foe.co.uk/resource/consultation_responses/incentives.pdf

   14. We are doubtful whether the government’s preferred—revenue neutral—system will give councils enough incentive to implement such an approach.

   15. It is likely that councils would be discouraged if they have to pay for the running of the scheme from outside the revenue raised by the scheme. This scheme will only be effective if sufficient councils decide to adopt it, otherwise it will be just a theoretical power.

   16. Such schemes should only be introduced where an effective recycling and composting scheme is in place, and should ensure that poorer families are not disproportionately affected.

   17. We would also suggest that good quality recycling schemes—for example kerbside separation—can be used to boost recycling rates, as they give people confidence that recycling is really taking place. We would like to see more funding for quality recycling schemes (eg kerbside separation) and the development and communication of best practice for recycling schemes, as part of a move to having fewer systems and therefore making it easier to inform the public of their responsibilities. Councils should be rewarded for quality recycling, not just quality, and the Government (or WRAP) should give much clearer best practice guidance to councils.

   18. In addition, it is essential that every effort is made to ensure that all recyclables are recycled under good conditions—scandals regarding recycling being processed in poor conditions in the developing world are not going to improve confidence or participation.

5. *The role of composting.*

   19. We are strongly supportive of Councils introducing separate collection of food waste, with the collected food waste being either anaerobically digested or composted.

   20. We also believe that Councils should promote home composting and offer a collection service of garden waste for composting. It is often best if this garden waste collection service is charged for, in order to prevent excess waste generation and encourage home composting.

6. *The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.*

   21. We welcome the plan to set targets for local authorities to reduce residual waste (the amount which goes to landfill or incineration). However, the waste levels suggested are too high—we can recycle, compost and prevent more than is proposed, as the proposal only assumes 50% recycling and composting and a stabilisation of waste quantity.

   22. We would recommend that the government improves its data gathering on residual waste, as we found that the data available is poor, and does not currently provide a robust basis for decision making and policy development, for example, to enable links to be made with product policy.

   23. There should be more investment in waste minimisation, including setting a target for total waste generation to prevent the amount of total waste produced from rising beyond 2010. This would require the development of policy measures to decrease total waste generation year on year, for example to cut down on avoidable waste such as excess packaging.

   24. In terms of packaging, a second priority should be increasing the recycling targets in the packaging directive, thus ensuring that packaging becomes more recyclable (removing it from residual waste), and helping to support the market for this recycling.
7. The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill.

25. In Friends of the Earth’s view, waste policy is a key component of both climate policy and resource policy—ensuring that the UK is as resource efficient as possible.

26. Maximising waste prevention, recycling and composting will minimise the climate impacts of our waste.

27. Recycling saves energy, reduces raw material extraction and combats climate change. The vast majority of studies have found that recycling our rubbish is better for the environment rather than incinerating or landfilling it.

28. Incineration is not a climate-friendly way to deal with the residual waste left over after recycling and composting. Studies have clearly shown that incineration is not a climate-friendly treatment technology. It is much better to deal with the waste left over using mechanical biological treatment (MBT) to removes any remaining recyclables and removes biological activity of the waste, so that it will not release methane when landfilled. These processes should occur in small, localised treatment plants.19

29. We are very concerned—and surprised—that the government still seems to be promoting incineration (albeit less enthusiastically than in the past), despite its poor performance in climate change terms. Incineration is also extremely expensive and inflexible. For a full analysis of the problems with incineration, see our “Up in Smoke” briefing: http://www.foe.co.uk/resource/media_briefing/up_in_smoke.pdf

8. The promotion of anaerobic digestion for agricultural and food waste.

30. We strongly support the Government encouraging the use of anaerobic digestion to treat agricultural and food waste and we welcome the introduction of separate collections of food waste from households. However, more funding is required for the building of anaerobic digestion plants.

9. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies.

31. Friends of the Earth does not consider incineration (with or without energy recovery) to be a sustainable way to treat residual waste and we do not wish any more facilities to be built. In Friends of the Earth’s view the first priority is to focus on minimising residual waste, through improving prevention, reuse, recycling and composting.

32. As far as recycling is concerned, we believe that source-separation at kerbside is the best option from both an environmental and economic point of view, and we are supporters of the Campaign for Real Recycling. Such systems require less recycling infrastructure as the main processing is bulking up rather than the sorting that would need to occur if recyclables were collected commingled.

33. We would therefore consider that the main infrastructure needs for recycling and composting are anaerobic digesters, composters, and in some cases facilities for bulking up recyclables.

34. We consider that the ever-decreasing quantity of residual waste is most sustainably treated in small-scale MBT plants, with the small quantity of remaining non-recyclable waste after digestion going to landfill. Support should therefore be provided for building more of these facilities.

Michael Warhurst and Becky Slater
Friends of the Earth
October 2007

Appendix

Friends of the Earth’s full response to the Government’s consultation on the English Waste Strategy:
http://www.foe.co.uk/resource/consultation_responses/waste_strategy.pdf

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Memorandum submitted by Biomass Worldwide Ltd (Waste 12)

SUMMARY

1. This submission refers to the classification of waste, [term of reference 3] and its influence on the realisation of the energy potential of the waste stream and the contribution this can make to the UK Climate Change targets, [7] and the encouraging of new reclamation technologies. [9].

2. Generating energy from waste derived fuels could make an important and immediate contribution to the UK’s Carbon reduction targets and should be encouraged. However uncertainties over the interpretation of the definition of waste and the classification of the products of waste reclamation are hindering the development of markets for reclaimed energy products. While progress is being made for some products such as compost, the position regarding fuels remains unclear. The apparent scaling back of Government ambitions for energy recovery cause concern.

INTRODUCTION

3. BWL is a new entrant to the waste processing business. The Company has developed an autoclave technology to process various waste streams to produce a fibrous biomass. This is a clean and sterile energy rich product from which recycle such as glass and metal has been removed. The autoclave technology is operating at a site in Australia using MSW to produce compost. The Company is developing its process in the US to use the biomass to generate energy and is looking to establish this process in Europe.

4. The Institute of Civil Engineers has estimated that Secondary Recovered Fuels [SRF] could deliver 17% of UK electricity. [Report by Oakdene Hollins, 2005.] Being a renewable energy source these fuels would help the UK deliver its carbon reduction targets by displacing fossil fuels. By securing the diversion of bio-waste from land fill they would reduce uncontrolled methane emissions. The International Energy Association have stated: “The benefits of energy recovery from waste fuels are such that any state-of-the-art waste management policy should include energy recovery irrespective of the individual local strategic preference, [eg: composting v. anaerobic digestion].” [IEA Position Paper “MSW and its’ role in sustainability.”]

THE AMBITION FOR BIO-WASTE

5. The Waste Strategy 2007 recognises the importance of SRF and the importance of energy recovery in a balanced energy strategy. It expects that 25% of MSW will be used for energy generation by 2020, a figure unfortunately scaled down with out explanation since 2000. It should also express a similar ambition for Commercial waste to help meet the Strategies stated objective of the increased diversion of Commercial waste from landfill. These two waste streams could make a significant contribution to the UK energy supply as the ICE have stated and would advance the Strategies own objectives. The further advantage of encouraging the recovery of energy from these waste streams is that it can be recovered as electricity, heat, gas, solid or liquid fuel. Potentially it is a very versatile energy source. To fully realise this potential there needs to be a pathway from the waste stream to full reclamation of a fuel product that is free of the “waste” tag.

6. The Strategy fails to commit its self to the elimination of bio-waste from landfill as for example the German Government has done. Bio-waste is a valuable resource with multiple end uses, yet is a hazard in landfill. Even with recovery typically 50% of the methane escapes to the atmosphere. The aim should be for full recovery yet the Strategy refers to “properly managed landfill with methane extraction” [Chapter 5 para. 2]. The implication is that the Strategy accepts that bio-waste will continue to be landfilled.

CLASSIFICATION

7. The use of SRF is handicapped by being classified and regulated as waste. To maximise recovery of value from the waste stream it is important that waste is viewed as a source of raw material as the Strategy recognises and that it is possible for the resulting output to be classified as a fully reclaimed product and free of the label “waste”. A situation should exist whereby the output or product can be regarded in the same way and used under the same regulations as any other similar output or product, where this use causes no more harm to the environment or health than the equivalent non-waste derived product. This is important if waste derived products are to be able to compete fairly with other equivalent products and with out an additional regulatory burden with its associated cost implications. For there to be an adequate market uptake of reclaimed products and materials they have to be able to compete with other similar products.

8. The strategy states that protocols will be developed for different elements of the waste stream so that they can be marketed as fully reclaimed and free of waste control regulations. It does not specifically commit its self to such a protocol for fuels and at present Defra and the EA are reluctant to look at the issues associated with a fully reclaimed SRF. WRAP for example are not developing a quality protocol for fuels. The Environment Agency is reluctant to respond to the consequences of the OSS case with respect to recovered oils.
9. At present the Government seem to have a preference for anaerobic digestion and incineration of the biomass fraction of waste and to keep waste derived fuels with in the Waste Incineration Directive [WID]. This handicaps the development of the new mix of technologies that can exploit the potential of SRF that the Strategy calls for. Any process operating with in the WID will in the public mind be labelled as incineration and there is a clear public resistance to incineration leading to costly planning delays. Residual waste with a useful calorific value is being consigned to landfill because of additional regulation and market resistance, exactly what the strategy sets out to avoid.

THE OSS CASE, OSS GROUP v DEFRA/ENVIRONMENT AGENCY

10. This case was heard by the Court of Appeal which delivered its verdict on 28 July 2007. The Court upheld the OSS Group position that subject to certain criteria it was able to recover waste lubricating oil and market it as a non-waste fuel product. Defra and the EA had adopted a restrictive interpretation of the recovery of fuels from waste stating that the conversion of waste streams to fuel products was not possible other than in exceptional, [unspecified] circumstances. This position was found to be contrary to EU law and practice. [The Legal Meaning of Waste—the OSS Case, Semple Fraser, Edinburgh.] In responding to this case Defra has maintained a restrictive view and has not accepted that there is a general position to clarify with respect to SRF. Their briefing “Regulation of Waste Oils, Interim Arrangements” emphasises that the appeal concerns the “limited question” of lubricating oils. In personal communication the department has stated that the establishment of a new standard will take “a few months” and that even then it is “likely that Recovered Fuel Oils will not meet this standard”. On the issue of waste oil the Strategy states that the EA will enforce the WID implying that full recovery is not possible. Chapter 3 para: 30. The OSS case took 18 months to come to its judgment, to proceed on a case by case basis like this will take much time and incur much expense and will seriously inhibit the development of SRF and its uptake in the market.

EUROPEAN POSITION ON SRF

11. The EU is developing technical standards for SRF through CEN TC 343, which defines SRF in terms of energy value, chlorine and mercury content and other values. This is to enable to fuel to be traded as a fully recovered product with reliable performance characteristics. Clearly a product produced to such technical standards could no longer be regarded as a waste as defined in the Waste Framework Directive. It should therefore not be regulated as a waste in the UK. The OSS case changes the legal position of recovered fuels in England and Wales which has been contrary to the EU position, which does allow for the full recovery of fuels from the waste stream.

CONCLUSION

12. This issue may be seen to be more relevant to the Energy White Paper and indeed the importance of recovered fuels is recognised there. But there is a danger of this falling between two stools. The need for clear guidance and explanations concerning the definitions and consequential regulations concerning recovered products is recognised in Chapter 3 of the strategy. However the situation with respect to energy remains to date unclear, as the OSS case has demonstrated. An explicit reference to the development of quality protocols for reclaimed fuels is required in the Waste Strategy so that the UK strategy is in accord with the EU Waste Framework Directive on this issue. Clear and unprejudiced guidance aimed at facilitating the use of reclaimed fuels while maintaining the levels of environmental and health protection required for fossil fuels, is now required. This would encourage the reclamation of energy from waste by a mix of technologies and maximise the diversion of bio-waste from landfill, key objectives of the Waste Strategy.

Biomass Worldwide Ltd

October 2007

Memorandum submitted by Capel Action Group (Waste 13)

1. ABOUT CAPEL ACTION GROUP

The Capel Action Group (CAG) is a committee formed some years ago under the auspices of Capel Parish Council to make known the views of local residents on key issues likely to have an impact on the community. In addition to making submissions on local and regional plans, CAG has submitted written evidence, and has been called to give oral evidence to a House of Commons Select Committee on waste issues (31 October 2000—Report dated 14 March 2001 HC 36–1).

In 2002, CAG successfully applied to the High Court to obtain an order to quash the seriously flawed decision of the Planning and Regulatory Committee of Surrey County Council in relation to the then proposed Capel mass burn incinerator.
In 2003 CAG participated in the Examination in Public for the Surrey Structure Plan and in October 2004 participated in the Examination in Public for the South East Regional Waste Management Strategy.

In April and May 2006 CAG submitted written evidence to a review undertaken by Surrey County Council’s Environment and Economy Select Committee on waste technologies and the County Council’s waste strategy and appeared in front of the Committee.

CAG submitted written evidence to the Examination in Public for the Surrey Waste Plan, which concluded in September 2007, and participated on many of the days on which hearings took place to consider the plan’s core strategies. Additionally the Inspector allocated three days for a formal site specific session on the Clockhouse Brickworks site, which has been allocated in the plan as the preferred site for an incinerator. The process involved leading counsel and the cross examination of witnesses.

2. EXECUTIVE SUMMARY

We welcome Waste Strategy for England 2007 and believe it builds significantly on Waste Strategy 2000. We believe the emphasis placed on driving up levels of recycling and composting to be correct and we are particularly pleased to see such strong support for Anaerobic Digestion.

In our comments we highlight:

— The need for Government to require single waste management structures to be established in two-tier authorities

— The need for proportionate regulation, which must be enforced.

— That strong emphasis be placed on source separation, with an urgent need to separately collect food and garden waste.

— The need to research the optimisation of product design and the benefits/excesses of product packaging, as DEFRA envisages through its Waste and Resources Evidence Strategy.

— The pressing need to address methane emission levels from landfill sites, as the US is doing.

— That contribution to climate change should be a factor that is taken into account in decision making processes for all future waste management facilities.

— Our support for Anaerobic Digestion as a preferred disposal option, but that we consider mass burn incineration to be unacceptable due to the health risks it poses.

— The emphasis that planning authorities must place on identifying suitable sites for the significant increase in facilities that will be required to enable the recycling and composting targets in WSE2007 to be met.

3. THE ISSUES

(a) How policies will be implemented, roles of waste creators and disposers, localisation v centralisation

1. Waste is the antithesis of most forms of enterprise. The product already exists at the bottom of the supply chain. As there is too much waste the first challenge is to seek to reduce the quantity. The next challenge is to find uses and markets for what remains.

2. Minimisation is rightly at the top of the waste hierarchy and should engage the minds of creators and leaders in manufacturing industry, who are at the top of the supply chain. Those that feel the real impact of waste are consumers and those responsible for managing waste—at the bottom of the supply chain.

3. Sound effective solutions inevitably must be found in large part at the local level. The burden at local level can be expected to lessen through effective minimisation action at the top. The top level also needs to establish frameworks and policies to enable local action to proceed in an optimal fashion eg WRAP was a much needed initiative to enable markets for recyclates to emerge, although there is much still to be achieved here.

4. A prerequisite for progress at the local level is effective structures for the management of waste at local government level. We refer in section 12 to our concerns over the effectiveness of waste management processes in two-tier authorities.

5. We also believe that flexibility to embrace new approaches to waste handling and new technologies and are concerned that long term contracts, of 25 years or more, with waste disposal companies can act as a barrier to change, in an area where the need for change is paramount.
(b) The role for and implementation of regulations, and their enforcement

1. Regulation is essential in waste related matters. We in the UK probably would not even be where we are today (which remains a long way behind others) were it not for the collective will established through EU member states agreeing a vision and way forward. To that we would add that since 2000 the Government has provided strong leadership with the Waste Strategy for England 2007 (WSE2007) moving matters on further.

2. Regulations should be proportionate setting clear targets, where needed. There is no point in regulation if it is not enforced.

(c) The Classification of Household Waste

1. Much research and analysis has been undertaken into the composition of household waste. Such an analysis was reported on in Surrey in 2004. It showed that nearly 80% of the waste was potentially recyclable, reusable or compostable and that 67% was biodegradable waste. The most significant parts of the total waste stream were garden waste (23%), paper/card (22%) and food waste (16%).

2. The analysis also covered the composition of waste collected from kerbsides and road sweepings. The major components of this waste stream were paper/card (28%), food waste (22%) and green waste (13%).

3. WSE2007 identifies seven key waste materials categories where diversion from landfill could realise significant further environmental benefits. These benefits are clearly set out in chapter 4.

4. A pre-requisite for managing the streams of the seven key waste materials is the separation of household waste either at source or early on in the supply chain at materials recycling/separation facilities. Many collection authorities have much ground to make up eg many are not yet collecting food waste, a major source of biodegradable waste.

(d) Proposals for financial incentives to increase household waste prevention and recycling

CAG responded to the consultation. Our response is at the appendix.

(e) Composting

Composting has a clear role to play in recovering value from garden and food waste, as does anaerobic digestion. In many counties both approaches may be feasible depending on population densities and the availability of suitable road access.

(f) The Government’s approach to waste minimisation

1. Waste minimisation is a topic at the top of peoples’ minds when asked about how the waste problem should be tackled. Excessive product packaging is often quoted. It is always possible to point to excesses and to take action on those. But the majority of packaging exists for very good reason, primarily to protect the product. Manufacturers and retailers will not readily dispense with packaging if the result would be to suffer higher product damage or loss, which could prove to be expensive, and more environmentally damaging.

2. A question posed on packaging by DEFRA’s Waste and Resources Evidence Strategy 2007–2011 (page 17) is very relevant here:

What evidence is required to amend existing regulations to achieve packaging minimisation?

The strategy identifies a research project to tackle this and other packaging and resource efficiency issues, including the critically important issue of optimising product design (page 28). We consider this to be essential research/evidence based work.

(g) Contribution to climate change

1. Methane from landfill contributes significantly to total methane emissions in the UK. The cause of this is biodegradable waste that is placed in landfill. A major part of the solution will be found once all biodegradable wastes are separated and recycled and composted. Green and food wastes are major contributors and a key priority should be the establishment of collection schemes throughout England.

2. But landfill will be with us for very many years to come. As existing and closed landfill sites will continue to emit methane a strategy is needed to deal with this. In the US the Environmental Protection Agency (EPA) operates a Landfill Methane Outreach Programme. Almost 20% of US MSW landfills in the US operate such a scheme and the EPA estimates that a further 25% could turn their gas into energy, producing enough electricity to power 870,000 homes. (www.epa.gov/lmop/benefits.htm)
3. Contribution to climate change should be a factor that is taken into account in decision making process for all future waste management facilities. Disposal facilities can be effective in reducing impacts on climate change but some clearly do not eg incineration without combined heat and power recovery.

(h) The promotion of anaerobic digestion for agricultural and food waste

1. We find encouragement overall from WSE2007 and the elevation of anaerobic digestion (AD) to be one of its most encouraging aspects.

2. The ultimate disposal of waste, after manual and mechanical separation and sorting, brooks great controversy. The UK waste industry has very largely aligned itself to mass burn incineration (or EfW) despite the fact that it represents an old technology and is rapidly being challenged by new, emerging technologies. Most other European countries have made much more progress in managing household waste than has been the case in the UK. Countries, such as France, embraced incineration on a wide scale early on but new investment on the continent increasingly is finding its way into MBT, AD and other forms of thermal treatment. We believe mass burn incineration to be an unacceptable option for many reasons including impact on the environment but also due to the health risks posed, which we address in the next section.

3. One of the principal reasons put forward by the UK waste industry for its promotion of incineration is the relative ease of raising finance for a financially proven technology derived from a long track record. It claims that it is less easy to raise finance for newer technologies that do not have established track records. The industry also cites unreliable sources for the product outputs as a result of market uncertainty.

4. WSE2007 support for AD is therefore very welcome indeed. Firstly because AD is a cleaner and better technology than incineration; secondly because this endorsement, together with the support that will be available under the renewables obligation, will provide greater certainty for the UK waste industry and potential investment sources.

(i) Health concerns with incinerators

1. In May 2004 Defra published its review of the health and environmental effects of waste management. The review was in itself peer reviewed by the Royal Society, which said:

   “that it is important that anyone using these data takes adequate consideration of its inherent uncertainty.”

2. Certainly, there is good evidence that the emissions standards have driven down the actual emissions from incinerators and this will continue with the implementation of the Waste Incineration Directive. But it is also generally accepted that emissions standards are still based on what can be measured and what is technologically achievable, rather than what is safe.” (House of Commons Select Committee Report—point put forward by Capel Action Group (Q149) and accepted by Environment Agency (Q896), para 93, Select Committee)

3. Continuing para 93 of the Select Committee report:

   “Inevitably, this simple fact undermines the safety case which can be made from an incinerator meeting modern emission standards. In particular, the scientific evidence and consensus about the health risk posed by dioxins is not fully developed and the US Environmental Protection Agency have recently published for consultation a review which concludes that dioxins could be some 1000 times more toxic than previously thought. The Environment Agency told us, more generally, that our understanding of the health risk of air pollution is “at an early stage”.

4. Waste operators have often asserted that incinerators are safe, but there is extensive evidence to the contrary. The following comments highlight that evidence, drawn from a report on “The Health Effect of Waste Incinerators” published by the British Society for Ecological Medicine in 2006.

5. Large studies have shown higher rates of adult and childhood cancer and also birth defects around municipal waste incinerators: the results are consistent with the associations being causal. A number of smaller epidemiological studies support this interpretation and suggest that the range of illnesses produced by incinerators may be much wider.

6. Incinerator emissions are a major source of fine particulates, of toxic metals and of more than 200 organic chemicals, including known carcinogens, mutagens, chemicals that damage the immune system and hormone disrupters. There is no safe threshold for many of these substances. Emissions also contain other unidentified compounds whose potential for harm is as yet unknown (as was once the case with dioxins). Since the nature of waste is continually changing, so is the chemical nature of the incinerator emissions and therefore the potential for adverse health effects.
7. Monitoring of incinerators has been unsatisfactory in the lack of rigour, the infrequency of monitoring, the small number of compounds measured, the levels deemed acceptable, and the absence of biological monitoring. In particular, the three most problematical pollutants are either not monitored at all, or are monitored so infrequently as to be of no practical use. PM2.5 particulates are not measured at all (only the far less relevant PM10s), dioxins and heavy metals are measured 3 to 6 monthly and then annually. In other words these highly dangerous substances are not measured over 99% of the time.

8. So far, there has not been a single scientific study of the safety of modern incinerators. Rigorous independent health monitoring might give rise to suspicions of adverse effects on the foetus and infant within a few years, but this type of monitoring has not been put in place and probably would not reach statistical significance for individual installations. Effects on adult cancers would not become apparent for at least ten to twenty years. It would therefore be appropriate to apply the precautionary principle here.

(j) Adequacy of existing infrastructure for disposal, capacity for recycling and consideration of new technologies

1. There is a shortage of facilities to treat residual waste. This has arisen largely due to the dogged persistence on the part of waste operators in promoting incineration in the face of continued opposition by local communities. This has resulted in delays in the development of much needed facilities. The Government has acknowledged this in WSE2007.

2. This change has arisen mainly because of higher targets being set for recycling and composting, properly reflecting the primacy of the waste hierarchy and reflecting the new focus on managing key waste material streams. But there is no doubting that the “casualty” has been energy recovery, which has seen its targets reduced, most significantly in 2015 where it is a massive 12% lower than in Waste Strategy 2000. The new target for 2020 (of 25%) is 9% lower than the WS2000 target for 2015. The new target for 2010 is also lower.

3. Arguably this need not have been the case as the Government could have chosen to signal a desire further to reduce diversion to landfill by 2015. Instead diversion to landfill remains at 33%, the same level as in WS2000. In our view this apparent reluctance to further reduce diversion to landfill by 2015 signals two things: firstly that mass burn incineration is no longer seen as the first choice technology for energy recovery, even when heat recovery is part of the scheme, which is not always the case: secondly that AD has replaced mass burn incineration as the preferred approach, although options are being kept open should AD not deliver.

4. Further processing capacity for recycling and composting will undoubtedly be required now that recycling and composting targets have been increased in WSE2007. As a matter of urgency planning authorities will need to identify suitable sites that have a high potential to be realised in practice.

5. In our response to the consultation on incentives for recycling we drew attention to the particular problems facing two-tier authorities.

“Our view is that the two-tier authority structure has an inbuilt handicap in managing waste issues, compared with unitary structures. This is recognised in this consultation document but no solution is offered other than an exhortation for the WDA and WCAs to work together. Waste management is a function best performed by a unitary structure, which waste authorities are free to establish but are not required so to do. We believe that progress in waste management would be much better in two-tier authorities were they to be required to set up a separate structure, on which the WDA and WCAs would be fully represented. Such a structure would also enable members of the public to be represented. We urge Government, as a matter of urgency, to strengthen the requirement for such structures to be established in two-tier authorities.”

Appendix 1

Incentives for Recycling by Households

Capel Action Group

October 2007

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20 Not printed.
Memorandum submitted by History and Policy (Waste 14)

ABOUT US

The author is Dr Tim Cooper, Lecturer in History, University of Exeter, Cornwall Campus, Penryn, Cornwall.


History & Policy is an independent initiative working for better public policy through an understanding of history. It was founded by historians at Cambridge and London Universities who believe today’s “evidence-based” policy environment would benefit from more historical input. History & Policy works to increase the links between historians and those analysing, discussing and deciding public policy in the UK today, and makes historians and their research findings more accessible to policy and media audiences. See http://www.historyandpolicy.org or email mel.porter@sas.ac.uk for more details.

SUMMARY

— Politicians from all parties have acknowledged the need to address the impact of waste on the environment.
— Waste Strategy for England 2007 outlines possible approaches to waste reduction and recycling. However it does so largely without reference to the historical context of efforts to control waste and increase recycling.
— Knowledge of the historical context will assist policymakers in identifying the origins of the waste problem and some of the pitfalls associated with current efforts to solve it.
— Previous attempts to increase recycling in Britain during the 1940s and 1970s both proved to be failures after initial periods of brief success.
— The causes of failure were complex, but an unwillingness to confront the emergence of affluent, consumer life-styles, and inadequate efforts to regulate the market in waste products or to challenge key players such as the packaging industry all contributed.
— Future policy, if it is to be successful in achieving “One Planet Living”, will require a willingness not just to mobilise actors around the widely accepted, emotive rhetoric of “reduce, reuse, recycle”, but must also challenge those with established interests in the status quo.

1. INTRODUCTION: A HISTORICAL PERSPECTIVE FOR HOUSEHOLD WASTE AND POLICY

1.1 Waste Strategy for England (WSE) 2007 outlines a series of ambitious aims with regard to waste reduction and recycling and correctly emphasises the contribution waste reduction must make to achieve “One Planet Living”. The document proposes to achieve waste reduction through a number of means including:
   (a) Increasing the incentives to recycle: especially by increasing the landfill tax
   (b) Effective regulation: especially of fly-tipping and waste exports
   (c) Increasing the efficiency of usage of existing resources
   (d) Investment in waste collection and treatment
   (e) Developing local authorities’ waste management infrastructure
   (f) Encouraging a “shared responsibility” between industry, consumers and the voluntary and government sectors

1.2 WSE 2007 puts forward proposals without reference to the historical origins of the present issues surrounding waste, resources and the environment. WSE 2007 does not recognise the attempts of previous governments to address the issues of waste and resources, or the lessons that might be learned from these.

1.3 This paper contributes lessons from the history of waste in the twentieth century. These are:
   (a) An outline of the historical origins and causes of the present waste problem.
   (b) An outline of previous policy efforts to encourage greater recycling, and the reasons for their failure.
2. A BRIEF HISTORY OF HOUSEHOLD WASTE

2.1 The character of the waste stream in Britain changed dramatically during the twentieth century:
   
   (a) In the early twentieth century dust and cinders from household fires made up over 50% of household waste.
   
   (b) From the 1930s packaging waste (paper, cellulose, tins, glass, etc) formed a small but growing part of the waste stream; reflecting the emergence of nascent affluence and consumerism.
   
   (c) In the post-war era, dust declined rapidly in importance as electricity and gas displaced coal as the main sources of household heating.
   
   (d) Plastics increased rapidly from the 1950s, largely accompanying the growth of the supermarket and packaging industries.

2.2 The history of waste in twentieth-century Britain reflected more general trends in social and economic development. However, historians have recently demonstrated that the emergence of a “throwaway society” was also partly a consequence of government policy, especially of a post-war electoral politics that encouraged the pursuit of high standards of living.

2.3 The responsibility for coping with these changes in the waste stream largely fell on local authorities who had to respond quickly to constantly changing circumstances. In general they proved remarkably adept at developing disposal technologies to cope with the environmental and public health issues surrounding waste disposal.
   
   (a) The 1900s saw extensive investment in new incinerator and waste-to-energy technology
   
   (b) From the 1930s local authorities pioneered investment in controlled tipping and land reclamation
   
   (c) During the First and Second World Wars local authorities pioneered systems of universal recycling (salvage)
   
   (d) In the post war era there were experiments in municipal composting
   
   (e) These achievements occurred in spite of limited intervention from central government, which was limited to a loose legislative framework for provision of waste disposal services

2.4 Throughout the twentieth century local authorities and waste professionals demonstrated consistent interest in the potential of recycling as a source of local government revenue. However, their ambitions were thwarted by unstable demand from the market for secondary materials. Before the 1970s peacetime governments showed little enthusiasm for interference in the private industrial activity of scrap metal or waste paper merchants.

2.5 The scale of the municipal waste problem grew quickly and changed so rapidly, especially in the wake of the Second World War, that local authorities had no reasonable alternative to the adoption of landfill for the large amounts of domestic waste. Estimates of the growth of household waste indicate the following:
   
   (a) By the outbreak of the First World War about 9,000,000 tons of household refuse was collected annually.
   
   (b) By the end of the Second World War about 15,000,000 tons was collected annually.
   
   (c) By 2005–06, Defra estimates showed approximately 29,000,000 tons of municipal waste was collected annually.

2.6 These estimates of the weight of municipal refuse in the twentieth century illustrate the remarkable growth that took place. However, they hide the most important change, which was a dramatic increase in the volume of waste. This was the consequence of the decline of dense refuse elements like cinders and dust and their replacement by relatively lightweight packaging and consumer items.

2.7 The growing volume of domestic refuse caused collection and disposal to become increasingly difficult and expensive. The rising costs were borne almost exclusively by consumers, although this was partially disguised through the local tax system and the subsidisation of local by central government. Consumers did not necessarily feel the full force of the costs imposed by refuse disposal and producers none at all.

2.8 The innovation and growth-orientation of the consumer economy resulted in a rapidly changing waste stream, which prevented the establishment of recycling on a permanent basis in the twentieth century. New waste problems often emerged as soon as old ones had been addressed, demanding the development of new recycling methods: eg plastics, mobile telephones.

2.9 Conclusion:

Rapid social and economic change as well as government policy contributed to the creation of a new municipal waste stream in the twentieth century. The waste stream grew rapidly in weight and volume and changed in composition. This presented immense difficulties in terms of waste disposal and made it difficult to establish a widespread and permanent recycling system.
3. **Recycling and Policy in the Twentieth Century**

3.1 The idea of a central government “waste strategy” aimed at reducing waste and increasing recycling is not new. At least twice in the twentieth-century governments have attempted to develop a centrally guided policy aimed at increasing levels of recycling and reducing waste:

(a) During the Second World War the National Government (1940–45) used powers of compulsion to increase local authority salvage.

(b) The “War on Waste”, a policy designed and implemented by the Labour Government (1974–79) in response to fears about finite resources.

3.2 In both the cases initial successes met with eventual failure. Both efforts contain important lessons if present efforts to increase recycling and reduce waste are to prove sustainable in the long term.

4. **Wartime Salvage**

4.1 During the inter-war years (1919–1938) a series of new technologies for the large-scale sorting and recycling of waste were developed by waste management professionals.

4.2 In some cases these technologies were adopted by larger local authorities, such as Birmingham which built a large recycling plant after the First World War. In general these innovations were confined to the larger urban municipal authorities, which could afford the capital and labour costs.

4.3 During the Second World War the National Government in collaboration with the local authorities developed a universal and successful recycling system in Britain. This was a response to the temporary scarcity of raw materials caused by the shortage of shipping space.

1. A specialist Salvage Department was created within the Ministry of Supply (1939) charged with monitoring levels of resource recovery from municipal waste and encouraging increases.

2. From 1941, councils with populations over 10,000 were compelled to organise salvage schemes.

3. Most salvage schemes were organised on an *ad hoc* basis as simple add-ons to the general waste-collection and disposal process.

4. The shape of salvage was primarily determined by local government, which organised household sorting or centralised sorting according to local conditions.

5. Between 1939 and 1947 almost 9 million tons of re-usable material were recovered, generating an income of 26 million pounds sterling for local councils.

4.4 Many experts and local authorities wished to continue the salvage system into the post-war period. It was widely believed that recycling could be made profitable and become a means of paying for municipal waste disposal.

4.5 In the event salvage was allowed to decline both relatively and absolutely in the period after 1950, as can be illustrated by what happened to paper salvage.

1. In 1942 62.1% of paper consumption was met by salvage; in 1959 this had declined to 26.5%.

2. This decline had two causes:
   
   (a) The absolute decline of municipal waste paper collections from 433,664 tons to 392,240 tons, which reflected a fall in demand for waste paper.

   (b) The rapidly growing consumption of paper from 1,408,000 tons in 1942, to 4,903,000 tons in 1959, which resulted in a severe relative decline in waste recycling.

4.6 The decay of the wartime salvage network therefore had two main causes: firstly, the decline in waste prices in the post-war era; secondly, the return to high levels of consumption in the post-war era.

4.7 Numerous historians have demonstrated that the pursuit of affluence was a deliberate policy decision made by both Labour and Conservative post-war governments largely for electoral reasons. The waste problem of the late-twentieth century consequently had political as well as social roots.

4.8 By 1968, 1,226 local authorities disposed of waste primarily through landfill, whereas only 47 still ran significant salvage systems.

4.9 Conclusion

A successful system of recycling was established under the economic conditions prevailing in wartime Britain. It was sustained by resource scarcity, high raw materials prices and government intervention. However, with the pursuit of increasing standards of living by all post-war governments, sustaining the salvage system proved impracticable.
5. "War on Waste"

The 1960s and 1970s were a period marked by the emergence of the new environmentalism. The Oil Crisis (1973) brought to the fore fears of raw material shortages, which accentuated the fears raised by the Club of Rome’s report on resource depletion *Limits to Growth* (1972). In 1974 the new Labour Government responded to popular concerns with a green paper *War on Waste: A Policy for Reclamation*. This outlined a series of policy responses to the issues of waste and resource availability:

(a) Recognition of the limits of market mechanisms in achieving increased levels of recycling;
(b) Reliance on local authorities to create new recycling systems based on household separation;
(c) A new Waste Management Advisory Council (WMAC) to provide advice to industry on recycling, and to formulate policies dealing with packaging, etc;
(d) Development of a joint producer-consumer approach to waste reduction and recycling.

5.2. Unfortunately *War on Waste* failed to effect any significant changes in waste generation or disposal patterns, for the following reasons:

(a) The WMAC was largely staffed by industry executives and local government officials. Although official policy relied heavily on the voluntary sector it offered little meaningful representation or engagement with voluntary groups;
(b) The strength of industry representation and lobbying prevented the WMAC offering the kind of radical policy initiatives necessary to cope with new problems like packaging waste. This caused further disillusionment among voluntary and environmental groups;
(c) *War on Waste* explicitly limited government intervention to the areas of research and development and information/education. The failure to develop any means of intervening in the waste industry to set or amend price levels in order to create sustainably high levels of recycling proved fatal to embedding significant change in the waste management system.

5.3 Conclusion

The 1970s provided an opportunity to develop a new approach to waste. However, the government prioritised the needs of industry in the policy process and placed policy making in the hands of the WMAC, rather than voluntary or environmental bodies. These actions ensured that radical policies, required to deal with issues like packaging waste or the creation of a sustainable market for waste materials, could not be developed. A moment when government concern with raw materials and waste could have coalesced with public concern with environmental issues was consequently lost.

6. General Conclusions

6.1 The waste problem emerged in Britain during the twentieth century alongside important social and economic changes, especially in the emergence of widespread affluence and the supermarket retailing system.

6.2 Two efforts to put recycling at the centre of waste management policy both ultimately ended in failure.

6.3 The causes of this failure were complex, but some important factors can be seen in the failure to intervene adequately to stabilise the prices for waste materials, government encouragement of affluence, and a failure to challenge industries that encouraged waste, such as the packaging and retail sectors.

6.4 The unwillingness to challenge those with interests that contributed towards waste generation undermined the “War on Waste” in the 1970s, by destroying the confidence of voluntary and environmental groups in government policy.

6.5 *WSE 2007* contains elements that suggest some of the weaknesses of previous policy can be overcome: there is a mechanism for penalising landfill in the shape of the Landfill Tax and greater clarity on the role of producers in minimizing and recycling waste.

6.7 However, the ultimate test of *WSE 2007* will be whether it can sustain and extend existing achievements in recycling and waste minimization, and this may depend ultimately on government being able to show an equality of sacrifice between householders and consumers (who have borne the brunt of efforts to increase municipal recycling) and industry and retailers.

6.8 Recent press interest in packaging and consumer campaigns against packaging, set alongside the debate over weekly versus bi-weekly rubbish collections may be the first signs of public discontent that the sacrifice of effort in terms of waste reduction and recycling is unfairly balanced against householders and consumers.

*Dr Tim Cooper*

*History & Policy*

*October 2007*
Memorandum submitted by Compost Works (Waste 15)

THE ROLE OF COMPOSTING

1. Introduction

Compost Works is a voluntary group who have been promoting home composting in their locality for the last five years. As such, we talk to around 2000 people every year and have an excellent grasp of the views and composting habits of people in our locality. (Surrey commuter belt, mixed rural and town)

2. Home composting’s position in the hierarchy

WS2007 confirms home composting as being at the top of the hierarchy, but the public get very mixed messages when new schemes for green or food waste collection schemes are introduced, as outlined in the next two paragraphs.

3. Green Waste

The current emphasis on recycling targets has led to local authorities introducing green waste collections to increase their recycling rate, but in doing so, they have merely increased the total amount of waste collected, since a large percentage of the green waste collected would have been home composted previously.

Many people we talk to who were home composting and have switched to using our local green waste collection seriously believe they are helping the environment by using it. (Unfortunately, due to a lack of composting facilities in Surrey, the percentage collected that is actually composted is shipped over 35 miles out of the county for composting, adding to the carbon footprint.)

It is essential that green waste collections are charged for at the full economic and environmental rate, and not softly subsidised to help recycling rates.

4. Food Waste

The collection of food waste is rightly seen as an important step towards reducing organic matter going to landfill. However, as food waste collections are expanded, it is essential to consider how to avoid the trap described above with green waste—ie To ensure that all the people who are and have recently been introduced to home composting continue to do so, rather than diverting their food waste to a collection scheme.

5. Local Authority Waste Performance Indicators

We strongly support the proposal in WS2007 (Ch 6, paras 5–18) for a LA PI based on the average amount of household waste per person that is not re-used, recycled or composted.

Preferably the recycling targets should be dropped -This will help to put the emphasis on reducing waste and reduce the distortions caused by materials like green waste that have been added to the materials collected, increasing recycling rates but not reducing residual waste at all.

THE PROPOSALS FOR FINANCIAL INCENTIVES TO INCREASE HOUSEHOLD WASTE PREVENTION AND RECYCLING

6. We support the concept in WS2007 (Ch 2 para 20) to allow revenue-neutral financial incentive schemes that encourage recycling and waste prevention by households,

7. However, the proposal suggests a “recycling” incentive. What is required is to reduce residual waste and recyclables. Too many people believe that they are helping “the environment” by recycling, when it would be better if they hadn’t generated the recyclable in the first place

8. The charging mechanism must charge both residual waste and recyclables, obviously at a lower rate for recyclables. This will then ensure that the charging regime encourages home composting, alongside reducing residual waste and recyclables. Anyone who is below average will get a rebate, presumably done yearly as a council tax rebate.

Compost Works

October 2007
Memorandum submitted by the Confederation of Paper Industries (Waste 17)

1. CONFEDERATION OF PAPER INDUSTRIES (WWW.PAPER.ORG.UK)

This submission to the above named examination is made on behalf of the Confederation of Paper Industries (CPI). CPI has within its membership mill-owned and independent UK recovered paper merchants, UK paper, board and tissue manufacturers and corrugated converters. All Members of CPI will be impacted by the new Waste Strategy for England.

CPI represents:
- UK recovered paper collectors and traders who handle in excess of 67% (5.3 million tonnes) of recovered paper collected in the UK;
- UK paper, board and tissue makers who use over 95% (4 million tonnes) of recovered paper as a raw material; and,
- over 90% of the UK corrugated box making industry who have a recycling rate of over 84%.

2. CONTEXT TO THE UK PAPER INDUSTRY IN 2006

To give context to the unique UK paper industry it is important to understand the following:
1. The UK consumed around 13.9 million tonnes of paper, tissue and board products; one of the highest consumption levels in Europe.
2. The UK only produced 5.6 million tonnes of paper, tissue and board of which 1 million tonnes was exported.
3. The UK imported 7.8 million tonnes of unconverted paper, tissue and board products.
4. The UK imported, through a trade imbalance, 1.6 million tonnes of converted paper and board products and packaging around commodity goods.
5. The UK used 4.2 million tonnes of recovered paper and board (including some imports) representing a utilization rate of 75% (usage/production), well above the European average of 48%.
6. The UK collected just over 8 million tonnes of recovered paper and board representing a collection rate of 58% (collection/consumption), well below the European average of 64%.
7. The UK domestically recycled 51% of its collection (usage/collection), well below the European average of 88%.
8. The UK exported 3.9 million tonnes of recovered paper (49% of its collection) well above the European average of 12%.
9. If the UK had a utilization rate of 100% (usage/production) it would only be able to recycle 70% (usage/collection) of its collection requiring 30% to be exported.
10. There are some signs of new investment in UK reprocessing in the newsprint sector with three potential projects announced in 2006–07.

3. EXECUTIVE SUMMARY

The UK paper industry is the most successful recycler in the UK with the recovery industry collecting over 8 million tonnes of waste paper in 2006 (over 70% of what is deemed recoverable\(^\text{21}\)), the UK paper recycling industry using over 4 million tonnes of recovered paper (75% of its raw material) and the industry exporting the remainder to Mills overseas (just under 4 million tonnes). The paper recycling chain welcomed the introduction of the original Waste Strategy in 2000 as a means of raising the profile of waste and changing the mindset of all stakeholders to allow the development of a recycling economy. We saw the Strategy as a means of engaging with the public and business who saw waste as someone else’s problem and allowing development and investment opportunities in the collection, recovery and recycling of waste streams as a means of substituting primary raw materials. In terms of recovered paper the impacts of the original strategy have not seen any overall development of the UK industry in terms of full recycling. Recovery of waste paper has accelerated through 2000 to 2006 from 5.4 million tonnes to 8 million tonnes but UK paper making capacity has diminished through those years by 1 million tonnes and UK usage of recovered paper by over 700,000 tonnes as UK mills became uncompetitive in the European and Global markets. The switch from virgin material usage by UPM Kymmene to recovered paper in 2003, supported by WRAP, saw increased UK usage of over 300,000 tonnes during this period but it failed to halt the overall decline of UK paper and board recycling. The main issues leading to this decline were ageing UK mills, high energy costs and moves by European and global companies to take advantage of low labour cost economies outside the UK. The waste strategy also led to issues with regulatory costs, raw material quality and raw material pricing. It was

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\(^{21}\) According to the Confederation of European Paper Industries around 19% of paper, tissue and board products are non-recoverable. Using this assumption the UK consumed 13.9 million tonnes of paper, tissue and board products in 2006 making 11.3 million tonnes available for recovery.
4. Details

4.1 CPI supports the overarching vision of England’s Waste Strategy 2007—to set a policy framework to reduce reliance on landfill by driving waste reduction, increase re-use and recycling, and increase the use of energy from waste where it cannot sensibly be recycled.

4.2 We support the increasing landfill tax levels introduced by the treasury and think this will allow a clear economic case for businesses, the public sector and Local Authorities to consider the potential savings available from waste reduction, increased re-use and recycling. However care must be taken to ensure that, with the call for 25% of waste to be used for energy by 2020, this does not become a better economic option over re-use and recycling when the carbon benefits of energy from waste within the Strategy are clearly lower. In this case CPI would recommend a form of regulatory or fiscal measure being applied to energy from waste to ensure it remains an option below re-use and recycling.

4.3 We have serious concerns with the liberal use of the term “recycling” within the new Strategy. Wastes are not recycled until they have been made into new products yet the Strategy appears to focus on collection and sorting with continual reference to this as recycling. We can be sure that effective recycling has taken place within the UK and Europe under material reprocessors environmental regulatory requirements to fulfil their Integrated Pollution and Prevention Control permit rules however it is less assured when the material has been exported outside the Community for recycling. This is also true of the requirements for EU reprocessors to meet their carbon reduction targets under the EU energy trading system but again this cannot be guaranteed when recycling is taking place outside of the community. Thus CPI feels the liberal use of the term recycling for the collection and recovery of waste is dubious in many instances within the Strategy.

4.4 In order for the holistic carbon and economic savings of recycling to be fully realised CPI felt there was a need for a quality requirement for recyclable materials to be built into the Strategy. Certainly there is mention of the requirement for high quality recovered paper to “favour efficient recycling”; however, other than vague references to “segregated collections or sorting of waste at, or close to, its source by households and businesses”, there is little that will require Local Authorities to build quality into their waste management practices. Quality is the bedrock of sustainability, but this appears to be left to Local Authority level decision making, where current economic drivers favour low cost collection and sorting over effective recyclate recovery and preparation for recycling. In this respect CPI feels a real opportunity has been missed within the new Strategy. Waste Strategy 2000 led to effective increases in the quantities of recyclate being removed from the English waste stream but also led to a significant decrease in quality, particularly for paper and board, which has had a negative impact on the domestic reprocessing industry. The review of this Strategy was a real chance to improve the situation however, although the quality requirements for effective paper and board recycling are mentioned, there is little reference or guidance on how this will be achieved. CPI’s concern is that this new Strategy will lead to a continuation of quantity based collection increases of recyclate from the waste stream with compounded quality issues leading to lost economic and carbon savings associated with recyclate use over virgin materials.

4.5 The vast majority of commercial and industrial waste paper streams are of sufficient volumes for private companies to provide effective economically viable recovery services, in a lot of cases paying the producer for the material. This has happened for over 100 years in the UK with the waste paper being collected in a homogenous form for use as a raw material at paper mills substituting virgin fibres use. In terms of the domestic waste stream, paper banks were predominantly supplied by UK Mills with the support of Local Authorities, again this led to a high quality homogenous material being collected for direct use in paper mills with substitution of virgin fibre use. Since 2000 however, led by the old Waste Strategy targets and the Household Waste Recycling Act 2003, there has been great strides made in the introduction of kerbside collections of recyclables. This would appear a step in the right direction in terms of public participation and increased recyclate collection but the drive by Local Authorities to set these systems up as cheaply as possible has led to the increasing use of single stream (co-mingled) collections which has had serious implications for the quality of recovered paper. Recovered paper that is contaminated with other materials through the collection and recovery phase, either in vehicles or at the Materials Recycling Facility (MRF), is unsuitable for recycling and will have to be incinerated or landfilled, losing out on any carbon benefits from material that should be available for recycling. To date many Local Authorities using these single stream collection systems have relied on the export market to take there recovered paper as Far East mills have the labour cost economies to hand sort the material, yet even they cannot use highly contaminated material and it is likely a proportion of this material is being incinerated or landfilled in these Countries with little control over the environmental impacts. The new Waste Strategy does nothing to solve the quality issue and hands the responsibility to Local Authorities to deal with. As we have seen in the past, Local Authorities have severe financial pressures and it is likely, especially with the higher recycling targets of 50% by 2020, that the adoption of single stream collections to ease financial pressures will accelerate. Estimated recovery of waste paper and board through single stream collections has risen from 160,000 tonnes in 2000–01 to over 670,000 tonnes in 2005–06. CPI believes the UK is storing up serious problems by not taking a positive line
on recylcate quality as the export market will start to demand quality in the medium to long term, there will
be more public and political interest in ensuring that the export of recyclable materials is in line with global
equality concerns and, if there is insufficient quality recovered paper available in the UK, we may be
stifling the development of further UK paper recycling capacity.

4.6 Within the new Strategy is the call for Local Authorities to have more involvement with offering
recycling collection services (again a poor use of the term recycling as this is the recovery stage only) to
local businesses, especially SME’s. Within the Strategy this looks like being achieved by ensuring any new
municipal infrastructure developed has the capacity to deal with the commercial and industrial stream and
may encourage Local Authorities to offer single stream collections. Private sector providers are already
offering waste paper collection services for many businesses of this type and it is likely that there will be a
two fold issue. The first being of quality, as mentioned in 4.4 and 4.5 above, associated with single stream
collections. The second is a competitive issue; why should Local Authority infrastructure, paid for out of
the public purse or through PFI contracts, be used to compete directly with the private sector with no such
support? This is compounded by the upcoming landfill pre treatment requirements which will force all
private businesses to do some sort of waste stream segregation and the new landfill tax escalator that will
make the economics of re-use and recycling more viable for smaller and smaller businesses. Private
competition in this area is likely to rise without the entry of Local Authorities ensuring more small businesses
are serviced.

4.7 CPI had concerns with the Government figure of “over 8 million tonnes”, quoted within the Strategy,
for paper and card currently land filled. We wrote to the Minister in May and he confirmed that this number
was incorrect. However he stated that this will not impact on the proposed carbon savings associated with
increased paper and card recycling from the UK waste stream. Although we are happy that the number has
been clarified we are still not assured that the carbon savings are achievable as it is highly likely that all
increases in paper and card recovered from the UK waste stream will need to be exported, predominantly
to the Far East, where it is difficult to ensure that full recycling has taken place and carbon reduction has
effectively been achieved on the full volumes and tonnages exported.

4.8 Within the Strategy Government is targeting other paper sector streams for producer responsibility
agreements, and where necessary CPI will engage with stakeholders on these agreements. However, much
of the paper materials being targeted are produced outside of the UK (in 2006 7.8 million tonnes of paper,
tissue and board was made outside the UK and imported for use alongside 1.6 million tonnes of already
converted paper and board products and packaging around imported commodity goods), and engagement
further along the supply chain will be required. Increased collection levels for recovered paper will, in the
short to medium term, require increased exports and in this respect the development of a “centre of expertise
on export markets for recycled materials” will be an interesting development. Recovered paper is a globally
traded commodity; therefore any centre of excellence will need to ensure that there is no market interference
which favours the export market over the domestic market. CPI would have preferred a “centre of expertise
for recycled materials” rather than a specific reference to the export market as this development suggests
there are acceptable varying requirements for one market over the other and this is not and should not be
the case. Paper mill technology in the UK is no different from that in China and India and therefore
standards should be set for recovered paper in general.

4.9 On the potential to introduce incentives for recycling by households; CPI will continue to raise its
concerns that if a carrot and stick scheme is introduced, the collection of mixed recyclables in a large wheelie
bin will lead to further serious quality issues for the recycling industry. Some householders may hide non-
recyclable items in their recycling bins to save money, with the only policing of this provided by the collector.
Should this “internal fly tipping” not be picked up, the economic and carbon cost will simply be passed along
the recycling chain and make recycling less effective. We will publish our full response to Government on
this issue in August.

4.10 The paper and board industry already recover a large excess of packaging waste material in
to the targets required within Governments Packaging Waste Regulations and in the case of
paper we see no value in increasing the paper target. Indeed it would be more beneficial for paper and board
to be removed from the system as there is no financial value in the system for paper and board packaging
reprocessors or exporters as the value of the PRN and PERN is below the cost of the administrative
requirements of the system and increasing regulatory control means higher risks of failure within the system.
The Regulations have not led to increased investment in the UK’s paper and board reprocessing
infrastructure as the income from the export side of the market (now over 50% of the UK’s declared paper
and board packaging recycling) was always used as a price support mechanism. This forced UK reprocessors
to use the funds in a similar manner to remain competitive with the export market and meant that minimal
investment was undertaken. Any increase in the paper packaging targets would simply lead to the same
situation.

4.11 A further concern that CPI has with increased packaging waste targets for other materials would be
the cost subsidisation of Local Authority collection systems and the impact on paper quality. Many Local
Authorities currently collect non packaging newspapers and magazines in their kerbside collection systems
but in order to achieve higher revenues are now collecting packaging alongside paper to keep their collection
apples on a single tree. Environmental concerns and, if there is insufficient quality recovered paper available in the UK, we may be stifling the development of further UK paper recycling capacity.
Higher targets are likely to lead to higher subsidy to Local Authorities to collect more packaging and further increase the rate of growth of single stream (co-mingled) collection systems for municipal waste streams. The producer responsibility system should require producers to pay the full cost of recovery and recycling for the products they put onto the market yet it is obvious that other material streams are not paying the full cost as paper is being used as the carrying medium to reduce their collection costs. CPI feels this is in contrast to the full polluter pays principle.

4.12 In 2006 the UK only had sufficient reprocessing capacity for recovered paper and board to recycle about 50% (4 million tonnes) of what was collected. The rest was exported for recycling with around 25% (2 million tonnes) going to China, 13% (1.1 million tonnes) going to other Far East destination and 11% (0.9 million tonnes) going to Europe, however about 5% (0.4 million tonnes) of the European volume is likely to be subsequently transhipped on to the Far East. All the above requires effective regulation to be in place to prevent material of poor quality being exported for “sham recovery” or “disposal” outside the “duty of care” principles applying in the UK. CPI would like to make clear that the vast majority of exported recovered paper is of high quality and will be recycled in sustainable overseas markets however there have been a number of high profile cases of illegal shipments recently from single stream (co-mingled) municipal collections going through MRF type operations where higher quality risks are apparent, see 4.4 and 4.5 above. The Regulations have now changed at a European and UK level to try to clamp down on such illegal activity but established exporters of quality recovered paper are now caught up in this administrative nightmare that has added cost to the export system. The UK is competing globally for market share of the paper recycling market and added cost may make it economically difficult for UK exporters to compete. The consequences of the UK becoming uncompetitive against say US supply is a loss of market share and the potential for collection costs to outstrip the market price. This would either lead to fall in UK waste paper recovery or a degree of subsidisation being required from either the waste producer or the public to make the economics of collection work in order to meet the Strategy and Regulatory targets.

4.13 It is clear, certainly for recovered paper, that in order to claim environmental benefits and carbon savings, the UK must satisfy itself that effective, genuine recycling of UK recovered material is taking place wherever it is sent. To this end there must be systems in place not only to ensure the quality of material leaving the UK is sufficient for good quality recycling but that the overseas reprocessors are in fact contributing by managing their processes and plant in a way that meets the UK’s environmental objectives.

CPI would be happy to expand on any of the points raised above if the Committee thinks it useful.

Peter Seggie
CPI Recovered Paper Sector Manager
Confederation of Paper Industries

October 2007

Memorandum submitted by London Councils (Waste 18)

London Councils represents all 32 London boroughs, the City of London, the Metropolitan Police Authority and the London Fire and Emergency Planning Authority. London Councils fights for more resources for London and for a fair deal for London’s 33 councils.

The Transport and Environment Committee, TEC, provides a range of high quality operational services. TEC aims to ensure that London boroughs’ concerns and best practice are taken fully into account in the development and implementation of the whole range of transport, environment and planning policies generated by Government departments, the European Union, and the Mayor of London. The committee deals with a wide array of issues, including waste, climate change, air quality, water resources, bio diversity, nature conservation, licensing and public protection.
EXECUTIVE SUMMARY

1. London Councils supports the more holistic approach of Waste Strategy 2007 to the problems of waste management in the UK and is pleased to see that one of the primary aims of the strategy is to combat the potential climate change impacts of waste. The shift of focus towards waste prevention is welcomed as is the emphasis on sustainable waste management.

2. However, it appears that the strategy’s targets will be the responsibility of local authorities. Yet local authorities have been given no further powers with which to effect change over the purchasing behaviour. As it is, the high level target for waste reduction is for the reduction of the residual waste fraction, which does not necessarily translate into generating less waste overall.

3. London Councils welcome the strategy’s position on localisation of waste services as opposed to centralisation. Local waste management is in the right position to be able to take full advantage of the most sustainable waste management option. That is why London Councils particularly welcomes the strategy’s position that the current Greater London Authority Bill (now Act) will strengthen London’s ability to manage waste sustainably without change to the current structures.

4. London Councils is concerned by the apparent inconsistency in Government policy in the relationship of national to regional strategies and their consequence in shaping local authority waste services. London Councils considers that if Government consider that London boroughs should act in general conformity with the Mayor’s municipal waste strategy, then the Mayor’s municipal waste strategy should be in general conformity with the national waste strategy.

5. London Councils has concerns that the strategy does not effectively address the issue of when materials cease being waste and become useful commodities or resource. Failure to review this single issue will present a huge barrier to the development of new industries that could divert significant quantities of waste from landfill.

6. London waste authorities are committed to delivering excellence across the waste hierarchy, driving up recycling and diverting waste from landfill, but are concerned by the proposed replication of the current system whereby dry recycling and composting get lumped together in the headline “recycling” figure. London Councils advocates that the proposed indicator and local targets should be for dry recyclables only. Additionally London Councils does not support the Government’s current proposals to incentivise recycling.

7. London Councils supports the concept of producer responsibility and recognises that the Strategy places emphasises on making this work. However, London Councils is disappointed that the strategy continues to impose exceptionally heavy obligations on local authorities by comparison with other sectors. It appears that under the strategy, local authorities will continue to meet substantial additional costs for separately collecting packaging waste for recycling, therefore much of the cost of meeting “producer responsibility” targets will continue to be met by local tax payers rather than being reflected in the price of products.

8. London Councils welcomes the proposals to maximise the environmental benefit of recovery of energy from residual waste using a mix of technologies. However, WS2007’s position on separate collection and preferred technologies for the treatment of food wastes is a concern. Proven technologies such as incineration particularly with combined heat and power recovery (CHP) may offer a more viable solution for the disposal of residual waste including the food waste element. London Councils resolutely believes that technology choice for waste treatment must remain a local decision, to best fit local circumstances.

QUESTION 1:

How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste. Localisation as opposed to centralisation of waste management

1. London Councils welcomes the publication of the new waste strategy for England “WS2007” and supports the more holistic approach to the problems of waste management in the UK. The shift of focus towards waste prevention is welcomed as is the emphasis on sustainable waste management and recycling to cut carbon dioxide or methane emissions, thereby combating climate change. However, it appears that these targets will be the responsibility of local authorities. Yet local authorities have been given no further powers with which to effect change over the purchasing behaviour of residents, and thus have little power to control the volume of waste they generate—it is a matter of changing consumer culture, which is beyond the remit of local authorities. Alongside this shift of focus towards waste prevention, London Councils would have liked to see targets for waste reduction at source. As it is, the high level target for waste reduction is for the reduction of the residual waste fraction, which does not necessarily translate into generating less waste overall.

2. London Councils is disappointed that the strategy continues to impose exceptionally heavy obligations on local authorities by comparison with other sectors. While we welcome the stronger role for local authorities, this is disproportionate to the strategy’s continued reliance on voluntary agreements for industry and business.
3. London Councils had lobbied for the Strategy to be more prescriptive in allocating resources, regulatory burdens, and fiscal penalties in a way that consistently minimised environmental harm and promoted sustainability across all waste streams with more equity among all those responsible for producing and managing waste. As it is, the Strategy appears to continue the current policy of imposing exceptionally heavy obligations on local authorities by comparison with other sectors.

4. London Councils welcome the strategy’s position on localization of waste services as opposed to centralization. Local waste management is in the right position to be able to take full advantage of the most sustainable waste management option including the reuse and the charitable sectors.

5. London Councils is concerned by the apparent inconsistency in Government policy in the relationship of national to regional strategies and their consequence in shaping local authority waste services. Section 37 of the Greater London Authority Act 2007: (Duties on Waste Collection Authorities) will replace the current requirement for boroughs to exercise their waste functions “having regard to” the Mayor of London’s municipal waste strategy with a new requirement to act in “general conformity”. London Councils considers the power in section 37 to be an unnecessary elaboration and if Government consider that London boroughs should act in general conformity with the Mayor’s municipal waste strategy, then Mayor’s municipal waste strategy should be in general conformity with national waste policy and the waste strategy. Given the Mayor’s well publicised position on various waste technologies, London Councils is concerned that when the Mayor’s municipal waste strategy is reviewed it will be incompatible with the national waste strategy particularly surrounding waste technologies. Therefore a London authority, by acting in general conformity with the Mayor’s strategy, could be acting in conflict with the national strategy.

**Question 2:**

*The role for and implementation of regulations, and their enforcement.*

6. London Councils agrees with the strategy’s position that regulation has often not been sufficiently risk-based or targeted. It has often been over prescriptive. London Councils therefore welcomes the clarification of definitions and the rationalisation of waste protocols and the proposals to simplify the regulatory system. London Councils fully supports the Government’s position that it is vital that waste regulation is proportionate to the health and environmental risks it seeks to manage, and that regulation encourages, rather than discourages, waste prevention and the recovery of resources from waste.

7. The Regulatory Impact Assessment (RIA) for WS2007 concludes that although the strategy sets out key, new policies and actions and sets the framework for further policy development, it does not introduce any new regulatory burdens and WS2007 does not impose any new burdens on local authorities. The RIA sets out a series of cost-benefit analyses, where the costs relate to changes in waste management and the benefits relate to greenhouse gas impacts and/or reductions in levels of wider financial or public health risks. While this approach may be sound, it may nevertheless be misleading as local authorities who “volunteer” to drive forward the strategy’s objectives will have to make upfront monetary investments, with the majority of the benefits accruing to “society as a whole”. Future policy proposals brought forward when implementing the further policy development work outlined in WS2007 could increase the regulatory burdens on local authorities and other sectors.

**Question 3:**

*The classification of waste*

8. London Councils welcomes the strategy’s proposals to publish, for stakeholder consultation, draft updated guidance on the interpretation of the definition of waste.

9. There are two important issues here:

**A: Discrepancies with the regulatory definition of waste**

10. “Household Waste”, “Commercial Waste” and “Industrial Waste” are terms originally defined in the Control of Pollution Act 1974 and now in the Environmental Protection Act 1990 (EPA) with the supporting Controlled Waste Regulations 1992 (CWR). The logic of the allocation of wastes to different categories is not apparent, and the legal definitions from the EPA can lead to argument. Inconsistency in the government’s interpretation of the definitions places waste authorities in the untenable position of having to make significant investment decisions based on a “best guess” of government thinking.

11. To add confusion, in setting targets/standards on waste authorities, Government cannot even settle on using the legal definition of household waste. It seems probable that many waste authorities differ in their views of the interpretation of this definition. This, of course, may well be reflected in their reported figures for indicators and standards.
12. Besides the EPA terms, which are not recognised in the EU, we have terms arising from EU Directives. The Waste Framework Directive (WFD) currently defines waste as “any substance or object which the holder discards or intends or is required to discard”. The major term, affecting waste authorities is “Municipal Waste”.

13. Furthermore the WasteDataFlow (a government online database for local authorities to report their performance) definitions of municipal and household waste add a further level of interpretation of these regulations and judgements.


B: Waste as a commodity

15. If we are to achieve a more sustainable economy in the UK then government needs to urgently address issue of when something stops being waste and becomes a useful commodity or resource. Failure to review this single issue will present a huge barrier to the development of new industries that could divert significant quantities of waste from landfill. Some of the issues include:

— Refused Derived Fuel (RDF)/ Solid Recovered Fuel (SRF) is currently still waste, so can only be used in a Waste Incineration Directive (WID)—compliant facility (which is much more expensive);
— Compost Like Outputs (CLOs) from Mechanical Biological Treatment (MBT) and Anaerobic Digestion (AD) facilities are still classified as waste;
— Secondary aggregates made from incinerator bottom ash are, also still classified as waste even though they qualify for exemption from the aggregates levy;
— on a smaller scale, there is the question of whether community refurbishment, re-use and scrap projects waste facilities need full waste management licensing

QUESTION 4:

The proposals for financial incentives to increase household waste prevention and recycling

16. London Councils was pleased that Government decided not to introduce a local variable waste charging; instead providing the opportunity for local authorities to offer revenue-neutral incentives for household recycling. However, London Councils’ conclusion in response to the Government’s detailed consultation paper was that the proposals as set out are unlikely to be workable in London. Government must allow local authorities to develop appropriate local solutions.

17. Incentives would seem a useful tool for authorities wishing to encourage waste minimisation and recycling but needs to be considered alongside a range of other measures. Overall, London Councils is of the opinion that schemes set up along the lines proposed by the consultation will not have sufficient impact to change behaviour. Further, the costs will so far outweigh any potential benefits to most London authorities that schemes will be difficult to justify financially under the current climate of increasing costs and real term reductions in Government spending on local authority waste management. Many London authorities will not see any real benefits for improving recycling performance or for meeting their LATS obligations from implementing a scheme.

18. Whilst we welcome the Governments’ proposals for schemes to incentivise the right behaviour, the proposals throw up a key issue for consideration in the design of any scheme. Schemes designed to reward recycling ahead of minimisation could result in householders placing non-recyclable items in recycling bins to save money, leading to further costs up the chain for waste authorities and waste re-processors. Schemes which reward minimisation on the other hand may have little impact on recycling rates whilst encouraging flytipping. Since authorities are measured on their household waste recycling and composting performance by weight of materials, the incentive remains to collect more of the recyclable and compostable waste to achieve these targets.

19. London Councils supports the conclusions drawn by the New Local Government Network in their recently published white paper “How can we refuse? Tackling the waste challenge”. In which they conclude that some form of charging or incentive-based scheme to encourage recycling is unlikely to provide the solution. Concluding “if the real aim of any scheme is for the public to recognise the costs of waste disposal and change behaviour, the costs of implementation, enforcement and administration render any incentive too small.” London Councils therefore does not support the Government’s current proposals to incentivise recycling.
QUESTION 5:

The role of composting

20. The Waste Strategy 2007 places a heavy focus on composting as a vital mechanism for reducing impact of waste on climate change. The issue likely to have the most significant impact for local authorities is the continued inclusion of composting in the strategy’s new national recycling targets:

— recycling and composting of household waste—at least 40% by 2010, 45% by 2015 and 50% by 2020.

21. London waste authorities are committed to delivering excellence across the waste hierarchy, driving up recycling and diverting waste from landfill, but London Councils has concerns that the new targets proposed in WS2007 may not be deliverable in London and similar urban areas. The key concern is the proposed replication of the current system whereby dry recycling and composting get lumped together in the headline “recycling” figure. London Councils advocates that the proposed indicator and local targets should be for dry recyclables only.

22. The danger of the National targets is that some will see them as minimum standards to be achieved by all local authorities, not an average of all. There is no doubt that previous BVPIs for waste and recycling have been beneficial in ensuring resources were committed to driving forward the sustainable management of municipal and household waste by local authorities. However, they must be tailored to the local authority, not one size fits all.

23. The inclusion of composting creates a false impression of the success of recycling activities, and can lead directly to increases in the volumes of household waste collected. Wherever possible, organic waste (and particularly garden waste) should be composted at home, ensuring it does not enter the municipal waste stream. Provision of free universal collection of garden waste dis-incentivises residents from home composting and has a negative environmental impact.

24. Any analysis of the ranking of local authority recycling rates demonstrates that 70% of the top 20 performing authorities have a higher rate for composting than for dry recyclables. The combined indicator thus fails to reflect the need to increase biodegradable waste diversion without increasing the total quantity of waste collected.

25. The inclusion of composting in the national targets and local performance indicators is also prejudicial to inner urban authorities, which cannot “generate” any significant quantity of garden waste due to the nature of their housing stock. This leads to a situation, where a London borough with a good dry recycling rate but little in the way of green waste appears to be outperformed by a shire district with poor performance on dry recycling, but a universal, free-of-charge, garden waste collection service. Inner city authorities will not be able to collect garden waste for composting in a comparable volume to rural authorities.

26. It would seem more sensible to measure the tonnage of BMW landfilled, and even more useful to show this as a proportion of each authorities LATS allowance.

27. London Councils does however recognise that there are real opportunities for the separate collection and treatment of the biodegradable elements of municipal and commercial waste (food waste). But as set out below has concerns with Government’s prescription of a preferred treatment technology.

QUESTION 6:

The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

28. With regard to Local authority performance London Councils was disappointed by the strategy’s position on waste minimisation. While the strategy gives focus to waste minimisation it continues the government’s reliance on new national recycling targets as a measure of performance. Recycling targets have a disproportionate impact on the provision of waste services. The drive to achieve further performance improvement in recycling and composting the capital has been hampered by uncertainty over governance arrangements.

29. London Councils supports the concept of producer responsibility and recognises that the Strategy places emphases on making this work, including proposals for statutory higher packaging recycling targets. However, Government must ensure that the problems of slow impact on waste streams and continual delays in implementation experienced with current producer responsibility arrangements will be taken into account when the system is extended, for example to batteries and tyres.

30. Delayed implementation and inadequate regulation create significant additional burdens for local authorities who have to expand their services significantly without commensurate financial support from Government. Local authorities have achieved significant reductions in waste to landfill this needs to be complemented by a focus on producers to reduce waste at source.
31. Under the strategy, local authorities will continue to meet substantial additional costs for separately collecting packaging waste for recycling, therefore much of the cost of meeting “producer responsibility” targets will continue to be met by local tax payers rather than being reflected in the price of over packaged products. If the pricing of products reflected the true packaging and end-of-life waste costs, producers would then have a proper incentive to reduce these costs by eg light-weighting, design for longer life etc. Consumers would then shift towards purchasing products with lower waste impacts to save money. An economic distortion would be removed and the framework would no longer be subsidising the production of waste but helping to minimise it.

32. London Councils is disappointed by Governments continued reliance on voluntary action. London Councils believe that voluntary agreements too often simply allow industry to avoid significant behavioural change.

33. London Councils would rather have seen statutory measures established to implement producer responsibility legislation and with obligated businesses required to fund waste authorities operating compensatory schemes. Companies obligated to meet recycling achievements/targets for EU producer responsibility streams must be clear about their responsibilities towards meeting the national targets.

34. The UK appears to be comfortably meeting their packaging recovery/recycling targets. As a result there should be easily enough Packaging Recovery Notes (PRNs) or Packaging Waste Export Recovery Note (PERNs), to satisfy demand from producers. However, the generally comfortable situation for packaging producers will mean PRN and PERN values are likely to remain relatively low. This will limit producer investment in new recycling capacity and may reduce the profitability of collecting packaging materials.

**Question 7:**

*The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill*

35. London Councils is pleased to see that one of the primary aims of the strategy is to combat the potential climate change impacts of waste management.

36. However, London councils would rather have seen greater emphasis on meaningful waste minimisation—which by its nature would have had a greater impact on reduction of greenhouse gas emissions in general and methane in particular.

**Question 8:**

*The promotion of anaerobic digestion for agricultural and food waste.*

37. London Councils welcomes the proposals to maximise the environmental benefit of recovery of energy from residual waste using a mix of technologies. But has concerns over WS2007’s position on separate collection and preferred technologies for the treatment of food wastes.

38. WS2007 sets the separate collection and treatment food waste as the next frontier in the management of municipal waste by local authorities, with the emphasis on the potential of anaerobic digestion as a preferred new technology for the treatment of this waste stream.

39. London Councils recognise the opportunities that exist for the separate collection and treatment of food waste and some London waste authorities already provide this service to their residents. For more London authorities to offer this service there is a need for treatment facilities to manage this waste stream. A number of anaerobic digestion facilities are already planned in London however to provide sufficient facilities to meet the level of treatment required there is a need for significant investment from the government and the private sector to achieve the capacity required.

40. That said, while food waste and anaerobic digestion are possible areas for expansion of local authority services—there are a number of other significant steps that local authorities are taking to drive up landfill diversion and increase collection of other recyclates. The potential for separate collection of food waste across the whole of London (as in any major city) maybe restricted due to housing stock, lack of storage space and prohibitive costs (one London authority has calculated this would be as high as £1m annually). Local authorities already offer segregated collection of recyclables but space in London is already at a premium. Local circumstances may prevent or restrict multiple waste containers and the number of collections services that can be offered by local authorities. Proven technologies such as incineration particularly with combined heat and power recovery (CHP) may offer a more viable solution for the disposal of residual waste including the food waste element. This methodology may have further Climate Change benefits in terms of reducing the required vehicle movements. To make full use of this technology however, Government will need to consider the application and markets for the heat output from incineration.
41. London Councils is also concerned that as with the new waste targets the proposal for separate collections of food waste on a weekly basis is not backed up by proposals for an additional revenue stream for local government to deliver the service.

42. Within urban areas and particularly cities such as London there is a significant potential for the expansion of chargeable food waste collection and treatment from waste generated by the expanding corporate hospitality sector. Many London waste authorities are increasing diversion of commercial waste for recycling. At least one London authority is already offering a commercial food waste collection and others are known to be considering a similar service. However, treatment facilities are needed to manage this waste, and to provide these, certainty of funding is required.

**Question 9:**

The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies.

43. Since 2005 the London boroughs have overseen public and private sector investment in waste facilities totalling just under £0.5 billion, which has seen the capital’s waste management capacity increase by nearly four million tonnes. Two new Mechanical Biological Treatment (MBT) plants at Frog Island and Jenkins Lane have been opened by the East London Waste Authority (ELWA) on behalf of the London boroughs of Barking and Dagenham, Havering, Newham and Redbridge. These facilities deal with the putrescible waste while also extracting further recyclable materials from municipal waste collected and in 10 years the facilities will have diverted 67% of East London’s waste from landfill, and helped East London achieve a 33% recycling rate. ELWA also have planning approval for a local gasification plant that would convert the solid recovered fuel from the biological materials recycling facility (bio-MRF) into non-fossil fuel energy.

44. London Councils resolutely believes that technology choice for waste treatment must remain a local decision, to best fit local circumstances. There should be no policy preference between the two types of waste treatment listed in the strategy (incineration and anaerobic digestion) or the new or alternative technologies as each technology has advantages and disadvantages. Waste authorities should have the freedom to consult on and apply the most suitable technology for their individual circumstances. Waste authorities are however more likely to opt for proven technologies.

45. The Mayor of London has made his position on certain technologies, particularly incineration, well known. These include his unsuccessful attempts to stop the river-served Belvedere Energy-from-Waste Plant for Western Riverside Waste Authority; despite the Secretary of State granting the plant planning permission; and his opposition to the West London Waste Authority’s plan to use extra capacity at a plant being built in Colnbrook, Berkshire (which is under 200 metres from the Greater London boundary).

46. In both cases the Mayor’s intervention was over turned by the High Court. Both schemes are now going ahead and will play an invaluable role in helping the boroughs manage London’s waste needs. London Councils supports the Waste Strategy in that proven technologies such as incineration particularly with combined heat and power recovery (CHP) offer a very viable technology for the disposal of residual waste and must continue to receive equal representation alongside other waste disposal technologies. Paragraph 5 of our response in answer to Question 1 previously raised some of these same concerns about the potential for the Mayor’s strategy to be in conflict with National Strategy.

47. London Councils would have liked to see the strategy giving greater support for the provision of more smaller facilities as they are likely to be easier to procure being easier to site, are more acceptable to communities and therefore more likely to gain planning permission, and are more suited to the new or alternative technologies such as gasification, pyrolysis, and anaerobic digestion. Bigger contracts often act as barriers to the smaller providers who end up being “costed out” of the market. London Councils would like to see a move away from the emphasis on PFIs to alternative procurement options that allow local authorities more flexibility to apply the procurement models most suitable to their circumstances but this will require a more certain commitment on finance from government.

48. Current UK capacity for reprocessing combined with market conditions, and the success of commercial and local authority municipal recycling collections mean that much of the UK’s recyclate is through necessity exported overseas for reprocessing. The lack of market security and uncertainty in material supply act as a barrier to the development of waste reprocessing infrastructure.

49. There is no doubt that the UK requires more waste processing and treatment facilities, with a mix of both new and proven technologies to achieve national targets. Through the Single Regeneration Budget (SRB) programme, the London Recycling Fund (LRF) and other programmes and projects a considerable amount of work is being undertaken in the region to increase London’s waste treatment and reprocessing capacity (particularly working towards the 85% self-sufficiency targeted set out in the London Plan). However this infrastructure will take time to put in place.
CONCLUSION

50. The Government’s and London local authorities’ efforts to further improve the capital’s recycling rate have been hampered by the Mayor’s continuing calls for a single waste authority. This market uncertainty disincentivises the private sector from investing in London’s waste management infrastructure.

51. We have repeatedly called on the Mayor to put aside his attempts to increase his powers on waste and work with us in boosting recycling and managing London’s waste by helping find real alternatives to landfill.

52. The Mayor’s actions have led to uncertainty which has constrained investment opportunities. The commitment in the strategy to concluding this drawn out policy decision will allow London to begin to invest appropriately, but note should be made of the delay caused by the political processes involved. That is why London Councils particularly welcomes the strategy’s position that the current Greater London Authority Bill (now Act) will strengthen London’s ability to manage waste sustainably without change to current structures.

London Councils

October 2007

Appendix A

Defra Consultation on the interpretation of the definition of municipal waste used in the Landfill Allowance Trading Scheme (LATS) in England

Consultation Questions and London Councils Response:

QUESTION 1:

Do you agree that the interpretation of the definition of municipal waste used in LATS should be clarified?

During the earlier consultations by government undertaken to set up the LATS scheme, local authorities repeatedly identified potential conflicts and lack of clarity in the interpretation of the definition of municipal waste, it is therefore no surprise that the need for clarification remains. There is a clear inconsistency between the definition of municipal waste in the WET Act and in the guidance issued by Defra on this subject. London Councils agrees with the need for clarification.

QUESTION 2:

Do you agree that the Government’s preferred option, to amend the definition of municipal waste in the WET Act, is the most appropriate option?

London Councils has considered this question very carefully and in some detail following consultation with London waste authorities. London Councils is clear that it does not support option C as set out in the consultation paper.

Of the alternatives, a number of London boroughs believe that the misinterpretation by government of the interpretation of the EU Directive, as set out below, is so fundamental that option B should be adopted. This will allow all of the issues to be resolved and remove any future risk of uncertainty of the LATS scheme albeit that there may need to be some fundamental changes to the scheme in the short term. These boroughs are concerned that option C would put them, and the UK generally, at a disadvantage in operating the LATS scheme by effectively extending significantly the amount of waste subject to LATS.

Other boroughs accept that, as this issue needs to resolved as quickly and as pragmatically as possible and that there is a need to build upon the reduction in landfill already achieved, an amended option C could be accepted by them as a practical way forward subject to the issues around the meaning of “all waste under the control of local authorities” being satisfactorily addressed as detailed below.

CREATING AN INCONSISTENCY BETWEEN THE LANDFILL DIRECTIVE AND UK LAW THAT WOULD NEED TO ADDRESSED UNDER OPTION B

London Councils does not support the Government’s preferred option C as it stands. There appear to be a number of potentially wrong assumptions made by government in the guidance and interpretation issued for LATS. In London Councils opinion “option C” is not correct in its interpretation of the EU Landfill Directive, and will do little to clarify the issue in dispute. Paragraphs 4.2 et seq. of the consultation appear to suggest that Option C is offered largely to ensure the least possible disturbance to the current administrative arrangements associated with LATS. London Councils consider this to be far from ideal.

The lack of consistency between the definitions in the legislation and the guidance has an obvious impact on the ability of WDAs to classify what waste should fall within each WDA’s LATS allowances and, as a consequence, their ability to assess whether they will be in a position to meet their targets. There are also
significant financial consequences for WDAs because there is a wide difference in the volume of tonnage depending on which definition is adopted, which influences whether WDAs will reach their allocated targets with the potential to sell any surplus allowances, or be required to purchase additional landfill capacity from other WDAs, or risk having to pay penalties under LATS.

The consultation document describes the Government’s preference for the “copy-out” procedure when transposing EU Directives into UK law. The government copied out the Landfill Directive definition of municipal waste into the WET Act:

(a) waste from households, and

(b) other waste that, because of its nature and composition, is similar to waste from households.

However Defra’s subsequent guidance interpreting the Act appears to have taken a different approach, asserting that the WET Act definition of municipal waste meant “all waste under the control of local authorities be they waste disposal, waste collection or unitary authorities”.

The definition of municipal waste under the guidance is therefore much broader. This means that, rather than making a judgment as to what constitutes municipal waste in accordance with the Landfill Directive and WET Act definition, all waste handled by local authorities is required to be treated as municipal waste. This interpretation includes various wastes that come into the possession of local authorities that are not from households and are not similar in nature and composition to waste from households. This is not what the EU Landfill Directive requires.

Defra appears to acknowledge this error by proposing in option C that the WET Act should be amended to the guidance definition but that “municipal construction and demolition waste” should be excluded from the WET Act’s definition of municipal waste—a proposal that itself is inconsistent with Defra’s assertion elsewhere that it has interpreted the existing definition of municipal waste correctly.

Defra’s proposal in option C to change the WET Act would leave the UK in the undesirable position of imposing upon itself obligations that the EU Landfill Directive had not intended. Option C would create an inconsistency between the Landfill Directive and UK law, in that the new definition of municipal waste within the UK would be significantly wider than the one set out in the Directive. This will only cause continuing confusion about the objectives of the LAT Scheme and about the practical arrangements for reporting on the various waste streams that come into the possession of local authorities.

London Councils believe that the guidance is incorrect in its interpretation and therefore to amend the WET Act in line with the guidance seeks to perpetuate the confusion. The Landfill Directive defines municipal waste by reference to the nature or composition of the waste. Therefore, on any application of the EU legislation, it is clear that municipal waste does not refer to all waste in the possession or under the control of local authorities, and a distinction must be made in the types of waste sent to landfill in order to reflect the intention of the EU legislation.

Furthermore there is no enabling provision in the WET Act or LATS Regulations empowering the Secretary of State to alter the definition of municipal waste through the promulgation of guidance.

It is also impossible to see how Defra’s interpretation could be written into section 21(3) of the WET Act without requiring in effect the deletion of sub-paragraphs (a) and (b) (list above).

It is clear that the entire statutory scheme (made up of primary and secondary legislation based on the EU Directive) is predicated on the current definition in the Landfill Directive and the WET Act. It therefore follows that amending the legislation will not in itself lead to clarity but to greater confusion.

It would be wrong in principle for the Government to change legislation which is intended to, and does, accurately import an EU Directive into English law, so as to introduce a deliberate inconsistency between the two sets of legislation.

Government should have considered in more detail the option to amend the guidance to reflect the correct definition in the WET Act. However, it seems that Defra has chosen not to suggest an amendment to the guidance because this would entail more consideration as to the categories of waste required to go to landfill.

We would agree that some judgment is required in applying the WET Act definition. If Defra were concerned about the complexity, some detailed guidance from Defra would assist in ensuring certainty and consistency of approach. The fact that some judgment needs to be undertaken should not be an impediment to applying the correct interpretation as contemplated by the EU legislation.

Therefore some of London Councils member boroughs suggest that the government should adopt Option B and amended its LATSs guidance so that it is consistent with the Landfill Directive and the LATS Regulations.
KEY ISSUES TO BE ADDRESSED IN OPTION C: TO AMEND THE DEFINITION OF MUNICIPAL WASTE IN THE WET ACT

As mentioned above some of London Councils member boroughs consider that option C is not ideal but note that it is the Government’s preferred option. These boroughs recognise that the LATS scheme is working and delivering a significant reduction in waste to landfill and most local authorities have adopted a pragmatic approach in accepting the Defra interpretation. London is the second best region in the country for diverting waste from landfill. London only needs to divert a further 5.6% of the waste it currently sends to landfill to be within its 2009–10 allocation of landfill allowances (England as a whole needs to divert 11%).

Therefore if Government chooses to pursue option C to amend the WET Act definition of municipal waste then there are key points which need to be considered. However, this should not be taken as an endorsement of option C as it stands.

The major concern is that there remains uncertainty over the definition contained in the LATs guidance to describe municipal waste “to explicitly encompass all waste which comes into the possession of or under the control of waste disposal or waste collection authorities” which Government must clarify. Specifically:

- The fundamental question is what does Defra mean by the phrase “under the control of”?
  - does a local authority have “control” of 3rd party commercial waste using a transfer station or disposal site?
  - does a Waste Disposal or Waste Collection Authority have “control” on any or all wastes generated by it’s own local authority [buildings, premises, open spaces, etc] even if that waste is managed by outsourced contractors and service providers and does not use any of it’s own authority provided resources; and
  - does a local authority have “control” of waste generated on land owned by the authority, but situated outside it’s boundary in other authority areas.

Local Authorities, in the absence of clear guidance from government, have assumed that the points above are not under their control. Therefore should they now be included, local authorities could face significant extra LATS costs. Government have stated that they wish to minimise the change to the operation of LATS and should therefore clearly state that these areas fall outside the definition of municipal waste.

Further, within “option C” Government is proposing that the WET Act should be amended such that “municipal construction and demolition waste” should be excluded from the WET Act’s definition of municipal waste. If Government is prepared to make concession with regard to this element of the waste stream London Councils urge government to make further clarification with in the guidance definition of municipal waste, to exclude other types of waste that are neither from households, nor similar in nature and composition to waste from households, that routinely come into the possession of local authorities. These might include:

- abandoned cars;
- detritus;
- industrial waste from boroughs;
- tyres;
- a proportion of commercial waste; and
- arboricultural waste.

By way of further example a local authority might well make arrangements with local businesses that involved the authority taking possession of waste oils or solvents, or industrial wastes from paint shops or dry cleaners, or waste from stables. However these are not household wastes under the provisions of the Environmental Protection Act 1990 and its associated Schedules; nor are they similar in nature and composition to household wastes; nor are they construction and demolition wastes. These wastes are not municipal wastes in the terms set out by the Landfill Directive. However they would be defined as municipal wastes in Defra’s proposed revision of the WET Act.

London Councils proposes that these waste streams, in a similar manner to municipal construction and demolition waste should not be included in local authority LATS returns, but would remain “under the control of” local authorities. London Councils would be willing to work with Government to clarify this proposal.

London Councils

October 2007
Memorandum submitted by the Audit Commission (Waste 19)

The Audit Commission is an independent body responsible for ensuring that public money is spent economically, efficiently and effectively, to achieve high-quality local services for the public. Our remit covers around 11,000 bodies in England, which between them spend more than £180 billion of public money each year. Our work covers local government, health, housing, community safety and fire and rescue services.

As an independent watchdog, we provide important information on the quality of public services. As a driving force for improvement in those services, we provide practical recommendations and spread best practice. As an independent auditor, we ensure that public services are good value for money and that public money is properly spent.

SUMMARY

1. The Audit Commission welcomes the Committee’s consideration of the Waste Strategy for England 2007 and is pleased to submit evidence to this inquiry.

2. This response primarily draws on emerging findings from the Commission’s ongoing research. There are limits on our ability to draw firm conclusions from the evidence at this stage.

3. The initial evidence shows that:
   - Local authorities are making progress in procuring waste management infrastructure, but some local authorities and private sector contractors have expressed concerns.
   - Regulatory stability, and early information about any changes in regulation, is valuable in allowing local authorities to plan and procure for the long term.
   - As waste management arrangements for household waste have become more complex, the need for effective coordination of collection and disposal arrangements has increased. However there are barriers to effective joint working, including some deriving from the policy framework.
   - There are strong arguments in favour of the government’s intention to consult on further restrictions on sending biodegradable wastes and recyclable materials to landfill.
   - A substantial strand of local authority and local public opinion calls for more action by manufacturers and retailers on packaging in order to reduce waste.

DETAILED RESPONSE

Introduction—the Commission’s role in relation to waste

4. The Commission audits and inspects a wide range of public sector organisations, including all waste collection authorities (WCAs) and waste disposal authorities (WDAs). The Commission’s aim is to be a driving force for improvement in public services.

5. Subject to final parliamentary approval of the Local Government and Public Involvement in Health Bill, from April 2009 the performance framework for local public services will change, with a new area based, risk focused and forward looking assessment replacing the current Comprehensive Performance Assessment. This new approach, called the Comprehensive Area Assessment (CAA), is still being developed, but it is anticipated that one of the components of CAA, the use of resources assessment, will have an increased focus on sustainability in local areas. CAA will also assess the prospects of improving the quality of life in local areas, including the area’s sustainability.

6. We are currently undertaking a national value for money study into local authority waste management, focusing particularly on the diversion of waste from landfill. We have carried out fieldwork at 12 sites, covering 14 WDAs and 16 of the associated WCAs. This response draws on emerging findings from the first stage of the research, where these are relevant to the topics highlighted by the Committee. The response also draws on our experience of the audit and inspection of waste authorities. Further work and analysis will be undertaken as part of the waste management study, including an analysis of municipal waste management strategies and a survey of local authority landfill diversion plans. We cannot make firm judgements until this work has been completed, but we would be happy to brief the Committee further at a later stage.

7. This response concentrates on the role of local authorities in relation to waste, including their relationship with other organisations.

The Waste Strategy

8. We support the Waste Strategy’s aim of encouraging further movement up the waste hierarchy and we welcome the statement that waste is a shared responsibility.

9. Working with their local populations, local authorities have made significant progress in recent years with respect to recycling and composting performance (from 7 per cent of municipal waste in 1996–97 to 27 per cent of municipal waste in 2005–06) (Ref 1). Key actions include introducing door step collections of recyclable materials, often with support from DEFRA, and making improvements in the facilities at
household waste recycling centres. The majority of collection authorities and disposal authorities we have visited are also planning to develop their waste minimisation, reduction or re-use activity further, for example through school-based waste education and awareness programmes.

10. Our work in a range of local authorities suggests that most WDAs, including all of our fieldwork sites, are also taking steps towards landfill reduction through the procurement of residual waste treatment and disposal infrastructure (see the section on this topic below).

Waste minimisation and packaging

11. Many local authorities are seeking to expand their waste minimisation and education programmes as part of their strategy for reducing waste to landfill. However, the purchasing choices of local people are made in a context set by the policies of large-scale producers and retailers, often operating at a national level. Officers and elected members in most of the authorities we visited expressed the opinion that more should be done by central government to encourage waste reduction by manufacturers and retailers, particularly in relation to packaging. They claim the support of local people on this point, based on, for example, unprompted responses to municipal waste management strategy consultations.

12. We welcome the work within the voluntary Courtauld Commitment to explore biodegradable packaging and particularly to improve the labelling of packaging as to whether or not its materials can be recycled or composted. This should help reduce the quantity of packaging in residual municipal waste. However, to be useful rather than confusing for members of the public, labelling should take into account the fact that the materials accepted for recycling and composting vary across authorities.

The proposals for financial incentives to increase household waste prevention and recycling

13. The Commission has no objection to the general principle of local authorities being able to use financial incentives to influence how citizens dispose of waste, subject to certain conditions. Any scheme should:

- fit within a local waste strategy that results in the best overall management of waste and value for money for an area;
- avoid creating perverse incentives for the councils involved; and
- be fair and equitable across communities.

14. Further detail is given in the Commission’s response to the DEFRA consultation on the financial incentives proposals (see the Appendix to this memorandum).

Infrastructure for municipal waste treatment and disposal

15. Recycling targets and the Landfill Allowance Trading Scheme (LATS) have stimulated councils to divert waste from landfill and move up the waste hierarchy by commissioning new waste management infrastructure. However, the scale and speed of infrastructure delivery, and its likely contribution to meeting the national targets for diverting biodegradable municipal waste from landfill, is uncertain.

16. The Commission is conducting research (in cooperation with DEFRA and the Regional Centres of Excellence) to understand current and planned infrastructure capacity across England, set against local authorities’ landfill diversion plans up to 2020. This survey will also collect the projected costs of changing collection and disposal methods, as authorities move up the waste hierarchy. This research should provide a clear picture of progress in diversion of waste, the associated costs and any potential risks at both a national and local level. The results of this work will be published as part of our waste management study in spring 2008, although we will make the information available to DEFRA well in advance of that for use in their national waste modelling.

22 There is also some support from national survey evidence. When asked “Which of the following statements comes closest to your views of how retailers are addressing social and environmental issues?”, 5 per cent of respondents agreed that “Retailers are trying to do as much as they can, as fast as they can”, while 38 per cent agreed that “Retailers are making some positive steps, but still have some way to go”, 41 per cent agreed that “Retailers are only making slight changes and still have a long way to go” and 11 per cent felt that “Retailers are not really making any changes and need to do much more” (Ref 2).
17. Emerging findings from our fieldwork in relation to the procurement of new infrastructure are positive:

— Many local authorities felt that central government has improved its support and guidance to authorities engaged in waste procurement, through the creation of the Waste Infrastructure Delivery Programme (WIDP).

— Local authorities and their partners are aware of the planning risks for procurement timescales and have been seeking to mitigate these.

— There is some evidence of waste disposal capacity being built by the private sector without requiring contracts to be in place with users in advance.

— The Office of Fair Trading expressed concern in 2006 about the implications of local authority dependency on a limited number of suppliers (Ref 3). However the local authority waste disposal market now appears to be seeing a wider range of competitors. This includes UK firms from other sectors of the economy and new technology providers from abroad, often operating as sub-contractors or as part of consortia. Smaller UK waste management companies provided a real challenge to the larger waste management operators in two recent procurements in our fieldwork areas.

— Authorities engaged in negotiating long term waste disposal contracts have devoted significant resources to detailed modelling in order to understand and manage the risks involved in a large number of future scenarios.

18. However, during fieldwork private sector waste contractors expressed concern about the demands placed on bidders for local authority waste procurements (which are often through the Private Finance Initiative), including the process of competitive dialogue\textsuperscript{23}. These demands limit their capacity to bid for contracts, constraining market capacity and competition.

19. Private sector contractors also observed that the attractiveness of local authorities as customers varies. In deciding where to deploy their bidding capacity, waste companies consider factors such as evidence of political support for the procurement, a professional client side team and effective deployment of external consultants in the process. Potential bidders wish to avoid investing time and money in procurements that are unduly lengthy, involve substantially changing requirements or fall through due to lack of political support. There is therefore a risk that some councils will have difficulty getting good value from a competitive bidding process.

20. Most recent waste disposal contracts are for long periods (25 years or more). Some local authorities, while recognising that long contract durations may be necessary where major capital investment is involved, expressed concerns about the appropriateness of long contracts given the uncertainties around the future size and composition of the waste stream and the effectiveness or future acceptability of disposal technologies.

21. Building flexibility into long term contracts can be difficult and expensive even if done from the outset. Moreover, the experience of some authorities engaged in negotiating variations to existing long term disposal contracts indicates that such negotiations can also be lengthy and difficult, and the variations may be expensive. Those authorities committed to long term contracts placed great value on consistency in the political and regulatory environment.

22. For some authorities these concerns about uncertainty were heightened by the scale of their potential contracts, which were large even in relation to other local authority capital expenditure.

\textit{New technologies}

23. Our fieldwork suggests that private finance for new technologies is difficult to secure before a full scale plant processing UK municipal waste is running successfully. Mechanical-biological treatment and anaerobic digestion facilities for municipal waste have opened in the last few years. Their proven track record has improved the “bankability”\textsuperscript{24} of projects depending on these processes and encouraged the development of markets for their products, although some issues remain (see next section).

24. Advanced thermal treatments for municipal waste remain less familiar within the UK. However gasification, pyrolysis and mechanical heat treatment plants part-funded by DEFRA’s New Technologies Demonstrator Programme will start operating within the next two years. We would expect these technologies to become more bankable, dependent on the outcome of these projects. However the development of waste treatment technologies will continue, and we would encourage the government to monitor any need for further public development funding as newer technologies offering significant potential benefits arise.

\textsuperscript{23} The CBI has expressed general concerns about PFI procurement delays and expense (Ref 4).

\textsuperscript{24} That is, acceptability to the funders of privately financed projects.
The classification of outputs from waste treatment

25. Local authorities need as much information as possible about the regulations that will govern outputs from waste treatment processes before making investment decisions. We therefore welcome the Environment Agency’s work on a protocol for anaerobic digestate from segregated waste and on a number of other protocols for other major waste streams.

26. As one means of diverting biodegradable waste from landfill, many councils have chosen to procure facilities for various forms of biological treatment of mixed waste. The classification of outputs from these treatments is important because it determines how these outputs can be used or disposed of. This will influence the LATS benefits and overall costs of the treatment processes. In our fieldwork we found that some authorities who made plans in the expectation of the favourable regulation of the outputs of mixed waste processes have been obliged to change their plans and projections when it became apparent that the regulation would be less favourable than anticipated. We would encourage the Environment Agency to be as clear as it can in advance about the likely regulatory treatment of outputs from mixed waste treatment processes.

Regulation of landfilling

27. We welcome the government’s intention, subject to continued analysis, to consult on further restrictions on sending biodegradable wastes and recyclable materials to landfill. As the Waste Strategy notes, a variety of bans have been used successfully in other EU member states. A projected shortage of accessible landfill was a powerful stimulus for three of our fieldwork authorities, which are among the authorities that have been engaged for longest in moving up the waste hierarchy.

28. The government has emphasised the importance of greater certainty and stability in policy frameworks, for effective long-term planning. Annual LATS allocations were announced for the years from 2005–06 through to 2019–20. Authorities told us that this scheme has been successful in moving waste management up the agenda of local authorities. Early announcement of controls on landfilling waste beyond 2020 would promote sustainable waste management across all waste generating sectors. This would generate future demand for the treatment of waste by the private sector and the public sector, which could further stimulate the market for waste treatment infrastructure. Any such controls would give long term certainty to local authorities in planning procurements beyond the lifetime of LATS and also would allow councils greater freedom to be involved in the collection of commercial waste.

Relationships between Authorities

Co-ordination between collection and disposal authorities

29. Coordinating with waste collection authorities is becoming more important as disposal authorities, including joint waste disposal authorities (JWDAs), seek to divert sufficient biodegradable waste from landfill to meet their landfill allowances. Formal (sometimes legally binding) agreements are becoming increasingly common as waste disposal authorities sign significant contracts for waste treatment facilities, with guarantees concerning the provision of waste from collection authorities. Deciding on the most effective waste management arrangements involves complex modelling of both collection and disposal services, for example, to maximise materials recovery.

30. Each authority has to achieve best value individually for a waste management service that is increasingly becoming a joint effort between collection and disposal. A common dilemma is that for disposal authorities to achieve their landfill allowances, avoid substantial penalty charges and obtain best value in their waste treatment contracts, they may need collection authorities to invest in new and more expensive collection arrangements. But collection authorities, with restricted budgets and no financial penalties like those imposed on disposal authorities under LATS, have little incentive to invest. The only significant pressure on them is the risk of missing a statutory recycling target, which does not attract a financial penalty. We visited two JWDAs (of the six that exist) and reaching agreement appears to be more straightforward in such areas, where collection authorities ultimately bear the cost of disposal through a levy.

31. Some councils are proactive in local business networks, promoting waste awareness and waste reduction with small and medium-sized businesses and making links where possible with other companies that reuse or recycle waste. Expanded council commercial waste collection services can also be useful to local small businesses, and such greater engagement may be desirable if it either encourages more recycling or enables economies of scale across waste streams. However, extending council collections of commercial waste may be an issue for disposal authorities if it increases the overall biodegradable waste they must deal with under LATS. We have seen some disposal authorities actively encouraging collection authorities to introduce trade waste recycling schemes, to achieve an optimal solution for both parties. We are not at present persuaded that this will always resolve the issue given the possible difficulties and expense of introducing new trade waste recycling schemes.
32. The proposed creation of nine new unitary authorities would bring collection and disposal together in a number of areas. Also, subject to final parliamentary approval, the power contained in the Local Government and Public Involvement in Health Bill will allow authorities to form Joint Waste Authorities voluntarily. But at present, if authorities in two tier areas cannot reach agreement on the way forward then the last resort available to disposal authorities is the use of powers of direction. However, disposal authorities are reluctant to use these powers (and none of our fieldwork authorities had used them) because this would have a disruptive effect on their relationship with the collection authorities, and may not be appropriate in the context of developing new working arrangements intended to be of mutual benefit.

33. There may be scope for central government to review how, in practice, local LATS obligations (which bear on disposal authorities) and statutory recycling targets (which bear on all waste authorities) fit together in the light of the chosen strategy for an area. Tensions between authorities could be reduced by, for example, creating better incentives for collection authorities to emphasise waste minimisation and removing biodegradable material from the waste stream, as part of a more integrated system of performance assessment.

34. Our fieldwork found examples of waste partnerships that had generated and maintained a commitment to significant, long term changes, despite political differences. However, developing sufficiently strong partnerships between authorities requires a substantial investment of both officer and member time over a significant period. We found examples of delays and difficulties, even within the most successful partnerships. This is not surprising given our previous findings about the challenges of partnership working (Ref 5).

Joint procurement

35. Another potential driver for effective partnership working between authorities is the need to achieve economies of scale. This is heightened by the tension between rising collection and disposal costs, and the need to demonstrate best value and the pressure for efficiencies, most recently the requirements of the Comprehensive Spending Review 2007. Fieldwork for the waste management study suggests that there may be potential for greater economies of scale through more joint procurement of disposal facilities and (separately) more joint procurement of collection services, although we are not able to quantify this potential at the current stage in the research. Moreover, the potential benefits need to be balanced against the risk of weakening competition in the medium term if the amalgamation of contracts in a geographical area gives significant advantages to an incumbent supplier. The optimal lengths of disposal and collection contracts are likely to be different, so joint contracts for collection and disposal would require particularly compelling benefits to justify them.

36. Barriers to more joint procurement, particularly for collection, often appear to relate to the political desire to retain local control of waste services, rather than strictly operational issues. Arguably, local control enables waste management arrangements to meet local wishes, based on knowledge of local circumstances. But this needs to be balanced against the potential financial benefits of shared services and community preferences. Several fieldwork authorities argued that in fact many users would prefer more unified rather than locally tailored services (for example having the same colour boxes and bins, and the same materials collected for recycling, across authority boundaries).

37. With respect to disposal, some authorities are procuring joint residual waste facilities in order to make efficiencies, although we have also encountered examples where plans for partnership working have fallen through, for a variety of reasons, and others where joint procurement has been deemed to be inappropriate or impractical.

Future work

38. We hope to publish our report on local authority waste management in May 2008. The report will identify good practice, and provide information to local authorities so that they are better equipped to make sound, evidence-based decisions. We would be happy to discuss the emerging findings of the waste management study in more detail with the Committee or its officials if that would be helpful.

References

Reference 1

The Audit Commission’s consultation response on household incentives for recycling, August 2007

SUMMARY

The Audit Commission has no objection to the general principle of local authorities being able to use the mechanism of charging as a means to influence how citizens dispose of waste.

However, based on the evidence of fieldwork in connection with our audit, inspection and studies functions, we also sound a note of caution. Any scheme of charging should fit within a waste strategy that results in the best overall management of waste and value for money for an area and shouldn’t create perverse incentives/disincentives for the councils involved. Similarly any scheme should be fair and equitable across communities.

DETAILED RESPONSE

We have answered the questions set out in the consultation document where we have something pertinent to say.

QUESTION 1:

Do you agree that local authorities should have the power to introduce financial incentives for promoting recycling and reducing household waste? Why?

Response—We have no objection to the principle. We have observed that well designed and fairly implemented charging schemes can be used to successfully influence behaviour.

QUESTION 2:

(a) Do you agree that a power to introduce financial incentives would help local authorities to meet their recycling targets and their obligations under the Landfill Allowances Trading Scheme?

Response—We have already noted that charging mechanisms may influence behaviour. However, it doesn’t necessarily follow that such behaviour change means that recycling targets or LATS obligations are met. For example: a particular charging scheme might encourage much greater volumes of biodegradable materials such as green waste to be composted by householders at home and thus never enter the municipal waste stream. It is feasible in this example that while the objective of the LATS might be met (that is, less biodegradable landfill) the recycling target might be missed (because proportionately there is less material to be reclaimed from the waste stream).
In this case, while this would be a good outcome, the system of applying statutory recycling targets would need to change. It would be perverse if the risk of missing recycling targets was a constraint on introducing better waste management behaviours. The general lesson is that a scheme of charging would have to form part of a whole system approach to the management of waste designed to give the best outcomes, not just to meet existing statutory targets.

(b) Are there other barriers that Government could address to help authorities boost recycling and meet their obligations under the Landfill Allowances Trading Scheme?

Response—There can be barriers in areas where collection and disposal functions are separate because the pressures of the recycling targets and LATS obligations do not bear on collection and disposal authorities equally.

The pressure on the collection authority is the risk of missing its statutory recycling target, which doesn’t carry any real sanction and no financial penalty. Whereas, missing the LATS obligation can be very expensive for the disposal authority.

The disposal authorities we have visited were trying to resolve these issues through working with the districts. If they did not reach agreement they would only have their powers of direction, which they see as an instrument of last resort.

There may be scope to review how, in practice, local LATS obligations and recycling targets fit together in the light of the chosen waste strategy for the area. There is a need to minimise the risk of perverse outcomes perhaps by creating better incentives for collection authorities both to minimise the amount of municipal waste arising and to put a greater priority on removing biodegradable material from the waste stream (for LATS), as part of a more integrated system of performance assessment.

Question 4:

(c) Do you agree that local authorities should be free to determine the level of charges under a financial incentive scheme?

Response—Yes. We would argue that councils would need the greatest flexibility to implement a scheme that achieves the desired result of reducing the amount of biodegradable waste sent to landfill. At the same time it should be applied fairly and not increase activities such as fly-tipping.

Question 6:

The Government’s view is that it would be essential for local authorities to have good recycling services, fly-tipping prevention and enforcement strategies and measures to help disadvantaged groups in place before introducing financial incentive schemes. Good communication with local communities before the implementation of any scheme will also be critical.

(a) If the Government were to allow financial incentives, what requirement should the Government place on local authorities as regards:

(i) Existing recycling services—do you agree with the proposal to require authorities to offer a recycling/composting service for at least five waste streams to any household covered by a financial incentives scheme?

Response—It is vital that good recycling facilities are available to local residents so that the charging scheme is an incentive to take part. However, requiring councils to offer a specific (five stream) system across the country may impact on their ability to deliver value for money.

Placing such a requirement on councils alone may discourage useful voluntary sector participation in, bottle, clothing or shoe banks and at civic amenity sites. Similarly, offering advice on reducing waste, and alternatives which reduce the amount of material entering the municipal waste stream in the first place (such as home composting, wormeries, etc) may offer better value for money rather than stipulating a minimum number of different types of waste that must be collected for recycling.

(iii) disadvantaged groups?

Response—Charging needs to be carefully considered in the light of the ability of councils to offer recycling facilities and the ability of residents to participate. It should be recognised that a number of local factors could apply that would effectively exclude some groups from possible financial benefit through reducing and recycling their waste.
Some particular examples include:

— Those without room to store waste prior to collection. This applies to kerb-side recycling (for example, no room to store several bins for “routine” rubbish) and also to large occasional items such as furniture.

— Housing areas with communal bin stores—which would effectively be excluded from any personal incentive scheme.

— Transient or newly arrived populations—most of the examples cited seem to require householders to live at a location for a year (examples are given over a year). This will impact on students and migrant workers in particular.

(b) How far should these issues be determined by the Government, and how far at local level?

Response—The arrangements should be determined at local level within broad principles.

**QUESTION 7:**

(a) Do you agree that waste disposal authorities should have the power to implement financial incentive schemes at civic amenity sites?

Response—The inclusion of civic amenity sites in a charging scheme is vital to ensure that waste is not simply re-directed to them instead of being put out for collection. There are several possible difficulties.

— A lesser or no charge at civic amenity sites might encourage additional travel by residents (and a bigger carbon footprint) taking their waste to sites when it would be more efficiently collected at the kerbside.

— Conversely, people without access to a car or living far away from a civic amenity site would be disadvantaged.

— The issue would be further complicated at the boundaries between different charging schemes, for example by people using a site in other authority areas because it is nearer or cheaper.

(b) If so, how could financial incentives be administered at civic amenity sites?

Response—Others will be better placed to consider this, but it should accommodate all the factors required for collection (not encourage fly-tipping, be fair and equitable to all and encourage minimisation and recycling). How it would be administered would depend on how the basic kerbside collection charging scheme is set up, which would be a matter for councils to determine.

**QUESTION 8:**

Are there other issues that Government needs to consider concerning financial incentive schemes?

Response—Councils will need to consider the value for money of the potential gains from introducing such schemes against the likely impact and the costs of setting up and administering the scheme over its whole life. In particular administrative costs are likely to be affected by the degree of central control and reporting that is required. In designing any scheme government should carefully consider the likely burdens of any new approval or reporting mechanisms.

As with all important new measures, the introduction of local waste charging schemes would need to be sensitively handled in terms of local consultation and national messages. At a national level there would need to be clear leadership on the key issues that can be reflected at local level.

Audit Commission

*October 2007*

**Memorandum submitted by the Association of Manufacturers of Domestic Appliances (Waste 20)**

**FOOD WASTE DISPOSERS: ONE SOLUTION TO LANDFILL WHICH HAS BEEN OVERLOOKED**

Around 20% of household solid waste is kitchen food waste—approximately 40 million tons a year. The vast majority of it is collected by hand and transported in large lorries to landfill sites, incinerators or industrial composters. A small percentage of vegetable food waste—separated out from meat, fish and dairy waste—is composted by the householder.
Yet there is a product on the market which can remove all household food waste from the solid waste management stream to enable it to be recycled to the land, providing a cheap additional source of energy whilst reducing energy use and pollution in the refuse management process. It reduces municipal waste management costs by around £20 per household per annum. And it removes the need to separate and store food waste, avoiding complaints about odours, vermin etc—and the controversy over alternate week collections which flares up in summer months.

The Food Waste Disposer [FWD], fitted into the drain line under the sink, grinds waste into smaller particles which are flushed into the wastewater system using cold water. When treated by anaerobic digestion, this waste produces the equivalent of 85kWh of biogas per household per annum [compared to a FWD’s annual consumption of about 4kWh] and the digestate [sewage sludge] can be used on the land to feed soil and offset the need for manufactured fertiliser.

Buying and installing a FWD costs around £120 upwards, running costs for electricity and water are negligible—perhaps £7 a year—and this durable product has a life of between 10 and 15 years. It is a permanent solution, for FWDs are not removed when the householder moves. And it requires no major change in behaviour by the consumer—waste is just put down the sink rather than into a bin.

FWDs are just one of the solutions to the UK’s huge landfill problem, although one that has largely been overlooked up to now, not least in Defra’s latest Waste Strategy, which offers only garden composting as a contribution which can be made by householders. That solution is ideal where it can be adopted; it can remove much if not all food from the waste stream. But not all consumers can be persuaded to co-operate—and perhaps those who currently do are the “low hanging fruit” of this solution. Others either just don’t want to or do not have room to—flat-dwellers and others living in inner cities, for instance. And composting is not a solution for meat, fish or dairy waste.

Until comparatively recently, there was widespread scepticism about FWDs among environmental authorities—there were concerns about deposition in the sewerage system and encouraging vermin. Research and monitoring of actual use of FWDs have gradually removed these worries. As a result, an increasing number of governments and local authorities here and elsewhere are embracing FWDs as a major contribution to solving waste disposal problems.

Worcestershire and Herefordshire County Councils encourage householders to fit FWDs by offering cashbacks of up to £80 [they calculate “payback” time is just over 3 years]. For instance, in Italy federal law endorses FWD as an option; in Sweden, four towns reduce waste taxes for homes with a FWD; and in Norway, four local authorities subsidise FWDs.

Two of the main elements identified in “Waste Strategy for England 2007” are diversion from landfill and incentivising recycling and energy recovery. The FWD is an ideal product to achieve all three objectives. Because it can create more energy than it uses, it is carbon-positive. It is a solution with no capital cost to the waste management authority; discounts come out of current expenditure and are balanced by savings within four years and private developers are increasingly fitting them as standard in new apartment blocks.

Penetration in the UK of FWDs is currently around 6% of households. Studies in Europe indicate that wastewater treatment plants only incur noticeable increased costs when local penetration hits about 30%. These costs seem to vary from less than £1 a year to around £8. The savings achieved by the waste management activity are more than enough to cover such sums—and Ofwat has indicated that, in principle, it has no objection to the financing of water companies’ additional costs in this way.

Tim Evans Environment undertook an independent environmental impact study for Herefordshire Council and Worcestershire County Council (H&W) funded by the County Surveyors’ Society’s Research Fund. It was published in April 2007. This found that based on audited figures from H&W, each FWD would save on average 180 kg food waste per year and £18.63 per year. The cost transfer to the local water companies would be £0.68 per FWD per year for their methods of wastewater and sludge management. It also found that the Global Warming Potential effect (carbon footprint) was far more favourable than kerbside collection and landfill or centralised composting.

Douglas Herbison  
Chief Executive  
The Association of Manufacturers of Domestic Appliances  
October 2007

Memorandum submitted by the Institution of Mechanical Engineers (Waste 21)

The Institution of Mechanical Engineers is a professional body with a membership of over 78,000 engineers worldwide. As a Learned Society, the Institution seeks to be a source of considered, balanced and impartial information and expert advice. The submission to the Committee’s inquiry comments on areas where the Institution has specific expertise or a particular professional viewpoint.
SHARED CONCERNS WITH THE CHARTERED INSTITUTION OF WASTES MANAGEMENT AND INSTITUTION OF CIVIL ENGINEERS

The Institution is co-ordinating its waste management sector activity with the Chartered Institution of Wastes Management and Institution of Civil Engineers. The three institutions have met to ensure that the Committee is provided with independent professional input into all issues in which it has expressed an interest. A joint statement by the three institutions on areas of shared concern is attached to this submission at Annex A.

EXEcutive Summary

The Institution of Mechanical Engineers welcomes the Waste Strategy for England and believes that the overall broad strategic approach is the correct one. The submission to the Committee's inquiry comments on areas where the Institution has specific expertise or a particular professional viewpoint.

The Institution supports the strategy’s promotion of shared responsibilities for waste by all parts of society and welcomes the Government’s commitment to close co-ordinated working through the intention to establish a Waste Strategy Board and Waste Stakeholder Group.

There is an overemphasis in the strategy on municipal waste and not enough focus on how the targets set for commercial and industrial waste will be met. There is also an overemphasis on recycling and managing the treatment of waste and not enough emphasis on waste prevention. Although the strategy acknowledges the position of waste prevention at the top of the waste hierarchy, the Institution finds it surprising that there is not more emphasis on methods and plans for reducing waste at source.

Where financial incentives are proposed to increase household waste prevention and recycling, the Institution suggests recognition of disparity in the capability of households to separate waste and wishes to see the provision of proper separation and collection systems.

With regard to waste treatment technologies, the strategy places significant emphasis on anaerobic digestion. Indicating a preference for one technology only is limiting and counter-productive. To encourage the most efficient novel technologies to come forward the Institution believes it is reasonable to provide incentives for all treatment processes which are aimed at the main objective of reducing disposal to landfill. In particular the Institution finds that “waste to energy” processing is poorly recognised in the strategy.

Implementation of the strategy will rely on the provision of significant infrastructure. The existing infrastructure, and the current rate at which new infrastructure is being developed, is not sufficient to meet the targets and there are four principle areas to address: information and skills, effective planning, communications and decision support.

Finally, the Institution wishes to see more focus on ensuring that the concept of waste as a resource is embedded in policy and put into practice.

MEMORANDUM

1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste, including industrial, business and household waste. Localisation as opposed to centralisation of waste management.

1.1 The Institution supports the strategy’s promotion of shared responsibilities for waste by all parts of society. Delivery of the strategy’s objectives will involve co-ordinated and sustained action by all parties, including permanent behavioural change and perceptions by the public at work and at home. For success this strategy will depend on the strength of leadership by Government and the close co-ordinated working of many of its departments. The Institution therefore welcomes the creation of the cross departmental Waste Strategy Board, along with the new Waste Stakeholder Group.

1.2 The strategy largely focuses on the circa 9% of UK waste that derives from households25 and the creation of facilities by Local Authorities to deal with this material. The Institution believes that this approach will not deliver an optimal network of resource management facilities. Whilst there are proposals for commercial and industrial (C&I) waste, including a target for reducing by 20% from 2004 levels the volume of C&I waste going to landfill by 2010, there is little detail on how this will be achieved in practice (in 2 years).

2. The role for and implementation of regulations, and their enforcement.

2.1 The objectives and targets of the strategy are challenging, particularly with regard to the timescales in which they need to be achieved. In this respect, the Institution is concerned that in some areas (Figure E1 in the published strategy document) the strategy might be placing too much emphasis on policies of incentivisation and voluntary agreement and not enough on regulation coupled with effective enforcement. We would encourage the Committee to examine whether there is insufficient time available for a policy that waits to see whether such an approach works before considering the introduction of regulation.

3. The classification of waste.

3.1 The definition of waste is important, particularly in distinguishing when waste is not a waste.

3.2 The assumption is that the EU definition is being applied, which is “any substance or object which the holder discards or intends or is required to discard”. One interpretation of this is that everything not ending up in landfill is not “waste”.

3.3 It is our belief that a perception shift is required such that all substances or objects should be regarded as a “resource” prior to classification as “waste”.

4. The proposals for financial incentives to increase household waste prevention and recycling.

4.1 There is a need to recognise the disparity in capability to separate and sort in many households (eg due to old age, limited space in cities and high rise blocks, semi-invalids, being a large distance from bin pick-up points, inability to access recycling centres). “Incentives” provided to some householders at the expense of other, less able householders, would not be equitable. Much thought must be given to such schemes, and in avoiding discrimination and complex administration.

4.2 Incentives to reduce or recycle will only work if proper separation and collection systems are available. The Institution would like to see greater co-operation and collaboration between authorities to procure and operate common collection mechanisms to support public participation.

4.3 The Institution would like to see transparent decisions on how the increased tax yield will be used and the local authority element fed back to support better service delivery by local authorities.

5. The role of composting.

5.1 Composting of green waste, food waste, and animal and farm wastes are already practised extensively at domestic and farm level. Open composting in windrow is often odorous but accepted, closed container systems are better, and tunnel systems as used widely in some EU countries need further encouragement. The Institution does not, however, see the need for major extension of use of this relatively crude (but sensible) waste processing technology, which is best suited to “local and rural application”. We would note that composting is a net consumer of energy but conveniently turns a low grade waste into a low grade product.

6. The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.

6.1 The Institution suggests that much greater emphasis is given to reducing waste at source, for instance, plastic and cardboard packaging and plastic bags, although light in weight, are big in volume in relation to total household waste. Although the strategy includes a target for reducing the environmental impact of carrier bags by 25% by the end of 2008, the definition of “environmental impact” is not clear. The Institution wishes to see an unambiguous move to charges on bags in shops or the use of degradable bags as a priority.

6.2 There is considerable scope for making progress on packaging design within the context of the waste hierarchy and we suggest a focused body/authority is established to lead the waste minimisation scheme for each industry—this is needed because each industry will have a different emphasis and approach. Government needs to show leadership in focusing on priority issues, including the need for careful assessment of least environmental cost solutions. In this respect, the Institution welcomes the Government’s intention to establish a new products and materials unit to identify and catalyse actions across the supply chain. Further, we encourage the Government to make a more positive statement regarding the development of eco-design requirements, developing these immediately rather than in “due-course”.

6.3 In the quest for waste minimisation, the Institution welcomes the continued encouragement of “re-use and re-manufacture” with support through the Business Resource Efficiency and Waste (BREW) programme. In particular, we believe additional emphasis should be placed on developing a knowledge repository and resource for future understanding of the full environmental impact of this approach.
7. The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions to landfill.

7.1 The Institution advises the Committee to look more widely at this issue. The Institution believes that waste management policy should be much more strongly and explicitly linked to energy and climate change policy. We must maximise the value that is extracted from the resource that is currently classified as “waste”, whilst minimising its environmental impact. The logic of this approach is explored in the Institution of Civil Engineers (ICE) and Institution of Mechanical Engineers joint study, The Case for a Resource Management Strategy26 which was part funded by DEFRA. In this report the two Institutions argued that the UK should move away from weight based targets as the measurement of the success of waste management strategies, and instead adopt a measure of lifecycle carbon dioxide (CO2) associated with material streams and types of treatment. Using CO2 as a measurement suggests that present strategies, while meeting weight-based targets, could potentially release more climate-changing CO2 into the atmosphere than possible alternatives. We understand that the water industry is likely to be asked to include an assessment of carbon footprint as part of the next cycle of five year investment plans to be agreed with OFWAT. The Committee may wish to explore the benefits of a similar approach to waste infrastructure.

7.2 In addition, as part of a resource management approach, policy makers should take explicit account of the contribution Energy from Waste can make to energy policy goals of increasing diversity of supply and electricity generation from renewable sources. An ICE and (then) Renewable Power Association report27 has demonstrated that energy generated from residual Municipal and Commercial & Industrial waste could account for a theoretical maximum of 17% of UK electricity generation in 2020 and make a major contribution to meeting our targets under the EU Renewables Directives. There are sound practical reasons why this theoretical figure will not be reached but it does demonstrate the scale of the potential of energy from waste.

7.3 With regard to methane emissions, many landfill sites are currently piped to collect methane for conversion to electricity in gas engines and this commitment is ongoing. Existing measures including the Landfill Directive, landfill gas control and use at existing landfills and the Landfill Tax are already driving improvement. Measures in the strategy will put additional pressure on waste to landfill generally and therefore further reduce future methane potential from this source, eg promotion of other waste treatments (such as anaerobic digestion) and possible future landfill bans which have been successfully used elsewhere in Europe. It is much better to process future organic and reactive waste materials in plants where the reaction and recovery is relatively fast in relation to landfill gas collection and also more efficient.

8. The promotion of anaerobic digestion for agricultural and food waste.

8.1 The strategy document places significant emphasis on anaerobic digestion (AD), which chemically breaks down the waste stream to provide methane and other solid and liquid residues, as the treatment technology to manage organic wastes (food/kitchen wastes). This is a well known technology which so far has not been applied much in the UK (except for sewage sludge), although there are many such plants in Germany and also in Austria. AD plants are relatively expensive in relation to electricity produced (generally taken to be in a range from £3.0K per KWh to £7.0K per KWh) but with heat recovery and use of the digestate as land conditioner the “economics” improve, although about 40% of the heat energy is needed for internal process heating. However, unlike composting, AD is at least a net energy producer, although large scale up of the processing vessel is not too practical and multi-tank installations are needed to produce significant power output.

8.2 Combining sludge from major sewage plant and food waste/green waste is viable and would allow production plants up to the order 1 to 10MW output, although most installations are likely to be much smaller.

8.3 As with compost, for success it is important to maintain high quality outputs and therefore market confidence.

9. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies.

9.1 The existing waste management infrastructure in England cannot deliver the objectives of the waste strategy. Strong historic reliance on landfill in this country means that we must choose, design, build and commission new waste treatment facilities of significant size at a rapid pace. The change from a landfill to treatment approach will involve many types of technologies and capacities, as well as greater transportation of materials—locally, regionally, nationally and internationally.

27 Institution of Civil Engineers/Renewable Power Association (2005), Qualification of the Potential Energy from Residuals in the UK, ICE/RPA, London, UK.
9.2 The Institution identifies four critical issues in developing a waste treatment infrastructure to deliver on the strategy:

**Information and skill**

All parts of the waste industry, from planners, designers and engineers through to plant operators, need new skills and information to achieve the move away from transfer and landfill based strategies to alternative treatments. The Institution believes the proposed development by the Environment Agency and Environmental Services Association of a joint training plan and strategy to address shortages and gaps will be critical components in delivering the waste strategy and effective investment must be made in this component.

**Decision support**

Agreeing future strategies for sustainable management of resources and waste from all sectors will involve complex assessments and comparisons. The Institution believes that strategies should aim to manage these resources, with least overall cost to the environment and health locally and globally.

**Planning**

Lengthy planning processes remain a barrier to delivery of facilities and a disincentive to new entrants to the waste market. We were therefore disappointed that this year’s Planning White Paper did not envisage significant numbers of waste facilities qualifying as Nationally Significant Infrastructure Projects (NISP) and thus able to be approved by the proposed Infrastructure Planning Commission. As an example, the White Paper sets a threshold of 50 MWe for energy from waste plant to be considered a NISP. In our view energy from waste is an example of a project where the individual facilities may be relatively small, but taken as a whole, are fundamental to the delivery of the waste strategy. In this case we believe it would be appropriate to lower the threshold to 20 MWe (or less) or more logically base the threshold on throughput of waste rather than electrical energy. More widely we suggest that given the importance of delivering what amounts to a new national network of facilities over the next decade, the Committee seeks to clarify the Department for Communities and Local Government’s intentions in relation to waste infrastructure and the new procedures for major infrastructure projects.

**Communications**

Delivering the objectives of this strategy will depend on mass behavioural and attitude changes in England, which can only be achieved through sustained and co-ordinated communications from the highest level of Government and through a broad range of stakeholders, including the Institution. In securing the commitment of future generations to behavioural change, the Institution welcomes the education and communication actions proposed in schools.

9.3 A major objective of the strategy is to recover and recycle as much usable material as reasonably possible and then “process” all the leftover which contains organics, in the best technical way depending on the actual waste streams (which will differ). There must be freedom and encouragement for authorities and contractors to select whichever route is the best. The Waste Strategy lists a number of waste treatment processes other than anaerobic digestion (AD), but seems to over little positive encouragement to any process other than AD.

9.4 Indicating a preference for one technology only is limiting and counter-productive. Equally if the targets laid down are to be achieved there needs to be reasonable and equal incentives for each route (including incineration) and these incentives (ROCs, enhanced capital allowance, etc.) should be clearly defined as soon as possible. We note that AD plants produce CO₂ as do Incineration processes, and as do gasification plants when the gas is combusted. To encourage the most efficient novel technologies to come forward the Institution believes it is reasonable to provide incentives for all treatment processes which are aimed at the main objective of reducing disposal to landfill.

9.5 The Institution is aware of the concern for picking optimal disposal routes which aim to minimise carbon or methane to atmosphere, which save fossil fuels by displacement, which minimise disposal to landfill, but in addition where the economics can “stand up”. However, evaluation is not always clear cut and each project needs to be separately assessed and judged. Environmental Resource Management undertook a study on this issue for DEFRA which showed that there was often a fine balance between different routes when such additional matters as transport, plant building, varying process efficiencies, additional costs on recycled products etc. were taken into account.

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9.6 Finally, the Institution notes the insistence that any combustion of waste must have heat recovery. This is fully laudable but may be very difficult to achieve easily in many cases as there may not be a demand at the essential plant location. Additional capital funding should be made available to assist in providing a heat source benefit locally.

Institution of Mechanical Engineers

October 2007

Annex A

Shared Concerns with the Chartered Institution of Wastes Management and Institution of Civil Engineers

Collectively the three Institutions welcome the Waste Strategy for England 2007 and believe that the overall broad strategic approach is the correct one. However, during the consultation we have identified a number of shared concerns that we believe will fundamentally affect the ability of England to deliver against the targets set out in the strategy and those required by legislation in the form of Directives originating from Europe.

Infrastructural Deficit

The existing infrastructure, and the current rate at which new infrastructure is being developed, will not in our view deliver the more sustainable approach to waste envisaged in the strategy.

Most importantly, it is clear that future infrastructure needs to cater for all wastes, regardless of origin (i.e., commercial and industrial waste as well as municipal), and there are four areas in particular where attention needs to be focused:

- the necessary skills to plan, build and operate new waste treatment plants;
- an effective planning system;
- communications and awareness raising to improve co-ordinated action by all parties; and
- decision support tools, including better data, cost benefit and life cycle analysis, etc.

Waste Treatment Technologies

The strategy should avoid promoting one type of technology over another. We believe that local authorities, either individually or jointly, are best placed through their strategic planning role to identify what scale and type of technology best suits their needs.

Waste as a Resource

Although the strategy takes a big step forward by linking waste into the wider environmental agenda—including resource efficiency, energy policy and climate change—we wish to see this message driven home through a detailed action plan to ensure that the concept and practice of using waste as a resource becomes embedded much more effectively.

Memorandum submitted by British Glass (Waste 23)

Foreword

British Glass is the trade association which represents the interests of the UK’s glass manufacturers at European, national and local level on a wide range of topical legislative issues, including waste and packaging. It acts as the industry’s voice on health and safety, HR and environmental issues as well as assisting in the development of technical standards and specifications likely to affect its members.

British Glass welcomes the opportunity to respond to the EFRA inquiry into the Waste Strategy for England 2007.

There is growing concern from Industry regarding the obsession with packaging waste which is clearly out of balance with its environmental impact given that it amounts to only 3% of waste going to landfill.

British Glass is concerned with the emphasis on weight both in legislation and in the way that the retail trade (Marks and Spencer excepted) has interpreted its obligations under the Courtauld Commitment. Glass has a much higher recycled content element than any other packaging material and by recycling glass container waste through a closed loop system, and back into the production of new bottles and jars, there are considerable environmental benefits in reduced energy consumption and CO₂ emission.

We believe that wider environmental and resource considerations should be given in the future when waste strategy is being developed.
The glass industry is not complacent about weight issues and British Glass continues to work closely with WRAP, its members, brand owners and the retail trade to reduce weight through design and to encourage the bulk importation of products for UK filling. We have seen some notable successes through this activity in 2007.

EXECUTIVE SUMMARY

The massive disconnect between packaging targets and local authority targets is a major concern which, if not addressed, could result in the UK failing to achieve EU targets. Local Authority targets are weight based and not material specific. As a result, the collection of garden/green waste is frequently given higher priority than that of packaging recycling. This disconnect together with an over emphasis on mixed/co-mingled recycling collection is perceived as being a major failure of the UK scheme which, in turn, is seen as one of the reasons why the UK falls so far behind the rest of Northern Europe.

The lack of uniformity of systems across the Country is not only contributing to current failures but is creating considerable confusion in the eyes of the public who see a plethora of different schemes not only between authorities but also within the same authority. The UK Glass Industry could double its intake of recycled glass (Cullet) but is unable to do so because of the collection methods being used. The increase in kerb side collection is resulting in the well established economical bring system, (which is more than capable of supplying good quality cullet that could serve all end markets) disappearing.

There is also concern that the development of the MRF has proceeded without adequate attention being given to the development of material specific quality standards.

The increase in packaging targets is something the glass industry welcomes as it maintains momentum and ensures long term market security, but notes that this can not be achieved with collection systems and a recycling infrastructure that are considerably more effective than at present. Mixed/co-mingled collections of dry recyclables frequently require manual sorting and the excess cost of doing so is one of the main drivers for export for recycling of mixed waste. Proper source separation should substantially reduce the need to export waste and would enable significantly higher rates of recycling for most packaging materials.

DETAILED RESPONSE

1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management.

   1.1 The use of packaging and the “treatment” of packaging waste are covered by the EU Packaging and Packaging Waste Directive (PPWWD). In the UK, this is enshrined in the Producer Responsibility Obligations (Packaging Waste) Regulations. These regulations oblige all links in the packaging supply chain to contribute to the cost of recycling/disposal of packaging waste.

   1.2 It is noticeable that the Waste Strategy devotes nearly two pages to producer responsibility for packaging but less than half a page for End of Life Vehicles, WEEE and Batteries Directive.

   1.3 There is a legislative disconnect between the targets for packaging and those for local authorities. Local authority targets are weight based and not material specific. As a result, the collection of green/garden waste is frequently given higher priority than that of packaging recycling.

   1.4 The lack of joined up thinking together with an over emphasis on mixed/co-mingled recycling collection is a major reason for the current failure of UK schemes to match recycling rates achieved in much of Northern Europe.

   1.5 The lack of uniformity of systems across the Country is not only contributing to current failures but is creating considerable confusion in the mind of the public who see a plethora of different schemes not only between authorities but also within the same authority. The UK Glass Industry could double its intake of recycled glass (Cullet) but is unable to do so because of the collection methods being used. The increase in kerb side collection is resulting in the well established economical bring system,( which is more than capable of supplying good quality cullet that could be used by all end markets) disappearing.

   1.6 Whilst the Waste Strategy recognises the need for National Guidance, the proposal to have such a structure within the current framework of Defra is most unlikely to work. The leadership must come from a body that can effectively combine the appropriate executive arms of Defra, Department of Communities and Local Government and HM Treasury.
2. The role for implementation of regulations and their enforcement

2.1 Packaging and packaging waste is already the subject of regulations as commented on earlier. In particular the Essential Requirements are implemented in the UK. The UK being one of only three EU Countries to do so.

2.2 The subject of “excessive packaging” is raised frequently by media, politicians and, most recently, local authorities. Whilst there are examples of this, in the main packaging is entirely appropriate for its purpose—the highly competitive nature of the supply chain leaves very little room for unnecessary packaging.

2.3 The increase in packaging targets is something the glass industry welcomes as it maintains momentum and ensures long term market security, but notes that this can only be achieved with collection systems and recycling infrastructure that are considerably more effective than at present. Mixed/co-mingled collections of dry recyclables frequently require manual sorting and the excess cost of doing so is one of the main drivers for export for recycling of mixed waste. Proper source separation should substantially reduce the need to export waste and would enable significantly higher rates of recycling for most packaging materials.

3. The classification of waste

3.1 British Glass believes that the classification of waste should be agreed at European level.

4. The proposals for financial incentives to increase household waste prevention and recycling

4.1 It makes absolute environmental and commercial sense to maximise the recycling of household waste. Systems should be encouraged through education and “customer friendly” recycling schemes. Penalising householders for failure to recycle when schemes are frequently inadequate will simply antagonise people and hamper the encouragement of a recycling culture.

5. The role of composting

6. The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.

6.1 The packaging supply chain is highly experienced in the context of material choice for fit for purpose and will specify the use of recyclable and recycled content packaging wherever possible. There are a growing number of products where the use of recycled content is limited by lack of availability of recylcate of sufficient quality.

6.2 British Glass raises concerns regarding the recent emphasis on weight. Weight is one measure that should not be taken in isolation, or become the main driver for legislation. It is becoming apparent that agreements such as the Courtauld Commitment are driving signatories to consider moving away from heavier materials such as glass, despite it being easily recyclable.

6.3 Waste minimisation needs to be considered holistically. The primary role of packaging is to contain, protect and preserve. British Glass has for many years investigated the possibility of light weighting and for some products achieved success. British Glass is currently working with WRAP, its members, the retail sector and brand owners to take this initiative further to cover all product sectors, including beers, wines, spirits and foods. The project has resulted in further work investigating the possibility of bulk importing products to be filled in the UK in lightweight containers and the possibility of encouraging overseas manufacturers to lightweight abroad.

6.4 The issue of reusable packaging must be addressed on a holistic environmental basis. A substantial move to reusable packaging would be a considerable cultural change for consumers. Before any such initiative is enforced lessons should be learnt from Northern Europe eg When reusable quotas were introduced in Germany confusion by consumers resulted in reusable containers being disposed of as single trip, due to lack of awareness and education.

7. The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill.

7.1 The UK glass industry has no objections to higher recycling targets as set out in the Strategy as the benefits of using recycled glass does not just assist the UK in meeting the requirements of the Packaging Waste Directive and Landfill Directive but assists in meeting Climate Change targets and reducing CO2.

7.2 British Glass raises concerns regarding the recent emphasis on weight and carbon foot printing. These measures should not be taken in isolation, or become the main drivers for legislation. It is becoming Apparent that agreements such as the Courtauld Commitment are driving signatories to consider moving away from heavier materials such as glass, despite it being easily recyclable.
8. The promotion of anaerobic digestion for agricultural and food waste

9. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies.

9.1 The existing UK infrastructure for recycling of packaging waste is not fit for purpose. There are huge variations between local authorities in the types of materials collected, the collection methods used and the end-of-use recycling processes.

9.2 There is an absolute need for a strong National Waste Authority to oversee all waste resource activities including packaging recovery. A holistic, national approach is needed and the oversight authority must have power to pull the whole situation together.

9.3 The lack of joined up thinking has resulted in Local Authorities focusing efforts on mixed/co-mingled recycling collections. This has resulted in quality recyclate being lost to lower end markets as seen with glass (cullet) where quality cullet is being sent to low grade aggregate.

9.4 Mixed collections of dry recyclables frequently require manual sorting and the excess cost of doing so is one of the main drivers for export for recycling of mixed waste. Proper source separation should substantially reduce the need to export waste and would enable significantly higher rates of recycling for most packaging materials.

Rebecca Cocking
Recycling Manager
British Glass
October 2007

Memorandum submitted by the Institution of Civil Engineers (Waste 24)

INSTITUTION OF CIVIL ENGINEERS

The Institution of Civil Engineers (ICE) is a UK-based international organisation with over 75,000 members ranging from professional civil engineers to students. It is an educational and qualifying body and has charitable status under UK law. Founded in 1818, the ICE has become recognised worldwide for its excellence as a centre of learning, as a qualifying body and as a public voice for the profession.

EXECUTIVE SUMMARY

1. Shared Concerns with CIWM and IMechE

1.1. The Institution is co-ordinating its waste management sector activity with the Institution of Mechanical Engineers and the Chartered Institution of Wastes Management. The three institutions have met to ensure that the Committee is provided with independent professional input into all issues in which it has expressed an interest.

1.2. Collectively the three Institutions welcome the Waste Strategy for England 2007 and believe that the overall broad strategic approach is the correct one. However, during the consultation we have identified a number of shared concerns that we believe will fundamentally affect the ability of England to deliver against the targets set out in the strategy and those required by legislation in the form of Directives originating from Europe.

2. Infrastructure deficit

2.1. The existing infrastructure, and the current rate at which new infrastructure is being developed, will not in our view deliver the more sustainable approach to waste envisaged in the strategy.

2.2. Most importantly, it is clear that future infrastructure needs to cater for all wastes, regardless of origin (ie commercial and industrial waste as well as municipal), and there are four areas in particular where attention needs to be focused:

— the necessary skills to plan, build and operate new waste treatment plants;
— an effective planning system;
— communications and awareness raising to improve co-ordinated action by all parties; and
— decision support tools, including better data, cost benefit and life cycle analysis, etc.
3. Waste treatment technologies

3.1. The strategy should avoid promoting one type of technology over another. We believe that local authorities, either individually or jointly, are best placed through their strategic planning role to identify what scale and type of technology best suits their needs.

4. Waste as a resource

4.1. Although the strategy takes a big step forward by linking waste into the wider environmental agenda—including resource efficiency, energy policy and climate change—we wish to see this message driven home through a detailed action plan to ensure that the concept and practice of using waste as a resource becomes embedded much more effectively.

Implementation of the Strategy

5. National Governance Arrangements

5.1. The Strategy rightly flags the ongoing and necessary shift from waste management seen as an end of pipe activity, to resource management, where materials are treated as valuable resources flowing through the economy. In practice this means that in addition to traditional waste policy issues of targets, facility procurement and regulation, the Strategy is concerned with wider issues around integrating resource management into the national economy eg through the creation of sustainable markets for secondary or recycled materials.

5.2. As a result, in addition to DEFRA’s role as lead department, resource management has become a cross departmental issue, with key roles for the Treasury, BERR, DIT, Cabinet Office and CLG. There are also a range of publicly funded bodies with an interest in this agenda, including WRAP, the Carbon Trust, Envirowise, the National Industrial Symbiosis Programme and the Environment Agency. Whilst this situation potentially provides significant capacity to drive change, it also presents major co-ordination problems.

5.3. In a report issued earlier this year in conjunction with the Institution of Mechanical Engineers29, we advocated the creation of a cross departmental team operating at a strategic level to spell out clearly the changes required to deliver a strategy that genuinely treated waste as a valued resource. The report proposed that this team should be supported by an organisation to act as its “agent” with a role of influencing decision making and facilitating the creation of partnerships in areas such as land use planning, economic development, statutory delivery functions (eg transport, waste), procurement and financial management. We are concerned that no single body has yet been given the “agent” role and the specific task of making change happen. These functions could be added to the remit of one of the publically funded organisations listed above.

5.4. The creation of the cross departmental Waste Strategy Board is welcomed, although ICE reserves judgement as to whether it will be effective in driving forward the required action in key departments. The significant increase in funding for waste PFI credits announced in the Comprehensive Spending Review is a positive sign that Treasury spending plans are being aligned to the goals of the Strategy, although as discussed later, ICE are concerned that too much focus is being placed on PFI as a means of delivery. A second test will be the outcome of the recently closed consultation on the reform of the planning system.

5.5. Lengthy planning processes, with Local Authorities typically factoring in circa eighteen months for this stage of the process, remain a significant barrier to the delivery of facilities and a disincentive to new entrants to the waste market. ICE were therefore disappointed that this year’s Planning White Paper did not envisage significant numbers of waste facilities qualifying as Nationally Significant Infrastructure Projects (NISP) and thus able to be approved by the proposed Infrastructure Planning Commission. As an example, the White Paper sets a threshold of 50 MWe for energy from waste plant to be considered a NISP. In our view energy from waste is an example of a technology where the individual facilities may be relatively small, but taken as a whole, are fundamental to the delivery of the Waste Strategy. In this case ICE believes it would be appropriate to lower the threshold to 20 MWe, or more logically base the threshold on throughput of waste rather than electrical energy output. More widely, given the importance of delivering what amounts to a new national network of facilities over the next decade, it would help if the Committee seeks to clarify with the Department for Communities and Local Government what their intentions are in relation to waste infrastructure and the new procedures for major infrastructure projects.

5.6. In addition, as a professional body active in the field ICE recognises that it has a role in developing the knowledge and experience of individuals required to deliver effective resource management and providing expert advice to decision makers. The Institution are seeking to carry out this role in co-ordination with the Institution of Mechanical Engineers and the Chartered Institution of Wastes Management, enabling us to collectively encompass infrastructure development, waste technology and operations and logistics. We would encourage the Committee to examine if other partnerships such as this are emerging.

29 Institution of Civil Engineers/Institution of Mechanical Engineers (2007), How to Deliver a Resource Management Strategy, ICE/IMechE, London, UK.
6. Localisation and Centralisation

6.1. In terms of municipal waste contracts, there are real opportunities at the regional level to deliver both economies of scale and to create contracts that are able to attract more bidders and deliver better value to the public purse. In addition, in areas of two-tier local government, potential bidders must be provided with certainty as to how Waste Collection Authorities will collect and deliver waste and materials streams, strengthening the case for increased partnership working.

6.2. In addition, in terms of driving change across all waste streams, the experience of Hampshire County Council’s Natural Resources Initiative, suggests that Authorities can play a leadership and facilitation role in bringing together stakeholders to generate agreement on the rationale for a resource economy and the infrastructure required to support it.

6.3. In this context the Committee may wish to examine if Local Authorities (and Regional Development Agencies) are proactively aligning their “non waste” functions such as planning/spatial strategies, Local Area Agreements and economic development to the needs of the Waste Strategy. If not, this is likely to create a barrier to effective delivery.

7. Lack of Risk Management Arrangements

7.1. Annex A to the Strategy contains four scenarios setting out possible socio-economic changes over the period to 2030 and their likely impact on waste arisings. Whilst ICE applauds the fact that DEFRA has undertaken this work the Institution are alarmed that it is not clear on which scenario the measures set out in the Strategy are based. Furthermore, there is no evidence of any risk management arrangements should the assumptions in the scenario(s) turn out to be wrong. Promoters of individual waste projects would be expected to have proper risk management arrangements in place and the Strategy itself should follow a similarly professional approach.

Adequacy of Waste Infrastructure

8. Potential Infrastructure Deficit in 2010

8.1. The Committee will be aware that the Strategy was originally scheduled to be produced in 2005. ICE are concerned that while the Strategy was delayed for two years, key targets for diversion of biodegradable municipal waste from landfill have long been fixed by the Landfill Directive. Hitting these targets will require significant amounts of waste handling and treatment infrastructure to be operational. Furthermore, an even greater number of facilities will be required to integrate the Commercial and Industrial, and Construction and Demolition Waste streams into a functioning and fully effective resource management economy.

9. Municipal Waste

9.1. Whilst ICE commend the work of DEFRA’s Waste Infrastructure Delivery Programme (WIDP) in facilitating an increase in the pace of infrastructure investment, it is far from clear if this will be sufficient for the UK to hit the 2010 targets for diversion of municipal waste and thus avoid fines under the terms of the EU Landfill Directive.

9.2. In producing its response to DEFRA’s consultation on the Strategy, ICE engaged Dr Daryl Hill of Environment and Energy Ltd to carry out research into the number, type and cost of facilities required to meet its goals.

9.3. Whilst this research suggested that DEFRA’s assessment of the costs of the facilities was credible, ICE expressed concern as to whether sufficient plant could be made operational by 2010 to meet diversion targets. Our research suggested that 130 In-Vessel Composting/Material Recycling Facilities would need to be built and be operational and the logistics for separate collection implemented within these time scales. In addition, one would have to assume that these systems would achieve the level of source segregation of materials necessary. A further obstacle was finding viable outlets for all the materials generated; estimated at 5.8 million tonnes of secondary materials, with compost alone representing 2.1 million tonnes. Furthermore, ICE noted that DEFRA’s model appeared to assume that projects in train at the time of the consultation would reach contract close and proceed to build completion and operation within the timescales. A copy of this research is attached as Annex A. 30 We would therefore advise the Committee to examine progress towards delivery of facilities on this scale, the adequacy of logistics systems, the success of source separation activities and the availability of outlets for the materials generated.

30 Not printed.
10. **Market Capacity and Barriers to Entry**

10.1. The Office of Government Commerce’s (OGC), 2006 report on the Municipal Waste market\(^{31}\) found that there were too few suppliers bidding for waste contracts and that difficulties faced by new market entrants was a factor in reduced competition. The report also found that many Local Authorities lacked the specialist skills and experience required to carry out complex procurement exercises in the waste market, resulting in a reliance on external advisors.

10.2. ICE is concerned that both of these problems persist. Furthermore, anecdotal evidence suggests that there is also a shortage of the very external advisors OGC found were being used to plug Local Authority skills gaps. This situation limits capacity to deliver infrastructure and is not conducive to maximising the value gained from investment.

10.3. ICE would therefore advise the Committee to consider if the manner in which projects are being defined, and other procurement practices, are excluding potential new entrants to the market. The Committee may also wish to examine the nationwide availability to the waste sector of project management, procurement and legal skills.

10.4. In terms of capacity to construct facilities, the Committee should be aware that ConstructionSkills, the sector skills council for construction, is predicting a period of significantly rising demand, with infrastructure output projected to rise by 5.2% between 2007 and 2011\(^{32}\), with demand significantly higher in London and the South East. Waste projects are therefore likely to need to be attractive options for construction firms at a time when there are many other business opportunities (such as the London Olympics, for example).

10.5. This increase in demand is also increasing inflationary pressures in the construction sector. *New Civil Engineer* has recently reported that tender prices for buildings and infrastructure are expected to rise by between 4.5% and 5% over the next two years, whilst in London construction inflation is projected to stay at 6.5% until 2011\(^{33}\). Given that the Consumer Price Index (against which “real term” increases in spending are calculated) is running at 1.8%, and the pent up demand for spending on waste infrastructure, the Committee may wish to examine the impact of construction inflation on the cost of delivering the Strategy.

11. **Over Reliance on PFI**

11.1. In the context of procurement practice ICE are concerned that there is a prevailing sense that for larger projects, PFI is the only realistic option being offered to Authorities. PFI can result in a lengthy and costly procurement process, which may not always be the best option.

11.2. ICE would like to see cross fertilisation of ideas from other infrastructure sectors such as flood defences, highways and water and waste water where a variety of models have been used to secure long term private investment in public services.

11.3. In addition, the recent and ongoing experience of Buckinghamshire County Council suggests there is potential for well resourced and “educated” Local Authorities to use Prudential Borrowing to procure individual residual waste facilities.

12. **Non Municipal Waste Streams**

12.1. The Strategy largely focuses on the circa 9% of UK waste arisings that derives from households\(^{34}\) and the creation of facilities by Local Authorities to deal with this material. This approach will not deliver an optimal network of resource management facilities. Whilst there are proposals for dealing with Commercial and Industrial (C&I) waste, including a target for reducing the volume of C&I waste going to landfill by 20% by 2010, there is little detail on how this will be achieved. The proposals in relation to Construction and Demolition Waste are more positive and the introduction of compulsory site waste management plans for projects with a value of over £250,000 should drive more efficient behaviour, particularly if used alongside such good practice tools as the ICE Demolition Protocol.

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THE POTENTIAL FOR THE PROPOSALS TO TACKLE THE UK'S CONTRIBUTION TO CLIMATE CHANGE

13. Need for a Strategic Approach

13.1. The Committee has asked for views on the potential for the Strategy to make a contribution to meeting the UK’s climate change commitments, in particular methane emissions. The Institution believes that waste management policy should be much more strongly and explicitly linked to energy and climate change policy. We must maximise the value that is extracted from waste, whilst minimising its environmental impact. The logic of this approach is explored in ICE and IMechE’s study, The Case for a Resource Management Strategy[35], which was part funded by DEFRA.

13.2. The report states that the UK should move away from weight based targets as the measurement of the success of waste management strategies, and instead adopt a measure of lifecycle carbon dioxide (CO₂) associated with material streams and types of treatment. Using CO₂ as a measurement suggests that present strategies, while meeting weight-based targets, could potentially release more climate-changing CO₂ into the atmosphere than some possible alternatives. ICE understands that the water industry is likely to be asked to include an assessment of carbon footprint as part of the next cycle of 5 year investment plans to be agreed with OFWAT. The Committee may wish to explore the feasibility of a similar approach to the provision of waste infrastructure.

13.3. In addition, as part of a resource management approach, policy makers should take explicit account of the contribution Energy from Waste can make to energy policy goals of increasing diversity of supply and electricity generation from renewable sources. An ICE and (then) Renewable Power Association report[36] has demonstrated that energy generated from residual Municipal and Commercial and Industrial waste could account for a theoretical maximum of 17% of UK electricity generation in 2020 and therefore make a major contribution to meeting our targets under the EU Renewables Directives. There are sound practical reasons why this theoretical figure will not be reached but it does demonstrate the scale of the potential of energy from waste.

13.4. More fundamentally, it is not clear what the rationale is for the particular targets for EfW and recycling in the Strategy. The CO₂ emissions-based approach set out in The Case for a Resource Management Strategy provides such a rationale for target setting and would create a link in the public mind between waste, energy and climate change policy which in turn could deliver increased popular support.

4. The Promotion of Anaerobic Digestion

14.1. ICE would support the use of Anaerobic Digestion for the treatment of agricultural waste.

14.2. In relation to food waste, to produce a high value product, source segregation will be required, with a knock on impact to the costs and practicalities of collection. Without this approach, much of the material produced will be of poor quality and suitable only for landfill cover.

14.3. In addition, further work is required to assess the carbon impact of domestic food waste collection and processing.

14.4. Overall Anaerobic Digestion needs to be seen as part of a network of resource management facilities and cannot obviate the need for significant numbers of residual waste facilities, which ICE believes will need to include “mainstream” energy from waste technology.

Institution of Civil Engineers

October 2007

Memorandum submitted by the Packaging Federation (Waste 25)

FOREWORD

In response to this inquiry, the following submission is made on behalf of The Packaging Federation, a not-for-profit organisation representing the UK packaging manufacturing industry. As a manufacturing sector we have approximately 85,000 employees with a turnover in excess of £10 billion, making a contribution to the UK’s GDP of approximately 1%. The industry is divided into a number of sectors covering a variety of materials and each of these is represented by sector Trade Associations who will be responding separately to this inquiry.

[36] Institution of Civil Engineers/Renewable Power Association (2005), Quantification of the Potential Energy from Residuals in the UK, ICE/RPA, London, UK.
The committee has also received a detailed response from Incpen (the Industry Committee for Packaging and the Environment). Their submission contains considerable detail on the true impact of packaging in the environment and brings some much needed balance to the debate. In particular, it exposes many of the myths surrounding packaging and demonstrates the positive role that packaging plays in reducing collateral damage to the environment from wasted product and especially wasted food. We have not sought to duplicate the facts contained in Incpen's submission but do fully endorse and support their submission and the conclusions that it reaches. It is suggested, therefore, that The Packaging Federation's response should be considered in conjunction with that of Incpen.

**Executive Summary**

The obsession with waste packaging is clearly out of balance with its environmental impact—waste packaging is just 3% of Landfill and 18% of household waste (Defra figures). Proportionate attention should be directed towards the remaining 97% of landfill and 82% of household waste!

The overall carbon footprint of packaging including its treatment and disposal is less than 1% overall and yet it continues to receive a hugely disproportionate amount of attention. Without modern packaging, food waste in the supply chain would be much greater with the concomitant impact on the environment—indeed, on that basis, it is arguable that the overall carbon impact of packaging is likely to be positive.

There is a massive disconnect between the targets for packaging and those for local authorities. Local authority targets are weight based and are not material specific—and are primarily driven by the requirement for them to reduce the percentage of biodegradable waste to landfill. As a result, the collection of green waste is frequently given higher priority than that of packaging recycling including lighter materials like aluminium and plastic. This “Lack of Joined-Up Thinking” together with an over emphasis on mixed recycling collection (ie a lack of separated kerbside collection schemes) is a major reason for the current failure of UK schemes to match recycling rates achieved in much of mainland Europe.

The emphasis on localised schemes rather than strong central guidance is not only contributing to current failures but is creating considerable confusion in the eyes of consumers who see a plethora of different systems even in adjoining neighbourhoods. Much more recycling of packaging is possible but it require schemes that are easy to understand, consistent in approach and locally available—either as kerbside collections or “bring schemes”. This is essential if a true culture of recycling is to be created. Once such a culture exists and is supported by local facilities, much of the “hysteria” about “excessive packaging” will abate as the packaging “disappears” into recycling!

The Waste Strategy proposes increased recycling targets for a range of packaging materials. The industry is not opposed to such a move in principle but notes that this can only be achieved with collection systems and recycling infrastructure that are considerably more effective than at present. Mixed collections of dry recyclables frequently require manual sorting and the excess cost of so doing is one of the main drivers for export for recycling of mixed waste. Proper source separation should substantially reduce the need to export waste and would enable significantly higher rates of recycling for most packaging materials.

Waste minimisation needs to be considered holistically. The primary role of packaging is to contain, protect and preserve. For many food products in particular, the use of lightweight, mixed materials can substantially increase shelf life and reduce food wastage (which has a massively greater impact on the environment than packaging waste). Such materials that cannot be recycled should be captured for use as fuel in Energy from Waste (EfW) plants.

Lightweighting of packaging just to reduce the weight going to landfill is a negative concept. The emphasis should be on capturing the materials after use for recycling or EfW. In particular, the growing use of “biodegradable” materials, apart from contaminating recycling streams, imparts a negative message to consumers by apparently promoting the landfilling of used packaging.

We fully support the attention given to food waste in the Waste Strategy. Figures from WRAP show that food waste in household waste is substantially greater than packaging waste. Indeed, “avoidable food waste” (WRAP estimate) is close to the weight of packaging waste. Allowing for the waste of embedded energy alone, “avoidable food waste” has some ten times the impact of packaging waste. Factoring in only a small part of the effect of methane emissions from food waste in landfill gives an environmental impact of at least twenty times the impact of packaging.

At present the levels of Energy from Waste generation is at a dramatically lower level than most of N.Europe—8% vs 35%—50%. And in each of these countries, recycling rates are also higher. EfW should be seen as an adjunct to environmentally and economically sound recycling—not as a replacement for it.
Detailed Response

1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste. Localisation as opposed to centralisation of waste management

1.1 The use of packaging and the “treatment” of packaging waste are covered by the EU Packaging and Packaging Waste Directive (PPWD). In the UK, this is enshrined in the Producer Responsibility Obligations (Packaging Waste) Regulations. These regulations obligate all links in the packaging supply chain to contribute to the cost of recycling/disposal of packaging waste. In the case of the packaging manufacturing industry, it contributes some tens of millions of pounds each year through the various compliance schemes.

1.2 It is noticeable that the Waste Strategy devotes nearly two pages to producer responsibility for packaging but less than half a page together for End of Life Vehicles, Waste Electrical and Electronic equipment (WEEE) and the Batteries Directive. This obsession with waste packaging is clearly out of balance with its environmental impact—waste packaging is just 3% of Landfill and 18% of household waste (Defra figures). As an industry, we feel strongly that proportionate attention should be directed towards the remaining 97% of landfill and 82% of household waste!

1.3 There is a massive disconnect between the targets for packaging and those for local authorities. Local authority targets are weight based and are not material specific—and are primarily driven by the requirement for them to reduce the percentage of biodegradable waste to landfill. As a result, the collection of green waste is frequently given higher priority than that of packaging recycling including lighter materials like aluminium and plastic.

1.4 This “Lack of Joined Up Thinking” together with an over emphasis on mixed recycling collection (ie a lack of separated kerbside collection schemes) is a major reason for the current failure of UK schemes to match recycling rates achieved in much of mainland Europe.

1.5 The emphasis on localised schemes rather than strong central guidance is not only contributing to current failures but is creating considerable confusion in the eyes of consumers who see a plethora of different systems even in adjoining neighbourhoods. Much more recycling of packaging is possible but it require schemes that are easy to understand, consistent in approach and locally available—either as kerbside collections or “bring schemes”. This is essential if a true culture of recycling is to be created. Once such a culture exists and is supported by local facilities, much of the “hysteria” about “excessive packaging” will abate as the packaging “disappears” into recycling!

1.6 Whilst the Waste Strategy recognises the need for National Guidance, the proposal to have such a structure within Defra is most unlikely to work. The leadership must come from a body that can effectively combine the appropriate executive arms of Defra, Department for Communities and Local Government and HM Treasury.

2. The role for and implementation of regulations, and their enforcement

2.1 Packaging and packaging waste are already the subject of regulations as commented on earlier. In particular, the Essential Requirements Regulations (which specify definitions for the appropriateness of product packaging) are implemented in the UK—one of only three EU countries that do so. Packaging growth in the UK in recent years has been significantly less than growth in GDP—and less than countries like Germany and France whose per capita use of packaging is significantly higher than ours. Recent attempts by UK Government to persuade the EU to remove reference to “consumer acceptance” from the Essential Requirement Regulations (as signalled in the Waste Strategy) would result in minimalist, command economy style packaging that would dramatically impact product brands and would be wholly inappropriate in a market economy.

2.2 The subject of “excessive packaging” is raised frequently by media, politicians and, most recently, local authorities. Whilst there are examples of this, in the main packaging is entirely appropriate for its purpose—the highly competitive nature of the supply chain leaves very little room for unnecessary packaging. We fully support Inpen’s proposal that a multi-stakeholder National Packaging Standards Council should be re-established; such a Council would be able to examine the veracity of claims of instances off alleged “excessive packaging”.

2.3 The Waste Strategy proposes increased recycling targets for a range of packaging materials. The industry is not opposed to such a move in principle but notes that this can only be achieved with collection systems and recycling infrastructure that are considerably more effective than at present.

3. The proposals for financial incentives to increase household waste prevention and recycling

3.1 It makes absolute environmental and commercial sense to maximise the recycling of household waste. We believe that this should be encouraged by education and “customer friendly” recycling schemes. Penalising households for failure to recycle when the schemes are frequently inadequate will simply antagonise people and hamper the encouragement of a recycling culture.
4. **The role of composting**

4.1 Whilst recognising that home composting has some value in the safe disposal of garden and some food waste, we do not believe that it is appropriate for packaging waste other than for contaminated cartonboard waste. There is already considerable confusion in consumers’ minds about “compostables” and “biodegradables”, most of which fulfil their function only in commercial composting processes.

4.2 Commercial scale composting should be confined to those waste streams that do not have inherent calorific value. It is the antithesis of sustainability to be composting (or landfilling!) those waste streams that can be used for recycling or to generate heat and power. Designing materials to be composted or landfill specifically is a criminal waste of resources—even if they are produced from replenishable sources.

4.3 Encouraging consumers to place uncontaminated corrugated board waste into green waste for composting, as practised by a number of local authorities, should be strongly discouraged as it is an excellent material for recycling and for which widespread facilities are available.

5. **The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes**

5.1 The choice of materials for packaging is complex and should be driven by suitability for purpose. The concept of “responsible packaging” suggests that the supply chain is using “irresponsible packaging”—this is demonstrably not the case. The packaging supply chain is hugely experienced in the correct material choice for fitness for purpose and will specify the use of recyclable and recycled content packaging wherever possible and, in the case of food, where food contact regulations allow. Indeed, there are a growing number of products where the use of recycled content is limited by lack of availability of recyclate of sufficient quality. External specification of materials is most unlikely to lead to an optimal solution.

5.2 Waste minimisation needs to be considered holistically. The primary role of packaging is to contain, protect and preserve. For many food products in particular, the use of lightweight, mixed materials can substantially increase shelf life and reduce food wastage (which has a massively greater impact on the environment than packaging waste). Such materials that cannot be recycled should be captured for use as fuel in Energy from Waste (EfW) plants.

Lightweighting of packaging just to reduce the weight going to landfill is a negative concept. The emphasis should be on capturing the materials after use for recycling or EfW. In particular, the growing use of “biodegradable” materials, apart from contaminating recycling streams, imparts a negative message to consumers by apparently promoting the landfilling of used packaging.

5.3 The issue of reusable packaging must be addressed on a holistic environmental basis. A substantial move to reusable/returnable packaging would be a considerable cultural change for consumers. More importantly, such schemes would entail substantial logistical challenges and are likely to be considerably energy intensive in the case of food and drink packaging. Any legislative move to enforce the use of such packaging must be subject to rigorous environmental and carbon balance scrutiny.

6. **The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill**

6.1 We fully support the attention given to food waste in the Waste Strategy. Figures from WRAP show that food waste in household waste is substantially greater than packaging waste. Indeed, “avoidable food waste” (WRAP estimate) is close to the weight of packaging waste. Allowing for the waste of embedded energy alone, “avoidable food waste” has some ten times the impact of packaging waste. Factoring in only a small part of the effect of methane emissions from food waste in landfill gives an environmental impact of at least twenty times the impact of packaging.

6.2 Packaging has a significant role to play in reducing food waste. Apart from optimisation of pack sizes, the use of “smarter” packaging (including temperature history sensors) would significantly reduce the amount of food discarded because of expiry of “use by” dates. Whilst this may result in increased packaging use, the net environmental benefit would be substantial.

6.3 The overall carbon footprint of packaging including its treatment and disposal is less than 1% overall and yet it continues to receive a hugely disproportionate amount of attention. Without modern packaging, food waste in the supply chain would be much greater with the concomitant impact on the environment—indeed, on that basis, it is arguable that the overall carbon impact of packaging is likely to be positive.

6.4 Much of the attacks on packaging has been based on spurious science—if any at all. It is hoped that the scientific rigour necessary to adequately assess carbon impact will show packaging in a rather different light. It is certainly true that the carbon impacts of personal car use, home energy use, home heating and food waste are massive by comparison to those of packaging.
7. The promotion of anaerobic digestion for agricultural and food waste

7.1 We are concerned that anaerobic digestion is being seen as the obvious route for the safe disposal of food waste. Much food waste, particularly in conjunction with used, food contaminated packaging, has high calorific value and would be far better used as a fuel for EfW. There needs to be a study into the appropriate use of this waste stream with identification of the appropriate balance between the two methodologies.

7.2 Whatever the recovery route that is used, it is essential that material with calorific value is utilised for power and heat generation and not allowed, by default, into landfill. Anything less is an affront to sustainability—particularly at a time when sources of energy are increasingly dependent on areas of political uncertainty.

8. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

8.1 The existing UK infrastructure for recycling of packaging waste is not fit for purpose. There are huge variations between local authorities in the types of materials collected, the collection methods used and the end-of-use recycling processes. The “lack of joined-up thinking” occasioned by different targets for local authorities as opposed to those for the packaging supply chain (as explained earlier) has created a disparate structure which is critically limiting the amount of packaging that is recycled or recovered for use as fuel.

8.2 There is an absolute need for a strong National Waste Authority to oversee all waste resource activities including packaging recovery. A holistic, national approach is needed and the oversight authority must have the power to pull the whole situation together.

8.3 There are major recyclate quality issues arising from the many mixed waste collection schemes in use. As a result, the use of these materials becomes sub-optimal as their quality is insufficient for re-use in packaging manufacture—leading to potential failure to meet targets for the glass, aluminium and plastic sectors. We strongly recommend that “specifications” for recyclates” are written into all contracts between Local Authorities and Waste Management Companies—thereby ensuring uniformity of quality of recyclates that would be suitable to be traded for reprocessing into packaging.

8.4 Mixed collections of dry recyclables frequently require manual sorting and the excess cost of so doing is one of the main drivers for export for recycling of mixed waste. Proper source separation should substantially reduce the need to export waste and would enable significantly higher rates of recycling for most packaging materials.

8.5 At present the levels of Energy from Waste generation is at a dramatically lower level than most of N.Europe—8% against 35% to 50%. And in each of these countries, recycling rates are also higher. EfW should be seen as an adjunct to environmentally and economically sound recycling—not as a replacement for it. As stated earlier, EfW can make a substantial contribution to power generation in the UK — particularly with the looming energy gap in the next decade.

8.6 We fully support the proposal for increases in EfW in the Waste Strategy but believe that the targets contained therein should be significantly higher to bring the UK closer to its European neighbours.

8.7 For this to happen, there need to be robust mechanisms for diversion of waste materials to EfW facilities and for the process to be seen as a viable and positive alternative route for waste treatment—not a least acceptable alternative. In particular, the choice of “routes” for waste need to be based on robust scientific analysis—particularly for lightweight paper and plastic fractions and high calorific value food waste.

Dick Searle
Chief Executive
The Packaging Federation

October 2007

Memorandum submitted by Tetra Pak UK (Waste 26)

1. INTRODUCTION

1.1 Tetra Pak UK welcomes the Committee’s examination of the Government’s Waste Strategy and would like to take this opportunity to comment on issues around waste minimisation, the UK’s processing capacity and working with Local Authorities to introduce new recycling services, as well as informing the Committee of the improvements made in the availability of beverage carton recycling facilities in the UK.

1.2 We are members of INCPEN and the Packaging Federation who have also submitted responses to the Committee.
2. SUMMARY

2.1 In summary, the main points of our submission are:

— Minimising food waste is vitally important, and the role played by resource-efficient packaging must be recognised.

— More and better sorting infrastructure is needed to ensure that greater quantities of high-quality recyclate can be delivered back to industry for recycling. This should include provision for packaging—often lightweight and resource-efficient—that has so far been overlooked in the UK.

— A more standardised approach to collection by local government would enable better and more effective partnerships with industry, and more effective, straightforward communication with consumers.

2.2 In addition, the carton industry has made, and continues to make, a significant contribution towards post-consumer collection through the provision of consumer facilities, transport infrastructure and the creation of markets for the collected material.

2.3 Beverage cartons such as those produced by Tetra Pak were collected for recycling in relatively few Local Authority areas until 2006. Since 2006, and in particular since the launch of a cost-free bring bank service for local authorities in summer 2007 by the UK carton industry, there has been a step change in the availability of carton recycling facilities with over 70% of UK Local Authorities now having some type of service in place.

2.4 Further information on our efforts to improve carton recycling is included as an appendix to this evidence.

3. WASTE MINIMISATION

3.1 The packaging industry has gone to great lengths in recent years to minimise the use of resources. This continues, driven by both environmental and economic considerations—manufacturers have long sought to reduce costs and therefore increase competitiveness for themselves and their customers.

3.2 We believe that the future of the packaging industry will also increasingly depend on what materials are used in design and production, whether these are from renewable resources and what the overall environmental impacts of a package will be across its whole life cycle, for example: are the raw materials responsibly sourced? What are the environmental and carbon impacts of the materials and the manufacturing processes? Is the package efficient to transport?

3.3 In terms of Tetra Pak’s beverage cartons, the one litre Tetra Brik Aseptic package, the kind typically used for long-life orange juice, is about 77% paperboard, 17% low-density polyethylene and 6% aluminium. These other materials are crucial to the performance of the carton and they enable the use of paper as the main material.

3.4 Waste reduction and more efficient resource use at both the product design and manufacturing phases have been central to Tetra Pak’s approach for many years. Our investment in packaging innovation has enabled us to reduce the quantities of polyethylene and aluminium to the minimum needed to ensure product integrity, for example the aluminium layer is now 30% less than in 1969. We have also developed a new polyethylene liner (Tetra Wide) which reduces the polyethylene in the laminated carton lining by up to 30%.

3.5 It is vital, however, that the role of packaging in the prevention of food waste is recognized. If products are damaged or spoiled as a result of inadequate packaging, all the energy and materials in those products are lost.

3.6 We would be happy to provide the Committee with further information on our own approach to measuring and improving the complete life cycle impacts of our packages, if required.

4. UK CAPACITY TO PROCESS MATERIALS COLLECTED FOR RECYCLING

4.1 Together with its industry partners, Tetra Pak invested significant funds into constructing the UK’s first dedicated carton recycling plant at the Smith Anderson paper mill in Fife, Scotland, which was opened in 2004. The plant was used to process all of the cartons collected for recycling in the UK and Ireland, together with the UK carton industries and our customers waste up until June 2006.

4.2 Unfortunately, due largely to significantly increased energy costs, the plant was forced to close when the trading activities of Smith Anderson & Company Ltd’s papermaking business were suspended. As the Committee maybe aware, rising energy costs have been a major issue for many paper mills in the UK.

4.3 Since the closure of Smith Anderson, Tetra Pak has ensured that the collection and recycling of all post-consumer beverage cartons (together with industrial waste) has continued uninterrupted. We have worked with other partners in the paper industry to trial carton recycling at a number of other UK mills. We have also taken responsibility for ensuring all excess material is recycled by the nearest available mills within Europe.
4.4 Tetra Pak ensures that the transportation of material to Europe is undertaken as efficiently as possible—after the carton bring banks are emptied or kerbside collected material is sorted, bales of cartons are bulked-up at regional “hubs” until there is sufficient material to allow a transport-efficient trip. As a carbon neutral company, Tetra Pak will be measuring these trips and ensuring that the carbon emitted is offset with credible offsets. In 2008 we are aiming for all our offsets to be certified to the Gold Standard.

4.5 Ultimately, we are seeking to reduce the distance which we must transport materials by working to establish carton recycling mills/facilities within the UK as soon as possible. Whilst we are looking to work with a variety of partners in delivering this new processing capacity, we currently receive no direct support from Government on this.

4.6 We would welcome support as we seek to migrate more Local Authority areas to kerbside collection systems and the volumes of cartons collected for recycling increase. In particular, we would like to see new Material Recycling Facilities encouraged to accept and sort a broader range of materials, including beverage cartons, and to produce better quality material streams. It would be perverse to have environmentally sound packaging such as cartons (as evidenced by a number of credible European lifecycle studies, including the UBA II study in Germany) disadvantaged in the market by of a lack of collection and sorting infrastructure.

5. Working with Local Authorities to Introduce New Recycling Services

5.1 We believe that working with Local Authorities could be made simpler, and would support any measures that would bring standardisation and improve partnership working and coordination.

5.2 The complexity of organisations, recycling systems, range of materials collected and differing priorities, together with the misalignment of business and local government recycling targets, militate against effective partnership working.

5.3 It also makes communication to the consumer unnecessarily complicated, as what is recyclable in one area may not be in another.

5.4 Local authority communications reflect this, with some urging consumers not to buy products in certain types of packaging, and others readily accepting the same packaging for recycling.

5.5 We believe that the level of consumer engagement needed to achieve significantly higher recycling rates hinges on high-quality, user-friendly collection and sorting systems and clear, consistent messages.

6. Appendix—Progress in Expanding Carton Collection Services in the UK

6.1 Local Authorities and industry have made great strides in recent years to improve general recycling rates but carton collection and recycling have lagged well behind the levels seen across Europe and in many developed countries around the world.

6.2 This was due to very limited public access to collection facilities, caused largely by the fact that local authority recycling targets are weight-based and cartons—as an efficient lightweight form of packaging—have not been considered a priority material for collection. As such, just three years ago, there were very few opportunities to recycle cartons anywhere in the UK.

6.3 To overcome this problem and boost the availability of carton recycling facilities, the UK carton industry—through their industry body the Alliance for Beverage Cartons and the Environment UK (ACE UK) of which Tetra Pak UK is the leading member—took the proactive and voluntary step of launching a £1.5 million fund in 2006 to assist in the implementation of collection services across all local authorities in England, Wales, Scotland and Northern Ireland.

6.4 This investment, together with the appointment of a team of National Recycling Officers, helped to raise the number of local authority areas collecting cartons from 20 to around 100 by June 2007. Whilst this was a good start, we wanted to ensure quicker progress in delivering new schemes on the ground.

6.5 During this summer, ACE UK signed agreements with a number of major waste contractors, which enabled the national provision of fully-serviced bring banks at no cost to local authorities. Through this new service, we have dramatically increased the provision of carton recycling facilities over the last few months, and as of today people living in 291 Local Authority areas (approximately 70%) can now recycle their cartons—either via their regular kerbside collection or at carefully-selected “bring bank” sites.

6.6 We are guaranteeing the cost-free bring bank service initially for two years, and see it as a short-term solution to give the public access to carton recycling, build usage and awareness. In the meantime, we are also working to develop ongoing solutions for after this period, by working with waste contractors and MRF operators to enable migration to kerbside collection.

6.7 We have created a new website http://www.tetrapakrecycling.co.uk to keep stakeholders and the public informed of our progress and have created an interactive map (http://www.tetrapakrecycling.co.uk/ locator.asp) so that the public can see where collection is available, including full addresses for all bring bank sites.
6.8 Our aim is to ensure that access to carton collection/recycling facilities is available in all UK Local Authority areas by the end of 2008. We believe that this illustrates how we have taken responsibility for developing an effective solution that addresses UK consumers desire to recycle cartons, in the absence of direct statutory requirements.

Tetra Pak UK

October 2007

Memorandum submitted by the Local Authority Recycling Advisory Committee (LARAC) (Waste 27)

I am writing to present the LARAC response to the request for submissions to the above committee, which is contained below, and I thank you for the opportunity to provide information on the above subject.

The comments below are sent on behalf of the Local Authority Recycling Advisory Committee (LARAC). LARAC is an association of well over 400 local authorities across England, Scotland Wales and Northern Ireland whose waste management and recycling professionals’ co-ordinate and operate waste management services. Membership is drawn from all types of authority including statutory Waste Collection (WCA), Waste Disposal (WDA) and Unitary.

Overall LARAC believes that the English Waste Strategy does not provide enough leadership to take the country as far forward as it could. We are also concerned that Government intend more legislation for local authorities yet are taking a voluntary line with the private sector, which has a much larger component of the total waste stream.

If you have any queries on this response or would like to discuss the matter further then please contact me on (phone) or (email).

Lee Marshall
Chair, LARAC

How polices proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste.

Localisation as opposed to centralisation of waste management

1. LARAC feels that one of the keys to the success of the Waste Strategy is going to be the strength of the strategic lead that comes from Central Government. Whilst we think the Strategy provides a large amount of the right sentiment we do feel that it is lacking in the overall leadership and vision within a number of Government departments including the treasury that is required if England is to deal effectively with consumption, resource management and its environmental impacts.

2. There needs to be a focus on the fact that waste generally is a latent resource and that fact is not particularly changed as a result of the current waste classifications, in terms of household, commercial, industrial etc. Current targets are generally set sectorally and applied narrowly to certain classifications of waste. By looking at the whole waste stream in the round there is greater potential to make progress overall on recycling and keeping resources in economic use. The Landfill Diversion targets for local authorities and the Packaging Targets for the private sector are examples of where separate target regimes have created potential conflicts that mean the two sectors are not working as closely together as could be possible, or sharing a common goal.

3. LARAC also believes that a very strong emphasis should continue to be placed on the “Producer Responsibility” principle and that product design should have continued economic use of the resources of a product as one of its key principals. By designing in durability, reuse and “recyclability” then products will be easier for local authorities and others to deal with and so ensure that resources are not lost to the economy.

4. If the policies and plans with the Strategy are to be implemented and delivered as set out then clear leadership and sufficient resources within DEFRA will be paramount. At some levels the department appears to be one that officials pass through before going on to “bigger” areas rather than being an important priority in its own right. This lack of continuity can then lead to experience being lost to the department as soon as it has been gained and personal contacts and networks with non-governmental organizations, important for the development of sound policy, being disrupted.

5. LARAC believes there is place for both more centralisation and more localisation of waste management. Whilst we believe strongly from a local authority point of view that one size does not fit all local situations, we would concede that is room for some rationalisation and consolidation of techniques and equipment. For example, voluntary agreements on the colour of containers for the collection of different materials could bring about procurement efficiencies and also answer some of the public concerns about the different systems in place across the country.
6. We do believe that local authorities have made great strides in increasing recycling of waste in the past 10 years and this is due in part to the fact that they have introduced schemes applicable to their areas. This has meant that they have had to innovate which has helped maintain the pace of change that we have seen. Centralisation from this viewpoint would stifle innovation and could lead to a slowing down in progress as well as introducing inefficiencies to some areas. That said information sharing will help ensure that we are not reinventing the wheel and the work that WRAP does in this (and other) areas is to be welcomed and commended.

The Role for and the implementation of regulations, and their enforcement

7. LARAC is disappointed that once again regulations seem to be placed on the public sector disproportionately compared with the private sector. Whilst we appreciate the need to maintain the competitiveness of the UK economy and business by not imposing undue regulation, if the Strategy is to achieve the aim of making a serious contribution to climate change and one planet living it could be argued that more action is needed.

8. Given that household waste is a smaller component of the overall waste stream than commercial or industrial waste we feel that a level playing field needs to be achieved between the public and private sector in order for the Waste Strategy to deal effectively with commercial and industrial wastes as well as municipal wastes. This works both ways. On one hand, for example, the Landfill Allowance Trading Scheme increases the risk and potentially the cost of increasing trade waste provision for local authorities, but not private sector organizations. On the other hand, the decision to exempt all municipal waste from the requirement to be further pre-treated before being landfilled on account of councils being required to operate kerbside (household) recycling schemes under the WET Act may be considered to discriminate against private sector operations.

9. That said we do feel that targets for local authorities on the whole have had a positive effect and have been a significant driver in gaining local political support for the expansion of recycling schemes. From a practitioner’s point of view targets appear to have worked and we therefore see them as an essential element in leveraging money into authority waste management services when authorities are allocating resources.

10. If voluntary measures are to be proposed for the private sector that strict timetables should be used for their agreement and introduction. If these timetables are not met than previously published regulations could then be introduced. Whilst this is a very simplified example, it is interesting that whereas the Landfill Allowance Scheme that involved local authorities was introduced to a strict timetable, the Packaging Regulations and The WEEE Directive, involving the private sector, had a much drawn out implementation period.

11. Adequate resources must be provided for the Environment Agency and local authorities to carry out enforcement duties at the same time as working with Magistrates and Judges to develop suitable deterrents to back up enforcement action. That said a view needs to be taken on why we are regulating and policing environmental activities as there are instances where one set of regulations stops a greater environmental benefit from being achieved. An example of this was the Animal By Products Order which put back composting 5 years in the UK and means we are further back from achieving Landfill Directive targets than we could have been. This also exemplifies the need for the Government as a whole to prioritise and lead environmental stewardship.

The classification of waste

12. As mentioned earlier the way in which as waste is classified can sometimes conflict with achieving greater environmental benefits from waste. There continues to be uncertainty and perceived risk with regard to what is municipal waste and household waste, even though the Environmental Protection Act provides certain definitions.

13. The definitions of waste should be framed in such a way that their limits are clear and they do not work against achieving environmental benefits. In some cases, targets and legislation may be formed by waste definitions whilst the greater environmental benefit would be gained by changing the definitions themselves.

14. From a local authority point of view the continued exclusion of home composted waste from the definition of municipal waste would mean that a key element of waste reduction and valuable tool in meeting the Landfill Directive would not be available. Yet there is industry wide agreement that home composting is preferable to kerbside collections for composting waste.

15. If the Strategy is to lead to a change from seeing waste as a waste to seeing waste as a resource then the point at which an item is classified as a waste could become critical. If an item is seen as a resource until it really does have no further economic use, or there is no intention to gain any economic use out of it, then at that point (but not before) it should become a waste, provided that overall its continued use, re-use or further recycling doesn’t significantly increase pollution. At present items are too quickly classed as a waste...
and do not become a resource again until after they have are physically been through the recycling or reprocessing system. This places economic and regulatory barriers on keeping those items in the economic cycle and so means that more resources are lost to the economy than need to be.

16. This change in outlook from waste to resource needs to be mirrored in the definitions and classifications of waste if England is to make the step change needed in sustainable consumption.

**The proposals for financial incentives to increase household waste prevention and recycling**

17. LARAC was dismayed with the proposals contained within the Strategy for household incentive schemes and responded to the accompanying consultation accordingly. Given the overwhelming evidence from other European countries on the benefits and practicality of direct and variable charging schemes it was surprising that such systems were not proposed for England, even allowing for the Government’s obsession with controlling local authority expenditure. Indeed that Strategy flew in the face of the very evidence it was providing.

18. It is undeniable that introducing charging systems will be a very brave political decision but once again evidence from several other countries show that it can be done. Therefore we still believe that local authorities should be given the power (Not Duty) to implement direct/variable charging schemes within their area to increase and enhance the collection of materials for reuse and recycling. This power could come subject to certain conditions relating to having suitable and appropriate collection and communications systems in place along with proof of consideration of affordability for all residents.

19. Local authorities and their representative organizations have worked with Government throughout the consultation period to try and find a way to make the proposed schemes work but it was felt this was just not possible as they have so far been presented.

20. LARAC believes that England should take the examples and experiences of other countries in this particular field and apply them here. This would bring a type of “producer” pays principle to householders and should enable a stronger link to be made in people’s minds between purchasing decisions and waste generation. At present it is too easy for householders not to take personal ownership of the waste problem, it often being seen as something that “the council should do”.

**The role of composting**

**The promotion of anaerobic digestion for agricultural and food waste**

21. Composting in its widest sense will play a key part in local authorities achieving their targets under the LATS scheme. However if we are to pay full regard to the waste hierarchy then home composting needs to placed on a firmer footing within the LATS than it currently has.

22. We are aware of the large body of work that WRAP has undertaken to provide reliable and robust methods for measuring the impact that home composting has. We strenuously urge the Government to adopt these models and allow home composting to count towards the LATS targets before more local authorities implement universal and free green waste collection systems that may not actually be needed.

23. As already mentioned the introduction of the Animal By Products Order inhibited the growth in central composting provision at a time when it was just starting to take off. If composting is to play a greater part in landfill avoidance then the specification of compost as a product even when produced from a mixed waste stream must be reviewed. In this way, MBT processes capable of producing a high grade bio-product fit for purpose for spreading on land or landscaping would be promoted and low-cost MBT processes that create only a biowaste for disposal would be disincentivised. Regulations governing small-scale (community) compost operations should be further reviewed to avoid unnecessary barriers being established against their operation.

24. Soil erosion and loss of humus is a growing concern across the globe and a contributor to the problem of flooding after extreme weather. Waste and resources policy should be seen as an opportunity to return humus and nutrients to soils through the composting of waste.

25. In-vessel and anaerobic decomposition processes also have the potential to play a vital role in future treatment of organic wastes. LARAC supports the high priority the Government has given to these processes in the Waste Strategy 2007. However, more could be done through the Government’s investment strategy, through streamlined procurement procedures, and through proportionate regulation of processes already established in Europe to bring these technologies into widespread use more rapidly in the UK.
The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

26. It is felt that the Waste Strategy does not provide enough practical support for waste minimisation despite the lip service it gives to the waste Hierarchy. Whilst LARAC has always maintained that local authorities have limited influence over the amount of waste produced per household, measures the Government proposes for waste prevention appear to be subordinate to the promotion of re-use and recycling, for example measures to incentivise recycling and increase landfill tax.

27. As stated above an ability to charge householders directly for waste collections could have an impact on the amount of waste that householders produce. Otherwise waste prevention, over and above recycling, it can be a difficult message to get across to the public given that there is sometimes difficulty in selling the recycling message.

28. We believe that better product design has the potential to have a significant impact on waste minimisation. Studies on the light weighting of packing, for example glass bottles, have shown that substantial benefits could be accrued by manufacturers adopting “best in class” designs as standard. Given the aim of reducing the carbon impact of waste management this would bring about the double gain of a reduced call on primary resources and the savings in transport impacts that light weighting will have.

29. Greater emphasis should also be placed on new ways of using packaging including that of reusable packing. The Packaging regulations have had the effect of improving performance in this area with more retailers using transit packaging that is multi use rather than one use. More thought should be given to reducing further the application of single-use packaging where there is a practical alternative, for example in mail order and delivered goods. A simple example would be the use of cardboard, which can be readily recycled by householders, instead of polystyrene for goods that require protective packaging that are delivered to households.

30. This is an area where tougher regulation on the private sector could bring large resource benefits without undue economic disadvantage.

The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

31. The restriction of waste being disposed of to landfill should be a primary goal for all involved in the waste management industry. Equally it should be noted that advances in landfill design and regulation mean that nearly all landfill sites today capture landfill gas and many larger sites use it to generate electricity. In fact 25% of the UK’s currently renewable energy comes from this source.

32. That notwithstanding LARAC believes that the Waste Strategy could place a significant role in the UK’s contribution to climate change by enabling resources to be kept in economic activity instead of going for disposal or even recovery. Therefore focus should be given to putting in place the resources, infrastructure and legislative climate to enable high levels of recycling to be achieved.

33. In order to focus the outcomes of recycling on what we trying to achieve serious consideration should be given to the way targets are developed and assessed in the future. This should see a move away from tonnes to targets that measure and reward CO2 savings. This means that the focus would move to the materials that cause the most environmental harm rather than being on those that are the heaviest.

34. This principle should be applied across the board so that all waste streams are treated in this manner. As stated previously the priority given to municipal waste has been disproportionate to the tonnages relative to commercial and industrial wastes. If the Government want to gain the maximum CO diversion from the waste arena that it can move work will need to be done on the other waste streams to have the potential desired effect.

The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

35. The UK lacks much of the infrastructure it needs on all levels if the ambitions of the waste Strategy are to be realised. Government strategic investment, intervention and support are going to be required if this is to change in the medium term. This will include looking at land use planning issues and public acceptability of waste management facilities in their area.

36. PFI is the Government’s main “big idea” for investing in waste infrastructure. Despite the targets for PFI contracts having been modified from “contracts” to “facilities”, this model has a number of serious disadvantages for local authorities. It militates against innovation and competition in the waste management industry. It is only applicable to large municipal contracts. The process of gaining PFI credits and monitoring of contracts is very onerous and delays by several months or, occasionally, years, the construction of facilities now urgently needed to help the UK achieve its Landfill Directive targets.
Investment models based on PFI do not encourage the development of merchant plants that local authorities may share with private sector user organizations, so they do not encourage greater integration of treatment of municipal with non-municipal waste streams. The Government should offer a number of alternative investment models, incentives and opportunities to public and private sector organizations operating in partnership to develop facilities of all sizes, as well as PFI.

37. Materials are still routinely sent overseas for processing and while this is an acceptable route for them it is still not ideal. Given the potential carbon benefits of home processing along with the economic and social benefits the Government and others should do all they can to encourage investment in the UK materials processing infrastructure. LARAC endorses the work carried out by WRAP and other organizations in this area and would like to contribute to the faster development of the indigenous recycling infrastructure.

38. We are in danger of being engulfed in a vicious circle where increased targets mean more material is being collected placing further demands on home markets with then more material exported or used in alternative end markets. These end markets, such as aggregates for glass, are legitimate but do not keep the resources in economic activity and so have a smaller impact on the carbon reductions.

Local Authority Recycling Advisory Committee (LARAC)

October 2007

Memorandum submitted by Michael Ryan (Waste 28)

1. EXECUTIVE SUMMARY

The waste strategy in England, and in the rest of the UK, fails to examine any health or mortality data in electoral wards around any incinerator or landfill site, in order to prove or disprove any association between exposure to PM2.5 emissions from such sites and elevated rates of illness and premature deaths at all ages.

The Health Protection Agency, upon whom DEFRA and many Primary Care Trusts rely for expert advice on such matters, have not examined any of the data described above, otherwise they’d have observed that infant mortality rates are very high in the electoral wards around incinerators, and other industrial sources of PM2.5 emissions, and infant mortality rates are very low, or even zero for many successive years, in electoral wards that are free from such emissions.

The safest system of waste disposal is also the cheapest, and yet the UK fails to promote the safest system, which is plasma gasification, and which is at least one hundred pounds per tonne cheaper than incineration if the health damage costs of incineration are factored into the calculation.

Incineration costs approximately sixty-eight pounds per tonne and the health damage costs are about the same again.

Plasma gasification has a net cost of about twenty-three pounds per tonne and has negligible health effects and also zero toxic residue to be landfilled, unlike incineration where about 30% of the volume burnt is left as highly toxic ash.

Other countries such as US, Canada, Japan, France, and Norway are using plasma gasification, and yet here in the UK, Councils are signing 27-year PFI deals for incinerators, often in locations where there is a deep water port for easy importation of waste from abroad.

The UK should immediately cease importing waste, and also switch to the safest system of waste disposal.

Here in Shropshire, Veolia have just been awarded a 27-year contract to build and operate an incinerator at Harlescott, Shrewsbury, when they have also been awarded a contract to operate a plasma gasification plant for Dow Corning in Midland, Michigan, as can be seen from this news release of 1 October 2007: http://www.inentec.com/news.html

Veolia also wish to build incinerators at Newhaven, Sussex and at Gerrards Cross, Buckinghamshire, where such installations will cause the infant mortality rate and other health parameters to soar in electoral wards that receive PM2.5 emissions from their incinerators.

2. INCINERATORS AND INFANT MORTALITY RATES IN LONDON’S ELECTORAL WARDS

If the City of London is counted as a single electoral ward, there are 625 electoral wards in the Greater London Authority’s area.

When the Office for National Statistics [ONS] VS4 birth/mortality data is examined for the four years 2003–06, there are 43 electoral wards where there were zero infant deaths recorded by ONS in each of the four years.
The “zero” infant death wards in London were all free from incinerator emissions from the incinerators within the GLA’s area at SELCHP [New Cross], Edmonton, St Mark’s Hospital at Northwick Park, Hillingdon Hospital, Kings College Hospital at Denmark Hill, the four sewage sludge incinerators at Crossness, Beckton, Beddington Lane [Sutton] and at Edmonton, and also from the Colnbrook incinerator just outside the GLA’s boundary.

During the same four year period 2003–06, there were 42 electoral wards which had infant mortality rates which were greater than, or equal to 10.0 deaths per 1,000 live births. These wards with exceptionally high rates, are all associated with incinerators, a fact that needs to be demonstrated on a map such as the ward map that Ken Livingstone kindly sent me following my FoI request, and which I’m sure he’ll be glad to supply to the EFRA Committee.

There have been several newspaper reports about my infant mortality research starting with the Enfield Advertiser of 25 April 2007 and the Sunday Express of 29 April 2007.

Those who think that infant mortality is caused by “deprivation” will be surprised to learn that some of London’s least deprived wards have very high rates of infant deaths, including Chingford Green ward, which “just happens to be” downwind of Edmonton incinerator:

http://www.guardian-series.co.uk/search/display.var.1592749.0.concerns_over_infant_death_rates_in_chingford_green.php

Not many soccer fans will know that David Beckham’s father lives in Hampton Road, Chingford, which is within a mile of Edmonton incinerator, although most will have heard that Ted Beckham nearly died of a heart attack a few weeks ago. When I checked the Waltham Forest Guardian website for “heart attack” recently, there were 363 items, mostly fatalities. It was no coincidence that there are so many heart attacks in Waltham Forest and the only person who seems to have identified the Edmonton incinerator as a major cause is Kathy Gosling, a former Councillor of Waltham Forest Borough Council.

When a literature search was done today [26 October 2007] for “air pollution, infant mortality” in the archive of the US National Library of Medicine there were seventy-five peer-reviewed journal articles listed, the latest being “Fine particles, a major threat to children” by J Henrich and R Slama.

Fine particles are usually termed PM2.5s and page 16 of the DEFRA Air Quality Strategy for England, Scotland, Wales and Northern Ireland report of July 2007 lists some of the adverse health effects of PM2.5s, and starts: “Both short-term and long-term exposure to ambient levels of PM [particulate matter] are consistently associated with respiratory and cardiovascular illness and mortality as well as other health effects.”

In the London Borough of Brent, Fryent ward is one of the “less deprived” wards and yet due to its proximity to incinerators, has the highest infant mortality rate in that Borough at 12.8 deaths per 1,000 live births. Fryent ward was named by Brent PCT as having the highest hospital admission rate for cardiovascular disease in their latest report that I’ve read.

There were nine London wards with higher infant mortality rates than Fryent in 2003–06 as follows:

- Harrow Weald [Harrow]: 16.1 per 1,000 live births [eight infant deaths]
- Chingford Green [Waltham Forest]: 15.6 per 1,000 [six infant deaths]37
- Noel Park [Haringey]: 15.1 per 1,000 [twelve infant deaths, and 1,071 live births]37
- Tottenham Green [Haringey]: 14.0 per 1,000 [fifteen infant deaths]37
- Newington [Southwark]: 14.0 per 1,000 [twelve infant deaths]
- White Hart Lane [Haringey]: 13.7 per 1,000 [twelve infant deaths]37
- West Ham [Newham]: 13.3 per 1,000 [thirteen infant deaths]
- Northumberland Park [Haringey]: 13.3 per 1,000 [fifteen infant deaths]37
- Queensbury [Harrow]: 12.0 per 1,000 [eight infant deaths]

I’ve included the number of live births in Noel Park ward above, because there were a similar number of live births recorded in Valentines ward [Redbridge] in 2003–06, where there were 1,020 live births and zero infant deaths. Note that unlike the wards with high infant mortality rates, Valentines ward is outside the range of PM2.5 emissions from the London incinerators at Edmonton, SELCHP etc.

Most people would be able to tell the difference between zero infant deaths and twelve infant deaths, especially the parents and families, and also the friends and colleagues of the bereaved parents.

Members of Parliament cannot be expected to look after the interests of their constituents, or the nation as a whole, unless they are adequately informed of the facts.

When I made a formal submission to the EFRA Committee examining the Environment Agency nearly two years ago [published 11 May 2006, pages Ev202–206], I did not have the infant mortality data for every electoral ward in England & Wales. I now hold that data and have analysed it and proved that there is a clear and consistent association between industrial sources of PM2.5 emissions and elevated rates of infant mortality.

37 These wards are affected by emissions from Edmonton incinerator.
3. **Ironbridge Power Station & Elevated Rates of Infant Mortality**

Here in Shropshire, we have a major source of PM2.5s from Ironbridge Power Station. During the nine-year period 1998–2006, the group of eight orange-coloured electoral wards on the downwind side of Ironbridge Power Station had a total of 56 infant deaths recorded by ONS, and can be seen on the map at:


The same map has a group of six green-coloured electoral wards on the upwind side of the power station where there were just four infant deaths recorded during the same nine-year period.

The orange-coloured wards had four times as many live births as the green-coloured wards, so if the infant mortality rates in both zones had been the same, there would have been 16 infant deaths in the orange-coloured wards, and not 56.

Dr Catherine Woodward, of Telford & Wekein PCT, has published a report [May 2006] which claims to prove that emissions from Ironbridge Power Station have no detrimental effect on rates of sickness and premature deaths on electoral wards downwind of that power station.

http://www.telfordpct.nhs.uk/pct_information/TWBoardbriefings/2006/may_2006/7/Agenda%20Item%207%20-%20Investigation%20in%20South%20Telford.pdf

Dr Dick van Steenis MBBS is a medically-qualified doctor who has considerable expertise in the health effects of industrial PM2.5 pollution and he tried to get Dr Woodward to agree to a meeting at which he could explain how the power station was causing such high rates of illness and premature deaths at all ages. Dr Woodward refused to meet in her letter of 31 May 2005, and her Chief Executive has asked David Wright MP to have my statement of evidence [Ev202—206] removed from the Parliamentary website:

http://www.parliament.uk/documents/upload/David%20Wright%20MP%20to%20Jack%20Mr%20Michael%20Ryan.pdf

The 40 “excess” infant deaths in the orange-coloured electoral wards during 1998–2006 were not an awful coincidence, but the predictable result of being downwind of a major industrial source of PM2.5 pollution.

4. **Composting of Waste**

Composting of waste seems a harmless form of disposing of waste, and yet David Davies MP is aware of major problems in parts of Yorkshire due to moulds etc from large composting sites.

**Conclusion**

I request that Dr Dick van Steenis be allowed to explain the facts about industrial air pollution to the EFRA committee, members of which are likely to have searching questions for him.

I also request that David Wright MP be invited to attend such a committee so that he understands fully that he is mistaken about Ironbridge Power Station and that the deaths due to the toxic PM2.5 emissions from that plant will continue.

*Michael Ryan*

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**Memorandum submitted by BAN Waste (Waste 29)**

We are grateful for the opportunity to comment on this issue.

We consider that there are a number of overarching principles upon which the Government should be basing its waste minimisation policy:

— The prevention of hazardous chemicals from entering the material supply chain
— Waste reduction measures including producer responsibility measures and eco-design
— The development of infrastructure and markets for services and products which promote waste minimisation
— The promotion of waste reduction, product repair, re-use, recycling and composting services

We are concerned that prevention of hazardous chemicals from being produced does not appear to be a high priority for the Government as this would seem to us to be a fundamental element of a resource based waste management policy.
WS2007 makes considerable reference to waste prevention however we are concerned that current
Government proposals may simply result in a switch from landfill to energy recovery at the expense of higher
options. This would make a move to the next step up much harder. If waste minimisation is to be achieved
and landfill and incineration prevented, then a great deal of new policy, legislation and incentives now need
to be introduced.

In our view, the Government needs to harness a range of policies in order to create the circumstances for
a resource management and sustainable consumption strategy to flourish. There are a number of approaches
which we believe could be considered by the Government to strengthen uptake of waste prevention and
minimisation measures. In particular we would highlight the role played by:

- Regulation
- Fiscal incentives, disincentives and support
- Behaviour change systems (eg incentive schemes)
- Sustainable procurement policies
- Statutory waste minimisation targets, re-use/repair/return targets and source separation targets for
  local authorities, commercial and industrial organisations.
- Infrastructure and market development
- General public information and awareness raising campaigns (targeting both children and adults)
- The development of information, education, training and advice services to support commercial
  and industrial sectors, local authorities, government and enforcement agencies.
- Assessment, inspection and enforcement practices

Policies to reduce and prevent waste need to be strengthened and targeted at:

- Householders and school children
- The extraction, commercial, manufacturing, industrial and trading sectors
- Government bodies and Local authorities and
- Enforcement agencies (Health and Safety, Environment Agency, Customs and Excise and Trading
  Standards)

The chosen mix of regulatory budgetary, fiscal instruments, procurement and enforcement measures will
need to trigger change without threats of short term inflationary shocks (as prices are raised to or
set environmental costs and taxes) or unemployment (as UK businesses move overseas or cease production
rather than compliance with tougher environmental standards).

We urge the Government to seriously explore the important role to be played by regulatory and fiscal
measures.

The Government does appear to recognise the importance of education and training and we welcome the
wide range of initiatives that the Government has introduced over the last five years.

We are concerned about the bias of funding support in favour of large, capital-intensive waste, re-use and
recycling initiatives. This could well be at the expense of the most innovative and important waste
minimisation sector in terms of the waste hierarchy—SMEs and the voluntary and community sector.

Infrastructure desperately needs to be improved and local networks of small enterprises set up to support
a locally based sustainable consumption and resource managed economy.

**Producer Responsibility Regulation**

We support the Government policy aim of the use of the producer responsibility approach to ensure that
businesses take responsibility for the environmental impact of products that they place on the market, and
particularly once they become waste. However we believe that producer responsibility measures should be
mandatory rather than voluntary.

We welcome the recent introduction of legislation which incorporates some elements of producer
responsibility requirements, eg Packaging Directive and the WEEE and ELV Directives but we believe that
producer responsibility needs to be greatly extended into new fields to capture other products and sectors.
Producer responsibility, for instance, should be extended to primary industries, such as the agriculture,
 quarrying, mining, water and energy producers since they produce amongst the greatest amounts of waste.
Mining, construction, agricultural and sewage industries cause the majority of waste from raw resource
usage and the majority of waste is generated from manufacturing, construction and demolition and mining
activities (p34, Bifa, Future Perfect 2003).

Manufacturing, transport infrastructure and building industries should also be targeted since it is at the
point of design that there is the greatest capacity to develop product and process alternatives. With reference
to the construction and transport infrastructure industry, we welcome the development of Site Waste
Management Plans and the Code for Sustainable Homes but consider that there is a need to introduce
regulatory environmental management measures. This would help improve sustainability performance, including waste minimization and hazard reduction during the construction stage, period of usage and demolition.

Producer distributors, retailers, vending operators, fast food outlets and event organisers could also play a role in producer responsibility through stewardship agreements.

We welcome the Government’s aim of reducing the overall cost of waste management by establishing incentives for producers to consider the end of life waste management costs however we feel that the focus should be on the prevention of waste, and particularly hazardous waste. It is our view that the Government’s view of producer responsibility should be widened to include a requirement on businesses to address and urgently phase out the use of hazardous materials or processes. The aim would be to prevent pollution and achieve zero discharge of persistent or bio-accumulative substances.

We support the methods proposed by the Government of identifying products and materials which have particularly negative waste growth and environmental impacts being developed for Sustainable Consumption and Production (SCP). (Securing the Future, UK Gov Sustainable Development Strategy, March 2005) We would suggest that this method could be used to identify products and sectors requiring stronger producer responsibility guidance, support or measures.

We believe that there is a need for better integration of different policies affecting waste policy and key to this is the development of linkages between waste and other government policies. We therefore support the development of a Sustainable Development Strategy. It is our view that producer responsibility should require strategic partnerships to be developed with re-processors and links developed to agriculture, water and energy. The producer responsibility approach could create and optimise the development of a more integrated recycling and recovery infrastructure and could level the playing field amongst manufacturers and primary industry operators who are adopting more sustainable and responsible but, possibly, more costly practices eg eco design or organic farming.

In our view, there are a number of producer responsibility approaches which could be explored:

1. The producer deals with the liability costs of the environmental damage caused by their product.

With this aim in mind, all new materials could be required to undergo mandatory toxicity tests. Manufacturers of materials could be required to take out insurance against any environmental or health problems arising from new products over a 50 year period.

2. The producer pays for the economic costs of setting up the infrastructure needed to provide re-use, repair, return, recycling or composting facilities to extend the “life” of their products and packaging. The facilities could be on the premises of distributors or traders.

The payment methods could be structured in such a way as to reduce costs for companies which produce durable, repairable, easily recyclable or compostable products with minimal packaging and to deter companies which do not adopt environmentally responsible policies. Stewardship agreements could easily be linked to producer responsibility measures.

3. The producer manages the physical products and their packaging or the effects of the products and their packaging.

4. The producer adopts a take back ownership system.

This approach would combine physical management and economic payment for the product and its waste management.

5. The producer takes responsibility for the product information.

Standardised systems would aid reliable information feedback to customers and stakeholders.

LIFE CYCLE ANALYSIS

We support the European Thematic Strategy recommendation of a whole life-cycle approach to products, services and materials to identify key environmental impacts from waste and resource use.

In our view, the definition of “Life cycle” impacts needs to be comprehensive. We consider that the life-cycle approach should not simply be restricted to the production and consumption phases of products and materials. One option might be to adopt an entire life-cycle approach to producer responsibility incorporating responsibility for waste generated from the extraction of raw materials for the product to post consumption waste. The Ecological Paradigm is an approach which examines the full impact of any chemical product ie its feedstocks, by-products, wastes, compound transformations as it breaks down throughout the life cycle from extraction, synthesis, processing use and disposal until all associated products and wastes are converted to chloride ions. (Thornton, Pandora’s Poisons, 2000) Life cycle analysis, when used for long-term decision making, must reflect how each stage of a life cycle is likely to change over time due, for example, to waste composition changes etc.
We support the Government’s proposals to focus on developing data on the environmental impacts, including waste-related impacts, of products across their life-cycle. We welcome proposals for a review of Sustainable Consumption and Production evidence, to identify gaps and priorities and new research requirements.

We agree with the methods outlined in the recent England Waste Review 2007 report of identifying products and materials which have particularly negative waste growth and environmental impacts. We would add “durability of the product” to the list of: “amounts of waste generated and amounts of hazardous waste generated, projected growth rate of product sales and/or product waste; weight and volume; hazardous waste content; use of recyclates and used components; and ease of re-use and recycling.”

HAZARDOUS MATERIALS AND WASTE

We welcome the introduction of a Hazardous Waste Forum and support the Government’s aim to introduce a form of producer responsibility to industrial sectors producing products containing hazardous waste streams such as solvents used for industrial cleaning or lubricating oils, garden pesticides and decorative paints. However, we believe that the government should also target pharmaceuticals products, cleaning agents, DIY chemicals, general building products (eg insulation), car maintenance chemicals, hygiene and beauty products, agricultural pesticides, growth hormones, weed-killers, slurry, mining and quarrying wastes, ship-building wastes, nuclear waste as well as ammunitions chemical and biological weaponry.

We also welcome the introduction of the REACH regulations.

We support the key challenges set out by the Government for hazardous waste management over the next 5 years:

— continue the trend for reductions in arisings;
— provide treatment capacity for waste diverted from landfill;
— meet the landfill waste acceptance criteria; and
— tackle mis-management of hazardous waste.

We would add a new target:

— To prevent or reduce the harmfulness of materials, products or processes.

This target would support the European Framework Directive on Waste which requires member states to encourage “the prevention or reduction of waste production and its harmfulness.” It would also comply with the European Commission’s thematic strategy on the sustainable use and management of resources which will include proposals to reach the Sixth Environmental Action Programme’s aim whereby: “the wastes are non-hazardous or at least present only very low risks to the environment and human health.”

The statistics on chemicals testing are shocking. There are over 11,000 organo-chorines produced commercially and thousands produced accidentally as by products. In 1984 there were over 48,000 registered industrial chemicals, 3,300 pesticides, 8,600 food additives and 3,400 cosmetic ingredients in the US alone! For industrial chemicals there have been no complete health checks carried out and no data is available on 78% of the chemicals. Information on accidental by products formed by the chlorine industry is even less. (Thornton, Pandora’s Poison, 2000). Even 100% post-consumer recycling will manage only 2% of the total waste stream, without addressing toxicity issues. In our view, all new chemicals should automatically undergo toxicity testing.

In our view a stronger approach is required where toxics have been identified to support the replacement and phase out of those substances. Tighter regulation would help the environment, encourage innovation and stimulate investment in cleaner technologies as was found when CFC’s were treated this way under the Montreal Protocol.

In order to ensure that UK businesses are not commercially disadvantaged by tighter regulation, we urge the Government to consider legally binding international agreements to restrict and phase out and eventually ban the manufacture, generation, use, storage, discharge and disposal of persistent, toxic bio-accumulative substances (similar to international agreements on global warming and ozone depletion.) Priority could be set according to the largest scale, most toxic chemicals and processes based on current understanding of hazard posed. The introduction of a rapid phase out process could then be introduced to encourage the development of cleaner substitutes. This could then be followed by a gradual phase out of other synthetics.

In the meantime, in order to encourage greater producer responsibility, chemical companies should be forced to face up to the risks associated with the release of these unknown chemicals on to the environment without toxicity tests. Chemical companies should be required to automatically undertake toxicity tests on all new and hitherto un-tested chemicals before being allowed to sell them on. They should be mandated to obtain insurance for any chemicals they produce and they should not be allowed to release the products to the public without insurance cover for their potential health and environmental impacts.
With reference to household hazardous waste, we welcome the introduction of guidance on good practice by the National Household Hazardous Waste Forum and the Chartered Institute of Waste Managers and are pleased that the Government recognises the need for separate collections of household waste. Household hazardous items requiring immediate attention might include: batteries, oils, pharmaceuticals, paints, pesticides, cleaning fluids etc.

There is also an urgent need to develop hazardous household waste plants for dealing with:

- Fridges and WEEE
- Cars
- Fluorescent lamps
- Batteries

The banning of materials from landfill is another approach which the Government should consider for deterring the use of hazardous materials in products and for promoting recycling and composting. However, materials bans from landfill must not be undertaken without simultaneous measures to deter incineration and maximize recycling of plastics, paper, cardboard, bio-degradable material etc. We recognise that the banning of specific substances from landfill will reduce the use of landfill. Landfill product and substance bans have, for example, been successfully used in Nova Scotia, Canada, to reduce landfill. In Nova Scotia the following materials have been banned from being landfilled: biological waste which has not been treated and neutralised, beverage containers, corrugated cardboard, newsprint, lead-acid batteries, spent industrial lubricants, used oil, paint, ethylene glycol (car anti-freeze), some plastics, steel/tin containers, glass food containers, compostable organic material from industrial, commercial, institutional and residential sources. Nevertheless, it is our view that landfill material bans should be accompanied by similar restrictions on incineration. The Government’s proposal to ban “all combustible waste” is a key example of an integrated approach to landfill bans. Many combustibles, obviously, have high calorific value and would be extremely useful to the incineration industry but could equally be a valuable resource to re-processors or composting companies. Without an integrated policy approach, the banning of all combustible waste from landfills could simply be used as a regulatory carrot to promote incineration at the expense of recycling and composting.

**Information Gaps**

The Government’s acknowledgement that it does not consider that there is sufficient information and evidence on which to base a single prevention target for all waste or for single major categories of waste points to the need for work to be undertaken to address the issue. Research could be undertaken to:

- Analyse who produces waste, where, what the composition of waste is, why they produce it, whether they recycle, compost or dispose of it and how their behaviour and the waste composition might change under different circumstances.
- Identify resource exchange schemes, recycling collection services, reprocessing, waste minimisation services and products and suppliers.

A detailed analysis of waste content, waste flows and current infrastructure is essential if the Government and Regional Development Agencies are to: identify the likely future composition of waste; scope the number of processing facilities required and identify the infrastructure strengths and weaknesses in each region. It will also help them to review the likely future infrastructure, costs, regulatory options, charges and taxes and fiscal remedies, procurement policies, contracts and funding requirements.

The New Technologies Fund has provided excellent opportunities for research into capital based back-end technology approaches to waste management however much more support needs to be provided to establish the best approaches to front end elements of the waste strategy:

- Waste minimisation (re-use and repair schemes, producer responsibility measures)
- Educational issues
- Network support
- Market development and
- Price intervention measures and
- Support for the community sector

**Regulation**

A firmer approach is required to promote waste minimisation, recycling and composting. Where this has been used (LATS/landfill tax/PRNs/incineration directive) this is when real changes occur. A phased introduction of voluntary to manadotory would allow for the considerations of business to be taken into account.
The recent report by the Sustainable Consumption Round Table (May 2006) “I will if you will” claims that people want to adopt greener habits, but many believe individual action is futile. The Government cannot therefore wait for businesses and consumers to take voluntary measures to adopt green practices and lifestyles. According to the Round Table report action stimulated by regulation can be effective and go down well with the public. People are generally quite happy with measures that bring positive environmental results, even at some cost to themselves, so long as those measures are applied fairly. This means that government must take a lead in mandating and implementing regulatory, fiscal and best practice initiatives.

We would urge the Government to introduce mandatory “stewardship” requirements on producers and retailers, traders and event organisers.

We believe that there is a need to design products which generate less waste in use, result in less process and end-of-life waste and do use any potentially hazardous materials in their manufacture. However, we do recognise the need in exceptional circumstances a restricted amount of pharmaceuticals to use hazardous components.

We welcome the Government’s assurance that it is committed to promote eco-design as a mainstream element of good design practice by bringing together expertise through a new Sustainable Design Forum and the international Sustainable Products Task Force, with support from the Market Transformation Programme, Envirowise’s Designtrack scheme and WRAP’s Innovation Fund.

We support the development of policies designed to bring forward products, streams and services which are less harmful to the environment through the work of the Market Transformation Programme and the Environment Agency. We support the promotion of less harmful products, systems and services although we would prefer the use of enforcement practices rather than the introduction of voluntary measures. It is therefore our view that the “consensus” approach should be replaced with a mandatory requirement to reduce waste and achieve more efficient resource use at the product design phase.

We welcome the Eco-design for Energy-saving Products Framework Directive.

We also welcome the two new policy instruments (Site Waste Management Plans and the Code for Sustainable Homes) to promote the adoption of more responsible environmental management systems in the construction sector.

However, more producer responsibility measures need to be introduced which result in a sustainable process whereby any product, service or process leaves no unusable waste; uses sustainable energy and replenishes the resource base in a closed loop economy. This means designing out pollution and waste at the start of the process through Clean Product Design and Clean Production, and sensitive material selection. If there is a problem at the end of the useful life of a product, process or service, then the point at which the “problem” was introduced must be re-designed so that the problem is no longer within the process. Successful waste and pollution management can only be achieved if the entire chain is considered.

There are a number of regulatory approaches which could be used to promote producer responsibility practices:

- On-site recycling and composting facilities requirements for large businesses
- Packaging take-back, re-fill or ease of recyclability or compostability requirements (especially for transport packaging companies eg pallets, cardboard; secondary packaging and primary packaging eg cans, jam jars etc);
- Minimum recycled or recovered material content standards (especially in non-food packaging);
- Minimum energy, water and materials-efficiency standards;
- Ease of dismantling requirements (for re-use, repair, replacement or upgrading of parts);
- Disposal bans and restrictions;
- Materials bans and restrictions;
- Product bans and restrictions;
- Trade protection measures;
- Toxicity testing of new or untested chemicals requirements
- Mandatory insurance cover for companies which make chemicals to cover the costs of any potential health and environmental impacts.
- Separate kerbside collection service for hazardous household waste
- Separate kerbside collection service for kitchen and garden waste
- Minimum 7 materials kerbside recycling collection service
FISCAL ISSUES

Current production and waste management practices are unsustainable. Therefore, we believe that the Government should not be relying solely or too heavily on market forces and pricing structures to develop sustainable industrial, business and householder practices. Given that non-renewable resources will eventually have to be phased out, the Government should be planning how to implement that process in the least damaging manner.

We consider that more direct government intervention in pricing policies can help to achieve environmental goals by ensuring that prices reflect environmental impacts and discourage behaviour that damages the environment. We therefore welcome the:

- Ending co-disposal of hazardous and non hazardous wastes in landfill
- Landfill tax
- Aggregates levy
- Local household incentive pilot schemes
- Landfill Allowance Trading Scheme (LATS) and
- Tradable Packaging Waste Recovery Notes (PRNs).

We support the use of economic instruments to encourage behaviour change by manufacturers, traders, local authorities and consumers but this needs to be combined with other regulatory, educational, research and best practice policies.

A number of EU instruments are currently being prepared which may impact on business behaviour and that these may create price drivers to stimulate industry higher up the waste hierarchy. Those EU instruments relate to:

- Producer Responsibility
- Traded Pollution Permits
- Energy Taxation or offsets

We welcome the broad aim of those proposals.

However, we do not believe that the tax and economic instruments currently in use and proposed are sufficient to stimulate moves towards industries higher up the waste hierarchy. It is our view that the economic playing field must be rebalanced and the hierarchy of profitability must match the environmental hierarchy.

In our view, Government intervention could further stimulate the following scenarios:

- The cost of waste disposal increasing (due to inflation, fiscal and regulatory disincentives towards landfill and incineration);
- The development and implementation of best practice techniques of collection and sorting (due to the introduction of waste minimisation and source separation targets and the development of new “Green Academies” and other educational initiatives.)
- Source separated kerbside collection costs decreasing. (As these schemes become more efficient, costs will reduce, markets will pick up, prices will rise and more people will be enthused to take part in recycling. Investment in the necessary infrastructure will be essential to develop local industries).
- The long-term costs of raw materials rising particularly those subject to environmental constraints.
- The use of hazardous materials decreasing and the increasing use of eco-design and producer responsibility measures (due to fiscal and regulatory policies).
- The cost of reprocessed materials reducing (due to increased materials supply and more supplier outlets.)
- Innovative, industrial techniques replacing artisan methods of disassembly and reprocessing with the result of reduced costs (due to the increasing use of producer responsibility measures).
- The development of a waste minimisation, recycling and composting infrastructure that is locally based and dominated by SM enterprises and voluntary and community organisations. The SMEs and VCOs operating repair and re-use services could be based in busy, convenient locations such as supermarkets thereby encouraging customer behaviour change.

This could be promoted by the introduction of a number of fiscal measures—environmental taxes, tax breaks and exemptions, subsidy reform, grants and local tax rebates. The aim would be to change price signals in the market place in favour of more environmentally friendly products.

Economic instruments which could be considered include:

- Virgin materials taxes;
- Removing subsidies for virgin materials;
- Abstraction taxes
— A requirement on all primary industries, manufacturers and retailers to contribute to the cost of recycling as well as disposal.

— Removal of tax advantages for industrial processes that give rise to environmental degradation.

— Polluter taxes (eg energy, pollution, emissions and/or discharges taxes) on all companies which produce the most toxic classes of chemical eg chlorine and organo-chlorines, SOx, NOx, CO2.

— Cutting the subsidies presently given to incineration. The application of the Climate Change Levy, for instance, to mixed waste energy from waste schemes would enable practices higher up the waste hierarchy to compete on a more level playing field.

— Tax rebates or subsidies to manufacturers for eco-design/producer-responsibility schemes.

— Producer responsibility trading systems linked to the National Industrial Symbiosis Programme on-line database for tracking hazardous waste, composting, re-used and recycled materials. The database could be greatly expanded and processes introduced to link the system to producer responsibility trading schemes.

— Grants for: business collaboration, networking and academia work to support producer responsibility processes.

— Grants for: re-use, re-manufacture facilities (like the BREW fund)

— Disposable product taxes (for low durability or short life products such as disposable nappies, tampons, plastic bags). This would help more accurately reflect the cost of disposal. Repair and reconditioning services are often perceived as being expensive or inconvenient. Some products are increasingly cheaper to dispose of than repair (eg watches and shoes). Taxes on low durability, short life products could be used to set up the infrastructure needed to support businesses that repair and recondition products and improve customer access to those services.

— Resource toxicity taxes eg on companies that use toxic materials in products (eg heavy metals) where safer, more sustainable materials are available.

— Repair, re-use or environmental performance improvement allowances. Tradable allowance options of this kind could be introduced to help the market deliver environmental outcomes more efficiently.

— A sustainability levy applied to all goods and services.

— Introducing a price guarantee scheme for recycled materials to fund the build-up costs of seven stream recycling (including food waste and hazardous waste).

— Grants for doorstep collection/delivery re-use schemes. These might help to address the difficulties of access to services.

— Deposit/refund systems (where consumers have to pay high mandated deposits on non-refillable containers but they can claim the deposit back for refillable containers);

— Recycling/re-use tax rebates for retailers operating take-back schemes to meet storage costs.

— Business rebates for charities and re-use community/voluntary organisations to contribute to the high costs that this important sector is forced to undertake to dispose of low quality donations that cannot be sold or recycled.

— Import tariffs on imported clothing and shoes. The negative perceptions of second hand goods have seriously impacted on the work of the charity sector because of the cheapness of foreign imports particularly of new clothing and shoes.

— Export tariffs on the sale of commingled recyclates.

— Advanced disposal fees (paid when the product is bought) imposed on products which are hazardous and harder to dispose of eg fridges, pvc, batteries, electrical goods, vehicles;

— Introducing a disposal tax that reflects the environmental hierarchy by changing the current landfill tax into a waste disposal tax that reflects the environmental costs of different disposal options.

— A change in the landfill tax regulations so that the 20% offsets are paid into a publicly-run waste minimisation/recycling fund.

The tax revenue accrued could be used to pay for:

— Building the infrastructure needed to promote the re-use, repair, return, recycling or composting facilities to extend the “life” of their products and packaging. Re-use, repair, return, recycling and composting services need to be convenient and locally based to promote the market and make the service a more economic option for customers.

— Funding local authority, community and voluntary sector schemes and the Strategy Unit.

— Promoting greater partnership work between local authorities, community and voluntary groups and small firms.
— Setting up a materials recovery fund.
— Recycling and waste minimisation educational programmes.
— Setting up a transition fund for workers and communities working in the most polluting industries (eg chlorine and organo-chlorine industry based areas) to support alternative economic development and training during the transition phase to safer technologies.

Currently, the bulk of the financial costs, penalties and risks associated with recycling, composting and waste disposal of UK and imported goods are being borne by Council Tax payers and Councils. The introduction of fiscal measures would be the quickest method of encouraging businesses to review their waste and resource management and purchasing practices. When waste becomes a cost issue to business, waste minimization, recycling and composting targets will also become greater priorities. Measures need to be introduced which divert the costs of recycling or disposal of household waste collection (particularly hazardous waste) away from taxpayers to primary industries, manufacturers, distributors and retail operators. In this way, those organisations dealing with, and financially benefiting from, a product (from extraction of raw materials to disposal) could be held accountable for their role in creating waste and other environmental impacts. The producers would be required to develop and implement waste (and other) environmental management strategies to reduce the environmental impact of their activities. In this context, producer responsibility would be extended from manufacturing to cross all sectors and would include a broader range of sustainability issues. It would also encourage more responsible and integrated working practices.

In our view, other measures could also be introduced targeting local authorities to promote the development of waste strategies higher up the waste hierarchy. These could include:
— Funding to local authorities to set up the infrastructure required to promote waste minimisation and other policies high up the waste hierarchy
— A mandatory restriction on waste contracts of five years. This would help create the flexibility needed to enable local authorities to genuinely review their policies at five yearly intervals. This would also allow local authorities to honestly feed into the five year waste reviews by the Regional Technical Advisory Bodies. In addition, it would enable developing national and European policies and changes in waste management policies to be more quickly enacted.
— Stop joint tendering of recycling collection and refuse contracts to private companies (as these threaten the ability of community groups to compete with national companies.) Longer term integrated waste contracts shut out competition and penalise community groups.
— More stringent green procurement requirements on Government and public bodies to support environmentally preferable products procurement systems. Government criteria for awarding Local Authority Beacon status should include demonstrating best practice in waste minimisation measures, buying recyclables etc.
— End the commercial confidentiality of waste contracts.
— Grants to support waste minimisation practices within the local authority area with an emphasis on support for local small businesses and other organisations.
— Greater flexibility for local authorities to develop local environmental taxes and rebates. For example, we support the mooted proposals to allow local authorities to introduce variable charging for services to householders in a form (eg general waste/recycling ratio) that supports the waste hierarchy and supports the polluter pays principle. This would raise awareness about the issues but would also have to be accompanied with a major awareness raising campaign to explain why such local fiscal measures were needed.

An Environmental Tax Commission could be set up to examine the complex economic and regulatory impacts ahead of and after their introduction. Such a commission could be responsible for rebalancing the economic and sustainability playing field. The Commission could administer transitional funds and assess methods of “animating” change.

GREEN PROCUREMENT AND PRACTICES

Local government procurement policies could stimulate the market for green businesses. However, there is a lack of knowledge about these issues amongst officers (as well as the public, businesses, academic institutions and other networks.) Government bodies need guidance on green procurement. We therefore very much welcome the Sustainable Procurement Task Force and plans to achieve sustainable development through procurement practices and the production of a National Action Plan.

There is a need to map out and promote best practice in terms of:
— Green procurement policies;
— Waste minimisation practices; and
— Sustainable practices and environmental management systems within businesses.
Green procurement could apply to building specifications, lighting, energy, etc. This would help boost and support a stable “green” market.

The Environment Agency green procurement policy embraces a whole range of factors including the environmental performance of the potential supplier. This might provide a good starting point.

Punitive measures could be introduced to encourage best practice by local authorities. Financial penalties could be used against local authorities and government agencies that fail to meet targets for waste management and green product procurement to reduce waste and waste impacts and promote green manufacturers.

The development by local authorities of publicly available lists of approved local suppliers with green/social credentials might encourage suppliers to support businesses with higher environmental management standards. If the list was publicly available this could be an excellent resource for members of the public and businesses. It would act as a further stimulant to businesses and suppliers to become more responsible and would additionally act as an excellent publicity outlet for exemplary companies. The British Standard for environmental management systems could be useful indicator for local authorities to use in relation to identifying and supporting responsible suppliers and manufacturers.

**Market Development**

Market development is very much linked to the RDA aspect in the new WS2007. However, RDAs do not have a background in that area and have extremely limited resources. Consideration needs to be given to how RDAs will interact and communicate with local authorities. This is certainly not a standard practice at the moment.

In our view, if the development of markets for recycled materials is to be accelerated, then systems need to be put in place to ensure the promotion of:

- High quality of materials particularly through increased and improved sorting
- Information and tracking systems
- Security of supply
- A larger number of local materials supplier outlets
- More recycling and reprocessing facilities
- Green procurement as standard practice
- Business education and training
- Fiscal incentives or disincentives for businesses to recycle

If the full environmental and economic benefits of composting and recycling are to be achieved then end markets must exist. If end markets are to be developed and sustained, then customers must have trust in the reliability and quality of products they buy.

Standards are critical in order to reassure those members of the public or reprocessors planning to use the materials confidence in a consistent product. In our view, the establishment of high standards for materials is critical if the market for recycled goods, and, in particular, municipal compost is to be developed.

Collection authorities therefore need to focus on the collection of high quality materials. The Composting Association has reported that a number of mixed waste plants abroad have failed because of the poor quality of the material and particularly the inability of processors to extract small glass fragments from the material.

In our view, cleanliness is key to the production of high quality materials. Separate collection (as opposed to mixed waste collection which is subsequently sorted) is therefore critical for the efficient collection of clean feedstock.

We note with some concern Defra’s proposal that “The main potential outlets (for biodegradable waste material) include agricultural land, which depends on its value as a soil improver and fertiliser, plus horticultural, landscaping or domestic uses.” The National Farmers’ Union has stated that the potential to use composted mixed waste plants abroad have failed because of the poor quality of the material and particularly the inability of processors to extract small glass fragments from the material.

In our view, cleanliness is key to the production of high quality materials. Separate collection (as opposed to mixed waste collection which is subsequently sorted) is therefore critical for the efficient collection of clean feedstock.

We understand that compost had now been given or is imminently due to be given new quality standards that enable it now to be called a product not waste. We welcome this measure. Composting by community organisations has been discouraged by some waste regulations. We hope that this measure will encourage greater composting by community organisations.

In our view, the current BVPI definition of compost which incorporates the term “soil improver” set standards that are so low that they bring the current BVPI definition of compost into disrepute. In our view, there is a need for clarity on the Best Value Performance Indicator for compost. The definition of compost should be consistent across EU in order to stimulate demand for compost and establish common quality
standards to help with acceptability. There should be a requirement that local authorities undertake separate doorstep collections of organic matter in order to prevent the sham recovery of waste materials. “Soil improver” should therefore not classify as compost under the BVPI definition for compost.

The NFU have pointed out the need for tracking systems for compost and “traceability”. That is a requirement which we would support.

The statutory imposition of targets for commercial organisations and local authorities would both help to secure a constant supply of materials for recycling collection and reprocessing organisations and increase the materials available.

Alternatively, export controls or tariffs might be a means of maximising security of supply by restricting the opportunities for exports of materials abroad.

The development of large-scale recycling will also depend on the creation of regional-level processing and remanufacturing plants that can draw on local materials and use existing infrastructure as well as the connections between these producers and wider international markets.

Facilities developing recycled materials are widely distributed (relative to most primary materials) so there are opportunities to develop the materials market.

This sets a challenge for the new regional development agencies; they should work with local collection authorities to build up local processing capacity to match the expanded supplies of recycled materials, and with the private sector to expand the recycling of wood, construction and demolition waste, tyres, commercial organics etc.

For this to occur there is a need for education and training of businesses and pecuniary incentives to recycle.

Green procurement practices must be promoted to become the norm. We therefore welcome Defra’s proposal to continue to fund WRAP projects which stimulate domestic markets for recycled materials and promote “green” procurement. We also support the Sustainable Procurement Task Force’s work to stimulate markets through the development of innovative goods and services.

Investment in waste swap systems might be a useful means of making the reprocessed materials market more accessible to the wider public and businesses.

Regional economic policy could play a crucial role in linking all these issues through the local economy to the global economy.

The focus of waste minimisation, re-use and repair activities need to focus on the work of the Voluntary Community Sector and Small to Medium Enterprises. This is dealt with below.

**VCSs and SMEs**

The waste minimisation sector is dominated by small to medium sized enterprises and voluntary and community organisations. This is likely to continue however the sector requires major support if it is to expand and the barriers that are deterring customers from using repair and re-use services and products need to be urgently and effectively addressed.

We welcome the review of the WIP to consider how to encourage the development of new providers of services and facilities (including community sector).

However, it is our view that voluntary and community waste organisations need much more support to enable them to compete on a more even playing field with the private sector.

Currently, the cost of industrial technologies, the size of plants and treatment means SMEs and the VCS are excluded from PFI opportunities but if the focus was on services higher up the waste hierarchy, especially waste minimisation, recycling and composting then the opportunities for SMEs and VCSs could be opened up.

The size of PFIs should be limited to discourage capital intensive technology projects eg incineration/pyrolysis or large materials reclamation facilities. PFIs should support less capital waste minimisation and recycling/composting projects. Local authority PFI projects should also have to fulfil various general criteria eg promotion of sustainable development, contribution to local cultural, social, health, safety, regeneration or educational objectives and rigorous cost benefit analysis.

Local Authorities need to be encouraged to support community and voluntary sector recycling organisations through procurement packages that emphasize the additional training and educational services that charities and re-use initiatives often offer. In addition, we consider that the general emphasis of national, regional and local regeneration work should be towards sustainable resource management and sustainable consumption policies rather than sustainable waste management.

Local authorities could encourage economic regeneration through work with local SMEs and VCS businesses and Regional Development Agencies. However in order to undertake such work local authorities would require considerable additional resources to provide the necessary support and investment.
Barriers to the procurement of services by local authorities from the VCS and SME sector could be reduced by the employment of regional waste liaison and business development officers whose role could be to:

- improve co-ordination and development of contractual and partnership opportunities, best practice, legal advice, start-up support.
- Liaise between local authorities and other organisations
- Address financial barriers by evaluating and disseminating best practice and
- Improve future practice by supporting research and innovation

**STATUTORY PERFORMANCE STANDARDS AND TARGETS FOR LOCAL AUTHORITIES AND THE LARGE BUSINESS SECTOR**

Waste reduction is at the top of the waste hierarchy so the Government decision not to have targets for local authorities for waste reduction is, in our opinion, more than an oversight. This decision could result in another fridge mountain style of crisis.

In our view, targets should reflect stated government policies and the policies should be supported with regulatory, educational, best practice, structural and fiscal initiatives. Other countries do set national waste prevention targets. Scotland has set targets for waste reduction and the EU is discussing including waste reduction targets in new version next year.

We suggest that the Government could produce a waste reduction target for local authorities.

Another approach might be to develop repair/return/re-use targets for local authorities. Materials reduction, return, repair and re-use is higher up the waste hierarchy than recovery so these targets should replace the current recovery target for collection authorities.

Higher levels of divergence from landfill would be more likely to be achieved and the clear message established that waste is a resource if targets for the land-filling, re-use, recycling, composting of commercial and industrial waste were set. The introduction of business and industry re-use, recycling and composting targets and targets for other sustainability issues (such as those relating to energy and water use) would create a more integrated approach to waste and sustainability policies. They would stimulate greater awareness about sustainability issues—particularly if they were accompanied by fiscal penalties or incentives. Targets for large businesses would also create economies of scale that could help to boost the recyclates market and general green economy.

Currently the Government acknowledges that it “does not consider that there is sufficient information and evidence on which to base a single prevention target for all waste or for single major categories of waste” (page 21, paragraph 28, England Draft Waste Review) points to the need for work to be undertaken to analyse who produces waste, where, what the composition of waste is, why they produce it, and how it might change under different circumstances.

The Government proposal that directors of large private and quoted companies will be required to consider and report on non-financial key performance indicators that are relevant to their business, including information relating to environmental matters, including waste” could provide a starting point on which to obtain this basic information. The report Future Perfect by Biifa (2003) suggested that targets for waste reduction and recycling by businesses could include a statutory requirement to provide environmental reporting data on waste management performance, resource productivity, biodiversity etc in the annual reports and accounts. If the data collection and reporting was carried out in a standard format and automatically passed to the Environment Agency, then the information gathered could provide the basis for the development of national, regional and local waste strategy policies and the assessment of waste infrastructure needs as well as funding requirements. That is a measure we support and believe would encourage transparency as well as greater corporate social responsibility. If this work is to be carried out by the Environment Agency, then the Agency will need considerable investment to enable it to process the information quickly. Such work would provide the basis for baseline waste prevention (and recycling) targets.

As a starting point, we welcome the proposal that the Environment Agency will set a reduction in “waste disposal target” for industries that it regulates.

Statutory waste reduction and materials repair, return and re-use targets for manufacturers and other large companies might be another method of promoting best practice amongst commercial and industrial organisations—particularly manufacturers. The introduction of statutory waste reduction, re-use/repair/return targets and recycling and composting targets across all waste sectors together with producer responsibility measures would also push waste issues higher up the business agenda. Non-compliance with the target could result in financial penalties or other measures. Waste reduction targets for the biggest polluters could be monitored by the Environment Agency.

Home and community composting of kitchen and garden waste is the most sustainable form of composting yet it is not classed as a category of composting. According to a recent report by Dr Alan Knipe (May 2006, Lets Recycle) councils could save millions of pounds a year by encouraging householders to...
compost food waste at home, rather than splashing out on major centralised treatment plants. “Based upon the 10% of UK households using food waste digesters between 10 and 25 centralised treatment facilities need not be constructed and there would be potential cost savings of in excess of £20 million a year.” The House of Commons Select Committee proposed that local authorities could estimate the amount of home composted waste by identifying households with gardens and following the purchase of home composters (from local authorities or other major suppliers). They recommended that the government, Local Government Association, Composting Association and Community Composting Network should find a method for assessing the amount of home composting in the targets to local authorities. There is a similar need to monitor composting on allotments and other forms of community composting. The current definition of compost creates a dis-incentive to local authorities to promote home and community composting of kitchen and garden waste. Therefore home and community composted waste should be included in municipal composting figures.

The promotion of waste minimisation measures is difficult where co-mingled wheelie bin systems in operation using compaction lorries to crush the recyclates. The use of compaction lorries for collecting products is not compatible with the aim of restoring and repairing them. The mandatory use of box schemes for the collection of waste minimisation or hazardous materials would require local authorities to collect products for re-use or repair such as tools, spectacles, stamps, cds, dvds, videos, watches, etc or the reduced disposal of hazardous waste materials. A further system of assessment might therefore be to introduce a new “source separated materials collection” target whereby local authorities could be required to increase the number and range of materials collected by means of source separation methods of collection. This might have to be individualised to take into account the composition of the waste of each of the local authorities. We would suggest a minimum number of 3 separate waste streams (including compost and hazardous waste) but with the aim of collecting a minimum of 7 waste streams.

A separation target would probably require a mandatory increase in the number of waste streams that local authorities are required to provide a kerbside collection service for. We therefore consider that there is a need to increase the number of recyclable items collection authorities are required to collect from households. We suggest that the Household Waste Recycling Act 2003 be amended to increase the number of items to at least 7.

**Education**

We support the Waste Minimisation Toolkit which is a valuable aid in the development of data collection, measurement tools and behaviour change approaches.

In our view, there are a number of barriers discouraging members of the public from using services or buying products which reduce waste or promote re-use, recycling or composting:

- Lack of knowledge about the environmental impacts of actions they take and services and products they use.
- Lack of knowledge about what they as individuals can do to minimize those impacts (eg using washable nappies, Mooncups, composting waste).
- Lack of knowledge about best practice products and services available locally (nappy laundry services, community composting facilities, hire companies).
- Lack of knowledge about environmental issues relating to individual products.
- Negative perceptions about re-use schemes (eg share, lease, hire, repair, re-fill and return services)—in particular facilities being inconvenient.
- Negative perceptions that second-hand products, refurbished goods or items made from recycled materials are poor quality and/or expensive.
- Lack of interest in or incentive to change behaviour.
- Lack of access to information about the above.

*Lack of knowledge about the environmental impacts of actions they take and services and products they use*

We support the Environmental Action Fund’s aim to promote greater awareness on these issues.

The Eco and Enviro Schools schemes are other useful tools for promoting responsible attitudes amongst young people towards their environment and encouraging them to understand information that is already available about products.

Both schemes warrant continued support.
Lack of knowledge about what they as individuals can do to minimize those impacts

We support Environment Direct—a public advice service on the impacts of different goods and services and on how to make the most sustainable consumption choices. The website is a superb resource.

We also support the Recycle Now and Smart Shopping communication campaigns

These, too, are educational tools which should be continued on a sustained basis.

Lack of knowledge about best practice products and services available locally

Whilst we support national educational campaigns such as the Recycle Now media advertising, the work of WRAP and the retailers Re-usable Bag Campaign, we consider that it is essential that educational campaigns should also be supported which promote local schemes (both waste minimisation and recycling/composting). In our view local campaigning works best because it can be adapted to suit the particular characteristics of the audience and schemes operating in the area.

In addition, educational campaigns should be aimed at a wider audience (including hard to reach communities) and be a sustained activity.

There is a need to map out and promote best practice businesses and services to the public and other businesses, academic institutions and other networks.

Policies promoting corporate social responsibility and public access to information would also encourage companies to demonstrate greater public accountability.

Other information to assist customers in extending the life of their purchases could include:

- Information provided by operators of convenience stores, vending and fast food outlets, organisers of public and private events about the locations of local repair centres, facilities to support re-use, recycling and composting. This could be publicised on sales receipts (eg Nova Scotia), posters or leaflets
- Recycling system endorsement labelling (eg Germany’s Green Dot system where consumers can leave the product in designated bins and the product is guaranteed to be recycled);

Lack of knowledge about environmental issues relating to individual products

We support the recent development by Defra of a web site and a pocket sized guide to environmental labels in order to help people understand the many different kinds of labels already produced. We think this will be a useful public tool.

However, product information in different sectors needs to be standardised. Information needs to be in a usable, clear and honest form.

There is widespread mis-use of symbols, which not only causes confusion to members of the public but can create problems for reprocessing companies. The plastic recycling symbol, for example, has widely been abused by packaging producers to suggest to members of the public that the product could be easily recycled.

In fact, the wide range of plasticisers, softeners etc that could form part of a container means that, whilst plastic bottles often have a similar chemical make-up, yoghurt containers and other packaging with the recycling symbol on do not and so can not be easily recycled.

Lack of knowledge about environmental issues relating to individual products

Information needs to support the customer in:

- Comparing products or
- Identifying the options realistically available to them for extending the life of the product.

Potential labelling and symbols which would support comparison on sustainable consumption indicators could include:

- Seal-of-approval types of environmental labelling
- Environmental information labelling (energy efficiency, CFC use, recycled content or targets, recyclability, expected lifetime)
- Ecological Foot printing or Environmental Assessment Measures
- Product hazard and product durability labelling (eg listings of the hazardous properties of the product produced during its life cycle and their impacts)
- Lead by example schemes which identify and promote businesses adopting best environmental practice.
Lack of interest in or incentive to change behaviour.

We support waste minimisation measures such as behaviour change systems (especially positive incentive schemes).

Whilst we do support the right of local authorities to introduce variable charging and other punitive behaviour change systems with members of the public we think that the emphasis should be on incentive schemes. It is our view that well promoted incentive schemes can encourage greater public support for recycling and waste minimisation and can help to reduce the need for punitive measures.

In addition, there is an imperative to combine incentive/disincentive work with simple to use, clearly promoted and supported recycling, composting and waste minimisation schemes. For example, box collection schemes are far easier to support in terms of educating residents about contamination issues. When contamination of wheelie bins takes place, the collection crews are unable to see contamination at the bottom of the bins. Nor are they able to simply leave a clear card explaining why particular materials are not collected. Instead, local authorities have to rely on the far more intimidating and negative method of employing monitoring officers to identify bins with contamination and then door knocking the householders to explain what they have "done wrong".

Currently, members of the public are not encouraged to use repair services, buy second-hand or re-conditioned products or products that are made from recycled materials. Incentive schemes combined with awareness raising campaigns could be used to educate members of the public about the benefits of supporting sustainable products and services and motivating them to take action. Washington State's Get in the Loop scheme has proved successful and works by combining advertising (about the importance of buying recycled and telling them where they can buy recycled content products) with free promotional material to participating retailers and retailer promotion according to their level of participation in the scheme. Incentive schemes and awareness raising campaigns could be used in a similar way to motivate members of the public to buy second hand or refurbished goods.

Behaviour change campaigns could also be used to change trader, manufacturer or supplier behaviour eg low waste packaging procurement policies.

Negative perceptions about re-use schemes—in particular facilities being inconvenient.

There is an urgent need to explore measures (particularly fiscal policies) to develop a waste minimisation infrastructure dominated by small, locally based businesses. If a sustainable consumption and resource management economy is to be developed then issues of logistical inconvenience for reprocessors and potential customers must be addressed. However, these policies need to co-exist with educational campaigns to address issues relating to negative perceptions and lack of knowledge.

Negative perceptions that second-hand products, refurbished goods or items made from recycled materials are poor quality and/or expensive

The UK reprocessing and manufacturing industries compete on the world market by focussing on quality products. This fact highlights the importance of encouraging the collection of quality recyclates and composting materials and the imperative of encouraging source separation methods of collection (rather than co-mingled collection systems which suffer from high rates of contamination). A move to targets focussing on source separation and waste minimisation would assist in this regard.

Members of the public and reprocessors must have faith in the products they buy. It is vital that standards are improved.

Market development of quality goods needs to be combined with promotional work. Promotional advertising needs to be sustained to raise awareness and support for waste minimisation activities, services and products, recycling and goods made from recycled materials.

Lack of access to information

Gaps exist in public access to information about the above-mentioned issues. In particular hard to reach groups are often overlooked because of the expense of the communication methods required to target those groups.

We welcome the Government’s recognition of the importance of local authorities translating information on services into languages spoken by ethnic communities but in our experience local authorities are reluctant to provide that service. The problem relates to cost and the number of languages spoken (65 in Newcastle).

The situation is even worse as far as the provision of information to individuals with disabilities is concerned especially deaf individuals who may require the information in BSL format and blind or partially sighted householders who may require formats for their particular sight difficulties (eg cd, tape, large print, Braille, daisy disc etc). This is despite the provisions of the Disability Discrimination Act 1995.

Similar difficulties relate to providing information (eg in tape format) to individuals who cannot read. In our opinion, local authorities require additional support to target these hard to reach groups.
Other information gaps include involvement of customers and stakeholders. Attention needs to be paid to widening access to information to:

- Members of the public in general;
- Customers; and
- Shareholders.

We welcome the requirement on Directors of large private and quoted companies to consider and report on non-financial key performance indicators that are relevant to their business, including environmental and waste issues.

Additional information to shareholders, customers and other stakeholders could be supplied through performance data relating to statutory targets for waste reduction and recycling. Customers and shareholders could be more heavily involved in discussions and decisions about sustainability issues.

**BUSINESS SUPPORT**

Businesses need support and easy and cheap access to information, training, advice and funding to enable them to make informed choices themselves.

We support the BREW funded work of Envirowise, the Environment Agency’s NetRegs, WRAP and the work of Business Links. We also support the Environment Agency’s pilot on-line internet service “What do I do with my waste” and Net Regs guidance.

In addition, we welcome Defra’s proposal that it could help improve SME’s access to appropriate recycling and recovery services by a combination of:

- Advice and support under BREW, for companies to improve their waste management and maximise resource efficiency;
- Financial support under BREW for organisations to set up recycling collection services for commercial enterprises; and
- Placing recycling obligations on some or all businesses and/or waste management companies.

We welcome the introduction of the National Industrial Symbiosis Programme (matching one operator’s waste with another’s raw materials needs) and believe that the principles of industrial symbiosis provide significant potential for further resource efficiencies. We believe that the database could be expanded to contain information about distribution centres and waste resources. This would be especially useful for manufacturers and organisations wishing to exchange, sell or buy materials. The promotion of the National Industrial Symbiosis Programme or a similar type of database amongst the charity, refurbishment, repair and re-use sector might prove useful. An on-line database for tracking hazardous waste, composting, re-used and recycled materials could also be linked to producer responsibility trading systems.

Businesses need clarity about which organisations to approach for advice. Training and educational opportunities for businesses, public and statutory professionals across all sectors could be supported further in relation to green economies with the establishment of:

- A new type of Green Academy. It could be charged with developing organisational forms, knowledge and skills relevant to zero waste and sustainable consumption. Its curricula and priorities would be set by the needs of developing environmental markets. Hence its research, teaching and skill formation would be linked closely to ground level projects providing learning opportunities to those in or outside employment. The promotion of sustainable business practices including resource efficiency and waste prevention and environmental education would be part of the training of infrastructure development of professionals and unskilled staff.
- The appointment of Zero Waste Advisers—some recruited from leading waste minimisation, recycling and composting projects overseas—to advise on waste reduction and recycling schemes and projects. The group could be part of an international network, promoting exchanges and part time attachments and linking into practitioners’ associations.
- A Sustainable Development Agency incorporating a Zero Waste Agency to promote resource efficiency and act as a guardian of public health.
- A national network of Regional Waste Reduction and Recycling Coordinators. Work of this nature is invaluable but needs funding.
- Best practice guidance (perhaps through the use of a web site) on green procurement practices could be made publicly available for use by central and local government, their agencies and public bodies. Best practice guidance could also be supplied on ways of supporting waste minimization, repair, re-use, recycling and composting. This sort of information could be of assistance to a wide range of individuals and organisations.
If businesses are to respond appropriately to legislation then the Government and Environment Agency need to provide clear and comprehensive guidance well in advance of regulatory changes in order to allow sufficient time for investments. The government currently uses a wide range of communications channels to inform business about the requirements of legislation but we consider that there need to be clearer points of reference for business training and education particularly in relation to sustainable business development.

There may be business opportunities for consultancies to open up a niche market on advice on resource efficiency but this may require some initial Government support.

BAN Waste

November 2007

Memorandum submitted by CEMEX (Waste 31)

EXECUTIVE SUMMARY

1. CEMEX is a global building materials group and leading supplier of cement, ready-mixed concrete and aggregates.

2. In its cement making operations, CEMEX already has extensive experience of recovering energy from wastes including tyres and solvents. We are now introducing the recovery of energy from Refuse Derived Fuels (RDF) at our three cement plants in the UK.

3. However, the 2007 Waste Strategy for England fails to recognise the role that the cement industry can play in helping to provide a sustainable solution to the country’s waste management problems.

4. There are great benefits from the use of wastes as fuels in cement making which can contribute to making the industry, as well as society, more sustainable. Our ability to convert waste into fuel means that we can significantly reduce the amount of waste being diverted to landfill.

5. By deriving fuel from waste, CEMEX, and the wider cement industry, can help the Government achieve its ambitious aim of a 65% reduction in municipal biodegradable landfill by 2020, as well as a 15% increase in energy recovery by the same date. The industrial symbiosis of capturing waste as an important by-product for our business means that we can also support the Government’s ambition for greater sustainable procurement.

6. Through our utilisation of recovered energy, we can replace a significant amount of the fossil fuels that we use, such as coal and petroleum coke. In some of our continental European operations, 70% of the fuel that is used in cement-making has been derived from waste.

7. Our use of RDF can also cut emissions, especially of carbon dioxide and oxides of nitrogen. At our German plant in Rüdersdorf, the employment of alternative fuels over the past decade has resulted in a 50% reduction in emissions of nitrogen oxide.

8. As CEMEX utilises residual waste as fuel after all other recovery options are complete, we can provide the incentive for greater energy recovery, as well as deliver other benefits up the value chain. With CEMEX providing a market for residual wastes, it enables waste management companies and local authorities to have more confidence in investing in material recovery processes.

9. Despite the potential benefits, the cement industry is not seen as a real alternative to the electricity generators, who are often viewed as the sole users of RDF. However, unlike the generators the cement process results in no residue ash, with all the material forming a beneficial part of the product.

10. We, as an industry, realise that we need to promote our capability of utilising treated waste as fuel. But, we also believe it is important that the Government’s key strategy document plays a part in developing awareness of all the waste management solutions available.

11. The 2007 Waste Strategy for England champions “more material recovery, energy from waste and much less landfill”. We can support all three.

ABOUT CEMEX

12. CEMEX is a global building materials group and leading supplier of cement, ready-mixed concrete and aggregates. Bolstered by its acquisition of the UK’s RMC Group in 2005, the company currently operates three cement plants at Rugby (Warwickshire), Barrington (Cambridgeshire) and South Ferriby (Humberside), with a grinding facility at Tilbury (Essex) due to open in 2008. With over six thousand employees in the UK, we are able to provide a Britain-wide supply network of over five-hundred locations to ensure that building materials are locally available.
THE WASTE CONVERSION PROCESS FOR REFUSE DERIVED FUEL

13. CEMEX has been trialing, with the permission of the Environment Agency, a Refuse Derived Fuel (RDF) called Climafuel. Climafuel is primarily recovered from municipal waste streams after all recyclable material has been removed. The fuel consists of unrecyclable household waste, which includes soiled and contaminated paper, cardboard, wood, plastics and textiles.

14. Climafuel is typically produced by using a method called mechanical biological treatment (MBT), which sorts, separates and treats the waste. Climafuel is just one of several alternative or secondary fuels that can be used to power our cement kilns. Other RDFs utilise discarded tyres, sewage sludge, industrial sludges and oils. Indeed, through the exploration and use of these fuels, we hope that our cement clinker will comprise of up to 50% secondary materials.

15. MBT plants mainly combine anaerobic digestion with a waste sorting facility. The process begins when household waste is collected and delivered to a treatment plant, run by a waste management company. At the treatment plant, all recyclable materials are removed, and the remaining material is subjected to a composting process, before being shredded. The result is a solid, clean, non-hazardous and virtually odourless fuel. The Climafuel is then burnt in our kilns at two thousand degrees Celsius, which fuses the raw materials, as well as destroying any harmful emissions. The cement works are fully compliant with the requirements of the Waste Incineration Directive (WID), which specifies strict emission and operating conditions to provide both environmental and human health protection.

16. Tests are conducted before permission is given for an RDF to be burnt on a permanent basis. Our experience of this procedure is that it can be rather protracted. However, we are pleased to note that the Agency is reviewing how it might streamline this application process, and we have been helping to develop an agreeable solution. Previously, our application to burn tyres at our Rugby works took two years from submission to determination. Our application to trial and incorporate Climafuel into our energy needs was made in November 2006, with a permit variation to undertake a trial issued in October 2007.

CEMEX AS PART OF THE SOLUTION

17. As a supplier to the construction industry, CEMEX has the opportunity, through our capacity to utilise converted waste as a fuel, to become part of the solution to the wider waste management problem.

18. Our alternative fuel programme could deliver a substantial reduction in landfill disposal and emissions. We are able to provide local authorities with a safe, high volume waste disposal channel, while dramatically reducing our carbon dioxide emissions through the displacement of fossil fuels. Despite using very low rates in our energy mix, a trial of Climafuel at our South Ferriby plant produced a reduction in nitrogen oxide, a key pollutant in the combustion process, by around a fifth. We can also support the reduction of methane emissions by diverting biodegradable waste from landfill disposal.

19. With the UK topping the EU’s municipal waste landfill figures, the Waste Strategy Paper outlines stringent targets for municipal biodegradable landfill reductions by 2010 (25%), 2013 (50%) and 2020 (65%). The Paper also outlines the need for a 15% increase in energy recovery from municipal waste by 2020. With CEMEX’s experience in countries like Germany, where we have brought about huge landfill diversions, we can make a sizable contribution to achieving these goals.

20. Cement-making is extremely energy-intensive. Our alternative fuel programme means that we are able to use a greater proportion of recovered energy in our overall consumption levels, thus helping to reduce our use of fossil fuels. At our Kollenbach site in Germany, alternative fuels account for nearly two-thirds of the plant’s energy needs.

GREATER AWARENESS

21. In countries like Germany and Holland, cement companies are an established channel for using fuel derived from waste. However, in the UK, such recognition is comparatively low. The Waste Strategy’s omission of cement companies’ capability in this area simply perpetuates that lack of awareness.

22. The cement industry recognises that it needs to promote its ability to receive treated waste and employ it as a fuel. However, Government also has a role to play in acknowledging and developing awareness, since the benefits, within a wider waste prevention and sustainable management strategy, are clear.

23. The Government’s Waste Strategy Paper presented an opportunity to develop a greater awareness amongst key stakeholders, such as local authorities and waste management companies, that the cement industry is a real alternative to the more established energy recovery outlet, the electricity companies.

24. We believe that, given the ambitious landfill reduction targets, local authorities would be particularly interested to learn that cement companies are able to divert nearly a third more waste from landfill than the electricity industry.
Challenges

25. There has been a lack of sufficient incentives for waste management companies to invest in the necessary infrastructure and plant to collect and process household wastes and this has led to a limited availability of RDF in the UK. In practice, this has meant that the supply of good consistent quality treated material has not been sufficient for our requirements.

26. When initially trialing Climafuel, our machinery was often damaged due to wastes, such as hard metals and other foreign bodies, not being removed during the treatment process. Climafuel is supplied to a strict specification. Ideally, the material should also be subject to a rapid drying and composting process in order to produce a solid, clean and non-hazardous fuel, as well as to remove biodegradable matter. Again, this process has not been conducted according to our requirements. This deficit has meant, that in order to bridge the supply gap, we have had to import Climafuel from Holland.

27. Recent increases in the landfill tax escalator, combined with the requirements of the Landfill Directive, has meant that finally local authorities and waste management companies have started to develop the necessary infrastructure and processes needed. The designated year on year increases announced in the Waste Strategy Paper will support this progress, however, the UK is a long way behind other European countries such as Germany and Holland.

28. We recognise our responsibility to inform and work with potential waste management partners, but we also believe that in order to develop more effective integration, the Government must be prepared to provide assistance. In this particular instance, Defra could establish a minimum set of specifications regarding the quality of treated waste produced. We would be happy to work with Defra and the waste management industry to devise such standards.

Further Questions

29. We hope that we have demonstrated a number of the potential benefits to a sustainable waste management strategy that CEMEX, and the wider cement industry, can provide.

30. If you have any queries, require further information, or would like CEMEX to appear in front of the Committee, we would be more than happy to assist with your inquiry in which ever way we can. If so, please contact Marit Meyer-Bell, UK Director of Communications & Public Affairs, on 01932 583215, or via email at marit.meyerbell@cemex.com.

CEMEX
November 2007

Memorandum submitted by the Mayor of London (Waste 32)

LETTER FROM THE MAYOR OF LONDON TO THE CHAIRMAN OF THE COMMITTEE, NOVEMBER 2007

Please find attached my submission to your Committee’s inquiry on “Waste Strategy for England 2007”.

Reducing the amount of waste being sent to landfill is at the heart of managing waste sustainably. I am particularly concerned that, rather than genuinely reducing the amount of municipal waste being sent to landfill, local authorities are disregarding or attempting to find loopholes to circumvent the rules relating to the Landfill Allowances Trading Scheme (LATS) to give the impression that the amount of waste disposed of to landfill has been reduced, when in fact the waste continues to go to landfill but via the private commercial waste sector.

Around two-thirds of London’s waste is buried in landfill sites and mostly exported to sites outside of London. I have set targets in the London Plan (my spatial development strategy for London) that require a far higher rate of self-sufficiency. However the Government’s lack of support for advanced conversion technologies, continues to tilt the playing field in favour of established but inefficient and inflexible incineration technology.

I therefore very much welcome your inquiry as a timely means to address the inadequacies of the Government’s strategy and particularly its implications for London and the surrounding regions. I would welcome the opportunity for my Environment Policy Director, John Duffy, to present evidence at your inquiry.

Ken Livingstone
Mayor of London
14 November 2007
Memorandum

INTRODUCTION

— The Mayor welcomes the opportunity to respond to the Committee’s inquiry on the Government’s Waste Strategy 2007.

— This response is informed by the Mayor’s Municipal Waste Management Strategy.

— The main points of the response are summarised below followed, where appropriate, by answers to questions posed in the consultation document.

SUMMARY

— The Mayor is concerned that local authorities are selling their trade waste portfolios and deliberately pricing themselves out of the market. This behaviour is encouraged by the way the Landfill Allowance Trading Scheme operates and Defra has failed to put in place measures to monitor or manage this.

— The Mayor believes the Government’s stance of having no preference for one technology over another for energy from waste technologies equates to endorsement of the status quo. "Neutrality" is not a viable option when one technology (incineration) has a deeply embedded and mature market in the UK. Incineration is an inflexible and inefficient waste treatment method compared with advanced conversion technologies. Further, this view contradicts the Government’s Energy White Paper that explicitly favours advanced conversion technologies including gasification, pyrolysis and anaerobic digestion over any type of conventional incineration. This demonstrates once again that there is no joined up thinking in Defra on climate change and waste.

— There is a lack of clarity around the role of regional bodies in the strategy. The Mayor believes that a single waste disposal authority is required to tackle London’s infrastructure challenge, as is the case in all other major English and world cities.

— The Mayor believes that the Government should continue to set individual local authority targets for recycling and composting.

COMMERCIAL WASTE AND THE LANDFILL ALLOWANCE TRADING SCHEME (LATS)

1. The Mayor is concerned that the Landfill Directive has not been properly implemented in the UK, meaning more, not less, of London’s waste is going to landfill and so leading to damage to the environment and to our fight against climate change. The Mayor submitted evidence to the Refuse Collection Inquiry conducted by the CLG Select Committee and also has lodged a complaint with the EU Commission to ensure proper implementation and enforcement of the Landfill Directive.

2. The LATS scheme, set up to deliver the Landfill Directive, only applies to waste collected by local authorities, which does not properly reflect the intention of the Landfill Directive definition (nor the definition in UK statute through the WET Act 2003), which was far wider in scope.

3. The Mayor believes that the Government needs to review the implementation of the Landfill Directive as soon as possible and look at options for the inclusion of all commercial waste in the scheme irrespective of whether it is in the control of local authorities.

4. The Government’s LATS scheme has led to a considerable disconnect since the introduction of LATS between waste authorities’ obligations under the Landfill Directive for biodegradable municipal waste and their statutory recycling and composting performance targets, which are only for household waste. LATS has effectively acted as a disincentive for waste authorities to undertake a role in non-household waste management.

5. The LATS system encourages local authorities to retain a portion of their permits in case of an increase in household waste arisings, or a failure to divert waste away from landfill. They can artificially create this “safety net” by ceasing to collect commercial waste. The Mayor is concerned that local authorities are selling their trade waste portfolios and deliberately pricing themselves out of the market. Defra has failed to put in place measures to monitor or manage this.

6. The Refuse Collection Inquiry findings recommended the urgent review of London boroughs’ data to identify any disparities regarding commercial waste. However in its response to the Committee’s report, Defra completely disregards the Committee’s recommendation by saying it has already audited some of the London boroughs’ data. In fact, these audits focused on how data was gathered and reported for the first year of the LATS scheme and did not look at trends, such as reduced commercial waste collections, nor did it cover all boroughs as many boroughs are waste collection authorities and do not report under LATS. This is an inadequate response to both the Committee’s and the Mayor’s concerns.

7. The Mayor’s submission to the CLG Select Committee is attached as Appendix A [not printed].
CLIMATE CHANGE AND WASTE—THE ROLE OF ADVANCED CONVERSION TECHNOLOGIES

8. The Government says it will tackle climate change by reducing waste to landfill and treating 25 per cent of municipal waste in energy from waste schemes by 2020. Ten per cent of the UK’s municipal waste is treated through incineration plants today, and none of these plants utilise both the heat and power generated—they are the most inefficient form of energy from waste. The Mayor believes greater emission savings and more efficient energy generation can be achieved by using advanced conversion technologies including gasification and anaerobic digestion rather than through conventional incineration.

9. Research undertaken for the GLA38 (to be published in November 2007) shows advanced conversion technologies can save between 350 and 650 kg of CO₂ equivalent emissions per tonne of waste treated compared to landfill. The best performing incineration option modelled (with some pre-treatment and operating in combined heat and power mode) can achieve emission savings no higher than 350 kg of CO₂ equivalent per tonne of waste treated compared to landfill. All other incineration scenarios perform much lower, saving between up to 85 kg of CO₂ equivalent per tonne of waste treated.

10. The Mayor believes the Government’s stance of having no preference for one technology over another for energy from waste technologies equates to endorsement of the status quo. “Neutrality” is not a viable option when one technology has a deeply embedded and mature market in the UK. The use of advanced conversion technologies (and not only anaerobic digestion) must be actively supported in order for markets to be developed. Further, Defra’s lack of preference compromises and contradicts DBERR’s (then DTI) Energy White Paper39 which states incineration without combined heat and power (CHP) will not qualify for Renewable Obligation Credits (ROC) and incineration with CHP will be eligible for 1 ROC/MWh, whereas advanced conversion technologies including gasification, pyrolysis and anaerobic digestion are eligible for 2 ROC/MWh—the Government is clearly expressing a preference! This demonstrates once again that there is no joined up thinking in Defra on climate change and waste.

11. Existing waste infrastructure in London is wholly inadequate. The London Plan identifies the need for over 300 new waste facilities in London by 2020 if London is to meet its self-sufficiency targets for municipal, commercial and industrial wastes. Only a handful of new facilities have been developed over the last few years and London’s waste authorities urgently need to pick up their game.

12. The Government has proposed using PFI, Enhanced Capital Allowances, and Renewable Obligation Certificates to encourage a variety of energy recovery technologies. The Mayor supports this approach on the whole but is concerned that the tools are not fit for the job. PFI is notoriously risk-averse. The Mayor is also concerned that “a variety of energy recovery technologies” would in reality mean conventional incineration and anaerobic digestion. More needs to be done on encouraging technologies with higher energy efficiency potential.

13. The Government also talked about “recovering energy from waste which cannot sensibly be recycled”. This is an improvement from the current indiscriminate use of incineration but the Mayor is concerned about the use of the word “sensible”.

14. The Strategy suggests developing the energy market for wood waste. The Mayor’s concern that this is based on conventional thermal treatment of wood waste. It does not encourage the opportunity of small-scale gasification facilities with gas engines lending itself to decentralised energy systems. If this were the case then the Government’s suggestion would be very welcome.

15. The Mayor, through the inter-regional forum, is working with the East and South East of England Regional Assemblies to identify markets for recycled materials for the three regions. Plastic recycling is a major issue for London and the Mayor will be opening a plastics recycling plant in London next spring. The plant will process 35,000 tonnes of plastic bottles per year, producing 11,000 tonnes of food-grade PET (eg soft drink bottles) plastic and 6,000 tonnes of food-grade HDPE (eg milk bottles) plastic. This will be the world’s first recycling plant to produce food-grade recycled HDPE. The remainder of the plastic will be used for non-food applications (such as wheelie bins).

A SINGLE WASTE DISPOSAL AUTHORITY FOR LONDON

16. There is a lack of clarity around the role of regional bodies in the strategy. Voluntary arrangements have failed to deliver the necessary changes that are required in London’s waste management. The Mayor remains unconvinced that voluntarism can deliver this huge task. The Mayor believes that single waste disposal authority is required to tackle London’s infrastructure challenge, as is the case in all other major English and world cities.

17. Whilst the Government wishes to see “clear and well-integrated strategic priorities and plans” it has failed to put in place the governance changes to do this. The Government has acknowledged the limits of working at a local level by legislating to allow local authorities to create joint waste authorities, however

this does not go far enough. Experience from Wales and Scotland suggests that there is a need for infrastructure to be delivered on a sub-regional or regional scale and that in many cases local authorities are not suitably sized to deliver either the economies of scale or the expertise to deliver this infrastructure.  

18. The Government states that it sees a role for regional government bodies to develop services and facilities for the collection and management of waste, however the Mayor does not have the power to direct waste authorities to use such services or facilities and therefore he would be developing them as merchant facilities, with no guarantee of supply. This not an appropriate role for regional government.

Recycling and Recovery Targets

19. The new national household waste recycling targets are welcomed but it is disappointing that they are not for municipal waste and are not as challenging as the London Plan’s targets. The “recovery of municipal waste” targets are welcome. However this creates an inconsistency between targets for household and municipal waste, which is not welcome.

20. The Government has chosen not to set recycling targets for local authorities. The Mayor sees this as a huge backward step as targets have driven the improvements over the last five years and meant that for the first time a national target has been achieved. The Mayor believes that individual local authority targets should continue to be set.

Household Hazardous Waste

21. It is disappointing the Government only “encourages local authorities to offer separate collection services for household hazardous waste”. According to a study by Imperial College London, each year up to 10,500 tonnes of hazardous waste is produced by the capital’s households, yet in 2005 only 200 tonnes of this dangerous waste was collected by London boroughs’ main collection service and properly disposed of. This is because the council services are badly advertised, there are only two vehicles across the capital collecting this type of waste and only five reuse and recycling centres that accept all of this waste for London’s 7.4 million residents. Consequently, it is estimated that around 10,000 tonnes of household hazardous waste is being mixed in with normal household waste collections or liquids such as chemicals are being poured down the drain.

Implementation and Enforcement of Legislation and Regulations

Packaging regulations

22. The Strategy states that Packaging Recovery Notes (PRNs) are delivering increased packaging recovery however research undertaken for the GLA indicated that Packaging Export Recovery Notes (PERNs) appear to be functioning as an export subsidy for lower grade materials, potentially at the expense of domestic sorting and reprocessing activities. As a result, there appears to be justification for amending the current system to offer greater relative reward for the issue of (domestic) PRNs compared to PERNs to incentivise domestic reprocessing.

23. For domestic reprocessing, PRN prices are largely fixed by contracts between obligated companies or compliance schemes and domestic reprocessors. Many PERNs, however, are sold on a spot market basis, and thus often at higher prices particularly when there appears to be a shortage of tonnages to meet obligations. Furthermore, whilst PRN revenues from domestic reprocessing must be made transparent and reinvested in new recycling infrastructure, there is no such requirement for PERN revenues. As a result, even in situations where UK reprocessors are able to compete with the prices paid by overseas reprocessors, there can be more profit to be gained from exporting the material.

24. The PRN/PERN system supports reprocessing without regard for its carbon impact. For example, PRNs generated from recycling glass bottles back into new glass bottles, or from recycling glass into aggregate have the same value to waste producers. Yet in carbon terms, recycling glass back into glass rather than into aggregate has a far greater carbon benefit.

25. The current PRN/PERN system should be amended so that it is weighted in favour of materials being recycled locally and in favour of recycling with greater carbon benefits.

41 Imperial College London, Further Development for the Management of Household Hazardous Waste, August 2005.
43 The case for a resource management strategy, Institute of Civil Engineers, January 2006.
Pretreatment legislation

26. The Government says it will consult on strengthening the requirements for written records to support implementation of pre-treatment requirements for landfilled waste that comes into effect in October 2007. This is a key way in which increased recycling can be “required” for businesses, but there is a serious concern that the legislation will be difficult to enforce. Therefore further strengthening of the legislation is essential.

WEEE

27. The Government has chosen to prioritise the use of existing collection infrastructure, such as Reuse and Recycling Centres to collect WEEE. This approach is unacceptable because the Government has not reviewed the density of Reuse and Recycling Centres in London nor surveyed their suitability to separately collect electrical equipment. More should be done to develop in-store take-back and take-back on delivery. These systems would be likely to increase the volume collected, because they would be the easiest way for Londoners to participate and have positive transport impacts.

Financial Incentives to Increase Household Waste Prevention and Recycling

28. Whilst the Mayor supports the use of financial incentives as a means of increasing recycling participation and landfill diversion, he believes that the Government’s preferred option\(^ {44}\) constitutes direct charging, rather than a financial incentive. Introducing direct charging would be a disaster in London under current governance arrangements. An independent decision by a borough to introduce a charge (“incentive”) would have significant negative impacts on neighbouring boroughs, in terms of both fly-tipping and additional waste disposed of at their reuse and recycling centres. What is more, by excluding flats from the scheme the Government is perpetuating the myth that many boroughs refuse to address: that flats are “too hard” to cater for with recycling services. Nearly half of London’s households are flats and it is not acceptable to arbitrarily exclude them from an incentive scheme—especially when they will foot the bill for its implementation through their council tax.

29. The Government’s proposal is effectively a new local tax that could be levied in 33 different ways in London. This is typical of Defra’s approach to London, once again disregarding that London is a city and that its residents don’t recognise borough boundaries. The proposal, if implemented, will lead to confused residents who object to paying a new tax for no increase in service.

30. The Mayor is particularly concerned that the Government’s definition of revenue neutral is flawed. For the scheme to be revenue neutral the true cost of operating the scheme needs to be taken into account when calculating any potential rebate. By choosing to not include these costs in the definition of “revenue neutral” the Government’s approach would force local authorities to increase council tax to finance introducing these schemes, which is contrary to the Government’s own policies.

31. The Mayor is also concerned about the potential legality of the incentive scheme the Government is proposing and would like to see the legal justification for the scheme.

Reducing Packaging

32. The Government continues to promote voluntary agreements with producers. The further development of voluntary agreements is not appropriate, and statutory measures are required. Lack of significant progress to date shows the extent to which businesses will make voluntary commitments to prevent waste or promote reuse, composting and recycling when there is no immediate economic or regulatory stimulus. Voluntary agreements too often simply allow industry to avoid significant behavioural change. Shortcomings include low participation rates, leading to free-rider problems, and a lack of analysis of the impact, scope, outcomes and effectiveness of voluntary agreements.

33. The Government favours light-weighting of packaging, which may be an appropriate way to ensure resources are used productively where the product is not reusable or recyclable. However, this preference could drive the trend towards creating one-use products and packaging and prevent the product being reused if light-weighting is applied indiscriminately to all products and packaging. The preference for light-weighting or construction for reuse needs to be driven by the inherent reusability of products (for example soft drink cans are not reusable whereas soft drink bottles are), and material types (for example much plastic packaging is not recyclable).

34. Designers and producers of consumer goods, particularly packaging, should consider domestic recycling infrastructure as part of the design process. Clearly, a product is only recyclable if there are the facilities and technologies available to recycle it, a problem compounded by the inconsistent and misleading presentation of products’ environmental credentials.

Mayor of London

November 2007

Memorandum submitted by Dr Alan Taylor (Waste 33)

YESTERDAY'S SOLUTION.

EXECUTIVE SUMMARY

Municipal Solid Waste-Energy from Waste Incinerators are an outdated technology that acts in direct opposition to the basic intent of the Stockholm Convention on Persistent Organic Pollutants because, they generate these. Alternative technologies such as plasma gasification now exist and the technology cycle for the development of these is now approaching maturity, perhaps providing a safer more local and hence lower transport burden solution. The in-situ monitoring of waste treatment and its pollution lags behind the technological need. Implementation is nearly always retrospective and stimulated by external legislation. This situation represents a commercial opportunity for the UK to provide a lead. Should central government invest in research into, the development and commercialisation of high quality monitoring technology, then a business opportunity exists. Rather than looking to European technology providers central government could learn from the novel treatment methods currently being developed in the USA and Japan, by commissioning full scale plasma gasification plants. The lessons learned here would enable the UK to compete as a supplier in the international market place for waste management technologies rather than being a consumer.

The current climate represents an opportunity for the UK to provide a lead through, for once, legislating ahead of the EU. In the learning process of this it could create a long term commercial advantage.

YESTERDAY'S SOLUTION

1. Background

In response to Buckinghamshire County Council’s waste strategy consultation a local campaign group was formed; the Aylesbury Chilterns Resistance to Incinerator Development (ACRID). A grouping of local individuals came together to raise local awareness of the implication of municipal solid waste-energy from waste incinerators (MSF-EfWI) and the citing of such a reactor in the beautiful Aylesbury Vale. Local people revisited the published literature on EfW and EfWI in particular. This submission is as a result of this research and addresses items 1, 2 and 9 of the Terms of Reference for the Environment, Food and Rural Affairs Committee examination of the DEFRA Waste Strategy for England document May 2007.

The author, Dr Alan Taylor is a former Senior Lecturer in Physical Chemistry at Imperial College and a founder of the high technology laser company Powerlase Ltd.

This submission is written on behalf of ACRID in his capacity as head of technology investigations for the ACRID committee and does not represent the views of either Imperial College or Powerlase Ltd.

The committee’s attention is drawn to the following quotations:

The Stockholm Convention on Persistent Organic Pollutants

Article 1

Objective

“Mindful of the precautionary approach set forth in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Convention is to protect human health and the environment from persistent organic pollutants.”

"New Studies show that exposure to small particles (below a diameter of 2.5\(\mu\)m, PM2.5) is associated with substantially increased mortality, especially from cardio-vascular and cardio-pulmonary diseases. Present levels of PM2.5 in Europe are now estimated to reduce the statistical life expectancy in European population by approximately nine months, comparable to the impacts of traffic accidents. Thus, these newly identified impacts of fine particles by far exceed those identified earlier for ozone."

2. CONTEXT

This document looks at one aspect of the Waste Strategy for England, namely the use of municipal solid waste incinerators for energy recovery. Further it suggests that alternative and better technological solutions are already available and that, at last, high quality monitoring technology is becoming available and in a sane world needs to be implemented. Further, the need for the management of waste will continue and represents a commercial opportunity for the UK, should it choose to develop new technological solutions for in-situ monitoring of waste processing and waste management methodologies. As things stand the provision of large scale waste treatment plants is by non UK corporations who have a vested interest in supplying their own (out dated) solutions, thereby driving the waste management agenda in a direction that is favourable to their own commercial needs.

3. BACKGROUND

We cannot simply keep burying our own waste and hoping it will go away, nor can we sacrifice valuable resources bolstering up the immediacy of our convenience culture; new ways of being are required. In the limit of this, there can no longer be any waste. From a philosophical stand point any waste mitigation strategy that actively prolongs the production of waste, by assuaging the public consciousness; “Look we are reclaiming the energy from your waste so that we can all collude in its further production;” is bankrupt and at best mitigating and disingenuous.

World wide there has been great effort exerted into looking at solutions, with research in a great many countries highly active; looking at ways of improving waste management, environmental and health impacts. Anyone who expresses an opinion that all the parameters of MSW-EfWI are known, is making an assertion that is not based in fact. Quite simply the data set on the emission characteristics, process development and ecological impact, is incomplete. Further, governments do not get together to draw up legislation, specifically global legislation, unless there is a need.

Lest we forget, legislation is drawn up not to provide a safe limit for pollution, rather to lessen the impact through legislative limitation\(^47\). It is not a guarantee of safety, whether of not people choose to “spin” that it is; is rather, a matter of business expediency. Historically, the United Kingdom has always dragged its feet in respect to the implementation of such legislation either for incineration\(^48\) or landfill\(^48\), favouring short term business profitability over responsible world citizenship. Nevertheless, EU legislation is legally binding on partner states and more is on its way\(^49\). Retrospective implementation in order to comply with incoming and stricter air quality standards will have financial implications for those selecting out-dated technological solutions for the purposes of short term political gain.

MSW-EfWI, a now ageing technology, always produces a spectrum of organic chemicals that are not present in the waste that is their feedstock; in addition it produces fine particulate matter. Thus these are man made or anthropogenic sources, which add to the local and global ecosystems and, damage them. MSW incinerators generically have a chequered history.

4. LEGISLATIVE AND INTER-GOVERNMENTAL DOCUMENTATION

There are both European Union\(^48\) and UK governmental directives\(^50\) to reduce the usage of land fill, these are to be enforced by the introduction of land fill taxes. It is safe to say therefore there is international consensus that land fill is a bad idea. Therefore any process that adds to a landfill burden is suspect. MSW-EfWI still needs landfill.

The UK is a signatory to the Stockholm Convention on Persistent Organic Pollutants (POPs) essentially requiring it to cease production of these.

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Because of the nature of the Chemistry of MSW-EfWI (discussed below) plants it is a simple fact that they produce poly-chlorinated dibenzop-p-dioxins and dibenzofurans (PCDD/Fs), poly-aromatic hydrocarbons (PAHs), and various other volatile organic compounds (VOCs). A great many of these are known to have highly toxic effects, some of which are long term and hence difficult to detect. As long ago as 1995 the US agency for Toxic Substances and Disease Registry (ATSDR) published a detailed toxicology51 for PAHs and in 1998 for Dioxins52. These documents began to establish a toxicological framework for ongoing discussions in these areas. For comparison purposes they established a series of toxic equivalencies (TEQs) based on 2,3,7,8-tetrachloro-p-dioxin which is the most widely studied congener. It is very easy to get caught up in the detail of looking at which compound has which TEQ and in doing so forgetting that one is talking about toxic equivalency, the language is explicit. This document52 is the basis of many subsequent discussions and in the opinion of the author could benefit form revision and updating, it extrapolates from data and makes many generalisations the US Environment Protection Agency (EPA) agrees that it is based upon assumption and yet is has become “gospel”.

Incineration produces POPs.

Within the island context of the UK, the government has drawn up, through the Department for the Environment Food and Rural Affairs (DEFRA) a waste management strategy document53 in deed offering a position statement that incinerators are safe54. A close examination of this demonstrates that it glosses over the safety implications of Municipal Solid Waste (MSW) incineration. Presumably these position statements are based on a health report by Enviros Consulting (a part of the Mc Alpine Group). It is not surprising that third parties question the impartiality of such a report, given the links to the construction industry. This extensive document55 published in 2004 discusses many aspects and in places also notes that the quality of the available data set is poor. The Royal Society review of this document is not entirely complimentary.

The DEFRA air quality guidelines56, 57 (more recently published July 2007) is in a number of ways in conflict with the prior waste management document. This document cross references the World Health Organisation Guidelines58, 59 and refers to the European initiatives mentioned earlier. It extends discussions into the realms of the environmental impact of particulate emissions, acknowledging the enhanced mortality such emissions engender.

The World Health Organisation (WHO) establishes that particulate matter PM10s, PM2.5s and ultra-fines (cause disease and enhance early death, there is evidence of growth defects and reduced IQs)58, 59. There is world wide research effort into the impact of PM2.5s covering chemical nature, source identification and distribution patterns of same. The ultra-fines contain particles that are nano-metre in scale. The whole field of nano-toxicology is emergent and under-developed60, 61, 62 as such represents the unknown.

What is clear is that this is a matter of ongoing research, worldwide.

5. THE AVAILABILITY OF INFORMATION AND GOVERNMENTAL STRATEGY

Since the advent of the World Wide Web, we live in an age where information is, in principle, more widely available. As such governments and large corporations are ever more careful in what they publish. In effect this negates any real dialogue; DEFRA itself in its own strategy document outlines the need to “handle” public perceptions. Protest organisations, at least in Western countries are free to publish whatever they wish. This proliferation (or deliberate non-proliferation) of information has lead to a situation where there is an acceleration of bytes (some of them sound) about the “facts”, and where consciousness is manipulated to fulfil other objectives. Not all the information published on the web is well researched and factual.

There are even conferences aimed at overcoming the negative perceptions of Energy from Waste63. This, under the guise of true consultative approach seems a little out of place. In effect unless one has access to recent research articles via a university library the general public is left to rely upon information provided (research articles cost as much as £30 each) as and when the government chooses, a rather strange implementation of the nanny-state in overdrive. Further the detailed technical papers published by governmental organisation are written in such a manner as to obfuscate and cause loss of “will to live” in the reader, more specifically the lay reader. Jargon is as ever the coat of the chameleon seeking to hide half truths.

54 http://www.hpa.org.uk/chemicals/ippc/incineration_posn_statement.pdf
58 http://www.who.int/bq2006/WHO_SDE_PHE_OEH_06.02_zng.pdf
60 Ji et al., Inhalation Toxicology, 19, (2007), 745–751.
63 http://www.energywaste.co.uk/Workshop.asp?m_pid = 9889&n_m_nid = 9923
6. WHAT IS MSW INCINERATION AND HENCE EFW(I)?

In their simplest form incinerators are large ovens where waste is burned in an oxygenated environment. The chemical reaction between waste and oxygen is exothermic (produces heat) that can be used to heat water to drive turbines. The feedstock for such incinerators is very mixed (heterogeneous) in nature, with varying calorific value. The waste contains organic matter and what chemist terms organic chemicals. These organic (carbon based) materials when completely oxidised make CO₂ and H₂O, incomplete oxidation creates CO. Unfortunately the reaction chemistry is not quite that simple, in that as a product of combustion various ashes are produced. These ashes still need landfill and because of the concentration of toxic materials that results from these processes this ash needs to be treated as hazardous waste, requiring separate landfill or further treatment. Incineration produces POPs that were simply not there in the first place. Amongst these POPs, the PCDD/Fs are known to be highly toxic acting inter alia as carcinogens (they cause cancer) and even gene switches. Because they are large aromatic molecules they are not water soluble, they localise in fats or lipids. They are subject to bio-accumulation (they get more concentrated in living things) and bio-magnification (when animals eat others with high concentration their own chemical concentration goes up, this can include humans). They are chemically quite stable and long lived. Governmental doctrine assuages public opinion by presenting statistics comparing the very locally produced pollution to overall national averages, in so doing denying any possible affect of localised clustering.

The track record of incineration is poor, the large scale production of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans (PCDD/Fs) was determined only in retrospect and reactor design has since improved to reduce flue gas emissions of same. Some key factors have been identified and at certain temperatures the 300–450 °C these compounds are more easily made. Very high temperatures are therefore needed to effectively reduce the content of these. They, POPs, are always produced. If process temperature is increased they are removed form the exhaust gases but concentrate in the resultant ashes. The presence of chlorine is needed to make PCDDs, and all MSW has this and the content will depend upon the feedstock.

Because of new legislation emission limits on PM10s have been set and this has caused incinerator operators to put in place more rigorous filtering regimes. However this does not catch the PM2.5s and ultra-fines. A recent study has shown that the particle size distribution depends on process temperature, with higher temperatures producing particles that range in size from a few nanometres to a few microns. The peaks in the particle distributions occur at ~40nm and ~2 microns. As a rule of thumb the smaller the particle the more likely it is that it is transported further and absorbed into our body.

These toxic chemicals and particles enter our body through three main pathways, we breathe them in, we eat or drink them and they are absorbed through our skin. The whole area of particulate emissions and their affects remains very much a hot topic yet consensus remains that they cause morbidity and mortality.

7. MONITORING

The data set on true emission characteristics of MSW incinerators, Energy from Waste (EfW) incinerators being a sub set of these, are not readily available. In fact there is consensus that this is incomplete. There has been progress in developing new on line monitoring capabilities yet consensus remains that they this is still research. In the absence of stack top monitoring and chemical assay of incinerator ashes, any quoted values are at best projections and at worst guesses. Surely, it is a simple requisite that such monitoring must be in place.

The quantification of human body burdens is limited in live beings and is only ever a snapshot at a given time, because living organisms absorb things and then after a time change them or pass them from the body. Measurements of in vivo body burdens for humans is perhaps limited to blood sampling from live volunteers, the fat soluble PCDD/Fs/PAHs are found in assay, presumably from the lipids in cell

64 http://www.atsdr.cdc.gov/toxprofiles/tp104.pdf
70 Grahame et al., Inhalation Toxicology, 19, (2007), 457–481.
71 Grahame et al., Inhalation Toxicology, 19, (2007), 727–744
73 Schlesinger, Inhalation Toxicology, 19, (2007), 811–832.
75 Aboh et al., X-ray Spectrometry, 36, (2007) 104–110
76 Reff et al., Atmospheric Environment, 41, (2007), 4584–4598
77 Clarkson et al., X-ray Spectrometry, 36, (2007) 104–110
membranes only. The author is not aware of any current methodology to measure particulate body burdens. Post mortem studies may yet provide an evidence base, by their very nature concentrations are static upon death and exposure histories can only (currently) be gained from indirect sources and via extrapolations.

Some indirect methods of monitoring are however proving helpful in clarifying long term exposure patterns. Researchers have recently looked at the possibility of micro-evolution due to toxic stress\textsuperscript{81}, bio-monitoring with lichens\textsuperscript{82}, genotoxicity with Tradescantia micronuclei\textsuperscript{83} and uptake in peregrine falcon eggs\textsuperscript{84}. Direct transferability of these to the human condition also remains somewhat of an extrapolation, though the long term natures of these bio-markers are proving insightful.

Governmental safety assurances are based on retrospective epidemiological studies from a number of localities for example\textsuperscript{85, 86, 87, 88, 89} and are assumed to be directly and globally transferable. Little acknowledgement is made of differing climatic conditions between sites and the absence of such studies in the UK, is very noteworthy.

Risk analysis\textsuperscript{89, 90} is based on average body exposures/loadings and putative emission characteristics quoted in comparison to mass burdens using the TEQ scale mentioned earlier and the whole area is still generating research\textsuperscript{86, 91}, whilst acknowledging uncertainty in the toxico-kinetic and toxico-dynamic models\textsuperscript{92, 93, 94}. What is safe to say is that the area is very much one of research and may lead to the development of a new area of human pathological endeavour in years to come, when the long term exposures effect in the population at large.

8. TECHNOLOGY CHOICE

Weber \textit{et al}\textsuperscript{95}, discuss at length the concept of POP destruction technology in line with the intent of the Stockholm convention suggesting that PCB (Poly-chlorinated biphenyl) destruction facilities operating at 1100\textdegree C with residence times in excess of 2 seconds. Plasma gasification technologies operate in this domain rather than at the temperatures that synthesise POPs. They are used to treat POP rich waste from other sources. Like all developing technologies there is a time lag between conception and inception; see for example\textsuperscript{96, 97}.

In a fast changing world it is interesting that there is so much emphasis (in the UK) on incineration, particularly so when facilities to produces fuel gases from waste are already operational around the world, for example the plasma gasification plant at Utashinai in Japan. Secondary gas combustion is much easier to control (being of a homogenous nature) and the high temperature processes do not create POPs; in fact such methods are used to treat incinerator waste prior to landfill. The technology cycle has now advanced. Perhaps it is time for the UK to look to the USA and Japan for guidance on how to handle waste for the future. Arguments can be made about the volume handling of such gasification plants in comparison to MSW-EfW, however might it not also reduce the transport burden if smaller more local facilities were built to handle local waste?

There is much development in the area of gasification (including plasmas) as evidenced by a recent conference\textsuperscript{98}, perhaps agreeing with the title of the document that incinerators are . . . Yesterday’s Solution.

\textit{Dr Alan Taylor}

\textit{November 2007}

\textsuperscript{81} Medina \textit{et al}., Chemosphere, 67, (2007), 2105–2114
\textsuperscript{83} Misik \textit{et al}., Environmental Pollution, 145, (2007), 459–466.
\textsuperscript{84} Malish \textit{et al}., Chemosphere, 67, (2007), S1–S15.
\textsuperscript{85} Morselli \textit{et al}., Waste Management, 27, (2007), S85–S91
\textsuperscript{87} Grosso \textit{et al}., Chemosphere, 67, (2007), S118–S124
\textsuperscript{93} Kerger \textit{et al}., Chemosphere 67, (2007), S272–S278.
\textsuperscript{94} Charnley \textit{et al}., Food and Chemical Toxicology, 44, (2006), 601–615.
\textsuperscript{96} Camacho, World Patent WO 97/08494
\textsuperscript{97} Raymond, Canadian Patent CA 2339 457
\textsuperscript{98} \url{http://www.gasification.org/}
Memorandum submitted by Land Network International Ltd (Waste 34)

1. Some years ago, when I was developing Land Network on the instructions of the DTI under the Enterprise Initiative, I discussed how much waste was available and could go to land with Professor Lynn Frostick of the University of Hull. This would be more than 10 years ago and she then thought that it was “a little over” 100 million tonnes per annum. I am now of the view, on evidence, that we could recycle possibly more than 150 million tonnes per annum to land. Incidentally, we never use the word “dispose”, we regard these “wastes” as a resource and there to replace, and do a better job, than the importation of around £1 billion’s worth of mineral fertilisers.

The main barriers to recycling are out of date, technically inadequate and restriction-orientated regulation from DEFRA. Interpreted by an Environment Agency which has a culture of “obeying the letter of the law” to the point of completely forgetting about enabling the good guys in order to try and catch the bad guys. What this civil service-orientated attitude fails to realise that prescriptive regulation progressively restricts the good guys and makes them less and less profitable, therefore forcing them to make a choice between getting out of the business or stretching the rules and gradually becoming the bad guys. My guess is that the performance of the Environment Agency is significantly less than HM Customs in their efforts to control and catch the importation of illegal drugs. The Environment Agency has very little idea of what is going on, on the ground and that is not improved by having “mileage targets” for officers; one of the officers on the ground recently told us that he had been told not to go out more than 4 times a month in order to try and control the mileage bill! If our Environment Agency thinks they can catch the bad guys by issuing typewritten notices and shuffling them about whilst sitting at their desks, they are even more naive than I thought they were.

The whole of the policy is concerned with environmental protection rather than environmental management.

Where Land Network is aiming at is to manage the environment and make a major, positive contribution to Carbon management. The photograph [Annex C99] attached shows a 200 horsepower tractor on a Land Network farm, it is ploughing oil seed rape which was harvested in the autumn of 2007, the grain was crushed and then the oil was processed to produced the biodiesel which is now driving the tractor. The land on which the oil seed rape was grown, has had compost made from “wastes” for the last 5 years and has not used mineral fertiliser for the last two. The Carbon footprint figures on this setup show that we take over 43 tonnes of Carbon dioxide out of the atmosphere on every hectare that we carry out this operation and (not often spoken about) we pump Oxygen back into the atmosphere. For those that have time to read it, also attached is a draft of a paper on how this all fits together [Annex B100]. Its contribution to the management of the atmosphere in terms of Carbon dioxide and Oxygen, written for the journal ICE—proceedings of the Institution of Civil Engineers, “Waste and Resource Management”.

2. The Role for Regulations

As discussed in item 1 above, I have grave doubts about how the Environment Agency is set up and how it operates. I recently, (18th October 2007) filed 11 formal complaints with the Environment Agency as a result of many months, or even more than a year, of frustration. I filed them with the Agency’s Technical Manager, for whom I have a good deal of personal and professional respect and, therefore, I wish to make it clear that in no way am I attacking this officer who I regard as a good officer labouring under the strain of a very difficult system. Because he asked me, I then stressed what I felt was the problem of why these difficulties occurred and what could be done about it. Somewhat later on (12th November 2007), I used my experience to suggest how things might be wrong. I don’t suppose anybody will take any notice, but in the last 39 years I have been in over 2500 companies at Board level with a decision to be made. Many of these were one-man-bands (farms for example), many were larger farms and machinery dealerships, some were helicopters, food factories, clothing and all sorts of things, some were ICI (when John Harvey-Jones sorted it out) and British Steel (when that was sorted out) and a good many more as well. I have no doubt whatsoever than the growth in cost of running the Environment Agency could be held for several years ahead and the outfit would do a better job if my recommendations were at least thought about and at least in part implemented. I do not believe that they are catching anything but a very small percentage of people who are breaking regulations and damaging the environmental, I do believe that they are significantly inhibiting people who are honestly trying to comply with the law and do a good job.

3. Classification of Waste

The EWC (European Waste Catalogue) is inadequate, incomplete and substantially illogical. Further, the blind adherence to its use by the Environment Agency neither protects the Environment nor encourages recycling. I would much prefer to see an open minded classification which provided a positive link between the original material (regarded as waste in law) and the route by which it could be recycled. With respect to recycle to land, some progress has been made in recent years with the introduction of a Standard and, in particular, PAS 100. The problem with Standards is that they again, because of the “says here, jobs worth”.

99 Not printed.
100 Not printed.
culture that far too often exists, the Standard then becomes in itself a barrier. PAS 100 is not particularly related to agriculture and the offer of our Environment Agency to allow us to develop our own standards, is of no practical value simply because of the resource cost of developing these for commercial operations.

4. Financial Incentives

Household recycling is inevitably linked to waste collection by local authorities. The problem with source separation is that none of us on the receiving end of it can trust it. Source separation is never 100% and is frequently far too far from it to allow quality production to proceed. While, in principle, I am overall against centralising operations (because of trucking costs, road congestion, fuel use, loss of local jobs, etc, etc) I am able to observe that we can have medium scale use of new technologies coming through to separate at relatively local level within some form of MBT plant. I am therefore of the view that we are likely, within a few years, to abandon source separation. The problem with MBT is that it means different things to different people. There is also an unnecessary and unhelpful regulation that says that materials which are not source separated and fed into a MBT plant which produces a compost, that compost cannot be put on agricultural land. DEFRA's consultation on this matter something over a year ago was not helpful in that it decided to go to the expense of having a consultation and just shelving the results. If the output needs a Standard, then either the Standard is inadequate (in which case revise it), or it is adequate in which case we should be allowing that material to go to food producing land.

I am of the view that source separation can never be trustable, it is very expensive and further proposals are likely to produce serious political backlash. We now have the technology to take material as complete garbage, in one collection, to facilities where it can be handled safely.

5. The role of composting

Probably something around 150 million tonnes of wastes a year can be composted in the UK. We have the technology. We can do it safely. We can make a significant contribution to reducing greenhouse gas emissions and to improving the Oxygen content of the air in the process. The atmospheric management is done by PCCS (Photosynthetic Carbon Capture and Storage). Again, see Annex B101.

6. In my view, the Government can do a good deal to encourage a more sensible approach to packaging and, where it is necessary, insist on formulation which allows some route towards recycling. As an example, John Deere (the biggest farm machinery manufacturer in the world) have for several years had a range of combine harvesters, marketed worldwide, where the none structural body panels are made from soya protein. We can recycle those to land! It is quite possible to go a lot farther with making sure that packaging is recyclable by one route or another.

7. Read the attached paper for the ICE. [Annex B102]

8. Anaerobic Digestion

I worked inside several of the water companies for several years. They all use anaerobic digestion and this works quite well where the inputs are up to about 10% dry matter. Above this, the process gets increasing difficult to manage and increasing expensive. Until quite recently, despite what DEFRA has been encouraging us to do for 5, 6, 7 years, it really didn’t work very well. Now, we have got new technologies coming through which will help process much higher dry matter contents. One of the most encouraging is AAAD, this mean aerobic digestion to start off with to get the temperature up, anaerobic digestion to take perhaps 60% of the potential methane off, and then back to aerobic digestion in order to get the smell out of the material. I am quite hopeful about this sort of technology and it is likely that we will be putting in one of these on one of our farms in the not too far distant future.

There are alternatives which are not anaerobic digestion which will yield methane for energy or some other route which allows the sterilisation, recycling of various fractions and energy production. One of these is autoclaving and there are some plants coming on stream soon, notably one at Rotherham from Sterecycle. Anaerobic digestion, of the liquid type may be particularly useful on farms producing animal slurries and where on-farm biodiesel production is started up. The biodiesel production delivers bioglycerol and a by-product and one of the ways of dealing with this is to digest it anaerobically. This is probably the sort of plant that we will put in very shortly. Full integration of recycling to land, abolition of the use of mineral fertilisers, production of biofuels, production of electricity from AD, all built into recycling with PCCS, is an integrated system that we can now deliver.
9. **Energy from Waste.**

Energy from Waste, EfW, is a disaster. Have a look at the following equation which is based on a large Carbon molecule, in fact one from petrol, but it applies to burning any Carbon material including garbage; 
\[ \text{C}_{36}\text{H}_{74} + 54\text{O}_2 \rightarrow 36 \text{CO}_2 + 37 \text{H}_2\text{O}. \]

Burning anything produces Carbon dioxide and consumes Oxygen. Nobody is talking about it much yet but, if we get the greenhouse gas, we loose the Oxygen. So, if we burn all the fossilised fuel reserves, it’s not just going to be hot and clammy, it is going to be a bit difficult to breathe too! See Annex A\(^{103}\).

**SUMMARY**

It isn’t the answer to everything and all our recycling needs and waste problems. However, there is one thing that is staggeringly important and that is PCCS. We can delivery fully integrated systems, right now, which will recycle very large quantities of material, take Carbon dioxide out of the atmosphere and turn some of the Carbon dioxide being produced by other methods back into Oxygen for us to breath.

*Bill Butterworth*

Land Network International Ltd

21 November 2007

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**Memorandum submitted by the Green Alliance (Waste 35)**

**INTRODUCTION**

1. Green Alliance is an independent charity with a central role in the UK environment movement. We work closely with decision-makers in government and business, and with other environment groups, promoting policies for a better environment.

2. We welcome the opportunity to contribute to this enquiry. The review of Waste Strategy 2000 and the subsequent publication of Waste Strategy 2007 has been the focus of our work on waste and resource policy over the last two years. In 2006 we published *A Zero Waste UK*,\(^{104}\) jointly with the Institute for Public Policy Research (IPPR). This pamphlet set out the vision of a zero waste UK and ten steps the Waste Strategy could take to get us there.

**RESPONSES TO QUESTIONS**

*How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management* 

3. We are pleased that the government has resisted pressure to drop its plans to allow local authorities to develop financial incentive schemes for households. We think that such charging is a vital tool for local authorities to have at their disposal. We are clear that there are pre-conditions if such schemes are to work well—these include provision of clear, convenient recycling services and adequate resources to deal with fly-tipping. Provided such conditions are met, we see charging for residual waste as an entirely logical way to incentivise recycling.

4. We think that neither the recycling targets (40% by 2010 and 50% by 2020) nor the residual waste targets (29% reduction by 2010, 45% reduction by 2020—from 2000 levels) are stretching enough to stimulate the innovation needed. Over 25 local authorities already have recycling and composting rates of 40% or more and a couple have reached 50%\(^{105}\). The Netherlands and Germany currently have recycling and composting rates of over 60% and in 2005 the then-environment minister Ben Bradshaw cited 60% recycling as achievable.\(^{106}\) Despite this, the targets in the Strategy seem to have been based on a calculated “economic” level of recycling which takes no account of the possible benefits of innovation which might result from more ambitious targets. This has been a central theme for the government’s Commission on Environmental Markets and Economic Performance (CEMEP),\(^{107}\) of which Julie Hill of Green Alliance has been a member, and which is due to report in November. Green Alliance hopes that the messages from the CEMEP report will be heeded in on-going implementation of the Waste Strategy.

5. Equally, we were disappointed that there are no targets in the Strategy for commercial and industrial (C&I) waste, and believe that it is time to consider whether sectoral targets could be set and monitored, possibly through business associations or independent bodies. Furthermore, the target for the construction

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\(^{103}\) Not printed.

\(^{104}\) http://www.green-alliance.org.uk/grea_p.aspx?id=956


\(^{106}\) http://www.gnm.gov.uk/content/detail.asp?ReleaseID=169769&NewsAreaID=259&NavigatedFromSearch=True

\(^{107}\) http://www.defra.gov.uk/environment/business/commission/terms.htm (although out of date).
sector of halving the amount of construction, demolition and excavation waste (CD&E) waste going to landfill by 2012 does not seem to have been fully thought through. There is a lack of clarity about the nature of this target (ie whether it is mandatory or voluntary), how it fits together with a number of other targets for construction waste proposed by both the Waste Strategy and the forthcoming Sustainable Construction Strategy, and who will have ownership of the target(s). For more information on this see the outcomes of a seminar Green Alliance held in July 2007 at http://www.green-alliance.org.uk/grea1.aspx?id=1960.

6. We need innovation, particularly in products and systems of consumption, if we are to aspire to the “one planet living” ideal. Our thinking on this has been influenced by the work of American architect William McDonough and German chemist Michael Braungart: their book Cradle to Cradle: remaking the way we make things envisages the consumption and production practices of humans being no more damaging to the planet than any other consumption and production that takes place in nature. They propose two cycles: a biological cycle, where resources drawn from the land are returned to the land; and a “technical” cycle, where non-renewable resources essential to industrial activity are used and kept in circulation ad infinitum. Unless we accept the need to keep resources in use far longer than we do presently we are going to encounter increasing problems of resource scarcity, as well as the problems that arise from overuse of what are theoretically renewable resources. It has been estimated that after six months as little as 2% of the input resources by mass are retained long-term within the economy and 98% emerge as waste. This is not a sustainable situation.

7. To achieve a “cradle to cradle” or “closed loop” economy two kinds of innovation are needed: in products and materials, and also in downstream materials handling. However, the way the economy is organised at present provides no mechanisms for tying up upstream innovation with downstream processing. The decisions are made by different groups of people—manufacturers and retailers on the one hand; local authorities and waste companies on the other. Compostable packaging is a good example of a new material introduced on its apparent green merits but without adequate consideration of end-of-life processing. Compostable packaging, generally plastic-like materials from renewable feedstocks such as starch and cellulose that break down in either aerobic or anaerobic composting conditions, have been used by some retailers for nearly two years despite unfavourable conditions for downstream processing. Few local authorities were separately collecting food waste for composting and not all packaging marked as “compostable” broke down on home compost heaps. Few packages carried labels explaining how they should be treated at end of life. There was (and still is) a lot of potential for consumer confusion. Worse, cross-contamination presents waste processors with additional problems—compostable materials in conventional plastic recycling streams (such as PET) undermine its quality; equally conventional plastics mistakenly sent down the municipal composting route will have to be identified and removed at extra cost.

8. Green Alliance is initiating work to explore how upstream innovation and downstream waste infrastructure commissioning can be better coordinated.

The role for and implementation of regulations, and their enforcement

9. We note that the pre-treatment regulations for non-hazardous waste to landfill that came into effect on 30 October have the potential to drive significant increases in business recycling rates as businesses will have more of an incentive to segregate waste materials on-site. There are also significant opportunities for the waste industry in meeting the needs of those businesses that either don’t want to or can’t segregate wastes on-site; this may drive investment in material recovery facilities (MRFs) and/or recycling infrastructure. However, for these benefits to be realised the regulations must be adequately enforced.

10. We believe there may also be a role for product regulations: these would be specific product standards for whole-life performance on energy, water and resource efficiency as well as the impacts of final disposal of the product. This could be a precursor to a situation where producers have responsibility for the impacts of their products at all stages of their lifecycle, not just through the standards to which they are manufactured but by conditioning their use and having responsibility for a closed-loop, zero-waste system. This would require regulations but most importantly it would need unprecedented buy-in from industry.

The classification of waste

11. We welcome the recent Quality Protocol for compost and the forthcoming Quality Protocol for anaerobic digestate. Both these protocols will make it easier for closed loop resource flows to take place.

The proposals for financial incentives to increase household waste prevention and recycling

12. As noted under Q1 we are strongly in favour of financial incentives. However, we believe that the condition that they be entirely revenue neutral could limit their potential. Our full responses to the proposals can be found in our response to Defra’s consultation: see the “recent news” section at http://www.green-alliance.org.uk/grea1.aspx?id=102.

The role of composting

13. There needs to be much more clarity with regards to the role of home composting. WRAP says, “Promotion of home composting to those households with gardens makes sense and should be a common element in virtually all authorities’ programmes”,109 and the government is currently considering whether home composted waste should be included in the new performance indicator for local authority performance on recycling and composting.

14. However, in a recent speech, the environment minister Joan Ruddock said, “Central government doesn’t usually have a preference when it comes to how leftover waste is dealt with as long as all the options higher up the waste hierarchy have been exhausted first . . . But when it comes to food waste we do have a preference. We think anaerobic digestion is the best process to use, and that local authorities need to collect food waste separately for this purpose”.110

15. Clarity about the role of home composting important for local authorities, some of whom might be giving disproportionate emphasis to collecting green waste to improve recycling tonnages, when home composting might be the better option. It is also important to give clear signals to the retailers about the likely disposal routes for compostable packaging. As already noted, some retailers are aiming for fruit and vegetable packaging to be home compostable whereas others are using materials that will only compost under the higher temperatures of a commercial composting facility or anaerobic digestion plant, thus requiring food waste collection systems to be in place. Clarity about home composting also means the government taking a position on whether potential downsides, in the form of methane emissions from badly managed compost heaps, outweigh the benefits.

The government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

16. Waste minimisation can only be seriously tackled through action on products and materials. Despite the welcome emphasis of the Strategy on products and materials, there is very little in the way of policies to address them. We are particularly concerned that the products and materials unit does not yet seem to be fully up and running—it is vital that this unit is properly resourced.

17. We are also concerned that there is insufficient emphasis on producer responsibility as a way of organising recovery and recycling, and, crucially, stimulating product re-design. In our 2005 report Return to Sender we set out some of the shortcomings of current approaches to producer responsibility. We concluded that while such initiatives have improved collection rates and recovery of materials, resulting in improved recycling rates, they have often managed to fragment and dilute responsibility through the involvement of third party organisations. Instances of genuine re-design of products are still rare. The main point of producer responsibility measures has seemed to be to shift end-of-life costs from public authorities to the private sector and it is clear that product re-design needs additional, specific policies to stimulate innovation. Product standards and product levies should both be explored.

18. For more on this point, please see our recent submission to the House of Lords Enquiry into Waste Reduction.111

The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

19. We clearly have to move away from landfill, a form of disposal which is a waste of resources, and thus a waste of carbon because of the energy that went into extracting raw materials, manufacturing and transporting products (assuming the energy has come from fossil fuels). The issue of landfill methane, and the targets arising from the Landfill Directive on limiting biodegradable waste to landfill, confirm that move since methane capture is unable to capture all emissions.

20. However, as noted above, we do not think that the recycling targets in the Waste Strategy provide a sufficiently ambitious framework for moving away from landfill. We welcome the suggestion in the Strategy that the government may consult on banning the disposal of some materials to landfill. This would offer greater certainty to businesses and local authorities and, if bans are signaled sufficiently far ahead, should help with the planning of new recycling infrastructure.

21. Studies show that most recycling saves carbon,112 however, we are concerned that a short-term focus on carbon could lose the bigger picture—for example retailers are encouraged through the Courtauld Commitment to lightweight packaging, however in general this involves using very thin plastics, which are very difficult to recycle. A focus on carbon above all else ignores renewability of feedstock and the impacts of its extraction, as well as toxicity, and water use and pollution.

The promotion of anaerobic digestion for agricultural and food waste

22. We welcome the government’s promotion of anaerobic digestion for agricultural and food waste as a “closed loop” approach although there is a need more demonstration technology. As mentioned before there is a need for the government to clarify the role of home composting vis-à-vis in-vessel composting or anaerobic digestion.

The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for government action to encourage the most efficient novel technologies

23. Despite the sterling efforts of WRAP, the UK’s capacity to process materials collected for recycling is currently low, particularly for plastics, and we export a considerable amount to countries like China. Demand for our secondary materials may well start to decline as the Chinese start to produce a lot more of their own, particularly as poor segregation and contamination with biowastes in the UK leads to lower quality recyclate which restricts its use and lowers its value. Much larger incentives are needed to stimulate investment in re-processing infrastructure in the UK. At the same time, greater clarity and uniformity is needed at the household and commercial level around how materials for recycling are collected and segregated. Experience from other countries suggests that improving recycling rates beyond 50% is dependent on good, consistent segregation of materials at source.

24. Green Alliance’s view is that energy from waste should have a limited role and recycling should always take precedence unless there is a very detrimental effect on the carbon equation. The Waste Strategy is clearer on this point than previous policy documents, which we welcome. We also welcome the emphasis on anaerobic digestion as a form of energy from waste because the residue should be a usable product (a type of compost) rather than a hazardous waste that must be disposed of to special landfills (which is the case with at least a proportion of the ash from combustion processes).

25. As noted in several places above, innovation in materials, products and re-processing technologies are all badly needed, and at present are proceeding slowly thanks to a history of delayed implementation of regulations and poor economic incentives. This situation has improved somewhat with the more recent increase to the landfill tax escalator, but is still not driving investment and innovation on a scale that will get us near to the ideal of the “closed loop” economy. Green Alliance’s work on CEMEP has sought to suggest ways in which both environmental policy and innovation policy can help remedy the UK’s lack of innovation in this area, including setting longer-term targets, introducing product standards that are steadily improved, and using the government’s buying power to create “lead markets” for new products and processes.

Green Alliance
November 2007

Memorandum submitted by Jon Letcher (Waste 36)

The main subject of this submission is section 8—“the promotion of anaerobic digestion for agricultural and food waste.”

Relevant experience/interest: I am no longer involved in digesters, but for nearly ten years I played a key role in the promotion of Britain’s farm digester industry, during its most active phase in the 1980’s and early 1990’s—as marketing manager of Farm Gas Ltd, and as co-founder and managing director of Waste Refineries International Ltd. These two specialist companies built virtually all the successful farm digesters in Britain, treating many types of farm and other wastes; and WRI won the RSA Better Environment Award for Industry (Product Category) in 1991, for its work with digester by-products.

Executive Summary

1. Existing measures will encourage some large, progressive farms to install digesters, but every livestock farm in the country will need access to anaerobic digestion, if the problems caused by livestock waste are to be solved; and only a major government-funded digester building programme will have any substantial impact on the problem.

2. However, such a programme could be financed largely by loans which would be repaid out of farm savings and income generated by the process. Digestion and separation reduces the costs and problems of handling and storing slurries, and converts it into three useful by-products—a nutrient-rich liquor and a compost fibre, as well as biogas.
3. Fertilizer and compost manufacturers should be encouraged to become involved in the use and
development of the liquor and fibre, which have already proved their potential, and could have a profound
effect on their own markets in the future. Net metering for electricity would encourage smaller farms to
generate electricity from biogas.

4. Digesters should be installed at all major agricultural colleges, both to give young farmers experience
of the process, and to clarify through research and trial programmes the financial value and best practice in
using the system and its by-products. Maximising (and publicising) the benefits and returns will encourage
farmers to install digesters, and help make the programme financially self-supporting.

5. On-farm co-digestion of farm with other wastes such as source separated municipal waste and sludge
from small local sewage works could have considerable financial and environmental benefits for waste
managers, and create gate fees which would attract many farms to install digesters, once the planning and
monitoring issues are resolved.

6. In the past, the narrow fields of interest of different government departments caused the value of the
process to be seriously underestimated, which was one of the main reasons why the UK’s farm digester
industry—then the most advanced in the world—collapsed in 1994. A positive, co-ordinated approach will
be essential for success.

MAIN TEXT

1.1 Energy-related initiatives by the government and by organisations such as Marks and Spencer will
encourage some farmers to install digesters; but there are many thousands of livestock farms in the country
which are all currently adding to greenhouse gas emissions and other environmental problems.

1.2 Most of these are small, often hard-pressed concerns which have neither the time nor resources to
consider side-issues such as power generation, though they may well be very interested in the other benefits
of the process, such as reduced fertilizer costs and reduced waste management problems, which affect the
fundamental, everyday activities of their business. Even 15 years ago many farmers were aware of the
benefits of the process, and believed that a digester must one day form an integral part of every livestock
farm.

1.3 But effective waste management is a major investment for an average farm, and funding has always
been the key issue. Most of my own work within Farm Gas and WRI involved helping farms to justify the
cost of their digesters; and when the 50% capital grant system was axed in 1994, WRI’s hard-won list of
“potential imminent orders” fell in value almost overnight from over a million pounds to zero.

1.4 If digesters are to be installed in large enough numbers to have a significant effect on the problem,
and if we are going to make up for lost time—Germany already has over 3,000 farm digesters in operation—
a major government-funded digester building programme will be needed. But the cost of such a programme
could be very modest, compared with that of many other energy technologies.

2.1 In 1994 WRI was working on a proposal for replacing the farm waste management grant scheme with
a new system based on loans—flexible, controllable and ultimately self-financing, this system could still offer
the best way forward for the industry.

2.2 Our proposal—which seems very small-scale now, but would have made a huge difference at the
time—was essentially that 50 farm digesters (costing about £5 million in total) should be funded each year
over a ten-year period through low interest loans, which would be repaid by the farms out of savings and
income generated by the digestion/ separation process.

2.3 The repayments from the first farms involved would be used to help fund other “waves” of
installations; so by the end of a 10-year period 500 farm digesters would be operating, and a permanent
“rolling” fund established which could, in time, fund the building of a digester on every suitable farm in
Britain, for a total public outlay (spread over 10 years) of about £50 million.

2.4 Costs have risen since then, but rising energy prices and economies of scale would help redress the
balance; and although the scale of the programme would need to be greatly increased in order to make a
serious impact, the cost of even a radically expanded programme would still be fairly modest, considering
the benefits involved.

2.5 The scale of the repayments could be varied according to the uptake at any one time—during the first
year or two, for instance, to get the programme off to a flying start, 0% interest with a repayment holiday
might be offered to a given number of applicants; but once the scheme was well established, and the likely
level of returns demonstrated in practice, repayments could be stepped up, to build up the “rolling” loan
fund.

2.6 Large retailers such as Sainsbury’s, which have banking interests as well as being the major outlets
for many farms likely to involved in the programme, may find a marketing advantage in helping to create
the loan fund in the early stages—by launching a special account for their customers, perhaps—to get the
programme off to a flying start.
2.7 Renewable energy contracts would be the simplest means of regulating the returns for the farms initially, but as the value of the other by-products and on-farm cost savings became better established, these could play an increasingly important part.

3.1 In the early 1990’s, the digested separated fibre was a key part of our marketing strategy for digesters, and by varying the rates at which we contracted to buy back the fibre from our digester customers we were able to control—to some extent—our flow of digester orders.

3.2 To make this possible, we developed our award-winning “Heritage” range of peat-free composts, based on digested composted manures, coir and wood waste, which included a seed and potting compost (trialed by Pershore Horticultural College) as well as simpler landscaping products such as soil conditioner and tree planting compost.

3.3 As a small producer, developing a brand new product range from novel materials, it was always a struggle for us to compete with the big established companies, such as Fisons, and we would have preferred to sell the fibre to them, to use in their own peat-free or low-peat products, so that we could concentrate on building digesters; but the volume of digested fibre was too small to interest them at that time. If hundreds of farm digesters were being built every year, the situation would be different, and although the very low prices of peat-based compost products at present mean that the fibre would have little impact on the returns from farm digesters initially, the high quality of the material, and the large volumes involved, mean that this fibre could become important in the future, as peat stocks become ever more depleted.

3.4 The fibre’s high nutrient content—which makes it attractive as a soil conditioner—means that it has less value as a substitute for peat in growing media; but one of our experiments revealed that the salts content was greatly reduced by the leaching effect of rainwater over a single winter (the runoff was stored with slurry for use as liquid fertilizer), suggesting exciting possibilities for the future.

3.5 Reducing the use of peat would also help to reduce greenhouse gas emissions; as would—potentially to a much greater extent—savings in the use of artificial fertilizers.

3.6 Digestion and separation make the nutrients in slurry more readily available as a fertilizer, both by altering the chemical form of the nitrogen, and by converting the thick, unmanageable slurry into a thin liquid which can be easily analysed for its nutrient content, and spread in a controlled way by irrigator; and some livestock farmers with digesters reported savings in fertilizer costs of 70%.

3.7 Paragraph 3.7 not printed.

3.8 Paragraph 3.8 not printed.

3.9 In the future, it is possible that the use of digesters could radically alter the whole concept and practice of fertilizer use and application on livestock farms.

3.10 Reducing the total nutrient loading, by making full use of the nutrients in slurry, can also help reduce nutrient pollution of ground and surface water.

4.1 As part of WRI’s strategy for promoting farm digesters, we installed a digester system at Walford College of Agriculture in Shropshire, in the early 1990’s, which is still operating today.

4.2 The system included a compost making unit and CHP generator; and we also planned that the college would conduct trials into the fertilizer value of the liquid, though these trials never took place on the scale originally intended.

4.3 As part of a digester building programme, comprehensive systems similar to the one we built for Walford should be installed on all key agricultural colleges, and trials into the fertilizer value of the liquor, and potential savings in waste management costs, should be carried out as soon as possible, preferably working in conjunction with independent on-farm trials, such as those currently planned for the island of Westray in Orkney.

4.5 But it is essential that trials should not be allowed to delay the start of the farm digestor building programme itself. AD is a fully developed process, used on sewage works for over a hundred years; and Farm Gas and WRI have between them successfully treated virtually every type of livestock waste. (Incidentally, all these projects were the work of my former colleague James Murcott, now of Methanogen, the co-founder of both Farm Gas and WRI Ltd; who is not only by far the most experienced and successful farm digester engineer in Britain, but has been the industry’s leading light for 25 years, and the first to fully appreciate the importance of the liquor and fibre, and of on-farm co-digestion; and I strongly recommend that you call him as a witness for your enquiry.)

4.6 There is no need for more demonstration projects, which can be expensive, self-propagating, and can give misleading results, as the capital and running costs of these high-specification units can be much higher than those of standard on-farm systems.

5.1 Treating sewage sludge in rural areas and smaller towns can be a problem, as the sludge must either be transported, after primary treatment, to a centralised processing plant, and transported away again for disposal, or a suitable on-site treatment system must be installed, incurring high capital and maintenance costs.
5.2 On-farm co-digestion with farm wastes can reduce costs for water companies and their customers, reduce the amounts of fossil fuel used for sludge transport, and provide valuable gate-fees for the farms involved.

5.3 The costs of transporting and spreading the sludge can often be greatly reduced, as the sludge, after treatment, is spread with the farm slurry by irrigator, while the capital cost of the extra digester volume required for the sludge is minimal (1 cubic metre of digester volume, which will treat the waste from only 1 dairy cow, will process the sludge from 100 people.)

5.4 We discussed projects of this kind with several water authorities, and some operating managers were very interested; but the projects came to nothing mainly because of the lack of a co-ordinated plan for setting and monitoring standards, relative to environmental, health and planning issues. If these issues were resolved, co-digestion could help many farms to afford the cost of a digester.

5.5 The same is true of other wastes, especially organic wastes from source-separated domestic rubbish; and I believe that on-farm co-digestion of these materials with livestock wastes would often prove to be a preferable and more practical route than installing digesters purely for domestic waste processing alone.

6.1 In the past the industry has suffered by falling between a number of departmental stools.

6.2 To avoid these problems in the future, I believe a biogas programme should be made the responsibility of a single programme director, who is not involved in any other form of energy or other project, and who reports to and is supported by a panel of representatives of the relevant government departments, farmers, digester manufacturers, and (once the programme had gained momentum) those involved in the use of the by-products.

6.3 This director must be given authority to negotiate and hopefully resolve at a national level such potential barriers as the planning and monitoring issues involved in co-digestion schemes, and to co-ordinate the research projects mentioned above; but his main responsibility should be to ensure that the required number of digesters is installed, week by week.

6.4 I am confident that, if the government committed sufficient funds in the early stages, a major biogas programme could be initiated quickly and successfully—a clear commitment by the government will attract investors and manufacturers, who will promote the process actively by the usual channels.

6.5 I have given many talks about the process in the past, including a series organised by the Wildfowl and Wetlands Trust, and I am sure that a farm digester programme would be strongly supported by the general public, especially as it would arouse none of the controversy surrounding some other forms of renewable energy.

6.6 It would also help dispel the myth that such technologies are bad for the economy. A farm digester programme, in addition to its environmental benefits, could substantially improve farm incomes, and create a major new industry for rural areas—WRI’s staff of 25 were building about one farm plant per month, and there are at least 30,000 farms in Britain that need access to a digester.

Jonathan Letcher
November 2007

Memorandum submitted by the Staffordshire and Stoke-on-Trent Waste Partnership (Waste 37)

INTRODUCTION

The Environment, Food and Rural Affairs (EFRA) Committee has decided to examine the Government’s Waste Strategy for England, which was published by the Department for Environment, Food and Rural Affairs on 24 May 2007.

Information in response to the examination is provided as a joint response by the Staffordshire local authorities with statutory responsibilities for waste collection and disposal.

This report addresses each of the nine questions/considerations set out in the terms of reference.

EXECUTIVE SUMMARY

ES 1. Q1/Q2/Q3. The mix of central government legislation, policy (particularly statutory recycling targets) and fiscal instruments generally appear to be providing the appropriate level of market intervention and stimulation for local government to achieve a greater level of sustainability for the management of household waste.

ES 2. However, it is considered that the small and medium sized enterprises (SMEs) have fallen through a policy gap. The forthcoming pre-treatment of non-hazardous waste destined for landfill (in contrast to the expectations set out in Section 3, paragraph 38 of WS2007) appears to undermine the private sector
commercial waste services provided to SMEs by enabling local authorities to collect waste from the same source but with an exemption from pre-treatment as it becomes classified as municipal waste (albeit subject to LATS).

1.3 Similarly, the fiscal drivers and voluntary/corporate social responsibility agendas (eg Courtauld Commitment in respect of the retail sector to design-out excess packaging) look set to facilitate improved waste management practises in large business enterprises as the landfill tax escalator starts to stimulate behavioural change within the next few years.

1.4 However, it is considered that the small and medium sized enterprises (SMEs) have fallen through a policy gap. The forthcoming pre-treatment of non-hazardous waste destined for landfill (in contrast to the expectations set out in Section 3, paragraph 38 of WS2007) appears to undermine the private sector commercial waste services provided to SMEs by enabling local authorities to collect waste from the same source but with an exemption from pre-treatment (EA 2007) as it becomes classified as municipal waste (albeit subject to LATS).

1.5 Given that one of the long standing areas of contention within LATS is that it does not provide any incentive for local authorities to provide a comprehensive waste and recycling service to SMEs, coupled with the legislative uncertainty surrounding local authority duties in its requirements to facilitate such a service (and the associated budgetary pressures on local authorities to compete in this sector); it is considered less likely that recycling services to SMEs will be forthcoming from local authorities whilst undermining the private sector to provide alternative solutions.

1.6 Undermining a future MBT infrastructure also reduces the scope for local authorities to maximise the capacity of existing landfill and energy-from-waste infrastructure.
QUESTION/CONSIDERATION 2

The role for and implementation of regulations, and their enforcement

2.1 Regulations and the lack of enforcement and/or clear guidance involving the misunderstandings over the classification and associated duties for local authorities in relation to wastes arising from commercial sources, charities and schools continue to hamper sufficient development of coherent arrangements for all stakeholders.

2.2 In respect of waste prevention and waste minimisation, the level of enforcement of the Essential Requirements by local authority Trading Standards (the responsibility of the County Council in a two tier administration) has had limited success in providing multi-national producers/retailers with a level playing field to stimulate market confidence, especially in relation to competition from imported goods from outside the European Union.

QUESTION/CONSIDERATION 3

The classification of waste

SMALL AND MEDIUM Sized ENTERPRISES

3.1 Chapter 6, Paragraph 28 of the WS2007 is limited to “signposting” the direction and future expectations of Local Authorities in respect of waste and recycling services for SMEs.

3.2 The forthcoming pre-treatment of non-hazardous waste destined for landfill (as set out in Section 3, paragraph 38 of WS2007) also has the potential to act as a driver for local authorities to provide comprehensive recycling services to SMEs, but the most recent Environment Agency guidance (EA 2007) indicates that municipal waste is exempt from this requirement.

3.3 LATS has also highlighted the level of confusion to many local authorities over the responsibilities surrounding commercial waste and recycling collections, in particular, the requirements to “arrange for the collection of the waste”, in the relevant legislation (EPA 1990a).

3.4 The position remains unclear as to whether or not local authorities need to provide and record tonnages from “arranged” commercial waste collections that form part of a separate private sector collection and disposal to a facility not under the control of the Waste Collection or Disposal Authority. Defra’s position on this matter remains unclear with guidance (Defra 2005) that states

“If a WCA declines to collect certain types of commercial waste when requested to do so, and does not arrange for its collection by a private sector contractor, it is likely to be acting in breach of its duty under section 45(1)(b). Any WCA thinking of operating a selective service for commercial waste would need to satisfy itself that it was not breaching its duties under the 1990 Act.”

3.5 The guidance on the definition of “arrange” is still not clear as to whether or not local authorities providing contact details for a private sector commercial waste service in response to a customer enquiry, in order to enable the customer to instead make the said arrangements is sufficiently robust to constitute “arrange” and exempt the local authority from recording any tonnage details.

3.6 This position is further complicated as a result of authorities that contracted out their collections of commercial waste under compulsory competitive tendering or best value that no longer have any trade customers of their own.

CHARITIES

3.7 Chapter 7, paragraph 12 of WS2007 indicates the role that the Third Sector can provide in waste management. However, the current legislation is unclear and local authorities are making different interpretations resulting in different levels of service provision. It is not clear from the legislation if local authorities should be allowing all waste from the activities of a charity to be disposed of (or collected) free of charge.

3.8 For example, in the case of a furniture reuse charity with a high street outlet and warehouse, should such a charity expect a waste collection via a conventional service that may be expected from a householder—ie a frequent bin collection service and furthermore, should an authority also provide an unlimited bulky waste collection or unlimited access to the household waste and recycling centre.

3.9 In this particular example, the level of contention may be greater should a charity accept waste or furniture donations from commercial sources and undertake house clearance activities at commercial rates.

3.10 The range of charitable activities has proven to be much more wide ranging than simply servicing a community hall for cub-scout meetings with a traditional weekly collection.

3.11 Clarification on a number of other grey areas such as service provision to care-homes, day centres, community fair events, etc would also be useful.
SCHOOLS

3.12 Chapter 7, Paragraph 31 of the WS2007 recognises the need for clarification over the definition of school waste and the local authorities recycling obligations.

3.13 The wording in the relevant legislation has been a source of confusion for several years. Classification of “school waste” is not clear due the phrase “forming part of” within the relevant legislation (EPA 1990b and CWR 1992).

3.14 Differences in waste classification within two tier authorities that classify school waste as “household”, exist and there is a mixed policy of “free collection” and “chargeable” schemes.

3.15 The forthcoming pre-treatment of non-hazardous waste destined for landfill as set out in Section 3, paragraph 38 of WS2007 has the potential to act as a driver for local authorities to provide comprehensive recycling services to schools, but the most recent Environment Agency guidance indicates that municipal waste is exempt from this requirement.

3.16 The WS2007 further clouds the issue by including schools within Chapter 6, Box 6.1. under the heading of “Local authorities—business waste and resources”.

3.17 Aside from the need for clarification in respect of collection responsibilities, this should be extended in respect of school waste types and quantities that are permitted to be brought to household waste and recycling centres.

3.18 It is considered that the current legislation, policy and fiscal instruments fail to provide the level of detail to provide consistency over expectations of local authorities and stakeholders in terms of service provision relating to SMEs, schools and charities.

3.19 Should clarification be forthcoming, it needs to be more discerning than the recently revised guidance (Defra, 2006) to local authorities’ responsibilities in respect of “third party reuse credit payments”.

QUESTION/CONSIDERATION 4

The proposals for financial incentives to increase household waste prevention and recycling

4.1 None of the ten Staffordshire authorities currently intend to implement such a scheme for variable charging due largely to the impracticalities and the administration costs of running a scheme. Whilst the potential for positive behavioural change is recognised, it is considered that the potential for negative behaviour and conflict outweigh the potential benefits.

4.2 Whilst the socio-demographics and housing stock make such a scheme more practical in some areas of Staffordshire, the knock-on effect to the adjacent local authority administration areas and the cross boundary household waste and recycling centres within a two-tier administrative area, could result in logistical problems.

4.3 Should a variable charging policy be pursued, it is recommended that an extensive trial be conducted before giving the optional powers to implement such a scheme.

QUESTION/CONSIDERATION 5

The role of composting

5.1 The central government/Waste and Resource Action Programme (WRAP) home composting initiatives are considered useful and more urgency should be given by Defra to agreeing a formula to record sales against landfill diversion targets.

5.2 In terms of kerbside collections of compostable waste, the notion that such a collection service leads to more waste being created is not readily accepted. It is considered less likely that waste is “prevented” through home composting/bonfires and is more likely recorded against street/gulley cleansing and movements between residual waste bins and household waste and recycling centres rather than prompting householders to increase their gardening habits and creating additional waste arisings.

5.3 The green garden waste kerbside collection schemes in Staffordshire are also used by some authorities to collect other materials suitable for composting, eg food kitchen scraps, including meat fish and bones (which should not be home composted) and cardboard. Such a service may prove useful to some authorities that are overly concerned about the health impacts of alternate week collections by effectively giving an option to householders for a weekly food waste disposal option.

5.4 Also, providing an option for collecting cardboard in a compostable waste collection will free up extra capacity in the residual and recycling receptacles—again useful in the context of a successful alternate week collection or service.
5.5 In terms of negative aspects of composting, it should be recognised that some urban authorities will be disadvantaged in relation to the more rural authorities in meeting statutory recycling targets, possibly at the expense of rural authorities not providing a comprehensive dry recycling collection scheme or a properly integrated waste and recycling kerbside collection scheme.

5.6 Given the uncertainties and/or lack of waste treatment capacity in relation to “Anaerobic Digestion” technology, along with an absence or unclear policy direction for kitchen sink macerators for the disposal of food waste, the role of composting or anaerobic digestion of green garden waste, kitchen food waste and cardboard packaging is a key component of a successful alternate week kerbside collection service.

5.7 It should be recognised that some urban authorities will be disadvantaged in relation to the more rural authorities in meeting statutory recycling targets due to the lower amount of compostable garden waste generated from high density terracing, flats, etc.

**Question/Consideration 6**

*The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes*

6.1 It is considered that the necessary legislation is already in place to promote responsible packaging through The Packaging (Essential Requirements) Regulations 2003 and the Producer Responsibility Obligations (Packaging Waste) Regulations 2005 (HMSO 2003, 2005).

6.2 However, the level of enforcement of the Essential Requirements by local authority Trading Standards (the responsibility of the County Council in a two tier administration) has had limited success in providing multi-national producers/retailers with a level playing field to stimulate market confidence, especially in relation to imported goods from outside the European Union.

6.3 If the voluntary agreements made through the Courtauld Commitment (as set out in Chapter 4, Paragraph 64 of the WS2007) are to succeed, it is considered that better co-ordination of the Trading Standards responsibilities needs to undertaken at the national, regional and county level.

6.4 In terms of Packaging Waste Regulations, it is considered that added financial incentives should be incorporated within the Packaging Recovery Note allocation system to reflect the true environmental costs through the use of composite packaging and which has proved difficult to incorporate within local authority recycling schemes.

**Question/Consideration 7**

*The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill*

7.1 The mix of central government legislation, policy and fiscal instruments appear to be providing the appropriate level of market intervention to achieve a greater level of sustainability.

7.2 Waste management and recycling has been subject to high level strategic life-cycle-assessments to understand environmental impacts for many years. However, it is considered that there is a need to improve understanding of the carbon impacts of waste management at a sub-regional and local level, and this should be incorporated into future training requirements, which is not currently specifically identified as a requirement for skilled staff under Chapter 3, Paragraph 43 of WS2007.

**Question/Consideration 8**

*The promotion of anaerobic digestion for agricultural and food waste*

8.1 The trials at the AD demonstration plant in South Shropshire has been of interest to the waste management industry, but it is considered that the greater flexibility of invessel composting technology within the context of an integrated alternate week collection scheme is a more suitable technology for more rural or typical shire authorities that have a mixture of different organic waste.

8.2 It is considered that AD may have a greater role in more urban or metropolitan authorities to adopt this technology if their strategy is focussed on the treatment of food waste collected separately from garden waste.
QUESTION/CONSIDERATION 9

The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

9.1 The mix of central government legislation, policy and fiscal instruments appear to be providing the appropriate level of market intervention to stimulate the viability of the infrastructure required to meet Staffordshire’s needs.

9.2 In terms of deliverability, the difficulties of gaining planning consents are well known, and the provision to allocate sub-regional infrastructure under Planning Policy Statement 10 has not yet reached maturity, with regional planning and local planning documents still largely out of synchronisation. If the failure of the planning system is not arrested through PPS10, it is considered that the risk and uncertainty to the investment sector is likely to result in the collapse of LATS as a policy.

9.3 Furthermore the funding mechanisms associated with the combined heat and power element of energy-from-waste need reevaluating within the context of “bankability” and Private Finance Initiatives.

REFERENCES


EPA 1990a. Environmental Protection Act 1990, s. 45, Paragraph 1(b).

EPA 1990b. Environmental Protection Act 1990, s. 45, Paragraph 2/Para 4 and Schedule 1/Schedule 2.


Staffordshire and Stoke-on-Trent Waste Partnership

November 2007

Memorandum submitted by the Nappy Alliance (Waste 40)

EXECUTIVE SUMMARY

The Nappy Alliance welcomes the Environment, Food & Rural Affairs Committee’s current Inquiry into the government’s recent revised Waste Strategy. The Waste Strategy aims to put more emphasis on prevention and re-use, as well as providing stronger incentives for businesses, local authorities and individuals to reduce waste. The Alliance is pleased with the government’s overall ambition to break the link between economic growth and waste growth and we particularly support the government’s target to halve the amount of household waste which is not re-used, recycled or composted.

However, the Nappy Alliance is disappointed that the Strategy, despite its high level of detail, does not include any recommendations on how specifically to address the volume of disposable nappies in household waste.

Reusable nappies represent a viable alternative to disposable nappies, offering similar levels of convenience without creating any landfill. By not incentivising young parents to use real nappies, the Department appears to be missing an opportunity to significantly reduce the 3–4% of household waste going to landfill which consists of nappy waste.

In addition, the Government’s plans to introduce exemptions to variable charging for people with young children, purely on the basis that they produce more nappy waste, appear ill-considered. Whilst the Alliance is generally in favour of variable charging and financial incentives which seek to encourage waste minimisation and recycling, we believe that the proposed exemption from variable charging for young parents included in the Climate Change Bill, represents a missed opportunity for the Government to allow local authorities to significantly address what represents the biggest single-identifiable source of household waste, ie disposable nappies.
REVISED WASTE STRATEGY

1. The Nappy Alliance was established by independent providers of real nappies to act as the trade body for the commercial market of re-usable nappies, to promote their use amongst new parents and to address the on-going issue of the 400,000 tonnes of disposable nappies which go to landfill in the UK every year. The Alliance promotes awareness of the key benefits of reusable nappies such as a wider consumer choice, a cheaper option for parents than disposables and environmental benefits and cost savings to waste disposal authorities.

2. The Nappy Alliance looks forward to working with the Government in encouraging waste prevention and re-use, as well as providing stronger incentives for businesses, local authorities and individuals to reduce waste. We are encouraged by the Government’s recognition of the importance of reducing waste, particularly given that currently two thirds of waste is being diverted to landfill. Only Ireland and Greece in the EU15 send more waste to landfill than the UK. Therefore, if the government is serious about lowering carbon emissions and reducing the threat of climate change, it is clear that the current levels of waste must be addressed.

3. Currently, nearly 3 billion nappies are thrown away in the UK every year—8 million nappies a day—making up 3–4% of all household waste. The Environment Agency estimated that the decomposition timescale for some of the materials and chemicals currently used in disposables is more than 500 years. The paper-fluff and faeces should take approximately 100 and 10 years respectively to degrade. In addition, landfill currently accounts for 38% of all UK methane emissions, a greenhouse gas which is far more harmful in terms of climate change than Carbon monoxide. It is clear that increasing the uptake of reusable nappies could considerably drive down the harmful methane emissions currently emitted in the UK.

4. We are disappointed and surprised that despite the ambitious targets which the government set, its Waste Strategy does not include recommendations on how to reduce the amount of disposable nappies in household waste. Nappy waste currently accounts for 3–4% of all household waste and constitutes the largest identifiable category of household waste. With increasing levels of recycling of other household waste streams, this percentage is likely to increase even more. The current proposals for financial incentives to increase recycling and waste-minimisation are therefore a missed opportunity to encourage local authorities, manufacturers and individuals to address the issue of disposable nappies.

5. Young parents are already increasingly turning to reusable nappies as a way of reducing their contribution to household waste and because they can save around £600 over a child’s lifetime by using real nappies. The real nappy market is continuing to grow at a steady rate, with all major retailers now stocking at least one brand of real nappies.

6. Many local authorities across England already successfully operate a number of local real nappy schemes which seek to encourage the use of reusable nappies amongst households with young children. The Alliance believes that local authorities should be assisted with the funding and administering of re-usable nappy initiatives, which are constructive and sustainable. It is vital that local real nappy schemes continue to receive the much needed financial support from local authorities, particularly now that central funding through WRAP has dried up. In addition, in local areas where real nappy schemes are in place, councils should be encouraged to effectively promote their existence through adequate council recycling guides.

7. The Alliance has previously welcomed the Government’s recognition of the problem and the positive benefits for waste reduction that real nappy use brings. The work that has been done by DEFRA to promote sustainable development in this area is especially welcomed; in particular DEFRA’s funding of The Waste & Resources Action Programme (WRAP), which for three years funded the Real Nappy Campaign. The Campaign’s aim to encourage 155,000 households to use real nappies by March 2007 was an important step. However, despite the obvious benefits of real nappies on the reduction of household waste going to landfill in those local authorities which took part in the pilot schemes, the Department has decided to discontinue funding the Campaign. We now look forward to the government finalising arrangements for the proposed self-sustained Real Nappy Campaign Ltd which will take over the role of WRAP in promoting real nappies and which will be led by key stakeholders such as WRAP, Women’s Environmental Network and the Cornish Real Nappy Project.

8. As stated earlier, young parents are already increasingly moving towards real nappies as a means of reducing their household waste and saving money. We are therefore asking the Government, whilst reiterating the element of choice when deciding about which nappy to use, to make use of this increasing awareness about landfill issues amongst young parents to promote real nappies and counterweight the massive marketing campaigns of the disposable nappy industry.

113 EU-15 refers to the 15 countries in the European Union before the expansion on 1 May 2004.
9. The Nappy Alliance also supports the government’s plans to give local authorities the option to introduce a form of revenue-neutral pay-as-you-throw schemes, particularly if this coincides with an effective communication strategy aimed at encouraging local households to recycle and prevent waste. We look forward to working constructively with those local authorities who will be involved in piloting variable charging schemes, as per the provision in the Climate Change Bill that was recently introduced into Parliament. The Alliance believe these pilots represent a real opportunity to enable local authorities to take an increased role in reducing the amount of waste that goes to landfill, including the significant amount made up of disposable nappy waste. We believe a key part of this will be incentivising households to make use of environmentally-friendly and reusable products including real nappies.

10. There are many case-studies elsewhere in Europe which show that variable charging can lead to a sustained decrease in the amount of household waste going to landfill. For example, a recent study in Schweinfurt115, Germany, has shown that after the introduction of a form of variable charging, the amount of disposable nappies which ended up in landfill decreased by 35% as a result of parents switching to the use of real nappies.

11. We welcome the government’s acknowledgment that incentive schemes need to take into account certain disadvantaged groups. However, we are disappointed that the Climate Change Bill has identified young families as a category which should receive exemption or mitigation from variable charging schemes. The DEFRA consultation which preceded the Bill, explicitly stated that this is mainly because of young parents’ dependency on disposable nappies. The Bill as it stands will effectively encourage local authorities to give up on the largest category of household waste, disposable nappies. Given the anticipated increase in recycling rates of other waste categories within household waste, the percentage of disposable nappies in the total is likely to increase significantly.

12. The Alliance does not unequivocally accept the notion that households with young children need to be treated differently mainly because they throw away more disposable nappies. There is a viable alternative to disposable nappies in the form of reusable nappies which offer similar levels of convenience as disposable nappies and which do not create any landfill. By not incentivising young parents to use real nappies, the department appears to be missing an opportunity to significantly reduce the 3–4% of household waste going to landfill which consists of nappy waste.

13. The enormous cost of disposing the 3 billion nappies a year to landfill currently falls exclusively on local authorities and therefore indirectly on local taxpayers. The government urgently needs to start looking into ways in which manufacturers of disposable nappies cover part of the cost of disposing their products, by means of a levy or an environmental tax on disposable nappies.

14. The Government states in its Waste Strategy that energy should be recovered from waste wherever possible. However, according to research, incinerating waste to produce energy only makes sense for substances for which the incineration value is at least 11 MJ/kg. To incinerate substances with a lower incineration value, energy must be supplied; it yields no energy. According to research the incineration value of incontinence and nappy products amounts to approximately 7.5 MJ/kg116. Therefore, processing of nappy waste to produce energy is out of the question.

15. Manufacturers of disposable nappies have trumpeted recent technological improvements such as a reduction of the average weight of an unsoiled disposable nappy by 40% and claim this will greatly reduce the amount of nappy waste going to landfill. In fact, given that most of the weight of disposable nappies is constituted by baby waste (with the average weight of an unsoiled nappy of 44.6g and the average weight of a soiled nappy of around 150g117), reducing the weight of an unsoiled disposable nappy will have little effect once the soiled nappy ends up in landfill. In addition, and whilst we welcome the fact that some manufacturers of disposable nappies have increased the level of compostable materials in their nappies, the fact remains that in an anaerobic environment such as a landfill where the vast majority of disposable nappies will end up, it will still take many decades for these materials to decompose, whilst creating harmful methane emissions.

16. The Environment Agency which published a Life Cycle Assessment on the environmental impact of both reusable and disposable nappies in 2005, concluded that there was little overall environmental difference between the two products. The Environment Agency has since acknowledged that the study was seriously flawed from the outset. A revised Life Cycle Assessment has been commissioned and after considerable delay is now expected to be published in December. This flawed assessment has obviously caused considerable negative interest amongst certain media but the Nappy Alliance expects this revised Report to reflect the overall environmental benefits of reusable nappies much better than the original report did. Regardless of the anticipated positive conclusion for real nappies of the revised LCA report, certainly in terms of landfill reduction, real nappies remain the only viable option to disposable nappies.

CONCLUSION

We overall support the Government’s aims to put more emphasis on prevention and re-use, as well as providing stronger incentives for businesses, local authorities and individuals to reduce waste. However, the Nappy Alliance is surprised and disappointed that the Government appears to close its eyes for the increasing problem of nappy waste disposal and has missed a real opportunity to address of what currently constitutes almost 4% of total household waste and is the single biggest identifiable category of household waste. DEFRA needs to take urgent appropriate action and start actively incentivising young parents to switch to real nappies, positively encouraging local authorities to increase the uptake of real nappies and considering making manufacturers of disposables responsible for the cost of disposing of their products in a more environmentally acceptable manner. These actions would lower household waste, lower harmful carbon emissions and help the government reach its ambitious targets set out in the Waste Strategy.

Mike Riley
Chair of the Nappy Alliance

November 2007

EXECUTIVE SUMMARY

ECT Recycling currently provide kerbside recycling services on behalf of 17 local authorities and collect and market over 300,000 tonnes of recyclable materials a year. ECT has pioneered the separate collection of food waste from households in England and currently collects from 60% of all households with this served by separate food waste collections.

We are also the first waste contractor in the UK to have introduced a carbon accounting system alongside service provision. The greenhouse gas offset value of ECT’s recycling services is estimated to be over a third of a million tonnes of CO2 equivalent per annum. This calculation is made possible through ECT’s collection and marketing strategy: as all materials are kerbside sorted and as much as possible consigned directly to UK reprocessors. The certainty of end-markets and the quality of materials collected ensure that the environmental benefits from recycling are maximized and transparent.

Although our client authorities share this focus on the environmental benefits of recycling, Defra’s Waste Strategy for England 2007 (WS 2007) has not risen to the challenge of making explicit the links between these benefits and collection system characteristics, material processing and type of end-market. Instead, these issues have been side-lined with the consequence that co-mingled collection systems are on the increase, yet they mostly consign materials of a lower quality for export. The most recent data show a 30% year-on-year increase in co-mingled kerbside tonnage feeding into materials recycling facilities (MRFs).

WS 2007 highlights the role that the waste management sector should play in the recovery of resources in ways that deliver cost-effective reduction in greenhouse gas emissions over the lifecycle. However, WS 2007 lacks connection between the main drivers for municipal waste diversion, (primarily the Landfill Directive), and the materials and options that deliver the most cost-effective carbon reductions. This is a lost opportunity, as carbon benefits are unlikely to be optimized without direct incentives for local authorities to go beyond LATS targets. The latter only impinge the biodegradable fraction of the waste stream (about 63% of municipal waste in England, not 68% as assumed by WS 2007).

WS 2007 takes the view that choice of collection system is primarily a concern for local authorities, yet in our experience, these local decisions have a significant cumulative impact on the environmental outcomes. As more materials are collected through co-mingled systems, the environmental, social and economic benefits of recovered materials are greatly diminished. Growing reliance on export markets for low-quality recyclates should be regarded as a short-term strategy as the Asian economies will demand tighter material specifications in the near future.

119 Based on ECT compilation of compositional data from 115 local authorities.
1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste. Localisation as opposed to centralisation of waste management

ROLES OF THOSE RESPONSIBLE FOR THE PRODUCTION AND DISPOSAL OF DIFFERENT CLASSES OF WASTE

Local authorities

1. As a supplier of local authority services, our response will address household waste. Our discussions with potential local authority clients indicate that in many cases local authorities consider WS 2007 irrelevant to their local situations and are driven by the requirement to meet their LATS targets, stay within their budgets and meet the service expectations of their local residents. Budgetary considerations, for example, can determine whether the waste management solution most likely to be procured is infrastructure/capital focused or collection system/revenue focused. Local authorities are being sold “novel” technologies, such as MBT, as a convenient solution for mixed waste, yet such technologies have been developed in their countries of origin as “systems of last resort” to treat the remaining residual waste after all clean recyclable and compostible materials have been separated. The application of such technologies to unsorted, or semi-sorted waste complies with the need to meet targets but provides very little, if any, environmental payback for the millions of pounds of investment over long depreciation periods.

2. The objectives of WS 2007, therefore, cannot be met simply by setting and achieving targets. Local authorities are faced with a range of systems and technologies that can be procured to reach these set targets, every one of which has a distinct environmental profile. Recycling and landfill diversion, are not activities that can be seen as beneficial in their own right; public investment in meeting these targets should also be required to demonstrate tangible benefits that are measurable in energy/carbon savings, conservation of scarce resources, the safe handling of hazardous substances; regeneration and employment creation.

3. WS 2007 envisages an ideal view of a “carbonized” waste sector, striving to diminish greenhouse gas impacts of current waste management practices. However, there is a basic contradiction between the “end of pipe” view of greenhouse gas emissions, centred on diverting biodegradable materials from landfill, and the “lifecycle” view of resource management, where the carbon priority is the recycling of quality materials back into reprocessing (ie the main benefits are outside the immediate waste sector). As the main lever on local authorities is currently the achievement of their LATS targets, the sector is unlikely to realize the full environmental benefits of recycling through any redoubled efforts to recycle non-biodegradable materials with high embodied energy and high carbon dioxide offset values per tonne recycled (metals, glass, textiles and plastics).

4. In theory the UK’s implementation of the Packaging Directive supports investment in local authority collections through PRN/PERN revenues. In reality this policy instrument has been disappointing and the reprocessing and export sectors have not been transparent in how revenues from PRNs/PERNs have been invested. The priority for most packaging recovery has been to tackle the cheaper commercial sources—mainly leaving local authorities to fund the recycling of household packaging. Currently less than a third of the 4.3 million tonnes of readily recyclable packaging materials found in the household waste stream is recycled.

5. This situation contrasts with systems elsewhere in Europe, where industry pays for the collection of post consumer packaging. The PRN/PERN system should be revised to ensure that local authorities receive the direct support that they need in order to capture a higher proportion of packaging materials from the municipal waste stream. PERN revenues should finance a verification system for export markets, to ensure most robust accounting of what actually gets recycled and improve the credibility of UK packaging waste exports.

Householders

6. Effort versus convenience: Grasping the nettle of householder involvement in separating materials for recycling not only ensures better quality recyclate but also makes us more conscious of how much we waste, which in turn makes a significant contribution to waste minimization.

7. Frequently multi-million pound recycling infrastructure is procured on the false premise that householders prefer to put their recyclable materials “co-mingled” in a wheeled bin rather than into a box and/or bag from which materials are then sorted at the kerbside by the recycling service provider. More importantly, would householders with co-mingled recycling collections prefer this system if the implications for the environmental benefits of their efforts in separating their waste were fully understood? Clearly, suitable containerization for separated recyclable materials is an issue that must continue to be considered and developed.

120 Based on ECT compilation of compositional data from 115 local authorities.
8. **Cost:** The cost of recycling collections is generally much lower than Council Tax payers realize. The most elaborate source separated collection system—including colour separated glass, aluminium and ferrous cans, aluminium foil, newspaper and magazines, textiles, plastic bottles, cardboard, food waste and various items of hazardous waste such as batteries and engine oil would struggle to reach an overall cost of £1 per household per collection. This includes all bulking, marketing and haulage cost and there are no gate fees or disposal costs other than those associated with bio-processing of food waste.

9. The “Third Sector” is particularly efficient at providing high quality recycling collections at low cost. A recent report to the Welsh Assembly Government revealed a wide range in recycling system costs, with the average for local authority operated schemes of over £300/tonne, compared with social enterprises providing recycling services at an average a third of the cost (£96/tonne)\(^{121}\).

10. **Outcomes and confidence:** ECT considers this element to be of equal importance to cost and convenience in recycling systems. Our environmental awareness as a nation is increasing, and households participate in recycling schemes in the belief that this helps them to reduce their impact on the environment. However, this could be seriously undermined by scandals involving illegal movements of waste collected for recycling or the consignment of materials to end markets that result in no environmental gain.

11. However, contaminated mixed recycate that leaves the UK counts towards local authority recycling targets, making it counter-productive for them to ask too many questions of their contractors. A recent statement by the Environment Agency and Local Government Association\(^{122}\) blamed MRF contractors for hiding behind the cloak of commercial confidentiality in not disclosing the end markets for the materials collected. Authorities need to be more aware of their Duty of Care obligations and the Environment Agency needs to be far more vigorous in enforcement of these obligations and in the investigation of recycate exports.

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**Localisation as opposed to centralisation of waste management**

12. The UK is over-reliant on distant foreign markets for its poorer quality recycate—more so than any other EU country—with the inherent risk that, should these markets start to demand higher quality materials, our recycling systems would rapidly fail.

13. Source separated collection reduces the infrastructure and capital investment required to separate, bulk and market materials. These systems enable recycate to be handled locally in facilities that can be relatively easily accommodated—ie no special planning requirement and they are able to operate under a waste management licence exemption.

14. A popular misconception is that a MRF situated within the boundaries of a particular local authority constitutes “localisation” of waste management. In fact, MRFs achieve no more (and in quality terms, considerably less) than is achieved by the collection crews deployed on a source separated collection system. The output of a MRF is likely to travel many times further to find an end-market than the output from a source separated collection system. This is not so much in response to a “global” market as a need to find a market for materials of inferior quality.

15. There are three main aspects to the reduction of quality in MRF outputs: the relative inefficiency of the sorting system to eliminate contaminants from the product streams, cross-contamination of product streams by each other and the flow of mis-sorted product into the residual stream. As paper, cardboard and 50% of textiles are regarded as biodegradable for the purposes of LATS, it is particularly important for these materials to be properly accounted for in relation to MRF throughputs. Without proper enforcement and monitoring by the Environment Agency, there is little or no incentive for local authorities to insist on recyclates of higher quality and better environmental outcomes, as they are more preoccupied with overall recycling rates and LATS compliance.

16. Most of the 70 MRFs in England and Wales export recycate, with 4.7 million tonnes exported in 2006. Although the prices paid are generally above what UK reprocessors pay, there is a trade-off between security of the home market (greater long-term security with UK contracts) versus price. As economies in the Far East develop, more material will become available for recycling from domestic consumption, thus reducing the demand for imported material from Europe, particularly of the lower quality materials typically consigned by UK MRFs\(^{123}\). During this transition it is important that the needs of the UK reprocessing sector are not irreparably damaged. Whilst WRAP and other organisations have a role to play in this strategic issue, it requires overall leadership from Defra to ensure that longer-term objectives are met in relation to recycate market development that more fully acknowledges the wider economic benefits of the UK reprocessing sector.

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121 Survey of Funding of Municipal Waste Management Kerbside Collection in Wales, WAG 2007.
122 ENDS 391, Article 17.
123 UK plastic waste—a review of supplies for recycling, global market demand, future trends and associated risks, WRAP; Assessment of the UK export market for recovered paper, WRAP; Assessment of the international trading markets for recycled container glass and their environmental implications, WRAP.
2. The role for and implementation of regulations, and their enforcement

17. Lack of regulation is not the primary threat to the integrity of recycling systems in the UK, but the lack of enforcement and the belief in the primacy of meeting targets over all other considerations. 75 per cent of containers inspected at a UK ports by the Environment Agency’s dedicated illegal waste enforcement team in October 2005 were found to break the Shipment of Waste regulations. This is just one example of widespread and systematic movements of unsorted and partly sorted waste. This translates into a serious competitive disadvantage for operators who obey the regulations. Local authorities need to ensure that contracts with MRF service providers should make transparency of end markets a condition of the contract.

3. The proposals for financial incentives to increase household waste prevention and recycling

18. Compulsory recycling is surprisingly well received in those local authorities that have implemented it. It puts everyone on an equal footing and should be seen as a policy that unites residents in a common effort and ensures adherence to reasonable standards as to how to set out waste for collection.

19. A recent Defra study has shown that financial incentives contribute little to increased recycling and may not be a very cost-effective option compared with the introduction of residual waste alternate weekly collections, compulsory recycling and charging. It is widely recognized that waste charging systems in other European countries have been a significant element in improved recycling rates. Current recycling infrastructure is not being fully utilized by the public because of its discretionary nature. ECT’s experience indicates that it is more effective to establish recycling as a matter of good citizenship.

20. Although WS 2007 pays lip-service to household waste prevention, there are few practical instances of this in action. One of the policies that has had a significant impact on household waste arisings has been local authority support for home composting through the scheme operated by WRAP. This provides no financial incentive to householders to participate, yet the statistical evidence suggests that authorities that have promoted home composting and not collected garden waste free of charge have experienced less growth in waste arisings than authorities that have introduced free kerbside collections of garden waste. Currently the workings of the LATS mass-balance acts as a disincentive to home composting. Although this problem was highlighted to Defra in 2005, it has still not been resolved.

4. The role of composting

21. Second to home composting, windrow composting is the best solution for garden waste that doesn’t contain any animal by-products—it is cheap and the output is marketable. However, more control is needed over open windrow processes to ensure that they are environmentally safe, particularly with respect to fugitive emissions, bioaerosols and ammonia emissions. Food and garden wastes should not be mixed as this captures very little food waste but requires the entire waste stream to be processed in more expensive ABPR compliant facilities, such as in-vessel compost technologies and anaerobic digestors.

22. With the rapidly growing interest in food waste collection, both separately and mixed with garden waste, there is a need to diversify into anaerobic digestion in order to ensure markets and the best environmental outcome. The emphasis on separate food waste collections is particularly pressing given that the most recent national data on municipal waste composition, reveals that food waste comprises a much higher proportion of waste arisings compared with the compositional statistics presented in WS 2007 and is therefore of far greater importance in meeting LATS targets.

5. The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

23. Waste minimization is generally taken to include activities such as packaging weight reduction, home composting and nappy services. However, there are also waste collection policy options available to local authorities that have the effect of reducing waste.

24. An example of a highly effective policy measure is that of separate collection of food waste on a weekly basis with alternate week collection of residual waste. A scheme of this kind has now been fully rolled out by ECT across three contract areas in Somerset and is exceeding all expectations in participation, capture rates and customer satisfaction. South Somerset now has the lowest residual waste per head of any English authority, according to 2006–07 statistics.

125 Evaluation of the household waste incentives pilot scheme, July 2006.
25. This has been achieved through a recycling rate close to 50% which is not dependent on free collection of garden waste; a reduction in residual waste to final disposal to 180kg per person per annum, i.e. already meeting the Waste Strategy 2007 indicator target for 2020; and an overall reduction in the amount of waste under management. The evidence suggests that the reduction is at least partially due to changes in householders’ behaviour caused by greater awareness of their own food waste arisings.

6. The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

26. The Landfill Directive was originally envisaged as a necessary measure to reduce methane emissions from landfill, particularly in response to the historical legacy of poorly regulated landfill. Landfill gas extraction is relatively inefficient even when designed in, so diversion of BMW (biodegradable municipal waste) is a good policy. However, technologies that merely stabilise waste prior to landfill are themselves energy intensive, thereby meeting the targets but failing to improve on the environmental performance of a well managed landfill site. Each BMW waste stream needs to be addressed so that the most energy efficient processes are adopted.

27. In relation to the waste management sector’s overall contribution to the reduction in greenhouse gas emissions it is necessary to take a “lifecycle” view of the materials that become waste and the overall significance of their environmental impacts at different life cycle stages. The main benefits of recycling reside in the reprocessing sector where the displacement of virgin material inputs brings benefit through significant energy savings and reduced environmental impacts. The greatest greenhouse gas savings for the materials that pass through the waste sector (tonne for tonne and in absolute terms), are associated with returning quality materials (metals, plastics, textiles and paper) back into manufactured products, rather than through the diversion of potentially methanogenic material away from landfill (which is also worth doing, particularly through separate food waste collection delivered to AD).

7. The promotion of anaerobic digestion for agricultural and food waste

28. ECT welcomes the fact that WS 2007 signals the clear benefits of anaerobic digestion (AD) as a carbon saving technology producing gas from a renewable source. In countries where it has been applied most successfully, such as Denmark, there has been an ability to source feedstock from non-municipal sources (such as farm slurries) in order to improve operating performance. Currently, it is not clear how such cross-sectoral working can be achieved in the UK context. Defra’s Waste Infrastructure Delivery Programme (WIDP) mentions the need for such arrangements, but this is totally alien to the way in which local authorities currently procure waste infrastructure.

29. In order to realize the full benefits of AD technologies, food waste and garden waste should be treated as completely separate waste streams. Although WS 2007 acknowledges this fact, 75% of systems in place collect co-mingled kitchen and garden waste. Another case of opting for simplified collection logistics without considering the impact on the cost of onward processing. Food needs to be collected at least weekly and has to be processed in accordance with the Animal By Products Regulations. Garden waste is drier, can be collected less frequently and does not need to be processed to ABPR standards—and it does not need to be a free service as such collections end up collecting additional materials that are better composted at home and should remain outside the municipal system.

8. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

30. Ensuring the quality of recyclable materials is a function of the collection system; more effort needs to be made to address collection systems with less reliance on “end of pipe” technologies which can only salvage low quality product from key materials such as paper and glass.

31. The UK’s capacity to process materials collected for recycling: Paper—there is not a great deal of capacity left in the UK market. However the declining quality of paper collected for recycling is a matter of concern for the UK industry and increases the risk inherent in our dependency on export markets, as these markets can at any time raise their required specification.

32. Aluminium—there is capacity to reprocess much more. Again, the industry is concerned about the poor quality of aluminium collected for recycling as this can render it unusable.

33. Glass—there is plenty of scope for reprocessing more glass into containers in the UK, particularly clear and brown glass. However, co-mingled collection systems do not deliver colour separated glass and so the tonnage is diverted into “open loop” alternative markets that result in significantly less beneficial environmental and economic outcomes.
34. **Novel technologies**: To maximize carbon savings, novel technologies such as MBT should be used for residual waste only. Currently these technologies are being promoted as contributing to recycling/composting targets. However the markets for these inferior quality outputs are uncertain and such markets have not been realized in other countries. Elsewhere in Europe MBT is regarded as a “last resort” technology applied to municipal waste only after recycling options have been exhausted and there are very strict prohibitions over the application of “compost like products” from MBT to land. ECT is concerned that Defra’s Waste Infrastructure Delivery Programme (WIDP) is not paying sufficient attention to the market experiences elsewhere in relation to MBT.

ECT Recycling  
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**Annex**

**Definitions**

There are a number of terms used in this submission, so for clarification, these are defined here.

**Co-mingled collection**: collection of materials presented by householders for recycling which are transported to a mechanical sorting facility where a combination of optical, magnetic, electrical, screening and hand picking systems are used to produce marketable materials. A significant percentage of the tonnage collected is contamination and half of this remains in the materials that are sold. For this reason, these systems are heavily dependent on foreign, mostly far eastern markets, as the quality is poor. Currently a third of local authorities in England use this approach and this proportion is rising rapidly (between 2005–06 and 2006–07 co-mingled tonnage increased by 30%, twice the rate of increase in kerbside tonnages overall).

**Source separated or “kerbside sorted” collection**: collection of materials presented by householders for recycling which are separated into separate compartments on a purpose-designed vehicle by the collection crews. Any contamination is simply left behind. These systems supply mostly UK and some EU reprocessing markets as the quality is high. The glass container, aluminum and paper industries are particularly dependent on the materials supplied by these collection systems. 42% of local authorities currently use these systems.

**Closed loop**: a recycling process that can be repeated over and over again. In the case of glass and metals, this is infinite, whereas with paper fibres and plastic polymers the quality will gradually degrade after repeated reprocessing.

**Open loop**: a recycling process that cannot be repeated. Examples include the use of glass cullet as a construction aggregate and recycled plastics in underground drainage pipes. In some cases, when a full lifecycle analysis is performed, these options may be more detrimental to the environment that landfill. Crushed mixed colour glass sent into low grade applications in the construction sector would be a case-in-point.

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**Memorandum submitted by the National Industrial Symbiosis Programme (Waste 43)**

**Executive Summary**

1. The National Industrial Symbiosis Programme (NISP) is a business led programme which maximises the use of resources which would otherwise be consigned to waste through the profitable creation of business partnerships. Where material requires conversion to a form more suitable for use by the receiving business or process novel technologies may be indentified and implemented, particularly by working in partnership with the Resource Efficiency Knowledge Transfer Networks.

2. We welcome the recognition that commercial and industrial waste forms a major element of hazardous waste and of the waste sent to landfill and proposed setting of targets for reduction.

3. NISP works on a regional basis and strongly believes that the recovery of resources is most effectively done at local level. This not only avoids the problem of long journeys neutralising the saving of carbon through resource recovery but gives the greatest efficiency of material and resource usage. We are increasingly working with local government to develop partnerships for the collection of commercial waste and have sponsored the successful creation of the BREW Centre in Oxfordshire to provide more information and advice to local government. NISP also works with Regional Development Agencies (RDAs) to reach businesses at a local level. Although we welcome the targets given to local government for waste reduction,
in Annex C2 the targets are set out for the reduction of waste by government departments we believe that there is some inconsistency between the additional funding which is now being provided to the RDAs for commercial and industrial waste reduction and the fact that no targets are set at this level.

4. Material waste can be described as a resource in the wrong place. By not defining it as “waste” until all viable resources have been recovered and all options exhausted would make it far less onerous to recover those resources. This builds upon the work being led by the Environment Agency to simplify and improve the definition of waste consistent with low risk regulatory principles. More work on defining such products can in any case improve on the problem of over regulation.

5. NISP is actively involved with novel solutions for the treatment of agricultural and food waste. In particular we are actively working with Severn Trent and other sewerage undertakers to exploit their existing anaerobic digestive capacity. NISP is also working to identify where industrial food wastes are located to advise providers of anaerobic digesters of these opportunities. Such work is important to promote the use of AD technology within the food and drink sector.

ABOUT NISP

6. The National Industrial Symbiosis Programme (NISP) is an innovative business led programme which delivers environmental, economic and social benefits across the UK. NISP’s mission is to effect a long term cultural change in business to view all resources as an asset with a value which should not be wasted or discarded. Such “waste resources” include energy, water, materials, logistics, assets, expertise etc. NISP operates firmly within the business opportunity agenda, thus maximising on the benefits to business of industrial symbiosis.

7. By working across business sectors NISP members form partnerships to make maximum use resources which would otherwise go to waste. NISP works at a local level through 12 regional offices, each having a Programme Advisory Group (PAG) drawn from regional business. In England NISP receives funding from Defra’s BREW (Business Resource Efficiency and Waste) programme as part of the return of Landfill Tax to industry.

8. Since its National launch in 2005 NISP has grown rapidly, and today has in excess of 9,300 industry members drawn from across the UK. NISP’s holistic approach enables it to actively deal with all resources and by working successfully across the entire resource (and waste) hierarchy NISP has demonstrated successfully that business opportunity can be realised through greater resource efficiency.

9. Now in its third year of operation, NISP is delivered by International Synergies Limited (ISL) who also provides support internationally to Defra through the Sustainable Development Dialogues (SDD) in both China and Mexico. Cited as an exemplar programme by the European Commission (ETAP), International Synergies Limited have also received considerable interest for the potential replication of NISP across Europe, The United States of America, China, Mexico, India, Brazil and Australia.

10. Between April 2005 and Oct 2007 NISP has delivered, through its common sense industrial symbiosis approach to the better management and sustainable use of natural resources:

— engagement with over 9,300 industry members;
— more than £108 million in additional industry sales and costs saving of over £89 million;
— secured £68 million private capital investment in reprocessing and recycling facilities;
— diverted over 2.5 million tonnes of waste from landfill;
— saved over 5.1 million tonnes of virgin raw materials;
— eliminated a further 310 thousand tonnes of hazardous waste;
— reduced industrial water use by over 2.5 million tonnes; and
— reduced over 2.55 million tonnes of CO2 emissions.

11. NISP is a positive net contributor to the Treasury (a result of additional tax paid by companies enjoying higher profits, new solutions creating business start-ups, and by taxes paid by those people whose jobs have been saved/created by the programme.) whilst also continuing to contribute to the balance of payments whereby imported virgin materials are replaced by UK supplied by-products.

12. A feature of the Programme to date has been its ability to deliver proportionally more output for each unit input of funding. From an input of £9 million BREW funding over the first 24 months NISP has not only exceeded delivery on all contracted metrics and helped create over 1,360 jobs, but has also:

— delivered a total economic value added (TEVA) of £117 million;
— a net fiscal impact of over £10.3 million; and
— net economic gross value added of £53 million to UK PLC.

13. In the current year 2007–08 NISP once again is confident of exceeding all targets eg based on current capacity expected year-in out-turn for 2007–08 CO2 is 1.19M Te.
14. Due to the programme’s impressive results and positive impact, NISP’s terminology, commercial approach, business engagement model and efficacy are increasingly being emulated by other programmes both in the UK and internationally.

Q1: **How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste. Localisation as opposed to centralisation of waste management**

15. NISP welcomes the proposals in the Waste Strategy which place an increased emphasis on waste as a resource, the need to reduce commercial and industrial waste and for a broader local government role in waste streams beyond municipal waste.

16. NISP welcomes the intention to end landfill of biodegradable and recyclable waste in landfill, and an enhanced emphasis on the increasing use of waste to energy but only after waste reduction and significant increase in resource recovery. We recognise that if resources can be re-used, this avoids the use of virgin materials, which not only have an economic cost, but also in many cases a higher carbon cost than that of recovered resources. NISP also welcomes a greater emphasis on anaerobic digestion (AD) and combined heat and power (CHP) than on traditional mass burn incineration.

17. A better integration of municipal and commercial waste could provide economies of scale for both the private sector and local government, whilst also benefiting the small business sector that currently faces major difficulties in tackling waste as a resource.

18. We support the approach which takes National Policies down to a local level. Promoting the reduction of waste per se enables improved reduction of CO2 as well as valuable asset recovery of resources. However, current practices for transportation of waste over long distances (even internationally in some instances) often offset any carbon saving potential. A localised or regionally focused approach to resource recovery and waste policy is to be strongly encouraged not only for household but also for commercial and industrial wastes equally.

19. Working through a regional model (delivered through 9 regional offices across England) NISP has both a strong and very successful experience in building localised business to business partnerships to realise the value of materials which would otherwise go to waste. Both large and small business have a part to play, and in particular in the recovery of materials for reuse.

20. Smaller scale infrastructure in anaerobic digestion and advanced thermal treatment plants for example are potentially suitable for industrial areas where waste that is locally produced can be treated on site and the energy produced can be used in industrial processes or utilised as district heating.

21. We also welcome increased opportunities to work with local government. Local Authorities have a strategic role as planning authority and/or strategic commissioner of services to their local communities. They also have considerable commercial procurement capacity as well as powers to trade which are currently underutilised.

22. We welcome the allocation of targets to local authorities for the reduction of waste to landfill, but are concerned that if funding for waste reduction is allocated to Regional Development Agencies (RDAs) that this should be similarly accompanied by targets. Efficient resource management is both an economic as well as an environmental opportunity, and therefore by working with organisations such as NISP and other BREW bodies the RDAs can help to drive the changes needed. We are surprised that Annex C2 (Table C2.1) requires RDAs to "Co-ordinate business waste and resource management in partnership with local authorities (and other regional and sub-regional bodies) and the third sector". Further clarification is required that this includes the delivery agents mentioned separately on that page.

23. The Waste Strategy for England 2007 encourages Local Authorities to:

   "use their role as local community leaders in partnership with businesses, other local, sub-regional and regional public sector organisations and third sector organisations to achieve a more integrated approach to resources and waste in their area"127

24. In April 2006, a consortium was formed between the National Industrial Symbiosis Programme, the Local Government Association and Oxfordshire County Council to provide a central support service for Local Authorities. The resulting BREW Centre for Local Authorities provides specific support and guidance to enable Local Authorities across England to develop and provide better waste (and resource) services, strategies and infrastructure for their local business community. In short, such activities further help both the Local Authority and the business community to become more resource efficient, reduce waste and improve overall profits in the local area.

25. Since the Centre was launched in June 2006 they have developed an active network of over 600 local authority officers and funded localised “trailblazer” resource efficiency projects in over 35 Local Authorities.

26. NISP recognises the particular problems of SMEs and is now working with it's larger member organisations to encourage more sustainable resource use through the supply chain and sustainable procurement practices.

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Q2: *The role for and implementation of regulations, and their enforcement*

27. No response.

Q3: *The classification of waste*

28. NISP views waste (in the widest sense) as simply a resource in the wrong place. However, NISP operates across the entire resource supply chain providing both solutions and opportunities in order to release the value embedded within inefficient [resource] supply chain practices. In so doing, the programme can operate across the entire industrial economy—upstream and downstream—and its effects are therefore measurable across the complete spectrum.

29. By delivering business opportunities NISP both encourages and helps companies to understand the environmental impacts of their “wastes” and resource inefficiencies through an economic lens. Supporting companies to address resource inefficiencies throughout their entire supply chain, NISP’s activity delivers greater benefits than traditional bilateral waste reduction or recycling approaches. Without NISP’s innovative approach and proven methodologies these opportunities for change would simply not be identified or undertaken. By providing resources to NISP, BREW generates both significant industry additionality, increased resource efficiency per se and subsequent fiscal flows back in to Government.

30. NISP therefore feels strongly that material wastes should not be classified as a “waste” until all viable resources has been recovered, and that all potentially “useful” options have been exhausted. Such a legislative approach would make it far less onerous to recover such “useful” resources.

31. The BREW Waste protocols project is starting to help business by providing clear guidance on various waste streams that:
   - Defines the point of full recovery from a waste back into a product or material that can be reused by the business or industry, or sold into other markets; or
   - Defines when wastes are recovered to a state where the Environment Agency considers their use is acceptable in accordance with its low risk regulatory principles; or
   - Confirms what legal obligations remain to control the reuse of the treated waste material.

32. Waste oil, for example, is one of the waste streams addressed by the protocols project to date. Technical Advisory Groups (TAG) have been set up to bring together representatives from the Environment Agency, NISP, WRAP and industry looking specifically at waste lubricating oils and waste food oils. The TAG’s role are to produce technical report, to would enable the subsequent development of a quality protocols, setting out the process and controls necessary to determine at which point the processing of waste oils gives an end product that:
   - will not cause harm to human health or the environment;
   - meets a defined standard and requires no further processing;
   - has a market giving certainty of use.

33. Unfortunately, due to time constraints and the scale of the project, the waste food oil TAG have initially decided to limit their study to waste vegetable oil only.

34. The low impact register is also a useful step toward helping businesses to re-utilise “wastes”. However getting materials and processes listed can be an onerous process which would benefit significantly from being streamlined.

Q4: *The proposals for financial incentives to increase household waste prevention and recycling*

35. No response.

Q5: *The role of composting*

36. NISP welcomes the intention to end landfill of biodegradable waste in landfill and views composting as a useful recovery route for dry organic materials such as garden wastes, which AD plants will not treat particularly well.

Q6: *The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes*

37. We feel that more needs to be done to encourage the re-use of recovered plastics back into the food industry—particularly with respect to allowing its use more freely into food contact materials. Care would be needed for the return/re-use schemes to take into account the carbon involved in transport around the return infrastructure.
Q7: The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

38. Paragraph 10 identifies some of the environmental benefits of Industrial Symbiosis. These techniques together with application of other strategies to reduce biodegradable waste arising from significant waste streams and especially food waste will make a significant contribution to the reduction of methane. The waste strategy makes a number of mentions of the contribution of methane to greenhouse gases, but does little to link this to a practical response. However we warmly welcome the specific emphasis.

Q8: The promotion of anaerobic digestion for agricultural and food waste

39. NISP has identified a significant and existing anaerobic digestion capacity within the water sector and we are actively working with Severn Trent and other sewerage undertakers in this area to make this capacity available to the business community (specifically the agricultural as well as food & drinks sectors). This has the benefit of not only optimising the use of existing infrastructure but also increasing the efficiency of the anaerobic digestive systems through the input of higher calorific waste than just sewage sludge.

40. We are also currently working with our industrial members to promote and install advanced innovative digestive systems which improve the functionality of conventional AD processes. This leads to higher gas yield for conversion to energy whilst enabling the AD plant to operate more economically.

41. NISP are working with Food and Drink Federation (FDF), British Frozen Food Federation (BFFF) and others to help pull together a picture of where industrial food wastes are located. The intent is to use this information to best advise its AD developer members where to put new plants and facilities to treat these wastes. This activity is helping to both promote and realise the use of AD as a treatment option for all sectors of the food and drink industry.

Q9: The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

42. The recent Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC AR4) confirmed the contribution of landfill methane to global green house gas emissions and a summary of adaptation, mitigation and sustainable development issues for the waste sector. Innovative practice in the sector could put the UK at the forefront of technology provision with consequent economic benefits.

43. The Environmental KTN have stated that “the competitive edge in technology and manufacturing in the UK in the future is likely to come from smaller companies innovating in the areas of advanced thermal treatments and anaerobic digestion for specific industrial waste streams which are treated on site or in small merchant plants or for particularly hazardous and toxic wastes which are difficult to treat and command a high gate price”.

44. Such innovators for new technologies are amongst the membership of NISP including Pyrolysis, gasification, and advanced anaerobic digestion, linking these systems with our network for finance, infrastructure, land, planning, resources and end markets.

National Industrial Symbiosis Programme

November 2007

Memorandum submitted by the Composting Association (Waste 44)

1. INTRODUCTION

1.1 The Composting Association works on behalf of over 500 UK members to raise awareness of the benefits of the recycling of biodegradable resources. It aims to act as an advocate for the wider composting and biological treatment industries and to represent their views in a constructive dialogue with policy makers. The Association envisions an industry in which best practice is shared, standards are maintained and surpassed and which makes a positive contribution to safeguarding the environment.

1.2 Food and garden wastes (biowastes) are thought to comprise in excess of 30% of the municipal waste stream. As they are biodegradable this represents significant opportunities for local authorities to collect them separately for composting, anaerobic digestion (AD), or other biological treatment processes, in order to meet their Landfill Allowance Trading Scheme (LATS) obligations.

1.3 Currently over three million tonnes of biowaste are composted every year, producing in excess of two million tonnes of compost.\textsuperscript{129} These figures are set to rise substantially as local authorities strive to meet their LATS targets. Estimates of up to six million tonnes a year of municipal biowaste and at least a million tonnes of commercial and industrial biowaste to be diverted from landfill by 2020 may well be conservative.

1.4 The Composting Association believes the underlying principles set out in the 2007 Waste Strategy for England have set a course for improving the way waste is managed in England. DEFRA has endeavoured to address a number of inherently complex, interrelated issues in a concise manner. In particular, we welcome the:

- Revised composting and recycling targets for local authorities
- Focus on food waste
- Acknowledgement of the impacts of managing waste on climate change
- Proposal to consult on banning untreated biodegradable waste to landfill

1.5 Notwithstanding, there remain some significant issues that necessitate swift action if the vision in the Strategy is to be realised. In particular, there appears to be a disparity between the stated aims of the Strategy and the timeframe within which the policies will be delivered realistically; the urgency of the situation has not been addressed adequately.

1.6 We have set out our specific comments below in response to the Committee’s suggestions, focussing on the biological treatment of biodegradable wastes. However, a number of our comments also impact on recycling more generally.

2. Specific Comments

\textit{How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste. Localisation as opposed to centralisation of waste management}

2.1 The Strategy has acknowledged the importance of managing waste from municipal, commercial and industrial sources in a sustainable manner. However, the principal focus of the Strategy remains the municipal sector and the role played by local authorities. In realising greater resource efficiencies and economies of scale it is envisaged that a nation-wide network of biological treatment facilities will be required to treat biowastes from a range of sources; some of these will be small-scale decentralised facilities, some will be larger, providing centralised processing capacity. We anticipate that existing composting sites will diversify their activities and build on their materials-handling competencies to establish integrated biowaste treatment facilities, encompassing in-vessel and windrow composting, anaerobic digestion and biomass burning. To realise this, further action is required:

2.2 \textit{Co-ordinating biowaste collection rounds to maximise efficiency}—The Strategy has emphasised the importance of food wastes, but has focussed principally on household waste, and the impact on alternate weekly collection schemes. It has been estimated that there may be an equivalent amount of commercial food waste to that in the municipal waste stream, which presents significant potential to recover value. However, it is unclear how businesses will be incentivised to do anything other than continue with their current disposal arrangements in the short to medium term. Local authorities could play a significant role by integrating existing household collection schemes with the business community. Appropriate incentives would need to be set in place.

2.3 \textit{Procuring infrastructure}—At present most biowaste processing sites have been established on the basis of local authority contracts for municipal waste. Synergies with commercial and industrial waste sectors will add value and reduce business risk for operators. In order to achieve this, facility design and procurement will need to accommodate a range of waste streams (see comments below), but it is unclear how this will be realised. Government has recently announced in its Comprehensive Spending Review an extra £2 billion for Private Finance Initiatives (PFI) credits. Welcome though this intention is, it may well have the unintended consequences of:

- Selecting contracts with larger operators due to the very high transaction costs involved, thus reducing competitiveness within the sector
- Local authorities engaging in very long term contracts (25 years) that may prove inflexible to respond to changing needs in the future. (We only have to look back at the last 25 years and witness the massive change that has occurred.) A 10–15 year time frame would appear to be more appropriate
- Procuring infrastructure that would be unable to accommodate commercial or industrial wastes. Given the pressure on the land use planning system and the scarcity of suitable, affordable sites, this could unwittingly exacerbate the current infrastructure short-fall. Local authorities should be encouraged to consider non-municipal waste arisings during contract negotiations

The role for and implementation of regulations, and their enforcement

2.4 The Composting Association believes that effectively enforced, appropriate regulation is necessary to safeguard the environment and human health. Crucially they also ensure there are appropriate “barriers to entry” so as to enable legitimate businesses to compete on a level playing field and not be undermined by unscrupulous operators.

2.5 We would welcome formal acknowledgement by the regulator of industry codes of practice and voluntary schemes that have been developed in partnership between the industry and regulator. The Composting Association launched its Code of Practice130 in conjunction with the Cabinet Office, DEFRA, Environment Agency and devolved administrations in 2005. This sets out good practice guidelines that can be used as a benchmark by local planners, regulatory authorities and industry.

2.6 We welcome the intent of the Environmental Permitting Programme (EPP) to streamline waste permitting. However, our members need assurances that the Environment Agency will be sufficiently resourced to regulate and take enforcement action against illegal operators; they should not be reliant upon fees generated by licensed sites to undertake this duty.

2.7 Likewise, effective enforcement requires an adequate knowledge base by front-line Agency staff. As the waste industry becomes more complex and technical, it is paramount that the Agency retains technical experts who can advise and impart knowledge to front-line staff. In a rapidly changing industry, we remain concerned that lack of technical competence by the regulator may result in inappropriate enforcement action being taken and poor operational decisions made. Funding of the Agency to enable this is imperative in this regard.

The classification of waste

2.8 The Composting Association has been instrumental in helping develop and deliver the Compost Quality Protocol (QP) with the Environment Agency and WRAP. This built upon the original compost quality standard developed by the Association, which was subsequently translated into the British Standards Institution’s Publicly Available Specification (PAS 100). The launch of the QP has helped remove a significant barrier that prevented many of our members market their composted products. We are working closely with the Agency and WRAP on QPs for anaerobic digestate and uncontaminated top soils.

2.9 The issues surrounding the development and implementation of the QPs are complex: we therefore urge Government to consider ongoing financial support for this work in the future through the Business Resource Efficiency and Waste (BREW) programme. As the European Commission, through the Joint Research Council, is currently reviewing end-of-waste criteria, it is paramount that we engage actively to ensure that the work on the QP is acknowledged fully in that process.

2.10 Although the Quality Protocols have had a major impact in defining full recovery of composted materials, there remains considerable uncertainty about the landspreading options for Compost-Like Outputs (CLOs) from Mechanical Biological Treatment (MBT) plants. MBT is currently receiving considerable interest by local authorities to recover value and reduce the biodegradable content of residual waste. The way in which systems are designed and configured has a significant impact on the rates of recovery of materials and the quality of recovered materials, including CLOs; procurement decisions through PFI contracts are currently being made which will therefore impact on operational effectiveness of these plants. Furthermore, as Waste Strategy 2007 suggests that Government intends to consult on introducing further restrictions on the landfilling of biodegradable wastes, should this happen, the role of MBT seems likely to increase further. We therefore urge Government, in conjunction with industry and the Environment Agency, to establish guidelines on the landspreading of CLOs.

The proposals for financial incentives to increase household waste prevention and recycling

2.11 Incentives to promote recycling need to be well planned and executed. This means that householders participating in separate collection schemes need to be adequately informed about acceptable wastes and unwanted contaminants.

2.12 The biological treatment sector has grown on the basis of it manufacturing a range of products specifically tailored for different market sectors. Quality here is the key: operators are only able to manufacture quality products if the input feedstocks are of sufficiently high quality with the minimal level of contaminants, otherwise quality reduces and operating costs increase markedly. Separate collection schemes are essential to deliver this.

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2.13 The rise in interest in biodegradable and compostable packaging creates some opportunities and threats. On the one hand, biodegradable bags that have been certified independently to meet the European standard BS EN 13432 will play an important role in helping to facilitate the hygienic collection of food wastes. On the other hand, an increase in biodegradable packaging sent for composting could present unacceptable levels of contamination at sites, unless a clear communications campaign to inform the public of the difference between compostable and non-compostable packaging is established.

The role of composting

2.14 The composting industry has come a long way over the past decade, currently treating in excess of 3.4 million tonnes a year. It is a tried and tested method for transforming biowastes into marketable products, and has been proven to be dependable globally. Since the introduction of the Animal By-Products Regulations in 2003, the UK has developed a number of sophisticated in-vessel systems that rely on complex engineering solutions and operation by technically competent personnel. Composting is no longer a cottage industry; it has a proven track record for delivering a competitive biowaste treatment service in the UK and thus represents a low risk approach for local authorities and business.

2.15 Composting will have an important role to play in helping local authorities meet their landfill diversion targets. Rather than being a stand-alone operation, it will increasingly form part of integrated biowaste processing sites, in addition to AD, wood chipping, biomass generation etc. Whilst the Strategy has focussed on anaerobic digestion, composting will need to remain the process of choice for most woody wastes, as these cannot be broken down anaerobically.

2.16 The markets for compost have developed in parallel with the industry, and have been boosted by the compost QP. As discussed previously, the continued success of the composting sector to market a range of environmentally beneficial products will rely upon the delivery of clean, uncontaminated feedstocks. Integration with appropriate collection systems will therefore be critical.

2.17 The benefits of using composts appear to have been undervalued in the Waste Strategy, with greater emphasis placed on promoting renewable energy derived through AD. Compost use has two very important roles to play in helping deliver Government’s sustainable consumption and production strategy:

2.18 Agriculture—The benefits of compost applied to agricultural land (in particular arable crops) are significant and play an important role in the sustainable management of soils and food production.

2.19 The benefits of using composts have been realised by farmers for over 4,000 years. They play a vital role in sustainable agricultural systems by returning nutrients to the soil and arresting the decline in soil quality. Composts help improve soil functionality and resilience, and sustain biologically diverse habitats. This will help buffer soils against the predicted increased frequency of intense rainfall events and prolonged summer droughts. Some of the nutrients supplied can substitute for artificial fertilisers and improved soil buffering capacity can reduce the leaching of nitrogen and other nutrients. Recent studies in the UK have shown that over a five year period with annual compost applications, average yield increases of 7% over the whole period, compared with conventional fertiliser applications, were observed.131

2.20 Horticulture—Compost has the potential to replace about a million m3 of peat per annum, thereby helping it to meet the UK’s obligations under the Biodiversity Directive. Furthermore, certain composts can suppress crop diseases and other nuisances: thus reducing the use of synthetic fungicides and other agrochemicals.

2.21 Landscaping—Compost also has a potentially large market in restoring and “repairing” soil on brownfield sites such as former factories and industrial areas, as it can be an ideal component in topsoil manufacture where existing soil is scarce or of poor quality. This is important in terms of the current house building programme.

The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

2.22 Proposals in Waste Strategy 2007 have focussed on reducing methane emissions from landfill through alternative treatment methods and strengthening the role of renewable energy, such as anaerobic digestion.

2.23 Whilst we recognise the recent policy incentives for renewable energy, the role of composts in helping to stem carbon losses from soils appears to have been overlooked. As the UK has experienced significant organic matter loss during the last century, this benefit cannot be overstated. Figures from England and Wales show that percentage of soils with less than 3.6% organic matter rose from 35% to 42% in the period 1980–1995. Research published in Nature suggests that loss of soil carbon is linked to climate change.133 By inference, the controlled application of compost can help counter some of this loss, thus mitigating

carbon dioxide emissions. The Composting Association has provisionally calculated that composting an estimated 15 million tonnes of biowaste could have the potential to offset carbon dioxide emissions equivalent to those of over a million cars a year.

2.24 We would therefore welcome better integration of the Waste Strategy not only with emerging energy policies, but also with the sustainable farming and food strategy. There is a real need to establish policy drivers that provide a coherent link between bio-resource and soil management practices.

The promotion of anaerobic digestion for agricultural and food waste

2.25 Waste Strategy 2007 has placed a great deal of emphasis on the potential for anaerobic digestion to be employed as a treatment method for biodegradable (especially food) wastes. We recognise that this has significant potential, and Composting Association members are well placed to provide solutions as part of integrated biowaste processing sites. However, in order to realise this two issues need to be addressed:

2.26 The capital costs of investing in new infrastructure are far higher than those for in-vessel composting. Even with the proposed support through the double Renewables Obligation Certificates per MWh in the Energy White Paper, additional support may be required.

2.27 Support to assist the industry gain the necessary skills and technical expertise in operating AD systems and applying digestates to land will be required. AD is a technically demanding process and it will take some time for operators to gain the necessary skills to operate these systems effectively under varying conditions. Unless both the industry and regulator receives appropriate support, it seems likely that mistakes will be made that may disadvantage the effective implementation of this technology.

The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

2.28 To meet the binding landfill diversion targets, in the region of 150—200 new biological treatment facilities are needed within the next decade, equivalent to about three a week (source: Environment Agency). Despite a greater than 20% year-on-year increase in the quantities of biowaste composted over the past decade provision of in-vessel and anaerobic digestion facilities currently lags far behind that required to manage this important waste stream.

2.29 Problems stem from:
- The inherent inflexibility of the plan-led system to respond to changing circumstances and delivery of the Waste Strategy—Regional Spatial Strategies and local development documents take years to develop, resulting in a mismatch between future provision and immediate needs
- Resistance to proposed infrastructure by local residents, politicians and businesses—Uncertainty and concerns about loss of amenity and environmental impacts fuel a “NIMBY” attitude, which can “de-rail” even the best application. Building trust and understanding within local communities and elected members is a time consuming and resource intensive process that can represent a disproportionate burden for small businesses.

2.30 The lead-in time to establish new facilities can be in excess of two years. Unless the planning process can be improved, it seems likely that targets will not be met and the environmental, social and economic benefits of improved resource use will not be realised.

2.31 We suggest that Government establishes a task force to review current policies and practices, and make clear recommendations regarding a delivery timetable to establish new infrastructure. Similarly, in order to improve knowledge and understanding by elected members and local residents we would like to see Government establish a Waste Planning Education Programme.

The Composting Association

November 2007

Memorandum submitted by Alison Waterhouse (Waste 46)

Executive Summary

This response is given by Alison Waterhouse, Sustainability Network Manager at Faraday Packaging Partnership. All comments should be taken as being the opinion of Alison Waterhouse. Faraday Packaging is a knowledge transfer network supporting innovations in packaging by linking the industry with leading academic expertise from a diverse range of disciplines. Faraday Packaging’s current activity in relation to sustainability is three fold: understanding the issues, rationalising and optimising current practices, and looking forward to the requirements of sustainable consumption and production.
The structure of today’s society from both household and retail perspectives necessitates the continued use of packaging. Although packaging remains a relatively small part of the waste stream, the industry still has its role to play in contributing to sustainable development and reducing sustainability-related impacts. Sustainability and packaging’s contribution to sustainable development should encompass an holistic view of issues and commitment to reducing impacts throughout the supply chain rather than a focus on single issues such as waste minimisation.

From a consumer perspective, packaging appears a highly visible indicator of waste, a view which has been encouraged by various campaigns highlighting perceptions of excess packaging. However, often missing from this presentation is the value that packaging can add to products. The functionality that packaging provides includes its value in protecting products throughout increasingly complex supply and consumption chains. Without this protection, levels of product waste would further increase, leading to greater losses of embedded energy from throughout product lifecycles.

MEMORANDUM

1. This response is provided by Alison Waterhouse, Sustainability Network Manager at Faraday Packaging Partnership (FPP). All comments should be taken as being the opinion of Alison Waterhouse. FPP is a knowledge transfer network part funded through BERR and part of the Materials Knowledge Transfer Network (MATKTN). Established through DTI funding in 1997 and with a current membership base of some 40 leading global brand owners and packaging companies, Faraday Packaging has established a strong foundation of linking the membership base with over 100 world leading academics from a range of disciplines spanning consumer behaviour & psychology to design, and engineering and materials and waste management to sustainable consumption. Since inception the partnership has facilitated over £12 million of research work between university partners and companies in the packaging industry and impacting on a total annual turnover in excess of £500 million. Research activity is structured around expertise in design, materials and sustainability. Activity related to sustainability is currently focussed around supporting members to develop their understanding of packaging’s contribution to sustainable development, options for optimisation of current formats and developing understanding of approaches to sustainable consumption and production. This paper is given specifically in relation to packaging and in response to the issue of: “The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes.”

2. The term “sustainable packaging” is in itself, a misnomer. In common with all business functions, packaging has environmental and social impacts. Reducing these impacts for a specific pack will alter its sustainable profile but is unlikely to make the pack sustainable as some impacts will remain. However, by minimising impacts where possible, packaging can make a contribution to the sustainable development of its supply chain.

3. Waste minimisation is only one aspect of responsible packaging. An holistic approach to minimising the impacts of packaging, encompassing other issues such as reductions in energy, transport, resources and product waste is preferable and will ultimately enable a greater contribution to sustainable development than will a focus solely on single issues such as packaging weight reduction.

4. Campaigns such as those run by the Women’s Institute and The Independent newspaper have helped focus consumer attention on perceived examples of excess packaging and have in turn added to the pressures felt by the packaging industry. As these campaigns have focussed on perceived excess, limited or no consideration has been given to the positive contribution that packaging makes to today’s society, particularly as an enabler of the current retailing structure. As with other industry sectors, the packaging industry is able to make a contribution to sustainable development. Spurred by a range of business drivers, the industry is making changes to both business processes and pack formats in order to improve its sustainable profile. However, these changes must be made whilst retaining pack functionality and in particular, in ensuring products are protected throughout their passage through the supply chain and up to the point of consumption.

5. Recent drives from the retail sector have seen a multitude of commitments intended to reduce impacts associated with both packaging and food waste. These initiatives range from packaging reduction to carbon labelling and from bio-compostability to energy savings. The lack of common approach is understandable for such a competitive industry and the differing approaches will undoubtedly deliver a range of improvements to the sustainable profiles of the sector. However, this approach is likely to add to the confusion experienced by consumers in understanding the impacts of their retail choices as they are presented with differing initiatives, all of which claim specific sustainability impacts.

6. Societal changes such as reduced time for shopping and food preparation, fewer local high street shops, demand for year round produce availability, contamination fears and lower levels of domestic science skills have all contributed to altering the structure of the retail and household environments in recent years. This current structure necessitates the use of packaging to ensure products remain fit for purpose throughout longer supply chains and consumption periods.
7. Achieving reductions in CO₂ levels is likely to necessitate maximising production efficiencies. In the majority of cases the embedded energy of a product is far greater than the embedded energy of its packaging. Therefore using packaging to minimise product waste can result in an overall energy saving. With increasing levels of food waste from households, appropriate use of packaging may be one solution to help make savings on embedded energy use.

8. The intricacy of current product supply chains and the differing functional properties of packaging materials makes relative assessments of sustainability a complex and problematic task. A more realistic option, at least in the short to medium term and using current manufacturing capabilities, is to assess the current environmental and social impacts related to the production chain and then seek to achieve a reduction across the board.

Alison Waterhouse
November 2007

Memorandum submitted by EEF, the Manufacturers’ Organisation (Waste 47)

INTRODUCTION

1. EEF is the representative voice of manufacturing, engineering and technology-based businesses with a membership of 6,000 companies employing around 800,000 people (see www.eef.org.uk for further information). Comprising 11 regional EEF Associations, the Engineering Construction Industries Association (ECIA) and UK Steel, EEF is one of the leading providers of business services in employment relations and employment law, health, safety and environment, manufacturing performance, education, training and skills.

2. We welcome this opportunity to submit our response to the House of Commons Environment, Food and Rural Affairs (EFRA) Select Committee’s call for evidence on Waste Strategy 2007.

BACKGROUND

3. Waste is one of the most pressing challenges facing the UK and its effective management is critical for sustainable development. Latest figures in the Strategy showed that some progress has been made over the past 10 years, with signs emerging that a decoupling of waste from economic growth is starting to happen in some sectors. However, the overall amount of waste that the UK produces, particularly in the domestic sector, is continuing to grow.

4. Manufacturers accept their responsibility for the waste they produce and strive to minimise waste and use waste as a resource where possible. Industry and business now reuses and recycles 44% of its waste, and sends 5 million fewer tonnes to landfill than in 1998–99134. Much of this change has been driven by costs. Businesses pay for raw materials, they pay to process the material into products, and then pay for the disposal. Waste minimisation is therefore already an important part of business models. Government must ensure that it provides the right climate for businesses to do more, whilst staying profitable in a highly competitive environment.

5. It is widely accepted that historically waste policy has been incoherent and confusing with Waste Strategy 2000 lacking a clear sense of direction and effective policy levers. The recently published revised waste strategy (Waste Strategy 2007) is a welcome step forward taking a more holistic view across waste streams linked with wider sustainable development objectives. However, a number of outstanding concerns remain with regards to how the Strategy will be delivered, which we discuss below.

A. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste. Localisation as opposed to centralisation of waste management

6. EEF believes that the recently published Waste Strategy 2007 is a welcome step in the right direction, by taking a more holistic approach to waste and resource management linked with wider sustainable development objectives. We support the 5-step Waste Hierarchy, as set out in the Strategy as a general guide to the priorities in waste handling. We believe that application of the waste hierarchy must remain flexible though, taking account of overall environmental, social and economic objectives and technical feasibility, including availability of alternative treatment methods. The recycling process can, in some instances, when taking into account transport and process emissions, produce more carbon emissions than would be saved by using the local landfill. For some low risk wastes, eg low grade filter cakes, landfill might be the more sustainable option overall.

7. Industry has a significant role to play in waste prevention and using waste as a resource wherever possible. Manufacturers are not only producers of waste, but will be providing the solutions to many of the challenges that are faced in reducing waste. However, government must keep up its part of the bargain and ensure that the new policy framework provides the right climate for industry to play its part, whilst thriving in a highly competitive environment. For example, government must show leadership and make full use of its purchasing power to drive change and continue its work on developing procurement specifications for use in the public and private sector. This will send an important signal to the market and increase demand for more sustainable products. In addition, government must make sure that adequate waste treatment infrastructure for waste is being developed in time to deal with the increasing amounts of waste diverted from landfill.

8. UK manufacturers compete with developing economies where environmental standards are not always implemented with the same degree of rigour. EEF believes that using voluntary agreements or supply chain pressures to facilitate change sends out the right signal to these markets. These initiatives would benefit from more support from government to encourage greater uptake in the UK and by international players within the same supply chain.

9. Consumers and retailers make the ultimate choice between cheaper imported products that do not have to cost in the effort to redesign and remanufacture and improve the environmental profile of a product and those that do. A government commitment to sustained and targeted efforts to educate the consumer about the environmental impact of their purchasing behaviour is therefore crucial.

B. The role for and implementation of regulations, and their enforcement

10. EEF believes that there is a role for regulations in driving positive change. However, the process of implementing and enforcing ill-devised waste legislation has been imposing increasing pressure on the resources of businesses. Our members are therefore keen to see increased effectiveness in waste regulation and a reduction in the administrative burdens placed on businesses in line with risk-based principles.

11. It is important that government keeps overall sustainability objectives in sight during the development of policy; we believe that the traditional regulatory route can be less effective at this. For example, the Restriction on Hazardous Substances (RoHS) Regulations135 require companies to undertake complicated and costly assessments of their products, with little, if any, benefit to the environment. A more risk-based approach is therefore required. Sometimes, waste regulations have lead to unintended consequences, for example, by creating barriers to greater reuse and recycling (see paragraph 16 and beyond). Finally, waste regulation is primarily targeted at limiting the amount of waste business can send to landfill and increase its recycling with little impact on waste prevention. This does not deliver the behaviour change which is needed to deliver the step-change which we all desire.

12. EEF supports proposals in the Strategy for material or sector-based voluntary agreements to engage business on waste reduction and resource efficiency. Effective engagement with industry is crucial as it will provide for sector specific issues to be addressed and sensible waste reduction and recycling targets to be agreed. EEF is keen to work with government on this.

13. Awareness of legal requirements is a pre-requisite to achieving compliance. A large proportion of businesses are still not aware of the potential benefits brought about by implementing waste prevention measures and more efforts are needed to pro-actively reach the waste producer community, with special emphasis on SMEs. EEF would welcome working with government on developing opportunities to reach companies within our large membership.

14. EEF believes that firm and effective enforcement underpins the success of waste policy and regulation. Illegal activity by unscrupulous companies continues to undermine the activities of law-abiding companies. The risk of being caught does not appear yet to act as a deterrent. We therefore support a more pro-active, proportionate regulatory effort to enforce regulations, targeting those companies that pose the greatest risk to the environment, whilst well managed businesses would earn an “On Trust” status with the regulator, resulting in, for example, cheaper fees, lower inspections frequencies and less bureaucracy.

15. Government must ensure that enforcement activities are adequately funded but EEF does not agree with landfill tax money, which has been paid by companies that comply with law, being used for this purpose. The revenue raised from enforcement should be returned to the regulator to fund more of this work.

137 E.g. Waste Management Licensing regulations or Waste Carriers Licensing Regulations
C. The classification of waste

16. The strict interpretation of the definition of waste as set out in the EU Waste Framework Directive\(^\text{138}\) has caused a number of problems in the UK, by working as a barrier to greater reuse and recycling. The definition of when a material is “discarded” is particularly problematic.

17. To illustrate, materials that are legally waste have to be handled, transported or treated in line with waste regulations. This has meant that for some low risk materials, for example wooden pallets, which can easily be reused or recycled, costs of complying with waste regulations\(^\text{139}\) are disproportional to the benefits of reuse and recycling and the materials continue to be disposed of to landfill. Instead this should be a contractual issue between companies when materials are sold for use or recycling. Materials destined for landfill should continue to be classed as waste.

18. In addition, the introduction of new Hazardous Waste Regulations, which implement the European Waste Catalogue,\(^\text{140}\) has resulted in more waste being classified as hazardous, bringing it under stricter landfill should continue to be classed as waste.

19. The review of the Waste Framework Directive provides a crucial opportunity to simplify and clarify waste regulation, and the UK government needs to be seeking real solutions to the problem as part of its negotiations activities. The best option would be to more clearly define the term “discard”, allowing companies to hand over materials which are of use to another company without the need to comply with waste regulations. The alternative is to clearly define the distinction between waste and industrial by-products and set criteria that establish when a waste ceases to be waste within the body of the Directive.

D. The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

20. EEF welcomes the priority given by the new Waste Strategy to waste prevention and minimisation, linked to the wider sustainable consumption and production agenda. As mentioned above waste prevention is already part of most business models and estimates by government agencies that companies can save 1% of their turnover a year through waste minimisation means that manufacturing companies increasingly focus their attention on this.

21. However, overall awareness of the opportunities brought on by implementing waste minimisation is still relatively low amongst businesses though, in particular amongst SMEs, and there is scope for encouraging companies to do more on addressing impacts at the “front of pipe”. However, figure on the potential cost savings from waste minimisation initiatives do not always take into account the “hidden” costs, for example the administrative costs or man-hours, of implementing such measures. This can lead to scepticism and provide a barrier to greater uptake by business.

22. Consideration of priority materials, products and sectors will ensure that actions are targeted at those areas that have the greatest potential for environmental improvements. Encouraging re-use, repair and re-manufacture of materials already in the waste stream will also play an important part in reducing overall waste production and direct materials away from landfill.

23. Rather than introducing further regulation we believe that greater engagement with industry is needed to encourage behaviour change. Supply chain driven initiatives are an effective incentive to engage businesses on waste reduction. Sectoral sustainability strategies, sectoral agreements and Corporate Social Responsibility are already used by businesses to achieve environmental improvements up and down supply chains.

24. In addition, the concept of “lean manufacturing” is already widely used in the manufacturing sector. It advocates using less resources- time, effort, workshop space, tools and raw materials. EEF is working with the Manufacturing Advisory Service (MAS) in the South East and London to better integrate environmental considerations with lean manufacturing and we would welcome the opportunity to work more closely with government on this issue.

25. Government must ensure that theses programmes aimed at improving business performance on waste minimisation are adequately funded. The services offered by BREW delivery bodies are in many instances, invaluable, but for many businesses the range of these and their function appears somewhat confusing, particularly where remits appear to overlap. Overall, there is a need for a more strategic approach to BREW Programme, linked with wider sustainability objectives.

26. EEF was disappointed to see no explicit mention of the future of the BREW funding in the recently published PBR and CSR07. We believe that the carrot and stick approach of using taxation to send a price signal to business and using the funds raised to help companies to change their practices is a cost-effective


\(^\text{139}\) E.g. Waste Management Licensing regulations or Waste Carriers Licensing Regulations

approach to behaviour change. We are therefore disappointed by the government’s decision to remove the ring-fencing of the tax and include it as part of the wider DEFRA budget, making it susceptible to further cuts.

F. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

27. EEF supports government efforts to move more waste out of landfill and towards greater recovery and recycling of materials, where this is the most sustainable option. However, lack of forward planning by government, barriers within the UK planning system and, as a consequence inadequate investment has meant that the UK waste management system has been slow to catch up with the growing amount of waste diverted from landfill, leading to significant increases in waste management costs.

28. The introduction of regulations, mainly aimed at restricting business’s ability to dispose waste to landfill, has meant that many of our members have been experiencing difficulties in finding available and affordable solutions to some of their waste streams.

29. EEF welcomes proposals for greater integration between municipal and non-municipal waste, including measures to encourage joint facilities and partnership with local businesses. However, the Strategy missed an important opportunity by not requiring (as opposed to encouraging) local authorities to consider non-municipal waste in their areas and municipal facilities to have spare merchant capacity for non-municipal waste. With landfill diversion targets for biodegradable municipal waste continuing to drive local authority behaviour, this means that local variations in the availability of affordable services and facilities to deal with business waste will remain. EEF is concerned that not enough has been done to speed up the process of getting the necessary waste infrastructure on line.

30. EEF is concerned that the increase in landfill tax and the implementation of pre-treatment requirements for non-hazardous waste will exacerbate the problem, leading to further bottlenecks in the system and further cost hikes.

31. Landfill tax revenues has exceeded £7.5 billion since 1996, however only a fraction of this has been reinvested in improving waste management infrastructure for businesses. In addition to funding initiatives aimed at improving business resource efficiency, the revenue could be used more effectively to support infrastructure development for business waste, in particular in support of SMEs. As set out in paragraph 25 above EEF is concerned that with the future of the BREW Programme uncertain, government might lose important lever to facilitate change.

32. Many materials are globally traded commodities and the same should apply for recyclates. At the same time as building up the infrastructure in the UK, government should encourage greater use of overseas markets for wastes where no appropriate facilities exist in the UK, provided they meet environmental and safety standards.

CONCLUSION

33. EEF welcomes the opportunity to contribute the views of the manufacturing sector to such an important and timely inquiry. The manufacturing sector is a key stakeholder in the whole debate concerning waste and resource efficiency and we welcome the opportunity to work closely with all interested parties in achieving the shared goals.

EEF, the Manufacturers’ Organisation

November 2007

Memorandum submitted by Gemini Waste Consultants Ltd (Waste 48)

EXECUTIVE SUMMARY

1. This submission addresses Terms of Reference items 1, 4 and 9 only.

2. Government is under two separate legal duties to prepare waste policies ie s44A of the Environmental Protection Act 1990 (EPA) and s17 of the Waste and Emissions Trading Act 2003 (WET). Both transpose EC directives—the former the EC Waste Framework directive (75/442/EEC) and the latter the Landfill Directive (91/31/EC). These are set out at Annex 1. In general terms, the EPA addresses waste in its broadest sense, whereas WET focuses on the narrower area of biodegradable waste to landfill. Clearly, while it would be possible to have two strategies, this would be impractical.
3. The requirements of WET are less broad and in practice s17 (7) of that Act accepts that a single strategy would suffice (Annex 3). Defra have confirmed that it is their belief that Waste Strategy 2007 satisfies the requirements of both WET and EPA, however, there is no specific reference to this in the strategy. This is paradoxical given that the focus of the strategy is actually a requirement under WET and not the EPA.

4. In the context of the Committee’s inquiry, the main deficiencies of the strategy vis a vis the Government’s legal duties are that it:
   i. Does not scope the full duties as required under the Acts, and
   ii. Where specific requirements are placed on Government (namely the requirements to plan for the diversion of biodegradable waste from landfill and for national and European self-sufficiency in waste disposal), these have either been overlooked or not addressed adequately by Government:

5. This submission also highlights that the Government’s approach to financial incentives is contradictory and misrepresents the European experience on which the Government places great reliance. Suggestions are made to overcome these shortcomings in order to optimise the opportunity that the Government is creating with its proposed pilot schemes.

**Detail**

*How Policies Proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste-including industrial, business and household waste (ToR 1)*

6. S44A of the EPA requires the Government to prepare a statement (the strategy) containing policies in relation to the recovery and disposal of waste in England and Wales. In addition, s17 of WET requires the Government to have a strategy for reducing:
   (a) The amount of biodegradable waste from England that goes to landfills, and
   (b) The amount of biodegradable waste from outside England that goes to landfill in England.

7. S17 (7) has the effect of providing for a single strategy to cover the duties under both Acts. There are 3 main sectors of waste that are within the scope of the strategy ie household; commercial and industrial; and construction and demolition. Therefore, it would not be unreasonable to find policies for each sector within the strategy in proportion to their order of magnitude in England and Wales.

8. In 2004, the UK produced 220 million tonnes of controlled wastes from households, commerce and industry (including construction and demolition wastes) which falls within the scope of the strategy. Household wastes represent about 9% of total arisings. It is also estimated that commercial and industrial wastes comprise approximately 25% of waste arisings. ([http://www.defra.gov.uk/environment/statistics/waste/kf/wrkf02.htm](http://www.defra.gov.uk/environment/statistics/waste/kf/wrkf02.htm)).

9. According to Government, its objectives with regard to construction wastes are:
   — to provide the drivers for the construction sector to improve its economic efficiency by creating less waste at every stage of the supply chain, from design to demolition;
   — to get the sector to treat waste as a resource, closing the loop by re-using and recycling more and asking contractors for greater use of recovered material; and
   — to improve the economics of the re-use and recycling sector by increasing sector demand and securing investment in the treatment of waste—this will benefit all waste streams, including construction.

10. As regards commercial waste a key element of the Government’s approach is:
    — the pricing and regulatory framework. Planned increases in the landfill tax (set out in Chapter 3 of the WS2007) are designed to incentivise a significant further diversion of commercial and industrial waste from landfill.

11. In contrast, its approach to household waste sets out a raft of targets and measures. Therefore, as regards waste in general the Committee will see that the strategy focuses primarily on household waste, contrary to its legal duty.

12. As regards biodegradable wastes in particular, the Government’s approach focuses virtually exclusively on biodegradable municipal wastes albeit that non-municipal wastes comprise the majority of biodegradable waste arisings.

13. The above show that the strategy is deficient by virtue of:
    — Not addressing in proper detail the majority of waste arisings, contrary to its duties under EPA, and
    — Failing to address the issue of diverting from landfill non-municipal biodegradable waste contrary to its duty under s17 of WET.
The proposals for financial incentives to increase household waste prevention and recycling (ToR 4)

14. In responding to the 2006 Waste Strategy Review Consultation, a number of local authorities, environmental groups and other stakeholders raised waste charging as an issue that Government should consider (PRIA para.12). In addition, the LGA has called for local authorities to be given the power to offer financial incentives to households for sustainable waste behaviour, because of their potential to reduce waste and encourage recycling, therefore cutting costs. The same point has also been made in the Lyons report. Subsequently, Government commissioned research into this issue by looking at schemes that operate elsewhere in Europe. This showed that “Pay as You Throw” (PAYT) schemes can work effectively. The Government’s response to the research was as follows:

— “The Government has considered the case for allowing authorities to introduce local variable waste charging. The Government has concluded that it does not wish to introduce a local variable waste charge, as seen elsewhere in Europe. Instead the Government wishes to allow revenue-neutral financial incentive schemes”

15. Consequently, the Government’s approach rejects all of the PAYT charging structures that the report showed worked and proposes one of its own. Despite the fact the lack of evidence for the Government’s approach it continues to cite European PAYT schemes in support of its approach.

16. Having established its policy position, Government then consulted interested parties on its proposals. Government published the responses to its consultation on Financial Incentives for Recycling by Households in October 2007. If minor paraphrasing of the consultation questions is carried out and equivocal responses eg may be etc. are added to the Yes and No replies for each question, the replies break down as follows:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that local authorities should have the power to introduce</td>
<td>81</td>
<td>18</td>
</tr>
<tr>
<td>financial incentives for promoting recycling and reducing household waste?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you in favour of the Government’s proposed scheme?</td>
<td>47</td>
<td>61</td>
</tr>
<tr>
<td>Do you want to be able to charge residents additionally for the waste they generate? (Qu. 4a)</td>
<td>38</td>
<td>45</td>
</tr>
<tr>
<td>Do you agree that authorities should be free to determine the level of charges?</td>
<td>68</td>
<td>13</td>
</tr>
</tbody>
</table>

17. Clearly therefore, not only would there appear to be no evidential basis for the Government’s approach, there would not appear to be the necessary support either. Any “charging” scheme, whether revenue-neutral or otherwise, would be a fundamental departure from current practice and historical precedent and one that could meet with public opposition. This does not make it wrong and Govt. should be congratulated for at least grasping half the nettle.

18. A recent announcement by the Minister regarding 5 pathfinder councils suggests a timetable that might not have empirical evidence in place until 2012. Given that there is no evidence that the Government’s preferred structure actually works, it could find itself back at square one at a most critical time. The UK cannot afford to risk wasting 5 years if it is to meet EC landfill targets. It would be a better use of time to broaden the scope of the scheme during its experimental phase to allow local authorities to adopt structures closer to the proven European models. As now, authorities would not be required to adopt any or either alternative structure. Indeed, the responses from local authorities to the Government’s consultation suggest that it could be somewhat easier to find authorities willing to test the “European” model than the Government’s own. Government appears to be embarking on a single course without any fallback position, and with the distinct possibility that it might not be successful in the final analysis.

19. Given that time spent in reconnaissance is seldom wasted, Government should move forward on a twin-track approach by inviting councils to trial revenue-neutral and alternative schemes.

The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the for Government action to encourage the most efficient novel technologies (ToR 9)

20. The duties set out under the Acts include the following key issue which are to be addressed in the strategy:

(a) The strategy must demonstrate how the Government will “Establish an integrated network of waste disposal installations . . . “ with the objective of ” Ensuring that the network enables European Community as a whole to become self sufficient in waste disposal, and the Member States individually to move towards that aim . . . .”
21. In the context of waste paper, Annex D to the Strategy states the following:

— The collection of recovered paper has grown strongly over the past ten years, increasing by over 80%, from 4.3 million tonnes to 7.8 million tonnes.

— This increase has been predominantly absorbed by the export market, and in particular by exports to China.

— Nearly all local authorities in England collect some paper for recycling.

— In 2006, some 1.4 million tonnes of paper packaging waste was exported for recycling.

Over the last 10 years the recycled content of paper produced in UK mills has increased by almost 10 percentage points (from 59% to 68% in 2005), the decline in paper production in the UK over the same period means that consumption of recovered fibre has increased by only ca.500,000 tonnes.

— Having achieved recycled content of over 80% in the newspaper sector the quick wins may have been achieved. There may be scope to increase recycled content further in the other paper sectors, but it could be harder to deliver.

— In general, export prices tend to be higher than prices paid by domestic mills

— In the absence of demand from export markets, the huge increase in collections of recovered paper might have led to oversupply in the UK market, and a decline in paper prices.

22. In the context of self-sufficiency, the current situation is clearly a failure and there is no indication in the strategy that this position has developed abnormally or against predictions and plans. The Strategy should therefore address two key issues:

(i) How to provide capacity within the UK, or at worst the EU, for the recovered paper that is already being exported, and

(ii) How to provide capacity for the increase in tonnage of recovered paper that is implicit in the strategy’s higher recycling targets.

And it must achieve these in the context of there being no prospect of increasing the proportion of recycled paper in newsprint and the apparent view held by the Waste Resources and Action Programme that there are only minor barriers to the processing of waste paper in the UK.

Table D.1: Barriers to market development for key materials

<table>
<thead>
<tr>
<th>Material</th>
<th>Supply chain</th>
<th>Inadequate collection infrastructure</th>
<th>Quality sourcing problems</th>
<th>Limited reprocessing capacity</th>
<th>End products—need for standard/specification/procurement barriers</th>
<th>Need for alternative markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>Plastics</td>
<td>xxx</td>
<td>x</td>
<td>xxx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>Glass</td>
<td>x</td>
<td>xx</td>
<td>x</td>
<td>xxx</td>
<td>xxx</td>
<td>xx</td>
</tr>
<tr>
<td>Wood</td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
</tr>
<tr>
<td>Compost</td>
<td>xxx</td>
<td>xx</td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
</tr>
</tbody>
</table>

Source: WRAP presentation to European Commission, 18 July 2003.

23. The Strategy’s policy response, which is set out in full in Annex D to the strategy, is:

(i) To rely wholly on voluntary agreements and targets set under packaging regulations. However, the targets are so timid that those for 2008 are being met already, consequently no improvement should be expected from that quarter;

(ii) For WRAP to investigate opportunities for open-loop recycling of paper products, one of which is to convert paper into moulded pulp products, egg boxes, etc. However, the strategy sounds a cautionary note here because:

— moulded pulp applications currently account for only 0.4% of the market for recovered paper and,

— UK currently consumes around 50,000 tonnes of moulded pulp per annum, and

— collection of recovered paper is increasing by almost the same amount per month.

The Annex further states that “(these) applications cannot be seen as a solution for the UK’s reliance on export.”
24. The issue of recovering waste paper for recycling is fundamental and not an issue of marginal importance. It cannot be acceptable in terms of sustainable waste management for the majority of the UK’s recovered paper to be processed outside the UK and the EU. Also, there is a specific duty on the Government to achieve the opposite.

25. Another point arises here which has been highlighted by the Environment Agency in its report on the 2006–07 Landfill Allowances Trading Scheme report and which has been commented on previously by the Committee is all exported waste that undergoes subsequent processing actually being diverted from landfill? Paper is vitally important to the success of LATS and the objective of diverting biodegradable waste from landfill because it is considered to be 100% biodegradable. Consequently, exported paper represents the equivalent of approx. 8% of total UK BMW arisings. This is a significant amount and, while it is not being suggested that this waste is not being diverted from landfill in China, the processes take place outwith EC regulations and it would be easier to monitor these process if they took place in the UK/EU. In this context, the EA’s report highlights the difficulties of processing waste even through Material Recycling Facilities in the UK by identifying the ranges of rejects that are suffered:

### Material recovery facilities (MRFs) used by all local authorities in England

<table>
<thead>
<tr>
<th>Region</th>
<th>Range* of MRF reject as percentages</th>
<th>Number of different MRF facilities used</th>
</tr>
</thead>
<tbody>
<tr>
<td>East of England</td>
<td>0 to 19.82</td>
<td>20</td>
</tr>
<tr>
<td>East Midlands</td>
<td>0 to 65.13</td>
<td>18</td>
</tr>
<tr>
<td>London</td>
<td>0 to 100</td>
<td>11</td>
</tr>
<tr>
<td>North East</td>
<td>0 to 86.45</td>
<td>5</td>
</tr>
<tr>
<td>North West</td>
<td>0 to 41.63</td>
<td>8</td>
</tr>
<tr>
<td>South East</td>
<td>0 to 20.17</td>
<td>20</td>
</tr>
<tr>
<td>South West</td>
<td>0 to 37.50</td>
<td>9</td>
</tr>
<tr>
<td>West Midlands</td>
<td>0 to 37.50 nt7</td>
<td></td>
</tr>
<tr>
<td>Yorkshire &amp; Humber</td>
<td>0 to 15.80</td>
<td>6</td>
</tr>
</tbody>
</table>


The EA appears to be so concerned by this situation that one of its priorities for 2007–2008 is:

— work to make sure that the reject rates from MRFs are accurately and consistently reported throughout England;

— audit reject rates from companies receiving materials from MRFs to make sure we support quality recycling programmes; and

— discount volumes that are rejected back to landfill against local authorities’ allowances.


### National waste strategy: England and Wales

S44A EPA

(1) The Secretary of State shall as soon as possible prepare a statement (“the strategy”) containing his policies in relation to the recovery and disposal of waste in England and Wales.

(2) The strategy shall consist of or include:

(a) a statement which relates to the whole of England and Wales; or

(b) two or more statements which between them relate to the whole of England and Wales.

(3) The Secretary of State may from time to time modify the strategy.

(4) Without prejudice to the generality of what may be included in the strategy, the strategy must include:

(a) a statement of the Secretary of State’s policies for attaining the objectives specified in Schedule 2A to this Act;

(b) provisions relating to each of the following, that is to say:

(i) the type, quantity and origin of waste to be recovered or disposed of;

(ii) general technical requirements; and

(iii) any special requirements for particular wastes.
Strategy for England

(1) The Secretary of State must have a strategy for reducing:
   (a) the amount of biodegradable waste from England that goes to landfills, and
   (b) the amount of biodegradable waste from outside England that goes to landfills in England.

(2) The strategy required by subsection (1) must (in particular) include measures to achieve the targets specified for England under sections 1 and 2.

(3) The measures mentioned in subsection (2) include (in particular) measures to achieve the targets by recycling, composting, biogas production, materials recovery or energy recovery.

Schedule 2A To Environmental Protection Act

Objectives For The Purposes Of The National Waste Strategy

1. Ensuring that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment and, in particular, without:
   (a) risk to water, air, soil, plants or animals;
   (b) Causing nuisance through noise or odours; or
   (c) adversely affecting the countryside or places of special interest.

2. Establishing an integrated and adequate network of waste disposal installations, taking account of the best available technology not involving excessive costs.

3. Ensuring that the network referred to in paragraph 2 above enables:
   (a) the European Community as a whole to become self-sufficient in waste disposal, and the Member States individually to move towards that aim, taking into account geographical circumstances or the need for specialised installations for certain types of waste; and
   (b) waste to be disposed of in one of the nearest appropriate installations, by means of the most appropriate methods and technologies in order to ensure a high level of protection for the environment and public health.

Gemini Waste Consultants Ltd
November 2007

Memorandum submitted by the CBI (Waste 49)

1. As the UK’s leading business organisation, the CBI speaks for some 240,000 businesses that together employ around a third of the private sector workforce, covering the full spectrum of business interests both by sector and by size. Member companies, which decide all policy positions, include 80 of the FTSE 100; some 200,000 small and medium-size firms; more than 20,000 manufacturers; and over 150 sectoral associations.

2. CBI members include waste producers, waste managers and companies developing waste treatment technology. Waste and resource efficiency is a major business issue and CBI welcomes the opportunity to submit written evidence for the Committee’s Inquiry.

3. As the Waste Strategy recognises, we have achieved a partial decoupling between the trend in waste arisings and economic growth. Total business waste arisings have been broadly stable in recent years. But we agree with the Government that we need to go further. The CBI believes that in doing so we should focus on reducing CO2 emissions from waste and on reducing the total volume of virgin resources used by the economy. On this basis we support the aims of the Strategy as set out on page 9 of the document.

Welcome Aspects of the Waste Strategy

4. The Strategy brings together a series of existing and new policies which it expects to reduce business waste arisings by 20% over 5 years. Many of these policies are welcome, for example:
   — Recognition of existing drivers for better business waste management: the enhanced Landfill Tax escalator, the Renewables Obligation as it applies to energy from waste (EfW), the introduction of Site Waste Management Plans, and the Landfill Directive requirement to pre-treat non-hazardous waste.
   — Materials-specific initiatives: There are also a number of welcome smaller scale initiatives on matters such as packaging and plastic bags, and specific materials such as plasterboard that will affect business.
Encouragement of synergies between municipal and business waste treatment: The Strategy suggests that facilities for municipal waste should have spare capacity for merchant availability for business waste and the CBI would support this.

**Areas of Concern**

5. Despite the many welcome benefits, the Strategy is weak in three areas, which together may threaten the achievement of the 20% reduction of business waste arisings:

- Level of support for business resource efficiency
- Planning system
- Regulatory reform

6. Support for business resource efficiency: In terms of business waste, the Strategy focuses on measures to constrain the ability of business to landfill waste. But by itself, may not be enough to generate the identification of and investment in opportunities to improve resource efficiency and alternative waste management options. While there are sizeable theoretical savings from improved resource efficiency which can be made in many sectors, these may not always be realised due to a mix of upfront costs, low scale of benefits compared to turnover (for example, for most sectors analysed in a Cambridge econometrics/Envirowise study, potential savings were less than 1% of GVA), or lack of senior management awareness (42% of SMEs in a YouGov survey never discussed recycling at Board level).

7. The Business Resource Efficiency and Waste (BREW) programme, funded by landfill tax receipts, is intended to help business identify waste minimisation opportunities. However, since the launch of the Strategy it has become clear that the BREW budget no longer has direct access to landfill tax receipts and is likely to face funding cuts.

8. Planning: Likewise, the Strategy fails to fully address the need to enable the planning system to deliver increased deployment of waste facilities. This remains a barrier to waste recycling and recovery. CBI Members have reported delays of 2 years for a materials recycling facility and even longer for other disposal facilities. It is estimated that there is a need for some 1,000 to 3,000 new facilities to handle even municipal waste. However, since municipal waste only accounts for some 9% of total waste further major investment will be required to re-use and recycle business waste.

9. The Strategy also argues that municipal facilities should have spare merchant capacity. The CBI supports this, but it is not clear how it would be achieved. It is important that there should be no cross-subsidy of business waste processing and municipal waste activity or vice versa.

10. Regulation: Too often waste regulation has created unnecessary bureaucracy or frustrated business action that would have had an environmental benefit (eg reuse of material classified as waste). Business is not convinced by the Strategy's assurances that the waste regulation has been successfully reformed. Progress has been made, but the Waste Framework Directive revision was a missed opportunity to develop a better legal definition of “waste”. It is still the case that even with such initiatives as the EA/WRAP protocol project (which determines when substances cease to be waste), everything has to be taken on a case by case basis meaning that every substance has to be considered separately. This causes delay and legal uncertainty.

11. The Strategy may also be overoptimistic in the impact it hopes the EU Energy Using Products Directive (EuP) will make. This is the first Directive to enshrine “life-cycle thinking” and thus covers design of equipment for end of life as well as during construction and in service. However, the CBI believes that actions under this Directive are initially being targeted on products for which energy use during service are dominant and that it will take a long time before actions under the Directive will address resource efficiency in terms of material.

12. Other concerns: Annex F of the Strategy addresses the issue of the enforcement of regulations against waste crime, such as fly-tipping. Given that a number of the drivers in the Strategy eg Landfill Tax are likely to stimulate such crime, it is not clear that the proposals in Annex F are sufficient.

13. The CBI supports the “waste hierarchy” as given in the Strategy as a valuable guide to the priorities of waste handling. However, it should not be regarded as an absolute rule. For example, although EfW is towards the bottom of the hierarchy, it can both be a sensible waste treatment option for some wastes and make a contribution to UK energy policy. And placing landfill at the bottom of the hierarchy is understandable, but it must be remembered that modern, well engineered landfill with high levels of methane capture poses only a limited environmental threat, and will always be needed to some extent both for certain wastes and given the current requirement for restoration of mineral workings of some 60M te per year.
Further Action Needed

To address these weaknesses in the strategy, and improve the likelihood of the hoped-for 20% fall in business waste arisings being achieved, action is needed in three areas:

- Increasing demand for sustainable products
- Increasing resource efficiency support and advice to businesses
- Reforming the planning system

A more rigorous approach to tackling environmental crime is also needed.

Increasing Demand for Sustainable Products

14. The most effective way to encourage resource efficiency is to increase demand for sustainable products, ie those which use less virgin material. This creates a market-driven “virtuous circle” where manufacturers have an incentive to produce more resource efficient products, and also the demand for recyclates is higher and there is more incentive for all players to segregate and collect waste streams which can be recycled. Several things can be done to stimulate this demand for sustainable products.

15. First, there needs to be proper promotion and demonstration, by Government if necessary, to show sustainable products are “fit for purpose”. A business to business example would be the promotion by BRE and WRAP of recycled aggregate, as a result of which 70Mte of recycled aggregate was used in the UK in 2006, equal to 26% of the market (and three times the EU average of 8%) Government should support this phase of development together with the production of procurement specifications that can be used by both public and private purchasers. Public procurement can then “kick start” the market and the product may then become competitive. For consumers, it is equally important that the product is well designed and fit for purpose.

16. Second, despite significant work by the British Retail Consortium and WRAP, current labelling systems for recycled and recyclable products are confusing. The development of clear, simple and meaningful labelling would assist the green consumer. Even a simple product may have several environmental labels (for example a ballpoint pen refill from one manufacturer carries 4 separate environmental advice labels on its packaging, none of which are explained).

17. Third, incentives for householders to produce less waste (eg rebates on Council Tax), could further stimulate demand for sustainable products.

18. Fourth, it should be remembered that sustainable products from recycled materials need to be competitive in the market place whether in the business to business market or the consumer market. In general, this drives a global resource flow that must be available for recyclate resources as well. For example, about 60% of metals for recycling are exported. The administrative burden arising from the implementation of the new EU Transfrontier Shipment of Waste Directive should be reduced.

Improving Support for Business Resource Efficiency

19. Many of the programmes under the BREW umbrella have shown themselves to be effective in realising the potential resource-efficiency gains available to business. Defra calculates that the BREW programmes would account for about one fifth of the 20% fall in business waste arisings it expects to see. On this basis, there seems a good case not for cutting the programme budget, as seems likely, but for some expansion where the cost-benefit data from the programmes justify it. NISP is an example of a programme which has proved cost-effective and probably has potential to scale up.

20. There is also a need to clarify what assistance is on offer and the differences of responsibility between the deliver bodies. For example, there are several separate Government-funded websites offering resource efficiency advice (eg the resource Efficiency KTN web site, is funded by DBERR, but the Waste Matters and NetRegs websites, are funded by DEFRA, yet they do not even cross-refer). It is to be hoped that the Business Support Simplification initiative will help address this issue.

Ensuring the Planning System Stimulates the Provision of Waste Facilities

21. There is a need for increasing availability of waste treatment facilities if the aims of the Strategy are to be met. The Strategy references work being undertaken by the recently established Waste Infrastructure Delivery Programme (WIPD) to ensure the coordination of regional and local planning strategies to ensure necessary waste infrastructure is planned for, and delivered in a timely manner. But the Government must go further if the planning system is to deliver the volume of waste investment required.

22. Timeliness of plans: The Barker Review detailed the difficulties that local authorities have faced in migrating to the new Local Development Framework plan making process (introduced by the 2004 Planning Compulsory Purchase Act), arguing that the procedures were “over engineered” and took too long for delivering new plans. The statistics bear this out. By November 2007 264 local development plan documents
were due to be submitted to DCLG ministers, but only 119 had been submitted. Of the 22 waste development plans to have been submitted; only half had been. Given the pressing timescales in the Waste Strategy, the Government must find a way to ensure plans are delivered on time.

23. Guidance to local authorities: Local authority planning Committees are often reluctant to approve applications for waste facilities due to public opposition. For renewable energy, where the issues are similar, the Government has taken a very proactive stance with the draft Planning Policy Statement (PPS) Planning and Climate Change, which states that planning authorities should: “look favourably on proposals for renewable energy, including sites not identified in development plan documents;”, “not require applicants to demonstrate overall need for renewable energy . . . and “avoid policies that set stringent requirements for minimising impact on landscape and townscape if these effectively preclude the supply of certain types of renewable energy”. A similar approach may be needed for waste, if PPS10 proves insufficient.

24. Public information: The CBI believes that local opposition to planning applications is sometimes distorted by lack of factual information on health and environmental impacts of waste technologies. If business provides this information it can be accused of bias in the results. Government funded research such as the health impacts study of waste management activities can assist in such cases.

Reducing the impact of environmental crime

25. Criminal activity, such as fly-tipping, frequently gives business a bad name and undermines the responsible businesses that comply with the regulations. To gain a level playing field, responsible business wants strict and fair enforcement. However, a distinction must be made between these deliberate offenders, and businesses with good environmental records which make a genuine mistake or administrative error.

26. The Strategy made none of the improvements to the enforcement system that are required. The CBI believes that a major deterrent should be the certainty of being caught and regulators must be sufficiently funded for their enforcement role. Unfortunately, the fines imposed by the courts for environmental offences are frequently insufficient to act as a deterrent, sometimes being less than the costs of legal disposal for the waste. Business suffers twice, once by being undercut and once by having to pay for clearance of own sites. Improvements in the training of magistrates may improve this situation.

CBI

November 2007

Annex

CBI responses to the Committee’s specific questions

Q1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management

27. See main response.

Q2. The role for and implementation of regulations, and their enforcement

28. See main response.

Q3. The classification of waste

29. Materials should be classified as waste only where there is need for it to be controlled eg to avoid fly-tipping or for disposal. Waste sold for use/recycling will not be fly tipped. It should be noted that other authorities than the Environment Agency may exert control, such as the Health and Safety Executive

30. Within this classification waste should be classified according to its actual properties eg lead glass does not leach lead and is not hazardous. The current European Waste Catalogue is not helpful as it is not user friendly and classifies wastes by the industry producing them. The same material may have more than one classification if it is produced by more than one sector.

Q4. The proposals for financial incentives to increase household waste prevention and recycling

31. The CBI supports the principle of this initiative.
Q5. The role of composting.

32. Composting is only one of a number of valuable routes to produce products from biodegradable waste, others exist such as Mechanical Biological Treatment, Anaerobic Digestion etc. The Government should resist the temptation to favour any particular technology. The recyclate market should determine the technology.

Q6. The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

33. See main response.

Q7. The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

34. The Strategy rightly makes the important link between reduced landfill and reduced virgin resource use, and carbon abatement. The detailed impact is complex, given that there are cases where recycling can actually be more carbon intensive than used/production of virgin material, and also that modern landfill employs methane capture for a significant amount of methane emissions. It should be noted that Landfill gas generation uses methane. Between one half and three-quarters of landfill gas methane is collected for this purpose, thus minimising methane emissions and producing renewable energy at the same time. Therefore while the Strategy can and should make a small but important contribution to meeting carbon targets, it is important that the cost/tonne of carbon saved of proposed waste measures is compared with alternative polices developed through the Climate Change Programme and the Energy White Paper, to ensure cost effective policies.

Q8. The promotion of anaerobic digestion for agricultural and food waste

35. Anaerobic digestion (AD) is a very suitable technology for producing energy and recyclate from biodegradable waste. It is capable of diverting large quantities of biodegradable waste from landfill and saving on the emission of greenhouse gases. Further technological development may provide competing technologies to AD. Provided both the carbon footprint and resource efficiency of the process is taken fully into account, the Government should allow the market to decide the technology that is actually used. (see paragraph 32 above).

Q9. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

36. See main response.

CBI
November 2007

Memorandum submitted by the National Farmers’ Union (Waste 51)

The National Farmers’ Union (NFU) is pleased to respond to the Environment, Food and Rural Affairs Committee inquiry on Waste Strategy for England 2007. The NFU has some 55,000 farmer and grower members in England and Wales and represents the great majority of fulltime commercial farmers.

Executive Summary

1. The NFU generally welcomes Waste Strategy for England 2007 as a step forward. However, the strategy still has a huge imbalance towards household wastes and local authorities. There is little new outside the domestic sector and it fails to offer the necessary level of increased support for business. While the statements to achieve synergies from the better integration of municipal and commercial waste facilities and the encouragement given to Local Authorities to take wider role in working with industry are welcome, very little detail is given on how this is to be achieved. The NFU is pleased the Strategy acknowledges the work of the Waste Protocols Project. We would like to see Defra commit further long-term funding to ensure the continuation of this important initiative.

2. The Strategy is disappointingly short on action to tackle the growing problem of fly-tipping. While we support many of Government’s proposed actions to reduce fly-tipping, it is hard to see how these will be achieved without the commitment of the necessary resources, especially to investigate and enforce serious
incidents of fly-tipping on private farmland where it is clearly the work of organised criminal elements. We are confused as to why the strategy is proposing the introduction of financial incentives for household waste prevention in the face of overwhelming advice to the contrary from the Communities and Local Government Select Committee. We are concerned such developments may contribute to increased levels of fly-tipping and thereby compromise the ability of Defra to deliver its policy objectives for the prevention of illegal waste activity.

3. The NFU welcomes the setting of higher targets for the composting of household waste and believes that the on-farm composting sector can make a significant contribution to help Government achieve these targets. However, we have concerns that reform of the Waste Management Licensing regime may result in regulatory barriers that restrict the development of the on-farm sector. Similarly, we welcome the Strategy’s strong support for anaerobic digestion (AD) and believe that the farming sector can play a key role in the development of the technology by offering on-farm sites and facilities. We believe that AD technology has considerable potential to reduce net methane emissions from management of agricultural manure and slurries to help tackle the UK’s contribution to climate change. However the key issue of land use planning matters seems to have been overlooked in terms of the ability of the UK’s capacity to develop the necessary infrastructure required to deliver the objectives set out in the Strategy.

How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management

4. The NFU welcomes the Strategy’s generally broader scope to consider all wastes. However, the strategy still has a huge imbalance towards household wastes and Local Authorities. If Government is serious about tackling the large volumes of waste produced by business and industry more detailed proposals to drive commercial and industrial resource efficiency are required.

5. We welcome the fact that the strategy clearly encourages joint planning and procurement between Local Authorities—both between waste disposal authorities and waste collection authorities in two tier areas and between groups of adjacent authorities. We are also pleased that the strategy also encourages broader roles for local authorities in planning for waste management and infrastructure for all wastes not just municipal. A welcome statement, if it is achieved, is the intention to achieve synergies between municipal and other waste treatment through joint merchant/municipal facilities. The NFU believes resource-based strategies and infrastructure, regardless of sectors/sources of wastes are vital in delivering a proper resource economy in England for the future. There are however, again, no firm proposals to require, support or facilitate this broader role in the strategy. Also, the crucial issue of land use planning is not sufficiently addressed. The Strategy merely reiterates the current Policy Planning Statement, PPS 10. Meanwhile the recent planning white paper only concentrates on very large waste facilities.

6. While we are aware that some examples of co-operation and collaboration exist throughout England, these tend to still be in the minority and much potential remains for joint working. However, we feel that if this is to really be achieved then the strategy needs to go further than simply encouraging joint working. Again firm and detailed proposals to either directly support or facilitate such plans are required.

7. We feel strongly that Local Authorities need to take some responsibility to help SMEs (including farm businesses) with waste management. For instance, there are currently very few easy options available for SMEs, especially those that work from home even though much of the waste they produce may be very similar in nature to household waste. An ideal approach would be for this source of waste to be collected from the property by the Waste Collection Authority, or delivered to a nearby Local Authority household disposal site by the SME home worker/householder along with household waste from the same property. For instance, Local Authority household collection sites could work with SMEs to accept small amounts of commercial waste and to issue waste transfer notes. This would not have to be at a scale that would disrupt the daily workings of the site or distract the site from its primary aim of dealing with household waste. For example, this facility could be made available for one day of the week and only apply to smaller volumes of waste.

8. In most cases, home-based businesses (we include farmers in this category) would be prepared to pay a small fee in return for the receipt of a waste transfer note and the peace of mind that they have fulfilled their legal duty in passing their waste to a licensed and responsible contractor/site that will dispose of their waste. Unfortunately, doing the right thing is often made the most difficult thing to do. Therefore this has to be the best option for all involved here and would be a huge help in leading businesses towards compliance whilst helping prevent illegal waste disposal. Clear instructions or guidance from central government are needed here to encourage Local Authorities to take a more pro-active approach in helping SMEs manage their waste.

9. The NFU is also pleased that the strategy seems to support more localised resource management facilities and solutions fit to meet local circumstances. As we point out during the course of this submission, the agriculture sector has a key role to play in offering sites, facilities and infrastructure to offer local solutions to local waste management issues.
The role for and implementation of regulations, and their enforcement

10. The NFU is supportive of Defra’s move towards simplifying the regulatory system and making it more proportionate and risk-based. Yet for farmers and landmanagers, perhaps one of the biggest disappointments is that the Strategy fails to give sufficient enough attention to the widespread problem of fly-tipping. While we support the proposals for tackling illegal waste activity that are set out in the Strategy, we nevertheless feel it is desperately short on detail as to how these actions will be implemented.

11. While the NFU welcomes any measures that might help alleviate the problem and any steps to encourage good practice, ultimately we believe that serious incidents of fly-tipping can only be tackled with more resources. Proper support and resources must be made available to the Environment Agency and Local Authorities to ensure, as the Strategy states, “that the Environment Agency and Local Authorities can do their job as effectively as possible” We believe that the extent of resources within Local Authorities and the Environment Agency to pursue serious incidents of criminal activity to be one of the main limiting factors. We do not feel confident that the Strategy puts forward a sufficient and clear commitment to make the necessary resources available. The Strategy talks of “ensuring better enforcement”. But regulators need full resourcing, not just via fees and charges, to regulate the unregulated and ensure that enforcement can be expanded.

12. The Strategy rightly points out new powers to tackle illegal waste crime are available to police, Local Authorities and the Environment Agency. But it is essential that they must make much greater use of these powers. Therefore training must be available for enforcement staff and the judiciary to ensure that they are aware of policies and procedures and that they are adequately prepared to bring cases against fly-tippers—particularly those persistent offenders. The level of fines for those convicted of fly-tipping are woefully inadequate to act as a sufficient deterrent. The NFU feels that until fines are increased to match the seriousness of the crime, offenders will continue to repeat offend.

13. More “visible” enforcement is needed and Local Authorities must be encouraged to develop a strategic approach to fly-tipping at a local level building on existing frameworks for tackling crime. There needs to be greater provision at civic amenity sites for longer service hours and inclusion of commercial waste facilities (either additional to household sites or incorporated within household sites). The Environment Agency’s BREW-funded, area-based targeted waste crime initiatives have achieved much in a relatively short period of time. E.g. The progress made in the Derby/South Derbyshire area is just one example of how the provision of more resources to the Environment Agency and Local Authorities can enable new approaches in partnership working and more innovative approaches to tackling waste crime.

14. The Strategy talks of “improving the data and knowledge base”. While we recognise that the development of the Flycapture database represents a considerable step forward in this regard, it must be stressed that the database fails to record fly-tipping incidences taking place on private land. Therefore the knowledge base in this area is unclear. In response to parliamentary question in March 2003, Michael Meacher stated that an estimated 618,000 tonnes of waste was tipped on agricultural land during 2001. A further breakdown in the figures indicated that some 380,000 tonnes of construction and demolition wastes were tipped, some 118,000 of cars, 94,000 tonnes of green wastes, 8,700 tonnes of tyres, 8,500 tonnes of household waste, 5,600 tonnes of furniture and 2,900 tonnes of household goods. It is thought that half of the estimated £100 million spent dealing with fly-tipped rubbish is born by private landowners themselves. In the absence of little official data, the actual figure could well be more. Therefore the Environment Agency and other enforcement authorities need to be equally aware of the extent of fly-tipping taking place on private farmland. This information is not currently captured by Flycapture.

15. More importantly, if the problem of fly-tipping is to be genuinely tackled, resources must also be available to investigate serious incidents of fly-tipping that occur on private land as well as public land. Although Local Authorities can be sympathetic about the problems of fly-tipping on private land and may remove fly-tipped waste in some cases, in the majority of cases it is left to the farmer to remove and manage and pay for the disposal of dumped waste. In the case of serious incidents which are clearly the result of organised criminal activity, the costs of removal can be substantial. This is neither fair nor helpful; nor is it in the public interest. Landowners are happy to work with authorities to help identify criminal elements and cooperate with surveillance activities but the will and the commitment from the authorities must be there.

16. One must also bear in mind that there are synergies between potential increases in waste crime, new proposals put forward in the Strategy and future increases in landfill tax. As the cost of waste disposal increases the likely increase in environmental crime needs to be controlled. Therefore it is only fair that some of the extra revenue from any increase in landfill tax should be used for better enforcement to prevent this possible knock-on effect. At the very least, Defra’s BREW programme must continue to fund work on tackling waste crime.
The classification of waste

17. It is well acknowledged that the classification of material as a “waste” can act as a huge barrier to its re-use. Businesses have to negotiate their way through much confusion and conflict when it comes to the definition of waste in particular circumstances. In many cases European and national legislation act as disincentive in the reuse or recovery of waste material which otherwise has the potential to be a valuable resource.

18. The NFU therefore welcomes the work of the Waste Protocols Project as an innovative approach to define the route to full recovery and take materials outside of regulatory waste control. The NFU has been involved in this project both through the project advisory board as well as being more directly involved in the development of specific protocols, such as the Quality Protocol for PAS100 Compost.

19. Against the backdrop of the current European Waste Framework Directive, we believe the protocols route is the way forward. Agreed standards and protocols provide users with assurance and confidence—especially since some of the recovered products may be applied to agricultural land and it is farmers who manage much of this country’s “landbank”. It is therefore essential Government ensure continued funding is made available through Defra’s BREW programme—not only to enable this project to continue, but to make sure it is adequately resourced to do so efficiently.

The proposals for financial incentives to increase household waste prevention and recycling

20. The NFU understands that this topic has been examined in depth in the Communities and Local Government Select Committee report on Refuse Collection. Government will be aware that the committee argued:

— The introduction of financial incentive schemes will merely be seen as an additional charge for a service most householders believe they already pay for through their council tax;
— Revenue-neutral financial incentive schemes does not necessarily mean “cost neutral” and will raise little money for councils to help them manage their waste budgets in the face of rising costs;
— Sums a householder may gain will be comparatively small (Between £20 to £30 per year) and arguably insufficient to change behaviour;

21. The Committee concluded that it was hard to see why any council would want to set up a complicated charging scheme that earns it no money and risks widespread disapproval. The Committee’s conclusions were based on wide variety of submissions and evidence and it is hard to disagree with the findings. Therefore while we agree it makes sense for Government to give Local Authorities flexibility to determine how they respond to their waste management challenges, it would seem foolhardy to pursue the introduction of such incentive schemes.

22. Most importantly it was recognised that such schemes could result in perverse effects such as potential increases in fly-tipping. Therefore such proposals for financial incentives might seriously compromise the ability of Defra to achieve the waste crime policy objectives set out in the Strategy. As we outlined previously, fly-tipping is a crime which can seriously impact on farmers and rural landmanagers and more must be done to address this problem.

23. We cannot help but feel that it would be more worthwhile for Government to focus on incentives for waste prevention and recycling by all sectors, not just for household waste. While household refuse generates considerable political and media attention it only represents around 9% of the total national waste stream. Financial incentives are likely to deliver more impact if focussed upon reducing, recycling and reusing waste in the commercial and industrial sector. Offering forms of capital relief can be a good way of incentivising investment.

The role of composting

24. The NFU welcomes the higher targets set out in the Strategy for the composting of household waste. We strongly believe the agricultural sector is well positioned to play an important role in managing societal waste through on-farm composting. On-farm composting of biodegradable waste can provide a cost-effective, environmentally favourable waste management option, which is already being successfully employed to deal with various biodegradable waste streams such as green garden waste. The Composting Association’s 2004–2005 survey on the State of Composting and Biological Treatment in the UK showed on-farm enterprises to represent around 30% of composting sites across the UK. Collectively, on-farm sites are thought to have dealt with around 13% of the overall organic waste processed in 2004–2005 and the on-farm sector saw a 40% increase in the quantity of waste managed between 2003–2004 to 2004–2005.

25. Many farmers have taken the opportunity to diversify into small-scale on-farm composting. On-farm sites provide valuable recycling facilities close to the source of the waste and play an important role in those rural and semi-rural districts to which they are particularly suited. In addition, on-farm composting in many cases offers farmers and landowners an alternative source of much needed income and can stimulate
additional employment. Farmers naturally make ideal waste managers as they have many of the resources needed—space, machinery, land and existing hard standing and building infrastructure. Crucially they also have the inherent knowledge, understanding and experience of managing biological systems.

26. The NFU therefore feels that the continued contribution from the on-farm sector will be crucial in achieving the targets set out in the Waste Strategy. However we are concerned that significant changes to the regulations governing composting may lead to the curtailing of activities in the on-farm sector. The majority of on-farm outfits (around 80%) operate on waste management exemptions as opposed to full waste management licences. As part of Defra’s Review of Exemptions and the introduction of the new Environmental Permitting Programme (EPP), Defra and the Environment Agency are looking at options such as reducing the yearly limit and introducing new charges for registration and notification. Although at present the quantity limits and costs associated with the current exemption lie right on the edge of what can be viable, they still manage to provide for a scale of composting that can be carried out at a sustainable level.

Moving into full Waste Management Licensing/Environmental Permitting is a major step change and the costs and time involved will mean such a route is simply not viable for many farmers. The future for on-farm composters therefore is either going to mean farmers investing with significant financial cost to comply with new conditions and controls or either dramatically reducing the amount of waste they recycle to a token gesture. The affect of such changes, may be to squeeze out many farm composting units. Entry costs may become too prohibitive for those farmers looking to get into composting as a viable diversification while any reduction in limits may make them an unattractive option for councils. A fact that sadly tends to be overlooked in all this is how such smaller, local farm operations are vital to a sustainable rural economy.

Most importantly, if such regulatory changes hinder the development of smaller-scale on-farm composting, we feel Defra will struggle to meet the ambitious targets set out in the Strategy.

27. Another point to consider is that the main market for finished compost is agricultural land. Use of the material on land on the same farm on which it has been composted can save on energy usage and transport costs. Finished compost is a well recognised soil conditioner and therefore can play an important role in enabling landmanagers to meet other Defra policy objectives such as Cross Compliance requirements for soil management. However Defra’s proposed changes to the Nitrate Vulnerable Zone (NVZ) Action Programme pose a considerable regulatory barrier to the agricultural market for finished compost. Proposed changes to closed periods and whole farm nitrogen loading limits may considerably restrict the use of organic materials on farmland. This in turn could also have a serious affect on the ability of Defra to meet the targets set out in the Waste Strategy.

The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

28. The NFU is pleased to see that Government is putting in place a statutory producer responsibility scheme for non-packaging farm plastics. We feel if such a system is implemented in the correct way it will lead to further recycling and recovery of waste plastics and the diversion of such material from landfill. The NFU is working closely with Defra and other stakeholders to develop a workable scheme. While the producer responsibility concept puts the onus on the producers of the plastic material to pay for the cost of the recovery and recycling/disposal, some costs may be passed back to farmers in the form of increased plastic costs. We encourage Defra to do what it can to monitor or ensure that such costs are not too excessive as this will only hinder the development of the scheme. This would be in nobody’s interest.

29. We understand the House of Lords Science and Technology Select Committee have appointed a sub-committee to look waste reduction with a focus on sustainable product design, products and production processes. It will be interesting to see the information gathered as a result of this inquiry.

The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

30. Proposals set out in the Waste Strategy have the potential to reduce greenhouse gas emissions from waste management—particularly from the development of localised solutions to for local problems, eg as outlined previously, on-farm composting of waste from the local vicinity and the subsequent use of the finished material on the same farm can save on energy and transport and some of the associated greenhouse gas emissions involved.

31. If the strategy is sincere in its support for the development of anaerobic digestion (AD) then there is considerable potential for reducing methane emissions. The NFU feels AD appears to be the most promising mitigation option for reducing net methane emissions from management of agricultural manures and slurries. This is arguably both more energy-efficient and economic than composting of such residues, since it yields a source of income from energy recovery, while retaining the nutrient value of the digestate or “biofertiliser” by-product.
32. However it is important more work is undertaken to develop greater understanding in this area. We generally need to learn from methane mitigation knowledge in other countries, especially work done on-farm within the EU. More research is needed on the use of digestate from anaerobic digestion as a fertiliser, including its effects on all greenhouse gas emissions, environmental impacts, etc.

The promotion of anaerobic digestion for agricultural and food waste

33. The NFU welcomes the Strategy’s strong support for anaerobic digestion (AD) as we feel that the agricultural sector has an important role to play both in supplying waste inputs and also providing some of the infrastructure for AD plants. The farming sector can offer sites and facilities for such plants, in much the same way as it currently does with composting units.

34. Such on-farm AD plants can contribute to rural diversification as well as playing a useful role in improved manure management. However, they have previously proven uneconomic except where other (waste or non-waste) matter is “co-digested” with the manures in order to boost gas and therefore energy yield.

35. While the measures set out in the waste strategy are supportive and send out positive signals we are concerned that much more needs to be done if the technology is really going to take off. The NFU believes that future deployment of AD technology in Britain is likely to involve:

- On-farm digesters utilising manures and farm-based feedstocks like silage maize. These will not utilise “waste” and so can operate without the need for a waste management licence or environmental permit. Income will come from sale of energy and possibly digestate—should markets develop as a result of the AD Digestate Protocol. Therefore, while we appreciate that this inquiry is focusing on waste issues, we must stress that the NFU believes it is critical that AD is not regarded solely as a waste management option, but also a way of adding value to a by-product.

- Larger centralised waste-licensed “merchant” plants, accepting multiple biodegradable wastes (manures, food packing or processing wastes, supermarket waste food, local authority green waste or food wastes), with income from both energy sales and gate fees.

36. The NFU is aware of examples at both of these scales. The former are likely to be around 250–500 kW electrical capacity, while the latter would be more like 500 kW–10 MW. On-farm digesters could be shared between several nearby farms, subject to regulation of movements and landspreading of manures and digestate between farms. Centralised AD plants might be located on rural industrial estates or close to food processing facilities, and could perform a role in localised treatment of municipal wastes, e.g. at the scale of a market town. Centralised AD plants are likely to be more profitable than single-farm plants, although they will have a longer design/planning lead time. Technologically, there is no reason why AD should not succeed in the UK as it has in Germany, where 3500 single-farm units have been installed with a combined capacity of 1100 MW.

37. The NFU welcomes the proposed doubling of the Renewables Obligation Certificates (ROCs) for AD technologies. While this sends out a positive signal to the industry, Government still needs to do much more if it is serious about incentivising take-up, particularly at the smaller on-farm scale. This could include offering capital grants, forms of capital relief, low-interest finance, or project development support and assistance with the development of market infrastructure (E.g. electricity network access, markets for use of digestate etc.) If Government really wants to AD take off it must do more to raise awareness of the need for the technology. Awareness raising initiatives need to be targeted in particular at planning authorities but also regulators and communities as gaining support and understanding from all these stakeholders will be key to overcoming current barriers.

38. The NFU is pleased that Defra is supporting the development of a standard and protocol for the production and use of anaerobic digestate. However it is essential that the proposed digestate standard reflects both ends of the scale—i.e. smaller AD units with agricultural inputs only, as well as larger centralised AD plants (for which the digestate standard may require more comprehensive proof of inputs and processing conditions).

The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

39. It is well acknowledged that the existing waste management infrastructure in England cannot currently deliver the objectives of the Waste Strategy. The NFU supports the Chartered Institution of Waste Management (CIWM) on this point, which argues that strong historic reliance on landfill in this country means that we must choose, design, build and commission new waste treatment facilities of significant size at a rate of one per week for the next decade. Facilities will be needed to meet the EU batteries directive whose first target date is 2012 but with almost no facilities to manage batteries anywhere in the UK. We will need an adequate network of hazardous waste treatment facilities, WEEE processing plants and liquid waste treatment facilities. The strategy also proposes exploration of general landfill bans—as are used elsewhere in Europe—which could require much more rigorous sorting and/or treatment of commercial and industrial
The critical issue that has to be addressed is planning. The planning system for waste facilities in England will prove to be the rate determining step in developing new infrastructure. The Planning White Paper issued in May 2007 seeks to streamline the planning system but this is likely to only have an impact on the development of particularly large-scale, strategically important waste infrastructure.

Following the introduction of the Agricultural Waste Regulations in 2006, agricultural waste is now classified as industrial waste. This means there is a need within the sector for appropriate facilities in rural areas for handling, recycling and recovery of agricultural waste. Defra and the Environment Agency are playing their part in encouraging secure, sustainable farm waste management in line with farmers' agricultural business needs and consistent with government policy on planning and waste management. This includes providing advice for those farm businesses looking to become “hubs” for farms in a locality participating in “waste clubs and recycling schemes”. Such clubs or schemes would typically involve collection and delivery of small amounts of solely “agricultural wastes” from local farms to central farm collection site where it can be sorted or cleaned and bulked up to sufficient enough volume so that it then becomes economical to move it to a proper waste management/disposal site. Such activities will be fairly seasonal by nature as they will correspond with the annual agricultural production cycle.

However anecdotal evidence suggests that while farm businesses are interested in diversifying into this area many are dissuaded due to the administrative burdens, costs and lengthy delays associated with engaging with the planning and pollution control interface. This means there is a real threat that such necessary infrastructure will not develop at all in some areas. We would encourage government to consider relaxing the requirement for express planning permission for certain developments of this kind. Since such activities will typically involve relatively small volumes of specific agricultural waste types, we instead urge government to view this as agricultural activity not needing planning permission or alternatively to explore ways that mechanisms such as local development orders or permitted development including prior notification can facilitate the development of farm waste infrastructure. Communities and Local Government recently commissioned a study for extending permitted development rights for non-household development. We believe that any review or revision of permitted development provides an ideal opportunity for Government to take this point forward.

In our response to the joint DCLG & Defra Consultation on options for improving the way planning and pollution control regimes work together in delivering new development we identified many barriers facing planning and waste management. However since the consultation in 2006, we are yet to hear of firm proposals or new developments from government on how such land use planning issues are to be reconciled with the need for new waste infrastructure. Until such issues are properly addressed we feel that England will struggle to develop the adequate infrastructure required to deliver the objectives set out in Waste Strategy for England 2007.

National Farmers’ Union

November 2007

Memorandum submitted by the REaD Group plc (Waste 52)


2. Our comments are restricted to the issue of producer responsibility relating to the waste resulting from direct marketing to households and businesses. We believe that better management of information and data by public, private and voluntary sector organisations could significantly reduce the amount of waste caused by direct marketing without unfairly impeding legitimate activity by commercial and charitable organisations. In particular we highlight the role that data suppression has to play in meeting these important objectives.

DIRECT MAIL

3. Volumes of direct mail have grown dramatically over the last two decades. As the Waste Strategy notes, in 2005 3.4 billion items of addressed direct mail and 13 billion items of unaddressed direct mail were sent out to UK households and businesses. Since 2003 volumes of unaddressed mail appear to be increasing at a rate of 1–2% a year.

4. There is no doubt that direct mail is responsible for a significant amount of household and commercial waste. Direct mail is estimated to account for approximately 550,000 tonnes of the household waste stream, which is around 4.4% of the UK’s annual consumption of paper and board. In 2003 only about 13% of direct mail was recycled.
5. Therefore, while targeted direct mail allows firms of all sizes to advertise their products and services to a wider customer base, it is important for companies, consumers and the community that this is done efficiently, effectively and with regard to the environment. More than ever, producers of direct mail—whether they are businesses or public sector organisations—need to ensure that they market responsibly.

6. There are today various ways in which the problem of waste from direct mail is addressed: individual campaigns (eg junk mail awareness), opt-out and data suppression. Recent research by Eunomia for DEFRA has explored the approach taken in other countries, looking at the effectiveness of bans, levies and increases in postal duties for junk mail as well as mandatory measures. One of the key methods identified was data suppression; a technique which the research suggested could be expanded across the industry.

7. Data suppression is at the core of the products offered by The REaD Group, allowing us to meet our commitment to reduce the effect of the direct marketing industry on the environment. By ensuring that direct marketing is not sent to individuals who have moved, to the deceased, or to people who do not want to receive certain mailings, our data suppression products make direct mailing more efficient for companies and reduce the amount of material being produced.

THE BENEFITS OF DATA SUPPRESSION

8. Data suppression is the practice of removing out-of-date or incorrect information from the large databases which constitute the majority of direct marketing mailing lists. Many of the information databases held by organisations have been developed over long periods of time and can quickly get out of date. As a result, databases often contain the names and details of individuals who no longer live at the listed address or who have died. The result is that a huge proportion of mail sent out will be addressed incorrectly, producing large amounts of waste, blocking the postal system and causing considerable annoyance to individuals dealing with superfluous mailings.

9. Inaccurate and out-of-date databases do not only cause environmental waste. Misdirected direct mail can also be sent to deceased individuals, sometimes over 10 years after their death, causing emotional distress to bereaved families. It can lead to instances of Impersonation of the Deceased (IOD) fraud. If a criminal obtains a credit card application sent to an individual who has died that means that the deceased’s identity can be stolen. The Bereavement Register was established by The REaD Group to eliminate instances of direct marketing being sent to deceased individuals. In this way, we have helped not only to stop these wasteful mailings but also tackle identity fraud and stop the emotional distress being caused to the family members of the deceased.

EXISTING “OPT OUT” AND SUPPRESSION MEASURES, AND DEFRA TARGETS

10. Currently the Direct Marketing Association actively promotes the Mail Preference Service (MPS), an “opt-out” service. This service aims to stop direct marketing by enabling consumers to have their names and home addresses in the UK removed from the databases and lists used by the industry. Today the MPS has over 3,200,000 subscribers. It is estimated that the MPS eliminates around 95% of unsolicited junk mail (mail from organisations with whom you have never had a relationship with), which amounts to 24kg a year in non opt-out households.

11. However, currently the Mail Preference Service often fails to stop direct mail from organisations you may have dealt with and provides no middle ground for the consumer to pick and choose which organisations may send them information. The MPS is only effective in so far as the individual wishes to opt-out of all direct mailings. If the individual consents at a later date to be on the mailing list of a desired product or service, then it is possible for their information to be reused despite their previous opt-out.

12. It is possible to adopt a much more flexible approach to be developed so that individual can enjoy the benefits of advertising, without the nuisance of junk mail. Products such as itsmypost.com, set up by The REaD Group, offers more choice to the individual about what direct mail they receive, by putting the legal onus on the mailer to stop sending direct mail.

13. Research suggests that existing data suppression mechanisms like MPS eliminate between 7,860 and 13,100 tonnes of junk mail per annum. This figure could be significantly increased if there was more of an effort made to remove people who are unlikely to respond to direct marketing approaches, using the methods we describe above.

14. However, an increase in suppression would not help the direct marketing sector to meet the Government target relating to the direct marketing sector, since that relates to increasing recycling rather than reducing the volume of materials used in the first place. This seems perverse, and is probably unintended. We therefore call on the Committee to recommend that the target is amended to reflect the contribution that “non-production” can make.
CONCLUSION

15. Direct marketing is a valid and effective way of enabling public and private sector bodies and charities to contact a large number of people at one time. By using up-to-date and accurate information for mailings by using the latest data suppression techniques, as opposed to out-of-date lists which include people who no longer live at the address or who are deceased, organisations will achieve a better success rate at the same time as improving their environmental performance by reducing waste production.

REaD Group plc

December 2007

Memorandum submitted by the Sustainable Organic Resources Partnership Expert Advisory Group
(Waste 53)

ANAEROBIC DIGESTION & CLIMATE CHANGE

SUSTAINABLE RECYCLING OF ORGANIC RESOURCES WITH RENEWABLE ENERGY PRODUCTION

A SORP EAG PAPER

August 2007

INTRODUCTION

Anaerobic biological technologies have been used by mankind for many centuries, initially for food and beverage production and more recently in the water industry for treating sewage sludge and generating renewable energy. Our need to tackle climate change will demand widespread adoption of sustainable solutions and this will favour biological anaerobic technologies. These processes offer high energy yield, high treatment rates and low residuals production; important benefits increasing popularity of digestion in the future.

The treatment of organic materials involves the breakdown of large composite structures, initially into complex molecules of proteins, fats and carbohydrates and eventually to smaller molecules to allow the reuse of essential carbon, phosphorus and nitrogen for the growth of new plant and animal life. The biological pathways which facilitate this can be aerobic or anaerobic. Both occur naturally but aerobic pathways are rate limited by the transfer of oxygen to the organic material, and whilst man in his ingenuity has been successful in overcoming this by using energy intensive aeration processes, these contribute further to climate change.

In nature, concentrated organic materials resulting from decomposition of plant and animal life undergo recycling by the anaerobic route and it is this pathway which is used and intensified in anaerobic processes such as Anaerobic Digestion (AD). This is the preferred technology used by the water industry for stabilising sewage sludge and providing beneficial safe sustainable recycling of biosolids (ie treated sewage sludge) to the environment.

There are many other strong putrescible organic wastes and these have traditionally been buried in landfills or spread on land, generally without prior treatment. The Landfill Directive, and EU diversion targets mean that by 2015 some 65% of putrescibles wastes must be diverted from landfill and treated. AD offers an environmentally friendly, energy producing, fully proven and resilient alternative to landfilling of putrescible organics.

In the UK the total amount of “waste” organics is about 40 million dry tonnes p.a.141, 142, 143, 144 (see Table below) and if all of this was treated using AD it could in theory provide about 10% of the total UK electrical energy requirements. Diversion of organics from landfill has a further significant beneficial impact on global warming by eliminating uncontrolled emissions of methane from the decomposition of the waste and converting them to renewable energy as heat and electricity.

<table>
<thead>
<tr>
<th>Organic Waste Energy Sources</th>
<th>Production Dry tonnes p.a (million)</th>
<th>Tonnes oil equiv. (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewage Sludge</td>
<td>1.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Livestock Manure</td>
<td>15</td>
<td>2.2</td>
</tr>
</tbody>
</table>

141 Sewage sludge data from e-digest of environmental statistics, published February 2006.
142 Livestock manure data from Biomass task force report, 2006.
143 Commercial food waste data from Encycle News, November 2006.
<table>
<thead>
<tr>
<th>Organic Waste Energy Sources</th>
<th>Production Dry tonnes p.a (million)</th>
<th>Tonnes oil equiv. (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Food</td>
<td>16</td>
<td>4.5</td>
</tr>
<tr>
<td>Domestic Food</td>
<td>7.5</td>
<td>2.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
<td>9</td>
</tr>
</tbody>
</table>

In the UK over the last decade, there has been significant technical advancement and financial investment in advanced anaerobic digestion to increase utilisation of existing assets and safeguard the beneficial recycling route for sewage sludge to land.

Advanced digestion involves pre-treatment before digestion to increase hydrolysis and acidification of the waste. This provides a substantial efficiency gain in conversion of organics to gas and renewable energy along with increased throughput, a higher quality, pathogen free, “compost” like end-product and reduced operating costs. Much of the AD expertise derives from this experience in the water industry sector and despite differences in the input “waste”, is transferable to other “waste” sectors. Thus existing knowledge allows fast-tracking of process application to other “wastes” such as municipal household (organic fraction), domestic and commercial food waste, and livestock manures.

**Anaerobic Digestion Biochemistry**

Anaerobic digestion involves the breaking down of complex organic materials, typically consisting of carbohydrates, proteins and fats, into simpler compounds, in the absence of oxygen. Hydrolysis reactions bring about the solubilisation of solid particles and these are then broken down into smaller molecules of simple sugars, amino acids and fatty acids. The process continues until all degradable material is converted to acetic acid or hydrogen and ultimately to biogas (a mixture of methane and carbon dioxide). Other essential nutrient elements such as nitrogen and phosphate are liberated from the original complex material largely as simple inorganic salts.

The process can take place at ambient temperatures and in a single reactor, however, optimisation is achieved by using higher temperatures (35–55°C) and multiple reactors. The residue from digestion is known as the digestate. This is a stable, nutrient rich humus which is used sustainably to improve soil quality and fertility with the addition of valuable stable organic matter and nutrients.

**Food Waste**

Each year in the UK about 7 million dry tonnes of food waste is produced as part of the manufacturing processes and there is a further 9 million tonnes of “out of date” or damaged food waste from supermarkets. Currently most of this is disposed of in landfill sites. This waste has a significantly higher energy value than the organic residues currently treated by AD (ie sewage sludge and livestock manure) and is generally available uncontaminated in large amounts, providing an ideal feedstock for AD treatment and recycling to farmland.

**Municipal Waste**

About one third of Municipal household waste is organics which includes kitchen waste, garden waste and disposables such as nappies as well as paper and cardboard. Not all of these are biodegradable but kitchen waste is and it rapidly becomes putrid and smells. It is ideal for anaerobic digestion whereas garden waste is best composted, and paper can be more directly recovered. Current collection practice focuses on source sorting of clean waste (paper, bottles, cans, garden waste) whilst food waste is mixed in with the non-recyclables. In modern high density housing this can cause odour nuisance and health concerns amongst residents. The unsorted non-recyclables are then collected by the municipality and the organic fraction can then be separated out and treated. This process is generally known as Mechanical Biological Treatment (MBT) and the Biological stage is typically AD or composting.

Perhaps a better method is to separate the kitchen waste at source. When coupled with frequent collection of these organics using biodegradable plastic bags, odour and health worries are no longer a concern and this waste provides an ideal feed for AD. There are a small but increasing number of kitchen “waste” sorting schemes across the UK serving both composting and AD technologies.

145 Agriculture emission from NFU and Methane to Markets Partnership.
AGRICULTURE

Agriculture is responsible for 6.5% of the UK’s GHG’s (Greenhouse Gas) emissions\textsuperscript{146}. The emissions of interest for AD, are those resulting from the decomposition of organic matter in livestock manure. The methane emitted from liquid manure management systems can be captured and used as a renewable energy source. In the UK this is about 700,000 tonnes p.a. of carbon equivalent.

AD is used in the European Union particularly in Germany, Austria and Denmark, to allow capture of this methane from livestock manures and by recycling the nutrients in the digestate back to the land, the use of inorganic fertilisers can be substantially reduced.

In Germany the plan is for 10,000 AD plants by 2010 with an installed electrical capacity of 3,000 MW capable of supplying about 5% of Germany’s electrical requirements. These agricultural based plants in Germany have benefited from the stable “Feed-in Tariff” arrangements (equivalent to 4 renewable obligation credits—ROCs) and a flexible feed approach allowing manure, energy crops and food waste all to be used.

There is much interest in the UK farming industry in AD. However, uncertainty about long term ROC values, increases the risk for any investor. More secure payback of capital can be achieved by co-digesting commercial food waste (which arrives with a gate fee) along with the manure. A number of such schemes are now operating in the UK.

ENERGY CROPS

There is much interest currently in using sustainable energy crops for production of bio-ethanol and biodiesel. Whilst AD provides an excellent solution for treating putrescible organics, it is also possible to directly digest energy crops such as sugar beet, wheat grain and maize (before they become food and waste) for energy production.

AD should generally provide a more efficient conversion from crop to usable fuel than other technologies\textsuperscript{147}. For example in producing bio-ethanol from sugar beet, the energy required for running the process is equivalent to 46% of the energy produced. By comparison such “parasitic” energy use is only 18% in producing biogas energy by AD from sugar beet.

AD produces biogas which is a premium fuel, ideal for electrical power generation and for heating using combined heat and power plants (CHP). The CO\textsubscript{2} present in biogas can also be removed and the methane fed into the gas grid or compressed and used as a vehicle fuel. The latter is being trialled in Sweden, and despite the parasitic energy use increasing it is still a very competitive 22%.

In comparing efficiencies of various processes for renewable energy production, clearly capital as well as running costs must be optimised. Whilst it is difficult at present to obtain reliable data for the above new applications, what is clear is the simplicity and resilience of the biological AD process using low temperature and simple robust tanks. This should ensure that over the long term, the total cost for an AD renewable energy installation, remains highly competitive.

BARRIERS TO AD GROWTH IN THE UK

All sustainable energy and waste technologies are inevitably more expensive than present practices. Without incentives, market economics will not provide the investments needed to deal with climate change.

There are two main drivers for AD; gate fees for accepting the waste and enhanced prices (ROCs) for the renewable energy generated. In the longer term, viability will depend upon how investors view the risk-reward profile with a crucial factor in the analysis being investor confidence in the value and long term stability of ROCs.

The present ROCs regime has worked well and provided an incentive for AD particularly where existing digestion assets exist. The UK water industry is a good example and output of renewable energy from AD has increased threefold between 2002 and 2006.

Current generating capacity in the water sector is 40MW\textsubscript{e} and sector data shows plans to expand this to 115MW\textsubscript{e} by 2010 with an ultimate potential of 186MW\textsubscript{e}. The discussion proposal to reduce the ROC incentive to 25% of its current value will curtail energy based investment in this sector. This will also have a knock-on effect to other sectors since the water sector is the cradle of innovation in AD technologies in the UK and supports a world class UK based supply chain. Growth and knowledge transfer to new applications in the UK will be best achieved by building on a stable base in the water sector.

The current definition of a waste within the Waste Framework Directive is also a barrier in that it limits recycling of prime quality organics material, eg “food waste” and this also limits the co-digestion of different wastes. The EA and WRAP have adopted an innovative approach to overcoming this, namely the development of treated product quality protocols along the lines of BS PAS100 for compost. This approach should greatly assist the application of AD technology in other sectors.

\textsuperscript{146} Agriculture emission from NFU and Methane to Markets Partnership.
\textsuperscript{147} Energy crop conversion data from Dr Andrew Salter, Southampton University, personal conversation.
Ev 336  Environment, Food and Rural Affairs Committee: Evidence

The scale of any sustainable AD development is ultimately constrained by the balance between nutrients supplied and the crop needs on the surrounding land to utilise the recycled nutrients, especially nitrogen in the digestate. This is overcome by dewatering the digestate and treating the liquors.

FORWARD VIEW

Anaerobic Digestion (AD) is the ideal process for treating "waste" generated from all stages of the food chain including the farm, abattoir, manufacturer, distributor, commercial and home food preparation to the resultant sewage sludge. Food “waste” has a high energy value and in capturing this, AD contributes to UK electricity needs whilst simultaneously facilitating recycling of essential nutrients and humus to the soil. AD can also use crops as well as “wastes” to generate renewable energy, especially electricity, and in a more efficient process, with lower parasitic energy requirement, than that used for bio-ethanol and bio-diesel production.

In practice there will be a variety of AD plants and whilst some will be dedicated to particular applications such as sewage sludge and household waste others will take a variety of feedstocks including livestock manures, food waste and energy crops. The new WRAP/EA quality protocols planned for the UK should revise the legislation and provide a level playing field for recovery of all biodegradable organics including those currently classed as wastes. In the longer term AD’s great strength as a natural biological process, able to convert putrescible organics into renewable energy and control odour, will become increasingly valued.

Sustainable Organic Resources Partnership Expert Advisory Group

December 2007

Memorandum submitted by the Environmental Industries Commission (Waste 54)

EIC was launched in 1995 to give the UK’s environmental technology and services industry a strong and effective voice with Government.

With over 330 Member companies EIC has grown to be the largest trade association in Europe for the environmental technology and services (ETS) industry. It enjoys the support of leading politicians from all three major parties, as well as industrialists, trade union leaders, environmentalists and academics.

EIC’s Waste Resources Management Working Group represents over 80 companies involved in sustainable waste management and the response below is provided in the context of planning for waste treatment infrastructure.

I would like to take this opportunity to respond to each of the areas of the area the Committee is focusing its inquiry on.

1. How policies proposed by the Waste Strategy will be implemented and the roles of those responsible for the production and disposal of different classes of waste—including industrial, business and household waste. Localisation as opposed to centralisation of waste management

MUNICIPAL WASTE MANAGEMENT

Municipal waste management is the responsibility of local authorities, and the provisions of the Waste Strategy are discharged through a range of measures, particularly the Landfill Allowances scheme.

However, the deliverability of the timed aspects of the targets set out in the Strategy is intrinsically linked with issues such as the planning, the availability of finance for new waste management facilities and the technical performance of these facilities.

EIC’s Waste Resources Management Working Group believes that it is crucial that these three issues (planning; finance and technical performance) are tackled together to ensure that the necessary waste management facilities are in place to meet the targets set out in the Waste Strategy.

For example, those facilities that often have highest levels of technical performance, and greatest bankability, are also those frequently attracting the greatest opposition during the planning process. This can delay the overall delivery of the necessary infrastructure, thereby jeopardising the achievement of the statutory targets.

Facilities that appear to offer more rapid progress through the planning process offer less certain, or incomplete, solutions, such that they may still need, to process their output, the use of facilities such as those described above that may be slower to deliver.

Whilst EIC supports the objective of making the planning system timely, cost effective, transparent and efficient (as set out in the recent Planning White Paper), our Members believe that it crucial to ensure that any changes to the planning system that streamline the delivery of waste management infrastructure are not at the expense of the key role planning plays in protecting the natural capital provided by the environment on which our economic system rests.
However, to ensure that the Directive targets are met on their due dates, EIC recommends the development of contingency planning, to be implemented incrementally, should progress be less rapid than necessary.

EIC also believe that the planning system could further facilitate the delivery of the Waste Strategy through the provision of recovery facilities in new developments.

EIC recommend that the provision of recovery facilities is included in relevant Planning Policy Statements to ensure that when a local authority approves planning permission for a new development it is on condition of suitable recovery facilities being put in place.

As part of the Waste Strategy the Government announced the launch of a Waste Stakeholder Group to provide external advice, challenge and assistance with delivering the objectives set out in the Strategy.

EIC has been invited to sit on the Stakeholder Group and looks forward to contributing to the delivery of the Waste Strategy.

**Commercial and Industrial Waste Management**

Commercial and Industrial (business) waste management is not the responsibility of a specific authority, other than the responsibility of the originating companies to comply with the Duty of Care.

Business make decisions on their waste management primarily on the basis of cost and EIC believe that the Landfill Tax is the crucial measure to drive the development of non-landfill solutions for business wastes.

This year’s Budget announced that from 1 April 2008 and until at least 2010–11, the standard rate of Landfill Tax would increase by £8 per tonne each year to £48/T in 2010–11.

EIC has engaged in a high-level lobbying campaign calling for a faster rate of increase in the Landfill Tax and welcomed the announcement on Landfill Tax in the Budget. However, Members believe it is crucial that the rate of increase in the Landfill Tax continues after 2011 to ensure it is successful in diverting waste streams away from landfill.

A higher rate of Landfill Tax is likely to achieve an increase in:

- Resource efficiency, though the adoption of more efficient business practices.
- Recovery and re-use of materials and equipment, in preference to discard.
- Non-landfill treatment and recovery options including:
  - Composting of green wastes
  - Energy generation via Anaerobic Digestion, or Gasification/Pyrolysis, of wastes suitable for use as biofuels
  - Energy generation via Solid Recovered Fuels derived from paper and plastics

EIC supports this simplicity of driver towards improved resource management, and does not propose any further direction from Government.

2. *The role for and implementation of regulations, and their enforcement*

High environmental standards will be at the centre of a successful resource efficient economy.

EIC supports the consistent and appropriate regulation of resource management activities, but cautions that this should support realistic recovery of resource materials and not be based on a slavish defence of a legal position.

Regulation needs to be designed to encourage the reuse of materials.

Furthermore EIC recommends the improvement of knowledge sharing (in respect of decisions) amongst regulators. Our Members have reported that decisions made by one section of a regulator often conflict with those made in another as there are no suitable methods to facilitate knowledge sharing and, therefore, consistent enforcement of regulations.

Lastly, the present risk-based approach to regulation should be reinforced, to support a high degree of self-regulation amongst practitioners with good track records, with greater regulatory efforts focused on poorer performers.

3. *The classification of waste*

No comment.
4. The proposals for financial incentives to increase household waste prevention and recycling

The Climate Change Bill will allow up to five local authorities to pilot incentives schemes to encourage people to reduce, reuse and recycle their waste.

EIC welcomes proposals for incentive schemes that will allow local authorities to charge for waste collection by weight or volume, provided that these are supported by a major campaign of public education.

5. The role of composting

EIC supports the use of composting where appropriate to the feedstock and intended product.

However the term is ambiguous, and it should be clarified whether the process is to produce a useable compost, or is one of partial biostabilisation to reduce the biodegradability of the waste prior to further processing or disposal.

Decisions over comparative performance in respect of carbon emissions should only be made after detailed Life Cycle Assessment using consistent boundaries.

6. The Government’s approach to waste minimisation, for example consideration of responsible packaging, including examination of the different materials used and the potential for reusable packaging and return schemes

Resource efficiency offers the opportunity for Government to promote greater productivity in business and reduce the burdens on the environment at the same time.

There can be no doubt that the opportunities for resource efficiency are huge. However, the current policy framework is fragmented, confusing and occasionally contradictory. This disincentivises businesses who need clear direction.

A clear, demanding and long term Government policy framework should be agreed—and stuck to. This will encourage investment in the resources and technologies needed to drive waste reduction.

The most important Government policy in this area is the Landfill Tax, which provides a direct signal of the cost of waste back to waste producers. The recent announcements of a faster rate of increase in the Landfill Tax is a welcome step forward.

The Government can set clear and consistent policy with targets that can be measured in terms of waste minimisation far stronger through targets at national and sectoral levels, including for commercial and industrial waste.

Waste minimisation is still the poor cousin to recycling/recycled content due to these issues being over-emphasised in the past.

The Government as a client and major specifier / procurer can lead the way in waste minimisation. This means working out the best way to set standards for others to follow. Where obstacles or confusion arise, this should be flagged as an issue that needs to be resolved, ie obstacles or confusion are preventing action being taken by the Government then they are also likely to be preventing action by everyone else.

7. The potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change, in particular through the reduction of methane emissions from landfill

EIC welcome the Government’s decision to take a lead on setting statutory targets to reduce carbon dioxide emissions. This will play a crucial role in the transition towards a low carbon economy.

Tackling climate change is crucial for the future of our planet. Without decisive and urgent action climate change has the potential to be both an economic disaster and an environmental catastrophe. It is crucial, therefore, that every sector of the economy contributes to meeting the UK’s statutory targets, and the waste sector is no exception.

EIC believes that the compliance with the Landfill Regulations, which require that Biodegradable Municipal Waste landfilled is progressively and dramatically reduced, are leading to a significant reduction of methane emissions from landfill. Furthermore, via PPC Regulations, landfill gas is being captured, extracted, and where practicable used for energy generation, or burnt.

These developments are, of course, welcome and will make an important contribution to meeting the UK’s climate change targets, particularly when you consider that methane is 23 times as damaging a greenhouse gas as carbon dioxide.

However, there is more that can be done.

Landfills are currently responsible for 40 per cent of all UK methane emissions. EIC believes, therefore, that the Government should consider calling for the inclusion of landfills in future trading periods of the EU Emissions Trading Scheme.
A central principle of emissions trading is that it allows for required savings to be achieved in the most cost-efficient way—thereby helping to resolve concerns about the impacts on competitiveness in Europe.

For this to be the case the EU ETS must include as many sectors as is practical.

Furthermore, the inclusion of landfills will have the added advantage of diverting waste away from disposal options towards recovery options.

8. The promotion of anaerobic digestion for agricultural and food waste

EIC considers that agricultural and food waste management should be considered separately: anaerobic digestion (AD) works best with a consistent quality and rate of feedstock, and produces a compostable residue in addition to gas which can be converted to energy. It is, therefore, well suited to the treatment of agricultural wastes.

Food wastes may, dependent on their source, be equally suitable for AD, but where their arisings are more variable, and the generation of a compost of less value, then alternative thermal processes using the food waste as a biofuel, such as Gasification or Pyrolysis, may be more suitable.

9. The adequacy of the existing infrastructure, such as energy from waste facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

As aforementioned, EIC is concerned that there is a potential for missing the target in the Waste Strategy as a result of failing to deliver the necessary waste management infrastructure in time.

There are several estimates of the numbers and types of facilities required, and within the constraints of our market economy EIC recommends that closer consensus be reached of the rate of delivery and distribution of the facilities required.

Government action to encourage the most efficient novel technologies has been focused on the New Technology Demonstrator programme, now coming into operation. EIC believes that this is a useful programme but it is now too late to start further physical exemplar facilities.

Instead Government should focus on reducing the deliverability risks described in our answer to question 1.

Merlin Hyman
Director
Environmental Industries Commission
December 2007

Memorandum submitted by Dr. Dick van Steenis (Waste 55)

I comment on your list of items.

1. No mention is made in item 1 of imported waste. As advisors to DEFRA such as Enviros do not have a clue about PM2.5s or health effects of industrial air pollution, policy decisions being made are the worst possible option. BAT and BATNEEC are specified in IPPC as the required means of waste management which means PLASMA GASIFICATION not incineration (energy from waste or plain) as being used in Panama, Canada, USA etc. Panama is planning 10 such units to handle the country’s entire waste which will produce 40% of their electricity, hydrogen for export to USA and gravel for use. I recommend the 5 page detailed report in Popular Science magazine of March 2007. Analysis of ONS infant mortality data by electoral ward 2003/4/5 in greater London reveals levels of 9.0 in zones of wards downwind of the London incinerators compared with only 1.3 upwind, meaning almost 7 times the infant deaths caused by incinerator emissions of PM2.5 particulates. PM2.5s are not monitored or regulated unlike USA. DEFRA has a few PM2.5 monitors but most are of the type that can be calibrated to read minus that means results fiddled. In Brighton in June 2007 PM2.5s were measured at minus 106ug/m³ which means the instruments were fraudulently adjusted to produce false readings. Incinerators produce 30% contaminated ash which needs disposal. Plasma gasification costs £31.50/ton in Ottawa and £23/ton for a larger unit in Florida with no outlay by the council on erection. The health damage from UK incinerators is horrific. IU attach 2 reports written recently plus 337 references while DEFRA has no references.148

2. IN USA PM2.5s which are the only size particles emitted that get into your lungs are heavily regulated. Here there are no measurements stack top or downwind of these. Mishaps and incidents are ignored by the Environment Agency due to downgrading of IPPC in 2000 to “anything will do”. In USA $10 million fines are commonplace.

148 Not printed.
5. Composting. DEFRA has been paying for composting of meat waste with grass at 5 sites in Yorkshire. As a direct result at a downwind farm nearby 41 cows died near Selby from mycotoxin poisoning, the farmers became ill and black & yellow moulds contaminate their hay stacks facing the composting units. The program I consider obscene and soil will be become contaminated also.

4A friend thought you would be interested in this article from Popsci.com:

The Prophet of Garbage—Popular Science
http://www.popsci.com/popsci/science/873aae7bf86e0110vgnvcm1000004eebcedcrd/2.html

In conclusion I would appreciate being allowed to appear before the committee.

Dr. Dick van Steenis MBBS

Memorandum submitted by City of London Corporation (Waste 56)

The City of London Corporation welcomes this opportunity to offer its observations to the Committee as part of its inquiry into the Waste Strategy for England. The City Corporation is not in a position to respond to all of the questions posed in the Committee’s call for evidence but I hope these comments will prove useful. May I also take this opportunity to offer my thanks for allowing us a short extension in the Committee’s deadline.

It is noted that, on the whole, the strategy is mainly concerned with domestic waste collection whereas the City’s main concern is with commercial and industrial waste. The overwhelmingly commercial nature of the City provides for a very different environment in which to operate a cleansing and refuse collection service when compared with other localities even those which include commercial centres. By way of example, the City has well under 10,000 residents but the City of Westminster has over 230,000. In addition to the concentration of business premises, there is of course the large volume of people who enter the City during the day for work, as tourists or en route for other destinations within London. Together, these present a challenging task for the City’s cleansing services but, nevertheless, the City of London is pleased to have received Britain’s Cleanest City award in 2001 and 2005, and being runner-up in 2003 and finalists in 2007.

The City does however have some concerns over the proposed changes to performance targets which could unfairly reflect the performance of the City. The City would suggest that more individualised targets should be set to take account of the different characteristics of different authorities. Alongside these, figures for recycling, composting and reuse should be shown separately. Household waste composted in home schemes should not be included as it is very difficult in the City’s view to develop a practical and robust method of measuring the mass of home waste composted at a cost which will not exceed the value of the information. Similarly, there are also concerns over the recovery of metals from household waste. These should not be included due to the problems of re-attributing them to the appropriate authority given that most incineration plants incinerate waste from more than one source. More generally there are also arguments for the inclusion of contextual and explanatory information to be published alongside performance results.

The other main concern is over the definition of “municipal waste”. There is a developing consensus that the current definition is too vague and has led to too many interpretations and variations amongst authorities, not just for the purposes of the Landfill Allowances Trading Scheme (LATS). Existing LATS targets are based on the current Waste and Emissions Trading Act definition of Municipal Solid Waste (MSW). Any changes to the targets without any corresponding change to the definition of MSW would be of concern. Proposals to amend the definition are therefore welcomed but the suggestion to describe municipal waste as “to explicitly encompass all waste which comes into the possession of or under the control of waste disposal or waste collection authorities, with the exception of municipal construction and demolition waste” still leaves aspects which are subject to interpretation.

For example, does the term “control” refer to an authority having “control” of third party commercial waste using a transfer station or disposal site; does an authority have “control” on any or all wastes generated in its own local area [buildings, premises, open spaces, etc] even if that waste is managed by outsourced contractors and does not use any of its own authority provided resources; or does an authority have “control” on waste generated on land owned by itself but situated outside its boundary in other authority areas? If the answer to any of these questions were “yes” then the City of London Corporation could be negatively affected to the proposed changes and, indeed, could face significant extra LATS costs.

If you have any further queries in connection with the City’s interests in this field, please do not hesitate to contact me or Bruce Hunt who has been responsible for the preparation of this submission.

City of London Corporation

December 2007
Memorandum submitted by Symphony Environmental (Waste 57)

Symphony is a British company which has since 2000 been developing and supplying oxo-biodegradable plastic technology, which it markets worldwide under the well-known “d2w®” trade mark.

We will specifically address issues mentioned in items 3, 5, 6, 7, and 9 of the Committee’s terms of reference after the following observations on the role which oxo-biodegradability can play in a strategy to deal with plastic waste.

Whilst the benefits of low cost, light weight, strength, imperviousness to gas and water, transparency, sealability, and printability are highly regarded, the very strength and durability which makes plastic such a useful and economic material can be a major problem when disposal is required.

Science has now found the answer to this problem—oxo-biodegradable plastic.

It is important to distinguish between the different types of biodegradable plastic, as their costs and uses are very different.

The two main types are oxo-biodegradable and hydro-biodegradable. Hydro-biodegradable is by far the more expensive. In both cases degradation begins with a chemical process (oxidation or hydrolysis), followed by a biological process. Both types emit CO₂ as they degrade, but in landfill hydro-biodegradable will emit methane, which is a much more powerful greenhouse gas. Both types are compostable in-vessel, but only oxo-biodegradable can be recycled in the normal plastic waste stream. Oxo-biodegradable plastic can itself be made from recyclate.

1. OXO-BIODEGRADABLE PLASTIC

A very small amount of d2w pro-degradant additive is introduced into the manufacturing process of normal plastic products. Degradation begins when the programmed service life is over (as controlled by the additive formulation). A typical d2w carrier-bag will be serviceable for 18 months, but service life can be extended or reduced as required. It will typically be re-used several times, sometimes as a bin-liner, before being discarded. There is little or no additional cost, as d2w products can be made with the same machinery, raw material, and workforce as conventional plastic products.

It is important to note that oxo-biodegradability is not primarily designed as a disposal option. It is intended as a low-cost precaution against plastic waste which finds its way into the environment, where it can otherwise last for many decades. If however, oxo-biodegradable plastic were to be collected and placed under a net with access to light and air it would degrade in a short time to nothing more than water, CO₂, humus and trace elements, leaving no harmful residues. There would be no need for landfill or incineration.

Degradable plastic products of both types have been dispensed by supermarkets for more than four years, and there is no evidence that people dispose more carelessly of them and they have not been encouraged to do so.

But suppose for the sake of argument that 10% more were discarded. If 1,000 conventional and 1,100 oxo-biodegradable bags were left uncollected in the environment, 1,000 conventional bags would remain in the rivers, streets and fields for decades, but none of the oxo-biodegradable bags would be left at the end of the short life programmed into them at manufacture.

Education is important, but there will always be people who deliberately or accidentally discard their plastic waste. What will happen to all the plastic waste that will not be recycled or will not be incinerated, and instead will litter the countryside and the oceans—would it not be better if the discarded plastic were all oxo-biodegradable?

Conversion of all short and medium-life plastic products to oxo-biodegradability should be encouraged by Government, and we have made a written submission to London Councils in relation to their proposal on plastic bags which is currently before Parliament. The first major country to adopt oxo-biodegradability in legislation is Brazil, where there are laws at State and City level requiring conversion to oxo-biodegradable.

D2w oxo-biodegradable plastic will be consumed by bacteria and fungi after the additive has reduced the molecular structure to a level that permits living micro-organisms access to the carbon and hydrogen. It is therefore “biodegradable.” This process continues until the material has biodegraded to nothing more than CO₂, water, and humus, and it does not leave fragments in the soil. D2w Oxo-biodegradable plastic passes all the usual ecotoxicity tests, including seed germination, plant growth and organism survival (daphnia, earthworms).

149 sub 40,000 Daltons
150 Oxo-degradation is defined by TC249/WG9 of CEN (the European Standards Organisation) as “degradation identified as resulting from oxidative cleavage of macromolecules.” And oxo-biodegradation as “degradation identified as resulting from oxidative and cell-mediated phenomena, either simultaneously or successively.”
Specimens of d2w oxo-biodegradable LDPE (low-density polyethylene) and PP (polypropylene) have been tested and demonstrated under the conditions of test to be fully compliant with the current European food contact material requirements. And US Food & Drugs Administration requirements.

Degradation of a d2w polyethylene specimen consistent with changes expected by American Standard D 6954-04 has been demonstrated. ASTM D 6954-04 is the Standard Guide for Exposing and Testing Plastics that Degrade in the Environment by a Combination of Oxidation and Biodegradation.

D2w Oxo-biodegradable plastic products are now being used by leading retailers in the UK and around the world. In May 2007 the Periodical Publishers Association of the UK recommended to its members that oxo-biodegradable film should be used for wrapping their newspapers and magazines for distribution.

Unlike PVC, the polymers from which oxo-biodegradable plastics are made do not contain organo-chlorine. Nor do oxo-biodegradable products contain PCBs, nor do they emit methane or nitrous oxide even under anaerobic conditions. Oxo-biodegradable plastics do not contain “heavy metals.” The metal salts used in oxo-biodegradable plastics are trace-elements necessary for healthy plant and human growth.

Oxo-biodegradable plastics are currently made from naptha, which is a by-product of oil-refining, and oil is of course a finite resource. However, this by-product arises because the world needs fuels and oils for engines, and would arise whether or not the by-product were used to make plastic goods.

Therefore until other fuels and lubricants have been developed for engines, it makes good environmental sense to use the by-product, instead of wasting it by “flare-off” at the refinery and using scarce land and water resources to make plastics.

2. HYDRO-Biodegradable Plastics

Plastics in this category normally have a high starch content and it is therefore said that they are made from renewable resources. However, many of them contain up to 50% of synthetic plastic derived from oil, and others (eg some aliphatic polyesters) are entirely based on oil-derived intermediates. Genetically-modified crops may also have been used in the manufacture of hydro-biodegradable plastics.

Hydro-biodegradable plastics made from crops are not genuinely “renewable” because the process of making them is itself a significant user of fossil-fuel energy and a producer therefore of greenhouse gases. Fossil fuels are burned in the autoclaves used to ferment and polymerise material synthesised from biologically produced intermediates (eg polyactic acid from carbohydrates etc); and by the agricultural machinery and road vehicles employed. Also by the manufacture and transport of fertilisers and pesticides.

An impossible amount of land and water would be required to produce sufficient raw material to replace conventional plastic products.

Three recent articles in the international press have drawn attention to the danger of using “renewable” resources derived from plants as a substitute for petroleum products. They focus on the use of corn and palm oil to make “biofuels” for motor vehicles, but the same danger arises from the use of corn and other agricultural products to make hydro-biodegradable plastics.

The International Herald Tribune wrote on 31st January 2007 “Just a few years ago politicians and green groups in the Netherlands were thrilled by the country’s adoption of “sustainable energy” by coaxing electricity plants to use biofuel. Spurred by government subsidies, energy companies designed generators that ran exclusively on this fuel, which in theory would be cleaner than fossil fuels because it is derived from plants.

The term “heavy metal” has never been defined by any authoritative body. Over the 60 years or so in which it has been used in chemistry, it has been given such a wide range of meanings by different authors that it is effectively meaningless.... . . .

Even if the term “heavy metal” should become obsolete because it has no coherent scientific basis, there will still be a problem with the common use of the term “metal” to refer to a metal and all its compounds. This usage implies that the pure metal and all its compounds have the same physicochemical, biological, and toxicological properties. Thus, sodium metal and sodium chloride are assumed by this usage to be equivalent. However, no one can swallow sodium metal without suffering life-threatening damage, while we all need sodium chloride (salt) in our diet.
But last year, when scientists studied plantations in Indonesia and Malaysia, this green fairy-tale began to look more like an environmental nightmare. Rising demand for palm oil in Europe caused the razing of huge tracts of southeast Asian rain forests, and the over-use of chemical fertilisers there. Worse still, space for the plantations was often created by draining and burning peat land, which sent huge carbon emissions into the atmosphere.

In Mexico on 25th January the financial newspaper “24 ORE” asked “Food or fuel? Is maize better on the table as tortillas or in the tanks of cars, converted into ethanol and then bio-fuel? The price of the cereal has doubled in a year because of the high demand for ethanol obtained from maize to produce bio-fuels. It has created a real food crisis because the price of tortillas has increased greatly. They used to cost seven pesos per kilo but now exceed 18 pesos. Tortillas are the basic element of the Mexican diet.

According to the Earth Policy Institute, “The trade off between food and fuel risks creating chaos in the world market of food products” and they predict that shortages and higher food prices will lead to starvation and urban riots

*Business Week* 5 Feb 2007 edition “The rise in the price of corn that’s hurting US pig farmers isn’t caused by any big dip in the overall supply. In the U.S., last year’s harvest was 10.5 billion bushels, the third-largest crop ever. But instead of going into the mouths of pigs or cattle or people, an increasing slice is being transformed into fuel for cars. The roughly 5 billion gallons of ethanol made in 2006 by 112 U.S. plants consumed nearly one-fifth of the corn crop.” US chicken producers are also being hit. The industry’s feed costs are already up $1.5 billion per year. Ultimately, these increases will be passed on to consumers, and there could be dramatic inflation in food costs.

Hydro-biodegradable plastics will not readily degrade unless they are in a highly-microbial environment, and will instead merely fragment for example in a field or a street.

**Specific issues in Committee’s Terms of Reference**

3. **WASTE MINIMISATION**

Compare different packaging materials, according to criteria like weight, energy and volume of reduction. If we take 100% as a starting point—without plastic we would have about 484% in terms of weight. In terms of energy consumption, with plastics if we take 100%, without plastic we will have around 300%. The same in volume of waste—with plastic and without plastic we have almost 300%.

**Paper Bags**

A stack of 1,000 new plastic carrier bags would be around 2 inches high, but a stack of 1,000 new paper grocery bags could be around 2 feet high. It would take at least seven times the number of trucks to deliver the same number of bags, creating seven times more transport pollution and road congestion.

Also, because paper bags are not as strong as plastic, people may use two or three bags inside each other. Paper bags cannot normally be re-used, and will disintegrate if wet.

The process of making paper bags causes 70% more atmospheric pollution than plastic bags. Paper bags use 300% more energy to produce, and the process uses huge amounts of water and creates very unpleasant organic waste. When they degrade they emit methane and carbon dioxide.

**Re-usable Bags**

Long-term re-usable shopping bags are not the answer either. They are much thicker and more expensive, and a large number of them would be required for the weekly shopping of an average family. They are not hygienic unless cleaned after each use. Whilst sometimes called “Bags for Life” they have a limited life, depending on the treatment they receive, and become a very durable form of litter when discarded.

Shoppers do not always go to the shop from home, where the re-usable bags would normally be kept, but for those who believe in long-term re-usable bags, they can be made from extended-life oxo-biodegradable plastic and will last for five or more years.

160 Prof. Emo Chielini, Professor of Fundamentals of Technologies, University of Pisa. Simpósio Internacional de Plásticos Degradáveis e Biodegradáveis 6th June 2007. See also Polymers and the Environment, 1999, Chapter 4, Management of Polymer Wastes, p. 78–81 and Degradable Polymers 2nd edition, Chapter 1).
4. Composting

Composting is the disposal option for a very small part of the plastic waste stream. Indeed, as composters cannot readily distinguish between oxo-biodegradable, hydro-biodegradable and conventional plastic, they prefer to exclude plastic of any kind.

However, if composting is the desired solution, organic waste can be put into oxo-biodegradable plastic sacks in homes, restaurants, hospitals, etc. and put straight into an industrial composting plant, so smells, disease transmission by flies, and handling hazards to humans are effectively minimised. The bags do not need to be opened and disposed of separately.

Oxo-biodegradable plastic does not degrade quickly in low temperature “windrow” composting, but it is ideal for “in-vessel” composting at the higher temperatures required by the animal by-products regulations. Indeed it is likely that windrow composting will soon have to be phased out.

Oxo-biodegradable plastic is particularly useful for “back-of-store” use in supermarkets, as waste bread and other products wrapped in oxo-biodegradable plastic packaging can be put into oxo-biodegradable sacks and put straight into a suitable composting plant.

Another problem with EN 13432 is that it requires almost complete conversion of the carbon in the plastic to CO₂, thus depriving the resulting compost of carbon, which is needed for plant growth, and wasting it by emission to atmosphere. Since oxo-biodegradable plastic (unlike the starch-based alternative) releases its carbon slowly, it produces high quality compost. The 11th September 2003 Report to the Australian Government by the Nolan-ITU Consultancy concludes that:

“oxo-biodegradable plastics based on polyolefins contribute to the amount and nutritive value of the compost because much of the carbon from the plastic is in the form of intermediate oxidation products, humic material and cell biomass. This is in contrast to plastics such as hydro-biodegradable polyesters (eg starch-based) that biodegrade at rates comparable to purified cellulose. At the end of the commercial composting process, all of the carbon from the latter has been converted to CO₂ so there is a contribution to greenhouse gas levels but not to the value of the compost.”

Oxo-biodegradable plastic can be tested according to American Standard ASTM D6954-04 for Plastics that Degrade in the Environment by a Combination of Oxidation and Biodegradation.

It is claimed by the hydro-biodegradable industry that a product is not compostable unless it satisfies European standard EN 13432. This standard applies only to plastic packaging, and was written before oxo-biodegradable plastics became popular. It is not appropriate for testing oxo-biodegradable plastics because it is based on measuring the emission of carbon dioxide during degradation. Hydro-biodegradable plastic is compliant with EN 13432, precisely because it emits CO₂ (a greenhouse gas) at a high rate.

If a leaf were subjected to the CO₂ emission test included in EN13432 it would not be considered compostable, or even biodegradable.

EN 13432 does not require that plastics biodegrade during and after composting within any particular time-scale. Paragraph 5 of EN 13432 says: “It is important to recognise that it is not necessary that biodegradation of packaging material or packaging be fully completed by the end of biological treatment in technical plants but that it can subsequently be completed during the use of the compost produced”

Conversion of organic materials to CO₂ at a rapid rate during the composting process is not “recovery” as required by the European Directive on Packaging and Packaging Waste (94/62/EC as amended), and should not be part of a standard for composting. Nature’s lignocellulosic wastes do not behave in this way, and if they did the products would have little value as soil improvers and fertilisers, having lost most of their carbon.

The Directive does NOT require that when a packaging product is marketed as “degradable” or “compostable” conformity with the Directive must be assessed by reference to EN13432. In the first place although the Directive provides that conformity with its essential requirements may be presumed if EN 13432 is complied with, it does not exclude proof of conformity by other evidence, such as a report from a reputable testing institution. Indeed Annex Z of EN13432 itself says that it provides only one means of conforming with the essential requirements.

Packaging made from oxo-biodegradable plastic complies with para. 3(a), (b) and (d) of Annex II of the Directive. This Annex specifies the essential requirements for the composition and the reusable and recoverable, including recyclable, nature of packaging.

Oxo-biodegradable plastic satisfies para. 3(a) because it can be recycled. It satisfies para. 3(b) because it can be incinerated. It satisfies para. 3(d) because it is capable of undergoing physical, chemical, thermal or biological decomposition such that most of the finished compost ultimately decomposes into carbon dioxide, biomass and water.

161 or its US equivalent ASTM 6400. There are also other national equivalents eg in Australia.
162 Annex II para. 3.
163 Article 9(2).
5. Methane

As noted above, hydro-biodegradable plastic emits methane deep in landfill where conditions are anaerobic, and hydro-biodegradable packaging should not therefore be encouraged.

Oxo-biodegradable plastic does not emit methane under any conditions.

6. Heat Recovery

In some countries, incineration is popular, and the necessary equipment is in place. Oxo-biodegradable plastic can be incinerated with energy recovery in the same way as conventional plastic, and has a higher calorific value than the hydro-biodegradable alternative.

7. Recycling

Oxo-biodegradable plastic can be made from recylcate, but Hydro-biodegradable plastic cannot.

Oxo-biodegradable plastics can be recycled with other clean commercial polyolefin wastes, provided that regard is had to the inclusion rate and the level of degradation, and that stabilisers are added where necessary. Hydro-biodegradable plastics cannot be recycled with other polymer components of waste. They would therefore have to be extracted from the waste stream and treated separately, at prohibitive cost.

It is difficult for recyclers to physically distinguish the two types of plastic so, the more that hydro-biodegradable plastic gets into the waste stream the greater the problem for recyclers. For this reason also they should not be encouraged.

Hydro-biodegradable plastics have been called into question by recyclers.164 Addressing the Local Authority Recycling Advisory Committee conference in November 2006 Recoup’s165 project manager warned that starch-based plastics could “have a negative impact on plastics recycling as a whole”. With compostable plastic packaging made from degradable starch-based materials and traditional [and oxo-biodegradable] plastics from oil-based ones, the fear is that bioplastics will increasingly find their way into the plastics recycling stream—impacting on quality and un-doing the work done on raising public awareness of plastics recycling.”

Symphony Environmental

January 2008

Memorandum submitted by Alpheco Composting Ltd (Waste 58)

Executive Summary

1. Local composting for recycling biowastes to topsoil offers very significant savings in road haulage and higher efficiency with better quality of compost than if collection and treatment are under entirely separate contracts.

5 & 8. The role of composting should cover food as well as agricultural and botanical “green” wastes and could include sewage sludge cake very efficiently. Anaerobic digestion should not be over promoted on the mistaken assumptions that:

— aerobic composting does not recover useful energy because it can deliver renewable heat efficiently and 4/5th of electricity is consumed as heat;
— aerobic composting does not need uneconomic quantities of bulking agent,
— electricity from anaerobic digestion may not curb climate change as much as the organic matter consumed in its generation would achieve when applied to topsoil.

9. Efficient novel technologies would be encouraged by:

— Avoiding simplistic percentage targets for recycling and composting;
— Removing the administrative barriers between waste collection and waste treatment contracts and between separate grant support for commercial and municipal waste management;
— Awarding comparable ROCs for renewable heat energy as well as for renewable electrical energy and relate those ROCs to amounts delivered and consumed rather than generated, or by replacing ROCs with tax incentives for the consumption of renewable energy.

165 RECOUP (www.recoup.org) is the national charity developing plastics recycling in the UK, promoting best practices and providing educational and training tools.


**Detailed Submission**

1. Localisation for recycling biowastes to topsoil.

   (a) We welcome localization as opposed to centralization especially for biodegradable wastes. Food wastes, garden wastes and biosolids (sewage sludge cake) arising from human homes and work places can be co-composted and the organic product applied locally. If all the biowastes of a town were to be co-composted, the product would annually improve an area of farmland, parks and/or gardens equivalent to only some 20% of that town’s built up area; a local surfeit of compost is virtually inconceivable if the quality and price are right.

   (b) We have calculated in a Suffolk setting that three satellite-composting facilities each of about 10,000 tonnes per year, would reduce “biowaste collection miles” by 42% compared to having one 30,000-t/yr plant. Such local sites will facilitate use of the renewable heat recovered and also mean fewer compost distribution miles. Management over the Internet etc. now allows suitable technologies to give virtually the same economies of scale as are expected of larger, more centralised plants.

   (c) The biowastes' collection method has more effect on compost and digestate quality than the process itself, and that is most probably similar with recyclables like glass, paper, plastics and metals. There is therefore a case for linking collection and treatment contracts for each type of material by removing the WCA/WDA “barrier” that sufficed when mixed waste was merely tipped in landfill or an incinerator.

   (d) Efficient management of biowastes should differ from that of dry-recyclables:

       — because the former begin to putrefy so need weekly collection while dry-recyclables can be collected fortnightly;

       — compost being of low price per unit should be used locally while recyclables generally need bulking up for more distant processing.

2. No comment.

3. No comment.

4. Incentives

   IT and recent legislation could allow waste authorities to set a Council Tax rate that anticipates the same waste management costs as in the previous year, thus ensuring continuity of service. Subsequently the waste authorities could send households a cash rebate that is proportional to their increased recycling and composting, ideally as measured per property by “chip & bin” accounts at year’s end. Since any cash “carrot” is worth at least three “sticks,” especially when the latter are hidden among bigger budgets, this could stimulate competitive chatter and so promote recycling and composting.

5. & 8. The role of composting and the promotion of anaerobic digestion

   (a) We recommend that the role of aerobic composting is not restricted to “green” botanical wastes by over-promotion of anaerobic digestion (AD). Rather we urge that the potential for local co-composting of municipal and commercial food wastes together with “green” plus agricultural waste and even with biosolids is equally promoted so that the true capital and operational costs of each be ascertained.

   (b) The strong promotion of AD in Waste Strategy for England 2007 seems to have been based on the generation of a modest amount of electrical energy and three mistaken assumptions:

       — That composting (ie aerobic digestion) does not recover energy was Mistake 1. Our in-vessel composting systems can recover heat energy *without flames* in a way that allows that heat to be delivered to leisure centers, housing, office or area heating systems and to green houses or poultry sheds. The total amount of electrical plus heat energy from an AD plant is about the same as the renewable heat possible from aerobic composting. It may also be noted that the heat from AD, which is over half of the energy released, may not be useable in UK due to planning restrictions on the locations of AD plants. (Agrilabs of Canada is the only other composting system we know of that recovers heat but like Horstmann, which *may* also recover some heat, it is entirely static so that heat may not be deliverable without excessive transmission losses.)

       — Mistake 2 was that composting of food wastes necessarily requires very large amounts of bulking agent to ensure air porosity. In-vessel systems that have sufficient and well-designed aeration sub-systems only need about 15% bulking agent.

       — Mistake 3 was to assume that the energy and carbon benefits of compost and digestates in soil are limited to the plant nutrients that they bear substituting for synthesized fertilisers.
Mistakes 1 and 2 apparently stem from reports by DEFRA’s consultants that only considered one particular in-vessel composting technology, which exhausts all heat to atmosphere and has a relatively weak aeration system.

Mistake 3 arose in those reports and the Environment Agency’s WRATE tool by not valuing the (admittedly not yet fully quantified) benefits of compost and digestate in:

- Reducing the fossil fuel required by farmers to irrigate, plough and cultivate;
- Increasing fields’ capacities to hold rainwater and thereby reduce rain-runoff that contributes to flooding down stream through flash volumes and deposited soil. Run-off also removes soluble fertilisers that need replacement and may promote eutrophication downstream.
- Increasing crop yields, which is particularly significant for organic farmers.

6. No comment.

7. Potential for the proposals in the Waste Strategy to tackle the UK’s contribution to climate change

Our estimates are that if the 6 million tonnes of food wastes per year in UK were digested or composted, the outputs could be:

<table>
<thead>
<tr>
<th></th>
<th>Electricity</th>
<th>Heat</th>
<th>Dried Solids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaerobic</td>
<td>1,476 GWhE</td>
<td>2,040 GWHh</td>
<td>450,000 tonnes</td>
</tr>
<tr>
<td>Aerobic with heat</td>
<td>Nil</td>
<td>3,400 GWHh</td>
<td>1,676,000 tonnes</td>
</tr>
</tbody>
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Agricultural and “green” garden wastes and biosolids might double those figures. So it is questionable— but not established —whether the electrical energy from AD merits the reduction in the quantity of compost/digestate that could be recycled to benefit topsoil. N.B. Our calculations and assumptions need peer review, perhaps by an academic institution to avoid any prejudice that may pertain to some consultants.

Meanwhile we believe that climate change will make healthy topsoil increasingly valuable. Also that transportation fuel requirements may well mean that satellite composting plants can contribute more to tackling climate change than can AD plants; the latter’s intrinsic capital costs, which must include connections to the National Grid, necessitate larger facilities counter to the proximity principle and often ill-placed for their heat energy to be used.

It is for those reasons that we feel the Waste Strategy’s tilting of our particular playing field towards AD, plus the double ROCs for electrical energy for AD but none for heat energy, has impaired our composting systems’ potential contribution.

8. See 5 above.

9. Potential for Government action to encourage the most efficient novel technologies

(a) Avoid simplistic targets that can discourage efficient novel technologies.

The Waste Strategy 2000 targets that 25% of household waste should be recycled or composted, stimulated the collection of “green wastes”, the perversity of which to meet short-term percentage targets, is apparently now recognized if not acknowledged. We assert “perverse” because the large bio-bins widely issued to attain that target, forced the use of big refuse collection vehicles that are inefficient for food wastes while also discouraging home composting. If the collection of “green” wastes had been called “harvesting” then the way that they counter the EU Landfill Directive’s use of 1995 arisings as the base line, should have been clear.

Thus simplistic percentage targets that led to the co-collection and treatment of woody matter together with food and truly green and soft wastes, turned a renewable energy source into a net consumer of energy (embedded and revenue). Therefore in the consultation preceding Waste Strategy 2007 we suggested that for the proposed target for 40% of household wastes to be recycled or composted, it should be made clear that “household” should NOT include “garden”.

(b) Remove the administrative barriers between the management of:

- Collection of waste by WCAs and treatment by WDAs so that if the WDA saves disposal costs compared to landfill and perhaps buying in LATS, those savings can be transferred to improved collections, which are key to product quality.
- Municipal and commercial schemes where the former have been grant-supported by DEFRA and the latter by dti/BERR.

DEFRA’s New Technologies Demonstrator Programme (part of the Waste Implementation Programme 2004) selected nine out of 90 applicants for significant grant support. The selection criteria were made clear but by assessing cost-efficiency on the tonnage of municipal wastes to be processed (ie disregarding collection methods and commercial biowastes), they perpetuated those two administrative barriers to the disadvantage of more holistic schemes that are only now being sought.
In our case RPS as DEFRA’s consultants ruled out our application on the grounds that the food-wastes’ collection method we proposed\(^\text{166}\) would “ . . . be in competition with . . . ” the “green waste kerbside” collections that DEFRA was then subsidizing for selected waste authorities.

(c) Award comparable ROCs for renewable heat energy as well as for renewable electrical energy and relate those ROCs to amounts delivered and consumed rather than generated.

According to Energy Consumption in the UK (dti/Office of National Statistics 2006), the domestic energy consumption depicted above is 79% for direct heat and remarkably little for lighting, computing etc. and for motive power. In common usage “power” and “energy” are often taken to imply only electricity but those consumption figures show it is misleading to exclude heat energy.

Secondly both electrical and heat energy are subject to transmission losses so consumption or delivery rather than generation, production or recovery amounts should be used to compare the efficiency of novel technologies.

The offer of double ROCs for electrical energy from AD caused our Bradford prospects to cancel their order for our innovative, combined heat with composting (AC+ CHC) in favour of anaerobic digestion with combined heat and power (AD+ CHP).

Alternatively remove ROCs altogether to prevent distortion of the market possibly to the detriment of the most efficient, novel technologies, and replace them with tax benefits for the delivery/consumption of renewable electrical, heat or motive energy that replaces energy derived from fossil fuel.

Neil Winship
Alpheco Composting Ltd
January 2008

Memorandum submitted by the UK Bag Manufacturers’ Association (Waste 62)

The UK Bag Manufacturers’ Association (UKBMA) is pleased to have the opportunity to contribute to this consultation. The UKBMA is the trade association that represents the interests of paper bag producers in the UK.

We support any efforts to reduce waste. Under the EU Landfill Directive, the UK is required to reduce the volume of biodegradable municipal waste sent to landfills. Paper bag manufacturers can help the UK achieve these goals.

BACKGROUND

UK-based paper bag manufacturers produce at least 99% of all the paper bags used in the UK. There are approximately 3,000 people directly employed in the production of paper bags throughout the UK.

The UKBMA is committed to sustainable paper bag production processes, which is why we source all our materials either from farmed renewable forests in Scandinavia or from recycled and local waste paper.

\(^{166}\) It was on the lines that we suggested in January 2003 to the Environment, Food and Rural Affairs Committee as was then published as EV177 in Volume II of the Eighth Report of Session 2002–03.
Virgin paper generally comes from the forests of Sweden or Finland, which vigorously follow strict practices of sustainability and biodiversity. Sweden, one of UKBMA’s largest suppliers, plants three trees for every tree removed and has more forest than at any time in its recorded history, all of it locking in more and more carbon. Combined with the energy it generates each year, the paper industry is at the point of genuine carbon neutrality.

**THE ROLE FOR AND IMPLEMENTATION OF REGULATIONS, AND THEIR ENFORCEMENT**

The UKBMA would support any regulations designed to reduce waste and to impact on climate change. However, we are concerned about the inclusion in the Climate Change Bill of a schedule that includes paper bags in efforts to impose a levy on single-use carrier bags. We believe that extending this to paper will not only penalize what is a neutral or actually positively environmental product but may have negative environmental implications. This would arise because a reduction in the use of paper bags (which, as we note above, are largely made from recycled material) will lead to an increase in the diversion of material to landfill. The UKBMA believes that, given the environmental advantages of paper bags and their inherent usefulness, paper should be exempt from any potential legislation.

**Production Process**

The paper industry has improved exponentially over recent years, so that it has now become far more environmentally friendly. The paper production process does use a considerable quantity of water but this is treated before being released back into the watercourse. The water is replaced and is actually cleaner after use than before. UK paper manufacturers have invested millions of pounds to ensure that this is so.

Furthermore, increasing amounts of energy used in producing paper bags are self-generated. Indeed, some paper mills are net contributors to the national grid during summer months, with the development and utilisation of bio-fuel energy systems.

**Life-Cycle Analysis**

Life-cycle analysis for the production of paper bags shows that modern techniques for producing paper are at least as environmentally efficient as producing plastic bags, since the latter will have to be transported half way around the world in order to be used in the UK. Reviews, such as the AEA Technology Report, did not take into account modern production methods described above. A recent and more targeted life-cycle analysis was completed by Ecobilan (France), which works with industry and government in environmental fields. This report clearly concludes that paper is significantly more environmentally friendly than polythene.

Single-use carrier bags made of plastic leave a deeper footprint on the environment, in contrast to paper. Paper bags are totally biodegradable and as we have noted, are produced using recycled raw materials, which would otherwise end up in landfill.

**Effects of a Levy**

It is claimed by some that, should a levy only extend to plastic carrier bags, it would result in a rise in the use of paper bags. These concerns however, are unsound. In fact, in 2002, Ireland introduced a tariff on plastic carrier bags. The result was a 90% reduction in the use of plastic bags and no increase in paper bag use. It can be expected that a parallel reduction in use and plastic bag litter would take place here, especially since some of the same major supermarket chains operate in both countries.

What we have learned from the Irish experience is that food retail outlets would shift from giving away thin plastic bags to selling premium reusable bags, but there would not be any significant replacement with other types of free issue bags such as paper bags. None of the major Irish food retailers (including Tesco Ireland) switched to paper bags.

Where retailers have begun to charge for bags in the UK, it has not led to an increase in the use of paper bags.

**Throwaway Society**

One of the key arguments/reasoning put forward by the Government for including this new schedule is that bags are a part of a throwaway society and that their removal is therefore important for promoting behaviour change.

The UKBMA notes that free newspapers, direct advertisers and junk mail are far more iconic of throwaway societies than carrier bags. Paper carrier bags, still have secondary use whilst the above-mentioned items are destined either for recycling or landfills. In an individual’s daily life they will encounter far more free newspapers, junk mail and advertisements than paper bags. We question why something, which has ongoing use, is made from recycled material, and can be recycled is being singled out in this way.
As a small industry, we do not have the resource potential or clout that newspapers and large corporations have to defend ourselves against legislation that jeopardises our livelihood and we fear that any potential legislation will impact on our industry negatively. We hope that the impact newspapers, advertisements and junk mail have will be considered before any action is taken on the paper bag manufacturing industry.

**UK Contribution to Climate Change through Reduction of Methane Emissions from Landfill**

Paper bags are produced using virgin pulp and recycled raw material. The recycled raw material used for paper bag production is derived from paper destined for the waste stream. Recycling diverts these materials from landfill. Without paper-based materials, these would all end up in landfill, increasing volume, waste and greenhouse gas emissions such as methane and carbon dioxide. For every 1 tonne of paper and cardboard recycled, an estimated 1.4 tonnes of carbon dioxide is avoided in landfill (CPI). Overall, the practice of recycling saves about 10–15 million tonnes of CO₂ annually (CPI).

**Recycling**

Due to massive investment by the paper industry, some 78% of paper waste in the UK is now recycled each year. Recovered paper is a valuable raw material, which can be re-used to create new paper and board products. Recovered paper is a raw material upon which the global paper industry relies. This is especially true of the UK, where 69% of the raw material used is recycled paper.

There is a rapidly improving recycling infrastructure in the UK—especially for paper. Local authorities operate household systems such as kerbside collection of recyclable waste. Paper can be easily and conveniently recycled avoiding landfills.

As noted above, UK-based paper bag manufacturers locally produce at least 99% of all the paper bags used in the UK, with over 3,000 people employed directly in the production of paper bags throughout the UK. Plastic bags, in contrast, are imported from low labour cost countries through the world, generally the Far East requiring transport from far greater distances. Therefore, increasing the amount of CO₂ emissions released. Due to significant investment in training and equipment over the years paper bag production has become one of the very few areas in the manufacture of packaging where local producers have not lost out to cheap foreign competition.

The UKBMA shares the view that the environment and climate change are pressing issues that must be addressed. We also believe it is important to raise awareness of the environmental advantages of paper and the efforts of the paper bag industry to operate in an environmentally efficient manner.

UK Bag Manufacturers’ Association

*October 2008*

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**Memorandum submitted by the Zero Waste Alliance UK (Waste 63)**

**UK National Waste Policy—A Bridge Half Built**

In July 2002 the Zero Waste Charter was launched at the House of Commons, and has since received wide national and international backing. It argued that there was a growing environmental imperative for the reduction, recycling and composting of waste to reduce:

- the dangers to human health of incinerators and landfills,
- CO₂ emissions, and
- the pressure on virgin forests, on minerals and on rapidly degrading soils.

The 10 point charter set out a strategy for moving to Zero Waste in the UK, notably by:

- maximising the recycling of dustbin and of bulky waste,
- introducing the doorstep collection of organic waste and a composting infrastructure,
- banning the thermal treatment of mixed waste and the landfilling of untreated biological waste,
- limiting waste disposal authorities to 10 year contracts to ensure flexible facilities to complement the growth of recycling and composting,
- introducing a disposal tax and earmarking its proceeds to promote Zero Waste, and
- accelerating and extending producer responsibility legislation.

After the launch of the Charter, the Government’s Strategy Unit supported many of the principles of the Charter. It led to a radical increase in the landfill tax. It supported increased rates of recycling and composting, secured additional funding for WRAP to engage in waste prevention and recycling, and for the first time recommended Mechanical and Biological Treatment as an alternative to incineration and landfill as a means of handling residual waste.
But it left a bridge half built. And policy has in the meantime slipped back to its previous groove: timid on targets, and a promoter of incineration.

Climate change will not be countered by limited ambition. Leading countries and regions in Europe are now recycling and composting 60% of their municipal waste. The UK remains a straggler. Recycling has doubled in four years, but still stands at no more than 23.5% in 2004–05. DEFRA’s current review proposes a maximum target of 50% by 2020, a level that the best UK authority is already meeting. This sets the bar too low. It offers too little too late.

Holding back recycling and composting and promoting incineration will not reduce CO₂ emissions. Yet this has been the consistent thread of Government policy since the Strategy Unit Review:

— The UK government is notorious in Europe for its opposition to the EU Bio waste directive, and has had it shelved.

— The UK Animal By-Products Regulations have set levels of treatment way beyond those operating in the rest of the EU, raising the cost and discouraging the composting of domestic and commercial food waste.

— The Government is pressing the EU Commission to redefine incineration as recovery rather than disposal.

— Funds for PFI waste disposal contracts have been increased, encouraging large scale, capital intensive disposal technologies and 20–25 year contracts and reducing the incentive to maximise recycling.¹⁶⁷

— In proposing long term national targets for incineration, but only modest short term recycling and composting targets for individual local authorities (a maximum of 30% for 2007–08) Government encourages disposal authorities to crowd out recycling and composting by the construction of large scale incinerators.

— The escalating landfill tax coupled with LATS, without graduated taxes on other forms of disposal, encourages a switch from landfill to other disposal options rather than the maximisation of recycling and composting.

— DEFRA has substituted a tick box sustainability appraisal for the Best Practical Environmental Option, which has facilitated proposals for incineration at public enquiries.

— In spite of massive local opposition the DTI has approved the proposal for a giant incinerator at Belvedere in East London (up to 800,000 tonnes, making it the largest incinerator in Europe), so creating a long term appetite for paper and plastic from Greater London, that should be recycled to save CO₂ emissions. Belvedere’s approval sets a precedent for giant schemes throughout the country.

DEFRA’s current Review is strong on the rhetoric of recycling, but it fails to will the means. It remains a charter for incineration not for Zero Waste. It argues for incineration as a means of countering climate change on two grounds: that it replaces methane producing landfill, and that it substitutes carbon neutral electricity production for fossil fuel power stations.¹⁶⁸

But it under-estimates:

— The loss of stored up energy embodied in recyclable materials prematurely incinerated (notably paper, aluminium, organic waste and plastic).

And it takes no account of:

— the capture of methane from landfill, which at the high rates assumed elsewhere by DEFRA makes landfill broadly comparable in terms of net CO₂ emissions to electricity-only incineration;¹⁶⁹

— the fact that electricity-only incinerators generate more fossil CO₂ than gas fired power stations and more in total than coal power stations, while CHP or heat only incinerators are only marginally better than gas fired stations even if the heat is put to good use—not always possible even in areas like Scandinavia where the demand for heat is higher than in the UK;¹⁷⁰

— the sequestration of carbon in depleting soils through the application of compost, or stabilised residues from MBT plants; and

— the lifecycle energy costs involved (and the waste generated) in the production of the incinerators themselves.

¹⁶⁷ The National Audit Office report notes that PFI deals take longer to bring to financial close than other types of procurement, and that after nine years, only six residual waste plants are in place or under construction.
¹⁶⁸ Defra (2006) Review of England’s Waste Strategy: A Consultation Document, February 2006. Its wording is: “EfW reduces emissions of greenhouse gases in two ways: because the wastes could otherwise go to landfill and generate methane; and because emissions from the biomass fraction of the waste, which are carbon-neutral, are likely to replace those from fossil generation.” p 60
¹⁷⁰ Eunomia, p6
Incinerators are producers of brown energy not green. They do not reduce green house gas emissions but increase them, both because of the overall CO₂ emissions at their strikingly low current levels of efficiency of 25% or less, and because their destruction of the “grey energy” embodied in the materials they burn increases the need for new energy intensive virgin materials.

The incentive structure and the process of decisions on disposal of waste are tilted towards incineration. Whereas stabilised residues from MBT that are landfilled are subject to the full landfill tax, bottom ash from incinerators is classed as inert, and charged only £2 a tonne.

Far from facing a graduated tax as a means of disposal, incinerators receive more Government funding, and have greater access to private finance, than recycling or composting. Accordingly they remain the technologies of choice for disposal authorities which the Government have left with the decisive institutional power in municipal waste management.¹⁷¹

Even where, because of public opposition, disposal authorities have fought shy of incineration or its modern variants pyrolysis and gasification, they have continued to negotiate 20–25 year inflexible contracts, incorporating Mechanical and Biological Treatment (MBT) plants, that produce “refuse-derived fuel” as a feedstock. They have made MBT, a potentially more flexible means of stabilising residual organic waste and suitable for the transition to Zero Waste, into a processing arm for incineration, and a barrier rather than a support to Zero Waste strategies.

ZERO WASTE ALLIANCE PROPOSALS

Zero Waste policies have had to swim against the institutional and policy tide, rather than being carried along by it. The Zero Waste Alliance therefore urges the Government and local authorities to re-orient their policies in the direction of Zero Waste, in line with leading regional and national governments overseas, and further to the 10 points of the original charter, adopt the following specific measures:

1. Set long term recycling and composting targets of 75% for all local authorities by 2015, (and a minimum of 60% for each individual local authority) along with waste minimisation targets, to prevent their crowding out by local and regional long term disposal contracts.
2. Press the EU to introduce the Biowaste Directive, and its requirement for kerbside kitchen waste collections in all cities, towns and villages with over 1,500 population.
3. Switch the government subsidy of PFI schemes to the start up costs of food waste collection and composting, as part of the Treasury’s forthcoming Comprehensive Spending Review.
4. Extend the grant of carbon credits to recycling and composting to reflect their impact on the reduction of CO₂ emissions generated by the production of virgin materials.
5. Extend Producer Responsibility Legislation to cover all materials in the household waste stream, and raise the targets for recycling of plastic packaging, glass and metals under existing legislation to those set by the leading countries in Europe.
6. Recognise incineration as disposal not recovery, in line with the EU Waste Framework Directive and rulings of the European Court of Justice.
7. Fund a major research programme to identify the hazards of nano particles, particulate aerosols, and brominated flame retardants that arise from the burning of mixed waste.
8. Introduce an incineration tax of at least £12 per tonne.
9. Charge incinerator bottom ash at the full level of landfill tax (rather than the £2 a tonne which it currently enjoys by virtue of its unwarranted classification as inert waste) and reduce the landfill tax to £6 a tonne for bio-degradable waste, stabilised to the levels set out in the 2nd draft of the Biowaste Directive.
10. Require compulsory insurance against future pollution and health claims for all disposal and recovery facilities.

The past four years have not been wasted. The ground for a radical increase in recycling and composting is now prepared. St Edmundsbury has become the first council to pass the 50% recycling and composting target. The leading continental and North American authorities are now reaching 75%. They mark the path to Zero Waste.

The imperative of climate change has, too, at last been unequivocally recognised by scientists, by the media and now by all major political parties. But it is not reflected in waste policy. In spite of the evidence that recycling and composting lead to major CO₂ savings relative to incineration and landfill—WRAP estimates the savings of current levels of recycling and composting at 10–15 million tonnes of carbon equivalent per year¹⁷² and in spite of its higher CO₂ emissions relative to gas fired electricity generation, the Government is still promoting incineration as a source of green energy.

¹¹¹ DEFRA’s lack of clarity on MBT residues and composting requirements is a further discouragement to disposal authorities seeking an alternative to incineration.
What is required is return to the boldness of the Strategy Unit’s policy, and a shift of finance and incentives towards composting and recycling. Climate Change policy calls for it. The Government should respect the evidence, free itself from the disposal centred waste industry, and complete the work that was left half finished after the Strategy Unit’s Review.

The Zero Waste Alliance

*November 2008*

**Annex**

**ZERO WASTE CHARTER**

The organisations, groups and individuals who have signed this charter are committed to achieving Zero Waste in Britain by 2020. Zero Waste is a new concept being pioneered by leading corporations, municipalities, and now provincial and national governments. It entails re-designing products and changing the way waste is handled so that products last longer, materials are recycled, or, in the case of organics, composted. Waste is in the process of being designed away.

The immediate imperatives behind the drive for Zero Waste are environmental. There is a new awareness of the dangers to human health of waste landfills and incinerators. Landfills are major producers of methane, and polluters of water tables. Incinerators produce greenhouse gases, and are a source of heavy metals, particulates and dioxins. Zero Waste strikes at the cause of this pollution.

It also lightens the ever growing pressure on the world’s forests, soils, and mineral resources by making more with less. Doubling the life of a car saves the 15 tonnes of materials required to make a new one. Recycling paper gives wood fibres six lives rather than one. Increasing the productivity of resources in this way also leads to major savings in energy. Zero Waste will play a central role in cutting CO2 emissions and sequestering carbon in the soil.

There is a further economic dividend. Redesigning production and increasing recycling to eliminate waste is stimulating a green industrial revolution. New materials and growth industries are emerging, together with a growth in jobs. In Germany recycling already employs more people than telecommunications. In the US, it has overtaken the auto industry in direct jobs. Governments that embarked on policies to reduce waste in order to combat pollution and climate change, are now realising that zero waste is a key element in any post industrial economic strategy.

Municipalities and companies overseas are well on their way to zero waste. They have shown that it is possible to recycle and compost 70% or more of their waste streams with existing product design. Residual materials which are hazardous, or are costly to recycle can then be phased out and replaced by new clean materials that can be returned to use efficiently and effectively.

Increasing numbers of cities and states have adopted the goal of Zero Waste, including Canberra, Toronto, the state of California, and most recently the Government of New Zealand. This charter seeks to extend these pioneering practices to all the municipalities and producers in the UK.

Our starting point is to create zero waste areas where we live and work—in our streets, and villages, in our schools and hospitals, in municipalities and our many different workplaces. We invite local communities, elected councils at every level, and our major institutions and corporations to sign up to these goals, to put in place measures to reduce their waste, and to expand recycling and composting with the goal of achieving Zero Waste by 2020.

By ourselves we can only go so far. The current waste regime still favours disposal over recycling. The Government must change this. Many products are difficult or too hazardous to recycle. The Government can change this, too, by making the manufacturers who produce them responsible for the waste that results, and for redesigning products so that they are safe, long lasting and can be easily recycled.

We call on the Governments of Britain, Wales, Scotland and Northern Ireland to end a decade of policy timidity and give a lead to the promotion of Zero Waste by adopting the following 10 point plan to transform Britain’s waste economy:

1. Set a target of Zero Waste for all municipal waste in Britain by 2020 (50% by 2010 and 75% by 2015).
2. Extend the doorstep collection of dry recyclables to every home in Britain without delay.
3. Provide doorstep collection of organic waste, and establish a network of local closed vessel compost plants.
4. Convert civic amenity sites into re-use and recycling centres.
5. Ban from 2006 the landfilling of biological waste which has not been treated and neutralised.
6. Ban any new thermal treatment of mixed waste and limit disposal contracts to a maximum of 10 years.
7. Extend the Landfill Tax into a disposal tax. Increase its level, and use it to fund the Zero Waste programmes.
8. Extend Producer Responsibility legislation to all products and materials that are hazardous or difficult to recycle.

9. Open up waste planning to greater public participation and end the commercial confidentiality of waste contracts.

10. Establish a Zero Waste Agency to promote resource efficiency and act as a guardian of public health.

Memorandum submitted by Environmental Recycling Systems (Waste 64)

EXECUTIVE SUMMARY

1. This response is from Environmental Recycling Systems (EVRS). EVRS has a unique technology for dealing with residual waste, developed in the UK over the last six years. EVRS is one of the 37 new technologies listed in the “Defra Waste New Technologies Demonstrator—Programme Catalogue of Applications—2007 Update” (NTDP) (1). Of these projects, only nine were offered funding, leaving 28 to their own devices. We are told that there may have been a further group, perhaps as many as 60, excluded for lack of ownership of the originality by the submitter.

2. The industry needs a choice of technologies to cope with a range of arisings. No one size, or one technology can fit all requirements, as local needs vary. We have identified many potential buyers of our process, all of whom rightly say that they cannot proceed without seeing a full size demonstrator plant delivering on our claims. We are in no doubt that this applies to the other NTDP applicants as well.

3. In our own case, we claim that our process can achieve almost total diversion from landfills of non-hazardous residual waste arisings. These can arise from Construction, Demolition and Excavation recycling, Commerce, Industry, Retail, and all other like non-hazardous residues which are predominantly organic (cellulosic). Using our process of “Thermally Induced Chemical Transformation” (TICT), we recover pure Cellulose and some Ethanol. This is a resource recovery technology to obtain new materials for reuse. It is anaerobic, using steam at 165°C and 7 Atmospheres (100 psi). We ensure that the process has no discharges to air, to land or to water, by hermetically sealing the plant, and by building it into ISO shipping containers. There will be no odour (being sealed), and little noise. Air and process water are to be extracted and cleaned in separate units, again recovering the resources therein. The design is fully scalable, from ½ T/HR to 20 T/HR and multiples thereof, enabling it to address the proximity principle, by for example siting the plant co-located with a producer of waste, such as a factory, school or housing estate. There is the potential to process other waste streams such as sludges and slurries, make the plant relocatable, and even process material mined from existing landfills, as is now being suggested (by Peter Jones OBE, currently the Mayor of London’s representative on the London Waste Strategy Board).

4. The process has been extensively demonstrated with a wide variety of inputs including board, card, food waste, both cooked and uncooked, paper, sawdust, straw, wood, etc. and has been shown to produce consistent results. It has been peer reviewed. (2). The process deals with co-mingled waste, separates inorganic material from the organics stream, and cleans materials such as plastic food wrappers, recovering both the cellulosic material and the plastics. As such therefore, source separation becomes un-necessary, which in our view could eliminate the cost of tactics such as alternate weekly collections, and multiple bins.

5. Our Research and Development was funded entirely by ourselves. We have a small working Product Evaluation and Test (PET) Plant, and have been seeking £1.2 million to build a suitable continuous demonstrator plant with 100 T/week capacity, but so far, have been unsuccessful. Nevertheless, we have a suitable site, waste stream and tremendous supplier support.

6. We believe that many of the others listed in the catalogue have now been forced to withdraw, their technologies being lost to the industry.

7. Had our technology been funded under the demonstrator programme in 2006, the choice would thereby have been increased. We have an unnecessary delay of two or even three years in bringing our technology to the marketplace. In our view, this denies the choice at a time when it is greatly needed.

INTRODUCTION AND BACKGROUND

1. EVRS has studied the responses submitted by the Environmental Services Association (ESA) and by the British Metals Recycling Association (BMRA), and to a very large degree, adopts the relevant points as submitted by both these associations.

2. It is clear that the industry needs choice. We would like our process to be available for consideration by those who have to process waste. Wider choice will be denied them unless we have a suitable demonstrator plant—the Defra foreword by Peter Jones OBE makes that very clear.
RESPONSES TO THE SPECIFIC POINTS IN THE WASTE STRATEGY EXAMINATION BRIEF

1. How the policies proposed will be implemented

Our process, like that described by BMRA members, and others like us, can produce material which is fully recovered for re-use. All this material is marketable as such and has a value. The regulations must therefore ensure that all materials fully recovered which have a ready market are declassified from the definition of “waste”. Failure to do so will deny the market-place sources of valuable material (at the time of writing, we project that our fibre product, “Zystur™” will sell for some £400 per Tonne). Our “Zystur™” fibre is an inert, sterile material potentially capable of incorporation into engineered plastics for use as building material and insulation, thereby turning Waste to Worth. This does for example displace wood flour which is variable and biologically active, with a fibre which is consistent and sterile, allowing production of a far better grade of new weatherproof “plastic wood”. This also can be recycled through the plant at the end of its useful life.

Without the declassification of such a recovered material from the classification of waste, there will be no international trade for our outputs—exactly the position that the BMRA submits.

2. The role for and implementation of regulations, and their enforcement

Like the ESA, we support effective regulation, and heavy penalties for those who operate illegally. This also requires that a proportionally light hand is used in respect of well run and legally operated businesses. We have advocated that individuals, not amorphous corporate bodies, should be trained and regulated. If the gold standard for plumbing and heating engineers is to be “Corgi”® registered, why not a mirror system for the waste industry, which already has a lead body, the Chartered Institution of Wastes Management (CIWM) which is very active in training? This removes deniability, and provides full accountability.

3. The classification of waste

This issue is of great concern to us, as only if our outputs cease to be classified as waste do we have the attractiveness of a model which returns value by producing saleable outputs, as well as landfill diversion. We produce new material, hence achieve re-use rather than just recycling, thereby moving us up the waste hierarchy.

4. The proposal for financial incentives to increase household waste prevention and recycling

Given that household waste may be a headline but is only a small part of the total waste stream, (perhaps 10%) we believe money spent here is disproportionate, and could be much better spent elsewhere, such as funding new technologies, of which ours is one.

5. The role of composting

Composting on a large scale is potentially fraught with problems of segregation and safe re-use, and when used purely as a means of disposal is in our view a very poor investment. Newer technologies, ours included, have the potential to return far better value. We would at least like to be able to make our case, but are denied access to the key funds that would make this possible.

6. The Government’s approach to waste minimisation

We see expenditure in this area as misdirected, when waste, and growth in arisings are facts of life, particularly when economies are in a growth phase. Good engineering design at the manufacturing stage should allow for better separation when recycling, leading to more recovery. One problem for example is that some soft drinks manufacturers currently use cap security rings which do not detach from the bottle, thereby contaminating the material of the bottle, when recycled. Another is the use of plastic tapes and label holders on cardboard boxes causing excessive contamination. We have been told anecdotally of Councils sending loads of cardboard to mills for recycling, having it rejected for this reason, and on its return, counting it again as new arisings! We agree with the ESA that this is no substitute for investment in infrastructure, which must surely be the highest of all priorities.

7. The potential for the proposals to tackle the UK’s contribution to Climate Change

We support the ESA’s position.
8. The promotion of anaerobic digestion for agriculture and food waste

As we consider that this process is a distraction from the newer technologies of which ours is one, we are against this being singled out for specific support. Like the ESA, we believe that the choice should be the widest possible, so that market forces can make the best choice for each particular objective. We therefore oppose this one technology being promoted over others, irrespective of its efficacy.

9. The adequacy of the existing infrastructure, such as energy from waste (EfW) facilities with heat recovery; the UK’s capacity to process materials collected for recycling; and the potential for Government action to encourage the most efficient novel technologies

a) Insofar as infrastructure goes, landfill is the wasteful placing of valuable resources largely out of reach, and the despoiling of our rural heritage, putting great pressure on land for essential housing, and this is our legacy. We inherited a green and pleasant land. We believe that as custodians of our countryside we have a duty to pass it on to our children and grandchildren in better condition than were received it, not worse.

b) We believe that Energy from Waste is an over-centralised technology which destroys valuable materials, returning very little value. It also opposes the proximity principle. It is however a large piece of capital investment of value to those who acquire it. Sheer scale suggests that these may be made into dinosaurs sooner than expected as it becomes vital to implement the proximity principle which will reduce carbon footprints and match local needs.

c) We believe that the UK as a whole has the will to collect and process materials. What is needed is investment into the infrastructure, as spelt out in the Institution of Civil Engineers “State of the Nation” review in 2004 (3).

d) We consider that the potential for Government action to encourage the most efficient novel technologies is vast, and the investments sought, comparatively with say PFI credits for an EfW plant, are very small indeed. If for example the original £30 million Defra New Technologies fund had been reasonably evenly distributed, with supplier contributions and equity investment to match, we would already have our demonstrator plant in place, and not still be seeking funding.

e) The BMRA submission has highlighted the need to address Automotive Shredder Residue (ASR). We believe that our process will deal effectively with this arisings stream, recovering the fibre, metals and plastics as discrete streams. Trialling this will require funds that we do not have.

f) The Defra submission supplement, at para. 4.19, refers to funding for new technologies. We have been unable to access this, the original £30 million fund being exhausted in 2005, and no new funds having been added since then. The Defra position was confirmed to EVRS today (25 November 2008) by John Burns, the Defra Programme Director of the Waste Implementation Programme (4), who said:

“The initial funding of £30 million (in 2005) has not been supplemented.
There are no new funds and what is unspent is committed.
There is no scope for new technologies to enter the programme.”

g) We therefore consider that further investment into new technologies is vitally important, especially where the process can be operated to deliver a significant return on investment. Such a strategy would reduce the burden on the taxpayer whilst generating a valuable new resource and income from sales of outputs.

References

(1) The “Defra Waste New Technologies Demonstrator—Programme Catalogue of Applications—2007 Update” (The EVRS technology is the last entry)
http://www.urbanmines.org.uk/assets/files/n/newtechnologiescatalogue2007_635.pdf

(2) To view the article on our EVRS “Zero-Bury” process in the September 2008 issue of the Journal of the Chartered Institution of Wastes Management, go to:
http://www.evrs.co.uk/vision/osment_EVRS_new_tech.pdf

(3) The Institution of Civil Engineers “State of the Nation” review in 2004

(4) The Waste Implementation Programme:
http://www.publicservice.co.uk/pdf/central_gov/issue11/CG11_sup%206002%20JohnBurns%20ATL.pdf

Environmental Recycling Systems

November 2008
Memorandum submitted by Gillian Bostic (Waste 65)

I would like to comment upon the essential reduction in the use of plastic bags by retailers.

I do feel that the majority of people (certainly in my region—South Gloucestershire) fully support the reduction in the use of plastic bags when shopping.

Why does it have to take so long for you to take formal action on this matter? Our neighbours, France, just decreed that from a certain date retailers were not to supply free plastic bags—why does it have to take us so long and why does it have to be gradual? Just do it—people soon get used to taking reusable bags.

Gillian Bostic
November 2008

Memorandum submitted by the United Kingdom Without Incineration Network (Waste 67)

Waste management practices are an important, although oft-neglected, contributor to climate change. Waste disposal drives climate change directly through the release of greenhouse gases, including carbon dioxide (CO2) and nitrous oxide (N2O) from incinerators and methane (CH4) from landfills. Waste disposal also drives climate change indirectly by depriving the economy of reused, recycled and composted materials, thus requiring increased extraction of raw materials, an extremely energy-intensive process.

Landfill taxes increase every year, and this has provided local authorities and industry with the incentive to divert waste from landfill. However in the absence of an incineration tax in the UK valuable resources are being burnt. To raise waste management above disposal and towards recycling, reuse and reduction it is important that there are disincentives for both incineration and landfilling. One such solution would be to introduce an Incineration Tax that follows the increases in Landfill Tax.

The United Kingdom Without Incineration Network (UKWIN) urgently requests that the Treasury investigates further the prospect of introducing an Incineration Tax to prevent recycling being undermined by a dash for waste burners. Not only would an Incineration Tax help ensure that scarce resources are used more efficiently, the Tax would contribute to achieving the Government’s target of an 80% reduction in greenhouse gas emissions by 2050.

Some incinerators generate energy, so-called “waste to energy” or “energy from waste” incinerators. But because waste prevention and recycling save energy, the energy generated by incinerating waste is small compared to the energy saved by recycling and reducing the same materials. For example: recycling, rather than incinerating mixed paper, saves more than nine times the amount of energy. Incinerating plastic generates nearly three times more lifecycle greenhouse gas emissions than recycling plastic.

Studies have shown that incinerators emit more CO2 per megawatt-hour than coal-fired, natural-gas-fired, or oil-fired power plants. But their greatest contribution to climate change is through undermining waste prevention and recycling programs, and encouraging increased resource extraction. “Surcharges on both landfills and incinerators are an important counterbalance to the negative environmental and human health costs of disposal that are borne by the public.” [1]

The current situation appears perverse, with taxes set at £32 and rising to £48 per tonne for landfilling, whilst the Government actively supports incineration with typically a £35/tonne subsidies for Private Finance Initiative (PFI) funded waste burners. This creates a drive to burn waste that should be recycled. Instead, the UK needs to create a graduated scheme of taxation penalties and credits that drives sustainable resource management. UKWIN would like to see the introduction of an Incineration Tax set at half the landfill tax rate.

Reference


United Kingdom Without Incineration Network
November 2008
EXECUTIVE SUMMARY

Flexibility is fundamental to meet the changing world of the future in which climate change increases, raw materials diminish and emerging industrialising nations add to the volatility of markets and global economies. Flexibility should be fundamental to the handling of waste as to any other industry.

Waste is also an area in which local communities can positively contribute to achieving the government set target of achieving 80% reduction of our carbon footprint by 2050.

Gloucestershire Friends of the Earth Network (GFOEN) believe that a new approach to dealing with waste is needed. By enabling the responsibility of decision making and action on waste to remain within small local communities, it enables them to take on the responsibility of dealing with their own waste. This principle should be extended to the development of small local residual waste management projects of proven need, after maximising recycling, that match the scale, form and size of their surroundings and that are acceptable to local communities. It is working on a small community scale so that there is direct participation and action at the local level that is the key. This would minimise the waste carbon footprint and stimulate small and medium enterprises in the recycling and in the recyclates industry.

In studying the process and procedures in the handling of waste GFOEN has become increasingly concerned that the PFI system established to meet the challenge of the EU Landfill Directive, has led to the focus of PFI funding on residual waste, to the detriment of financially encouraging local authorities to achieve high recycling rates. Furthermore, the PFI system appears to discourage public participation and innovation, all underlined by the lack of transparency in critical areas of modelling which directly influence outcomes leading to the critical decisions of site, size of facility and technology of a residual waste facility.

For consideration by the Select Committee and other communities GFOEN recommends:

— an increase in recycling targets to 70% by 2013 and at 2013 to reassess 2020 targets upwards preferably to 80%;
— greater separation of waste at kerbside;
— small local residual waste management facilities that match the scale, form and size of their surroundings and acceptable to local communities (5,000–45,000tpa, size dependent on proven need) preferably MBT with Anaerobic Digestion on a few local sites, for the benefit of local communities guided by variable short term contracts. Development staggered to allow recycling rates to increase over a period of time covered by LATS purchase and brought on line with population growth. There should be several small local contractors involved on different sites; and
— reforming the PFI criteria, contract system and guidance with regard to waste to enable innovation by:
  1. widening PFI funding to reduction and recycling;
  2. removing the floor level minimum cost for a residual waste project of £20 million;
  3. removing the long term contract requirement and providing the alternative of short term contracts of five to 10 years;
  4. requiring inclusion within an Outline Business Case (OBC) reference project modelling small residual waste facilities;
  5. if contested, requiring projected waste arisings to be tested at public inquiry before a residual waste project proceeds to ministerial approval;
  6. requiring all information and modelling processes used to advance a residual waste project be available for public inspection for transparency and for the greater public interest;
  7. requiring public consultation to take place at each stage of procurement; and
  8. removing the requirement for the output specification to be “technology neutral” for PFI funding.

MEMORANDUM

Flexibility is fundamental to meet the changing world of the future in which climate change increases, raw materials diminish and emerging industrialising nations add to the volatility of markets and global economies. Flexibility should be fundamental to the handling of waste as to any other industry.

Gloucestershire Friends of the Earth Network (GFOEN) have made representations to the Gloucestershire County Council (GCC) that flexibility can be achieved by:

— an increase in recycling targets to 70% by 2013 and at 2013 to reassess 2020 targets upwards preferably to 80%;
— greater separation of waste at kerbside; and
— small local residual waste management facilities that match the scale, form and size of their surroundings and acceptable to local communities (5,000–35,000tpa, size dependent on proven need) preferably MBT with Anaerobic Digestion on a few local sites around Gloucestershire, for the benefit of local communities guided by variable short term contracts. Development staggered to allow recycling rates to increase over a period of time covered by LATS purchase and brought on line with population growth. There should be several small local contractors involved on different sites. GFOEN regards inflexibility to be a single large facility with a long term contract that will dominate the waste market with a single contractor with no competition.

In April 2008 the Cabinet of GCC made the decision to look in depth at this dispersed solution (small local facilities on several sites) however so far no appraisal work has been undertaken.

RECYCLING AND COMMUNITY PARTICIPATION

In St. Arvans, Monmouthshire, a “Zero Waste” project which promotes waste separation kerbside collections of paper, glass, cans, foil, textiles, plastics, tetrapak cartons, green waste and food waste, has diverted from landfill 73% of household waste and has achieved a 95% participation rate in just over a year by a dedicated waste team informing and enthusing local residents. The Stanleys Waste Trial in the Stroud District, Gloucestershire also achieved a good success rate.

These projects have shown that greater kerbside waste separation can reduce the amount of residual waste going to landfill, quickly and effectively, by building up enthusiasm and thereby participation of small local communities by dedicated waste teams. This underlines the importance of actively involving local communities by enabling the responsibility of decision making and action on waste to remain within local communities to enable them to take on the responsibility of dealing with their own waste. This principle should be extended to the development of small local residual waste management projects of proven need and acceptable to local communities on a few local sites around a county like Gloucestershire. It is working on a small community scale so that there is direct participation and action at the local level that is the key.

The Consultation on the Gloucestershire Joint Municipal Waste Management Strategy revealed an overwhelming support from residents and Parish Councils for greater recycling. Rural areas like Gloucestershire, comprising of villages and market towns are ideal for this approach and even Cheltenham and Gloucester are made up of neighbourhoods. In addition this would minimise the waste carbon footprint.

Waste separated to kerbside is good quality waste that is acceptable to a wide range of industries that use kerbside recyclables. Municipal Solid Waste (MSW) has the potential to create new jobs in the collection and use of recyclables. The rubbish that makes up MSW is made from raw materials and the energy already used in its manufacture, so it makes economic sense to recycle rather than start from scratch in making products to sell.

RECYCLING AND INDUSTRY

Until the global economic crisis, increased demands from the industrialising nations such as India and China had forced up prices for raw materials eg metals. The London Metal Exchange (LME) is promoting steel and plastics futures because of the intense price volatility in these industries. It states that the LME steel billet contract should also correlate with the scrap metal sector. With economic stabilisation demand for dry recyclables will increase in value and stimulate new small businesses.

As little as ten years ago recycled paper was not readily available, now it is quite commonly used in all kinds of products, the same with recycled glass. Soft plastics are being turned into all kinds of rigid products, even fence posts and B&Q are advertising loft insulation made from recycled plastic. Britain is good at innovation and it is an ideal area of development for small new businesses thus providing new jobs and employment.

The work for the National Assembly for Wales 2007 by consultants, Eunomia showed 93.3% of the municipal waste stream could be recycled yet a large scale incinerator can inhibit the development of high recycling rates by long term contract requirements. This places an artificial ceiling on recycling levels and a municipal waste stream could be recycled yet a large scale incinerator can inhibit the development of high recycling rates by long term contract requirements. This places an artificial ceiling on recycling levels and a large scale incinerator can inhibit the development of high recycling rates by long term contract requirements. This places an artificial ceiling on recycling levels and a large scale incinerator can inhibit the development of high recycling rates by long term contract requirements. This places an artificial ceiling on recycling levels and a large scale incinerator can inhibit the development of high recycling rates by long term contract requirements.

Quote from KentOnline news article about the Allington incinerator, Kent.

Councillor Keith Ferrin, the council’s environment spokesman, said it had been a “stupid” decision in hindsight, but there had been no way to predict changes to the industry.

He said:

“The people who thought they were being very clever and economical with people’s money 10 years ago have produced a situation where the reverse is true, as KCC is now committed to a contract we can’t get out of.”

“What seemed a very wise decision a very long time ago is a very stupid one today.”
He added:

"At the time, people were saying nationally that this was the only way ahead."

"But if you make a prediction for 10 years’ time, the only thing you can be certain of is that it will be the wrong decision."

Industry particularly small and medium sized businesses tend to plan ahead on a 2/3 year basis because of the fast changing nature of the competitive business market place, in terms of innovation, changing demands, costs of labour, materials and access to credit for expansion etc. Waste is an industry in which County Councils need to have the same opportunity of short term contracts to be able to realise the true value of waste and to open this potentially innovative market to small and medium sized enterprises (SME’s) and thereby stimulate more employment opportunities.

In Business First (issue 2, Summer 2008) John Hutton, then the Secretary of State, Department for Business, Enterprise and Regulatory Reform (BERR) stated that innovation is the key to the Department’s Enterprise Strategy and wished to stimulate innovation through opening up government procurement to SME’s so that the government can benefit from the innovation they bring.

The just released Glover Report, “Accelerating the SME economic engine: through transparent, simple and strategic procurement” states:

“Action is needed by Government to address the concerns identified in this report. By ensuring open and fair competition for public sector contracts, whilst minimising burdens on potential and successful bidders, Government could not only help SMEs directly but also save money for the taxpayer. SMEs have an important role in supplying goods and services and the increased competition and innovation they bring has an important role in ensuring that the Government can deliver world-class public services that are value for money.”

THE PFI FUNDING CRITERIA, CONTRACT SYSTEM AND GUIDANCE

The PFI funding, contract system and guidance with reference to waste, is long overdue for revision, particularly with regard to:

Transparency and Consultation

The Glover Report makes transparency an important issue for supporting SME’s with regard to local authority procurement which includes waste. Full transparency in the processes, particularly modelling processes and procedures in developing PFI residual waste projects for procurement is also an important issue for councillors, stakeholders and the public.

The Gloucestershire County Council have said that it is required by the PFI process to make the output specification “technology neutral” so that the bidders will come forward with their own suggestions and that they will be assessed in particular by the use of the Evaluation Framework.

The interests of the waste industry are likely to be very different to what people feel is best for Gloucestershire, particularly as the reference project in the Outline Business Case (OBC) is a large incinerator with a 25 year contract which is likely to give a bidder the best profit return. In the face of such tempting guaranteed profits it is unlikely that a business man is going to put in a bid for small facilities on short term contracts no matter how good it would be for the Gloucestershire and however much it is supported by local residents. GFOEN question whether the technology neutral approach provides value for money in terms of public consultation and in outcomes.

The stated requirement for the “technology neutral” approach for PFI requires the use of modeling to narrow down the selection to preferred technologies in the OBC and an Evaluation Framework containing Key Criteria, sub criteria and weightings, in conjunction with the use of selected modeling tools with their inherent weightings. This is the process which will select from the methods put forward by the waste industry by which residual waste will be handled in Gloucestershire. The whole process is largely shrouded in secrecy by the caveat of commercial confidentiality and is going forward without the testing by public inquiry of basic assumptions, such as the amount to waste to be dealt with by 2020.

In Gloucestershire GFOEN has expressed growing concerns with regard to the lack of transparency and full access for all parties to the modelling used by officers to arrive at conclusions that are subsequently recommended to councillors for scrutiny and Cabinet decision on the residual waste project. For example, despite an environmental information request from GFOEN many of the appendices of the Gloucestershire OBC that contain modelling are withheld citing commercial confidentiality. The stakeholder consultation on the Evaluation Framework experienced by GFOEN with no pre-briefing papers or detailed definitions of terminology rendered the exercise flawed. Despite being the first tier of local government, Parish and Town Councils, or their Association were not invited to a stakeholder meeting.
Councillors of the Budget and Performance Scrutiny Committee were informed that commercial confidentiality precluded the officers from providing details of the consultation and the sub criteria from which the Evaluation Framework was derived and on which they were required to make a recommendation of its soundness. The Report to the Overview and Scrutiny Management Committee Nov 2008 states:

“We would have liked to have received more detailed information on the evaluation criteria but, in the main, understood that maintaining and protecting the integrity of the project meant that this was not possible.”

It is not appropriate to withhold any information with regard to the OBC or the Evaluation Framework as these are, in principle, documents that are frameworks which should be an expression of the desires as to how the residents of Gloucestershire wish to see their waste handled and how they wish to see selection progressed. The modelling processes used to arrive at these documentary conclusions must be transparent and open to scrutiny by councillors, stakeholders and the public, otherwise how is anyone able to assess the robustness of the modelling processes and procedure from which the solution of dealing with residual waste in Gloucestershire is derived.

The weightings given in an Evaluation Framework are crucial as they have the ability to change the outcome in the procurement process. “Data Deficiencies in Waste Management Policy and Practice” (available on the DEFRA website) underlines this point and adds that the modelling tool used can also have a similar dominating effect because they directly affect the scoring of the appraisal of options.

**Limitations of assessment tools**

There are various assessment tools available for Local Authorities to use to compare different management systems treating MSW. However it would appear that these software tools do have their limitations in terms of the parameters in which they function. For instance GFOEN understand from “Data Deficiencies in Waste Management Policy and Practice” that WISARD is unable to take account of reduced biodegradability, therefore when using the software system for the comparison of differing residual waste technologies there is a danger of overestimating the environmental impact for landfilling stabilised material from an MBT whilst potentially providing a overestimate of the benefit of incineration through the replacement of coal for the generated energy.

The Waste Strategy for England 2007 and in the government’s practice guidance for municipal waste management strategies and waste planning, suggest the use of the modelling tool WRATE, developed by the Environment Agency, but it is not mandatory. Because WRATE is concerned solely with waste management, it starts from the point at which we throw things away, so it has nothing to say about emissions associated with producing things originally or about waste minimisation.

GFOEN believe that the various assessment tools available are not able to pick up the full potential development for small new businesses providing new jobs and employment which could arise from a change in emphasis, from providing PFI funding solely at the end of the process to maximising recycling at the front end thereby lowering the carbon footprint and the use of small residual waste facilities on several local sites with a PFI support package.

Government has placed at the centre of its planning reforms the principle of pre-planning application public consultation. This principle needs to be adopted and made clear, transparent and evident in every stage of the development of the waste PFI process including each stage of procurement to enable full information to be available for public consultation.

**Long term contracts**

A key policy of the Government for PFI investment. Where waste is concerned GFOEN would argue that this approach is actually detrimental for Value for Money. Local government cannot respond to changing circumstances once having signed a long term contract which can become onerous as shown by the Kent example. The Kent scenario long term contract inadvertently set a ceiling on how much recycling could take place, in that having agreed to supply the Allington Incinerator 320,000 tpa it now cannot take full advantage of the growing recyclates market. Rightly the councillor said how was it possible to foresee such changes 10 years ago. Other examples of unforeseen consequences of long term contracts are Nottingham City Council is underwriting heat produced by the incinerator. Due to energy efficiency improvements the income from heat reduced with a shortfall of about £100,000 per month, which the City Council is now required to pay until 2016. By contract they are also responsible for maintenance work and may have to pay up to £20 million to upgrade boilers and grates to meet Environment Agency (EA) standards after the EA issued an enforcement notice and formal warning because of failings in the maintenance system. The contract also allows the operator to demand that up to 100% of all municipal waste collected by the City Council to be brought to the incinerator until 2032.
**PFI funding restricted to residual waste**

The emphasis on only offering PFI investment at the back end of the waste market, ie residual waste, is to the detriment of encouragement where investment should take place which is at the front end of the waste market to reduce, reuse and recycle. MSW is no longer poor value rubbish just to be black bagged and incinerated, it is a valuable resource. If separated at kerbside to retain quality, it has the potential to rival raw materials on cost to industry. Local Authorities need assistance to maximise separated kerbside collections to gain maximum value out of recyclables and stimulate local small industries in the collection and reuse of wet and dry recyclables. This could be achieved by expanding the areas of PFI investment to include recycling. The present restriction of PFI investment solely to residual waste infrastructure encourages LA’s to chase the lure of residual waste PFI capital investment to the detriment of maximising recycling.

**Size is an important issue in terms of flexibility**

PFI investment appears to be more readily offered to large scale single facilities because it is claimed that they are more efficient through economies of scale. GFOEN believe that this approach is short sighted, as it precludes the inherent value of the flexibility of small scale developments with short term contracts, the potential for stimulating small scale new businesses, the lowering of the carbon footprint by dealing with waste where it arises and more able to take advantage of new technologies whereas the larger the project the greater the vested interest in maintaining the life of that investment and thereby requiring a long term contract.

The size of a facility relates to the amount of residual waste. In many areas the justification for a large scale facility is also based on figures “plumped up” by green waste, by the inclusion of DIY builders waste and a general over estimation of percentage increase over time to 2020.

This is exampled by the evidence presented in the submission by Alan Watson, Consultant, on behalf of Gloucestershire Friends of the Earth Network to the Gloucestershire Waste Core Strategy Preferred Options. Yet the Gloucestershire PFI bid has been accepted by DEFRA despite being in receipt of the evidence presented in the submission by Alan Watson of the significant discrepancy.

1. From 1.30 to 1.35 in text and tables set out below the actual growth rate in the recent past is considered and it can be seen that the waste growth from 2006 to 2007 was actually at the 2020 target—assuming a 3%—or even a 1.6% growth, simply does not reflect the real data and should not be used to extrapolate future waste growth tonnages and costs. Since 2004 the average annual growth has been just 0.8%.
<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>24,660</td>
<td>19,864</td>
<td>23,535</td>
<td>25,352</td>
<td>26,495</td>
<td>25,675</td>
<td>26,438</td>
<td>25,788</td>
<td>24,723</td>
<td>24,801</td>
<td>21,770</td>
<td>21,522</td>
<td>290,621</td>
</tr>
<tr>
<td>2004</td>
<td>24,435</td>
<td>21,096</td>
<td>23,884</td>
<td>28,595</td>
<td>27,729</td>
<td>28,075</td>
<td>27,342</td>
<td>26,935</td>
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<td>24,865</td>
<td>24,952</td>
<td>21,677</td>
<td>307,539</td>
</tr>
<tr>
<td>2005</td>
<td>24,710</td>
<td>20,649</td>
<td>26,003</td>
<td>27,637</td>
<td>28,686</td>
<td>29,507</td>
<td>26,679</td>
<td>27,794</td>
<td>26,638</td>
<td>25,083</td>
<td>24,046</td>
<td>21,711</td>
<td>309,143</td>
</tr>
<tr>
<td>2006</td>
<td>25,508</td>
<td>20,807</td>
<td>23,225</td>
<td>27,761</td>
<td>29,854</td>
<td>30,183</td>
<td>26,867</td>
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<td>27,323</td>
<td>25,568</td>
<td>21,228</td>
<td>314,491</td>
</tr>
<tr>
<td>2007</td>
<td>26,989</td>
<td>21,861</td>
<td>25,522</td>
<td>29,027</td>
<td>28,837</td>
<td>28,186</td>
<td>27,715</td>
<td>31,277</td>
<td>26,400</td>
<td>23,935</td>
<td>24,766</td>
<td>20,077</td>
<td>314,592</td>
</tr>
</tbody>
</table>
2. On the financial year basis, from 1.36 to 1.38 inclusive, including a detailed breakdown of total waste arisings in Gloucestershire in the table below, the case is made that most of the increase in total waste arisings is from green waste and DIY/hardcore waste.

(a) 1.12 “the green waste is practically all ‘new’ waste which would previously have been left in gardens or composted at home. It should not be used as a basis to project overall growth rates. When green waste is removed it can be seen that over the period from 2002–03 reduces to just 0.87%—much closer to the national average of c.0.5% indicated in Waste Strategy 2007.”

(b) 1.13 “The increased emphasis on collection of DIY/hardcore wastes at HRCs has also almost certainly generated mainly ‘new’. Hardcore would have rarely have been put out with residual domestic waste and, if produced and disposed of at all, would have been collected in skips and would then most likely have been recycled as part of the C & D stream. If hardcore waste growth is removed from the equation then it can be seen that the average growth rate since 2002 is only 0.09%.

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>3.3%</td>
</tr>
<tr>
<td>2003</td>
<td>5.8%</td>
</tr>
<tr>
<td>2004</td>
<td>0.5%</td>
</tr>
<tr>
<td>2005</td>
<td>1.7%</td>
</tr>
<tr>
<td>2006</td>
<td>0.0%</td>
</tr>
<tr>
<td>2007</td>
<td>0.0%</td>
</tr>
<tr>
<td>2008</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Gloucestershire Joint Municipal Waste Management Strategy (JMWMS)

Objective 5: “Residual Waste as a Resource” states:

Subtext: “After we have reduced, reused, recycled and composted as much as we can there will still be some waste left over. This is referred to as residual waste.”

This implies that residual waste is waste that cannot be “reduced, reused, recycled and composted. Green waste is easily recyclable, DIY/hardcore waste can be recycled, yet the tonnages per annum of these new collections, which can be recycled, are being used to justify a large residual waste facility of 130-200,000tpa which would lock up potential recyclable material into a 25 year contract. The building of overly large facilities to burn waste that could be recycled does not offer value for money as pointed up in the Audit Commission Report on Waste.
CLIMATE CHANGE

In the Eunomia Report “Greenhouse Gas Balances of Waste Management Scenarios” written for the Greater London Authority it states:

“The most critical new driver for London’s waste management is climate change.”

and

“Perhaps surprisingly, when compared to many LCA studies, MBT (‘biostabilisation’) process performs better than many of the configurations generating energy due to both the lack of any release of GHGs associated with fossil carbon from energy generation and reduced emissions of methane in landfill.

Whether preceded or not by MBT (‘biodrying’), scenarios incorporating traditional incineration technologies perform poorly. This is the result of significant emissions from wholesale combustion of plastics at relatively low efficiencies, which negates the benefits derived from avoided emissions associated with energy generation.”

MBT and AD are proven technologies and in the light of this report GFOEN recommends small MBT and AD plants for Gloucestershire.

TABLE A PERFORMANCE OF CORE TECHNOLOGY TYPES UNDER CENTRAL ASSUMPTIONS

Gloucestershire Friends of the Earth Network

November 2008

Memorandum submitted by Professor J C Dearden (Waste 69)

EXECUTIVE SUMMARY

The OECD has indicated that England places too much emphasis on incineration as a means of waste disposal. Scotland and Wales are turning away from incineration, with much more emphasis on recycling and treatments such as anaerobic digestion.

Incineration uses much more energy, and produces much more carbon dioxide, than does recycling. The atmospheric pollution emitted by modern incinerators is better than it was 10 years ago, but is still much worse than is claimed. Damage to foetuses and infants from dioxins and related chemicals is much greater
than it is to adults, and is grossly underestimated. The danger from very fine particulate emissions is only now being realised, and very fine particulates cannot be filtered out effectively from incinerator gaseous emissions.

The Precautionary Principle needs to be applied much more rigorously to waste disposal methods, and particularly to incineration.

**MY CREDENTIALS**

I am Emeritus Professor of Medicinal Chemistry at Liverpool John Moores University, where I have worked for the last 43 years. I hold a B.Sc. in chemical engineering, a M.Sc. and a Ph.D. in physical organic chemistry, and an Associateship of the City & Guilds Institute; I am also an honorary member of the Royal Pharmaceutical Society of Great Britain, for contributions to pharmaceutical research. My prime area of work is in computational toxicology, and I was the 2004 recipient of the biennial International QSAR Award for Research in Environmental Toxicology. I am the author of about 250 scientific publications in computational toxicology and related fields, and am on the editorial boards of three scientific journals. I serve on a European Commission working party in connection with the recent REACH (Registration, Evaluation and Authorisation of Chemicals) legislation, and was invited to give evidence to the Royal Commission on Environmental Pollution in 2001.

My submission concerns waste incineration.

1. **Incineration as a means of waste disposal**

   “In this century of progress, with our knowledge of chemistry, and with the most complete machinery at our disposal, it seems to me like a lapse into barbarism to destroy this most valuable material simply for the purpose of getting rid of it, while at the same time we are eager to obtain these very same materials for our fields by purchase from other sources”.

   Bruno Terne, speaking at Philadelphia’s Franklin Institute in 1893, arguing against burning natural fertilisers in incinerators whilst at the same time extracting and transporting fertilisers from continent to continent.

   Up to around 30 years ago, incineration seemed a good idea for getting rid of waste; it avoided landfill, it quickly disposed of waste, and it could even provide energy in the process. However, little or no account was taken of incinerator emissions, and even fly-ash was not regarded as toxic, which led to the notorious Byker disaster [Ares & Bolton 2002, Tangri 2003]. Furthermore, incinerating waste does not get rid of it, but rather converts it into other substances, some of which are highly toxic, and one of which (carbon dioxide) is a so-called “greenhouse gas”.

   For many years, environmentalists have campaigned against waste incineration, for a number of reasons [Tangri 2003]. However, there is now an increasing realisation in official circles that there are better ways of treating waste than by burning it.

   1.1 A recent O.E.C.D. study [OECD 2007] stated that, in England, “the environmental harm caused by a modern landfill and a modern incineration plant are of a similar magnitude, while the costs of building and operating an incinerator are much higher than the similar costs for a landfill. Hence the total costs to society as a whole of a modern incinerator seem significantly higher than for landfilling—which indicates that some reconsideration of the current preference being given to incineration could be useful”.

   1.2 The EU Cogeneration Directive [European Parliament 2004] requires that EfW plants that generate more that 25 megawatts must have an overall efficiency of at least 70%. An EfW plant that generates electricity only has a maximum thermodynamic efficiency of 27%, assuming a steam temperature of 400°C [Environment Agency website 2008], and most plants operate in the region of 15–22% efficiency. I understand that DBERR is trying to change the Renewables Obligation in order to ensure that EfW plants can claim Renewables Obligation Certificates on a sliding scale below the 70% threshold, but that typical plants would be able to claim ROCs for only about 7% of their electrical output.

   1.3 Scotland is now moving away from incineration. In a speech on 24 January 2008 the Scottish Environment Secretary, Mr. Richard Lochhead, said: “We support technologies such as anaerobic digestion, which can be used to treat food waste and produce biogas. In our approach to waste, we are determined to remain mindful of the wider climate change challenge and our energy policies. That is why the Government is opposed to large inefficient energy-from-waste plants. Such plants could easily become white elephants and drain public funds. They require excessive transportation and could crowd out recycling and waste prevention” [Lochhead 2008]. Mr. Lochhead also said that Scotland was moving towards a zero waste society, and set a target of 70% municipal waste recycled or composted by 2025.

   1.4 Wales is also moving away from incineration. The Welsh Environment Minister, Jane Davidson, said on 18 October 2007 that: (i) a re-evaluation of the components of the municipal waste stream now indicates that up to 93.3% is potentially recyclable; (ii) the higher the recycling rate and the lower the proportion of energy from waste, the greater the displacement of greenhouse gas emissions (as a result of the reduction in processing of virgin raw materials through increased use of recycle); (iii) financial modelling shows that
by 2024–25, the option that has the lowest recycling rate (40%) and the highest energy from waste rate (60%) also has the highest costs; (iv) the anaerobic digestion of separately collected food waste is the most sustainable option in terms of reducing greenhouse gas emissions.

1.5 The Government has recently published its Waste Strategy for England [Defra 2007], in which the “waste hierarchy” is given, in order of preference, as: (i) waste prevention, (ii) re-use, (iii) recycle/compost, (iv) energy recovery, (v) disposal. It is interesting to note that, for the first time, anaerobic digestion is given preference within energy recovery options: “The Government wishes to encourage local authorities and businesses to consider using anaerobic digestion.” Although anaerobic digestion is currently a commonly used technology in some other European countries this is not the case in England.” Second preference is given to combined heat and power (CHP) recovery: “Any given technology is (where applicable) more beneficial if both heat and electricity can be recovered. Particular attention should therefore be given to the siting of plant to maximise opportunities for Combined Heat and Power”. Proposals for incinerators generating only electricity go against current Government recommendation.

Anaerobic digestion (AD) is a well-established technology, and in fact Lancashire has chosen to use AD instead of incineration for its 1.1 million tonne/year of waste, in collaboration with the Australian company Global Renewables Limited [Global Renewables 2007]. Global Renewables have stated [Global Renewables 2006] that “Landfilling/incineration is a primitive infrastructure solution which is not sustainable and leaves an uncosted problem which the next generation will be compelled to address”. Merseyside has also recently granted permission for a 400,000 tonne/year AD plant at Hooton.

1.6 Incineration reduces incentives to recycle/compost. It is often claimed by those who support incineration that high incineration rates and high recycling/composting rates go hand-in-hand. This is in fact not the case, as Figure 1 shows; there is clearly virtually no correlation between the two. The coefficient of variation is 0.131; that is, there is only 13.1% correlation between incineration and recycling/composting. One country has 41% recycling and 54% incineration. However, recycling rates are set to increase markedly, and clearly a country with 54% incineration will have to make a choice: either reduce its incineration rate, by closing incinerators or introducing an incineration tax as Denmark and Sweden have done [Sahlin et al. 2007] because their domestic incineration rates are too high, or by importing waste for incineration, as some countries such as Sweden are doing [Olofsson et al 2005].

1.7 Conversely, recycling, which the Government is urging us all to do more of, leads to a decrease in energy recovery from the incinerator [Wenisch et al 2004]. The related impacts tend to offset the environmental benefits arising from the waste recycling. Thus incineration and recycling are not compatible.

1.8 Incinerators are huge burners, and—not surprisingly—sometimes break down or set on fire. Examples of recent such incidents in British municipal incinerators are Allington, Crymlyn Burrows, Dundee and Kirklees. This has meant that large volumes of waste have had to be diverted at great expense to landfill.

1.9 Life cycle assessment (LCA) of recycling versus incineration has shown repeatedly that recycling is better than incineration in environmental and economic terms [Monthly UnEconomist 2000, Morris 2004, Wenisch et al 2004, Dodriba et al 2006, Eriksson et al 2007]; Morris [2004] has estimated that in cost terms (including health costs) recycling is almost $100 per ton cheaper than is incineration or landfill. A recent report [Hogg 2006] has also drawn attention to the socio-economic costs (including health costs) of incineration. It challenges H. M. Customs & Excise’s estimate [2004] of £0.01 per tonne of waste incinerated; there is apparently an error in Customs & Excise’s calculations, and the figure should be £3.19 per tonne of waste incinerated. Other estimates are even higher; the CAFÉ website [CAFÉ 2007] gives, using the same emissions data (which include particulates, SOX, NOX and VOCs (volatile organic chemicals)) as those used by HM Customs & Excise [2004], figures indicating that the unit damage costs of incineration can be as high as £15 per tonne of waste incinerated.

For an incinerator burning 600,000 tonnes of waste annually, damage costs, even using the corrected Customs & Excise figures, would be £1.9 million per annum. Using the CAFÉ figures, damage costs would be £9 million per annum. These figures do not, of course, take into account damage costs from fly-ash, which can cause health problems through leaching from landfill sites and from airborne dispersal during handling. It is clear from the above such an incinerator would cause serious socio-economic problems for local populations.
The statistics of the correlation are: coefficient of variation = 0.131, standard error of estimate = 16.8%. These figures mean that the correlation is virtually non-existent; the % recycled/composted correlates with only 13.1% of the % incinerated. As can be seen, the graph is effectively a random scatter plot.

1.10 It is frequently claimed by the proponents of incineration that its environmental impact, in terms of greenhouse gas emissions, is positive [Porteous 2001]. However, incineration—especially without CHP—is one of the worst waste treatment options environmentally. A U.S. E.P.A. report [Choate & Ferland 2005] shows that, for 20 categories of waste for which energy use figures are given, incineration uses less energy than recycling in only four—magazines/3rd class mail, textbooks, dimensional lumber, and medium density fibreboard. The average energy saving per ton for all 20 categories is 19.44 million BTU for recycling and 3.43 million BTU for incineration, relative to landfill.

Hogg [2006] has shown that when biogenic carbon is taken into account, an electricity-only incinerator is by far the worst option for energy production, in terms of CO₂ release (see Figure 2). The CO₂ release values are:

<table>
<thead>
<tr>
<th>Category</th>
<th>CO₂ Emissions (g CO₂/KWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined cycle gas turbine station</td>
<td>382</td>
</tr>
<tr>
<td>Coal-fired station</td>
<td>835</td>
</tr>
<tr>
<td>Oil-fired station</td>
<td>770</td>
</tr>
<tr>
<td>Incinerator, electricity only</td>
<td>1645</td>
</tr>
<tr>
<td>Incinerator, CHP</td>
<td>1086</td>
</tr>
<tr>
<td>Gas station, CHP</td>
<td>395</td>
</tr>
<tr>
<td>Incinerator, heat only</td>
<td>967</td>
</tr>
</tbody>
</table>

It is clear that incinerators would be profligate in terms of their greenhouse gas emissions.

1.11 It is salutary to see that at least one of the large companies dedicated to handling and treating waste has turned against large incinerators. Peter Jones, director of external affairs at Biffa, has said [Jones 2006] that landfill sites and big incinerators are now outdated technologies, and new waste treatments need to be promoted. He commented: “incinerators now are a lot cleaner than your garden bonfire but they emit lots more CO₂ than alternative technologies, they are risky high-value investments and have very long lives at a time when waste is changing dramatically. There is certainly a bit of a split in our industry over incineration. SITA and Veolia have big factories in France dedicated to building parts for big incinerators. But, if you build one, it is there for the next 30 to 40 years. In the next ten years it’s likely we will have CO₂ taxes or trading schemes across all industries. So by building a big incinerator now you are going to pay dearly in the long run”.
1.12 In 2007 the amount of standard waste going to landfill fell from 41,052,000 tonnes to 39,278,000 tonnes [HM Revenue & Customs 2007], a decrease of 1,774,000 tonnes or 4.32%. Almost all of the reduction was because of increased recycling. This is equivalent to three 600,000 tonne/year incinerators no longer being required. Since there will almost certainly be similar or larger increases in recycling over the coming years, there will much less waste available for incineration.

![Graph showing carbon dioxide emissions of various waste treatment processes and power stations](image)

Figure 2. Carbon dioxide emissions of various waste treatment processes and power stations (from Hogg [2006])

2. Emissions of dioxins and related chemicals

This section deals with the emission of dioxins and related chemicals from incinerators.

Dioxins are a family of 75 polychlorinated dibenzo-p-dioxins (PCDDs), the structure of the most toxic of which is shown in Figure 3. This compound is one of the most toxic chemicals known, and is a known human carcinogen and endocrine disruptor. Similar chemicals are polychlorinated dibenzofurans (PCDFs), of which there are 135 (see Figure 3). Other related compounds are polychlorinated biphenyls (PCBs), of which there are 209, many of which are known [Mukerjee 1998] to be endocrine disrupters; the structure of unsubstituted biphenyl is shown in Figure 3. Yet others are polybrominated diphenyl ethers (PBDEs), of which there are 209, and polybrominated biphenyls (PBBs) of which there are also 209; the structure of unsubstituted diphenyl ether is shown in Figure 3. PBDEs and PBBs are used as flame-retardants for electrical goods, clothing and furniture. They are known to be endocrine disruptors and to cause developmental neurobehavioural defects [Mikula & Svobodov—2006, Eriksson et al 2006]. The principal cause of their presence in the environment is widely accepted to be incineration [D’Silva et al 2004].

All these compounds are hydrophobic (lipophilic) and therefore tend to accumulate in adipose tissue in the body. They are also chemically very stable and are therefore resistant to metabolic attack, and therefore to excretion, since chemicals need to be reasonably soluble in water in order to be readily excreted.

PCBs, PBBs and PBDEs can be present in waste materials. Dioxins (PCDDs and PCDFs) are not normally present in waste, but are formed when chlorine-containing organic substances (e.g. PVC) are burned. If combustion takes place at temperatures of about 850C, any dioxins already formed are destroyed, but can re-form again post-combustion. Cunliffe and Williams [2007] found that “formation of PCDD/PCDF on flyash deposits in the post-combustion plant of incinerators can result in the release of significant amounts of PCDD/PCDF to the flue gas stream”. Littarru [2006] has shown that about 57% of emitted dioxins (in terms of TCDD equivalents) are in the flue gases, with about 43% sorbed on the fly-ash.

In 1997 Douben [1997] of H.M. Inspectorate of Pollution stated that “MSW incinerators are the dominant source of PCDD/F emissions to atmosphere and are responsible for up to 80% of the inventory”. It is now acknowledged that dioxin emissions from incinerators have fallen considerably in recent years. However, there remain a number of areas of concern.
2.1 Dioxin emission levels from incinerators are measured once or twice a year by external assessors who have to give prior notice of their visits. It is thus likely that operators ensure that a plant is running under optimal conditions for a visit. If much more frequent or continuous measurements are made, the total dioxin emissions are found to be very much higher than those calculated from biannual measurements. De Fré and Wevers [1998] found that emissions measured using the European standard method EN 1948 over a 6-hour period were 30 to 50 times lower than the average over a two-week continuous period. Reinmann et al [2006] showed that use of continuous dioxin sampling enabled operators to reduce dioxin emissions by a factor of 10, through careful control of operating conditions. True dioxin emissions from the proposed Ince incinerator, which would be subjected only to biannual checks, are thus likely to be very much higher than claimed.
2.2 Incinerators do not, for various reasons, run under optimal conditions all the time. Grosso et al. [2007] found that even under steady-state conditions total dioxin release varied between 1.5 and 45 μg TEQ per tonne of waste burned. Further, activated carbon was used to investigate whether active carbon on fly-ash could provide catalytic reduction, compared with > 99% during normal operation.

Sam-Cwan et al. [2007] investigated the post-combustion re-synthesis of dioxins, and found that levels at waste heat boiler outlets were 10.8–13.6 times higher than at the furnace outlets, whilst water spray cooling was effective at removing dioxins. It thus appears that incineration processes involving waste heat boilers would significantly increase dioxin levels in the flue gases prior to treatment, and consequently would make reduction of dioxin levels more difficult.

2.3 Incinerators have to be shut down on occasion, both for routine maintenance and because of operating problems. It has been observed that during shutdown and startup, the levels of dioxins and other pollutants can be much higher than under optimal operation. Tejima et al. [2007] tested the dioxin stack emissions of an MSW incinerator under conditions of startup, steady state and shutdown. They found concentrations of WHO-TEQ dioxin of 36–709 μg m⁻³ during startup, 2.3 μg m⁻³ during steady state operation, and 2.5–49 μg m⁻³ during shutdown. They estimated that 41% of the total annual emissions could be attributed to the startup period, assuming three startups per year. L.-C. Wang et al. [2007] found that a single startup could contribute about 60% of the PCDD/F emissions for one whole year of normal operations; hence, assuming three startups per year, 64% of total annual emissions could come from startup.

H.C. Wang et al. [2007] found that during startup the PCDD/F removal efficiency was only 42% with selective catalytic reduction, compared with > 99% during normal operation.

2.4 It is clear from the above that levels of pollutants emitted from incinerators can vary greatly, and can exceed the statutory limits placed upon their emission. (It must be noted here that those limits are generally based on what is achievable and measurable, rather than what is safe [House of Commons 2001]). In 2001 Greenpeace carried out a review of the performance of municipal waste incinerators in the U.K. [Greenpeace 2001]. They found that for the ten incinerators that they reviewed, there were 546 self-reported limit exceedances in the two years 1999 and 2000, covering HCl, SO₂, NO₃, CO and particulates. It is noted that there were no reported exceedances of limits for dioxins or other substances that are not continuously measured. The Greenpeace report says that “it is difficult to accept that this is truly the case. High levels of pollutants are often measured in the system or poor combustion of waste. For example, high levels of carbon monoxide would indicate poor combustion conditions under which increased production of dioxins, particles of incomplete combustion and retardant substances might be expected. Similarly, high levels of hydrogen chloride may be the result of large amounts of chlorine in the system, which again would be acceptable for conditions for dioxin formation. These peaks in production of dioxins and other hazardous substances are unlikely to be recorded by sampling undertaken only for a few hours, twice a year”. A Defra report [2004] stated that “there were 56 incidents of emissions outside permitted limits at the 14 incinerators accepting MSW in the UK in 2003...Three quarters of the incidents related to increased emissions of carbon monoxide and hydrogen chloride, which would not be expected to result in any significant environmental impacts (but see Greenpeace comments above). There were four incidents of dioxin and furans above permitted levels, and one incident of cadmium emissions above permitted levels”. Another reason for variable levels of pollutant emissions is lack of adequate control by the plant operators. The Greenpeace report states that “no incinerator currently operating in England is able to meet the legal requirements of its license (sic)”, and points out that despite the 546 exceedances, only one prosecution (of Sheffield City Council in 1999) was brought by the Environment Agency in the period 1999–2000.

2.5 Incineration produces two forms of solid residue—fly-ash, which is fine particulate matter carried with flue gases, and bottom ash, which falls from the fire-grate. They constitute, between them, about one quarter to one third of the total pre-combustion weight of waste. Fly-ash is known to sorb chemicals from the flue gases. As pointed out earlier, around half of emitted dioxins are sorbed on fly-ash [Littarru 2006]. Fly-ash is also responsible for the so-called dioxin memory effect [Cunliffe & Williams 2007], whereby slow de novo synthesis of dioxins occurs on the surface of the fly-ash; the dioxins then slowly desorb into the flue gases [Weber et al. 2002] for prolonged periods after the implementation of beneficial changes to the incineration process. There is recent evidence [Jiang et al. 2007] that fly-ash from larger incinerators has higher content of volatile components and higher leaching toxicity.

Fly-ash is classed as hazardous waste, and has to be disposed of to landfill. There is concern that, because of its dust-like nature, less than extremely stringent handling could disperse dioxins and other pollutants such as metals sorbed on the fly-ash into the atmosphere around the RRP. Recent figures for the metal content of fly-ash from the Eastcroft (Nottingham) incinerator are: zinc 0.3%, lead 0.1%, copper 0.05%, manganese 0.05%, 0.01% chromium, 0.01% cadmium, 0.01% vanadium. For an estimated fly-ash production of 49,000 tonnes per annum (tpa), this means 147 tpa of zinc, 49 tpa of lead, 24.5 tpa of copper and of manganese, and 4.9 tpa of chromium, cadmium and vanadium. We are concerned that in the main body of Peel’s Environmental Statement there is an indication that some fly-ash could be used in construction. This is in our view irresponsible.

Bottom ash contains similar proportions of heavy metals (except cadmium, which is lower than in fly-ash). Under the List of Wastes (England) Regulations 2005, incinerator bottom ash is classed as non-hazardous. However, the Environment Agency recently confirmed, in a letter to Mr Alan Watson [Watson 2008], that 12 out of 96 bottom ash samples that they tested met the criteria for hazardous waste, and the EA website [Environment Agency 2006] now states that zinc oxide has been given an ecotoxic classification (H14 by R50/
53, very toxic to aquatic organisms and may cause long-term effects in the aquatic environment. This probably means that all of Peel’s bottom ash (estimated in their Environmental Statement to be 36,000 tonnes per annum) would have to be disposed of as hazardous waste, and should not be used for block-making or indeed for any other purpose. If the testing of bottom ash showed the presence of chemicals that meant that it was classified as hazardous waste, this would impact significantly on the economics of the operation. It should be noted that The Netherlands will soon require a higher immobilisation efficiency of bottom ash treatment [Xiao et al 2008].

All of the above suggest that the dioxin emissions from large waste incinerators are many times those claimed by incinerator operators.

3. Particulate emissions

Airborne particles are classified according to their size. Particles with a diameter of ≤ 10 microns (1 micron (μm) = 10-6 metre) are potentially dangerous because they are small enough to be drawn into the lung; such particles are designated PM10s. Particles with a diameter of ≤ 2.5 μm are more dangerous because they can be drawn deeper into the lung; they are designated PM2.5s. Even smaller particles are even more dangerous.

There is a vast literature concerning the health effects of airborne particulate matter [Pope & Dockery 2006]. It is now established beyond reasonable doubt that particulate air pollution can cause cardiovascular morbidity and mortality [Miller et al 2007], cardiopulmonary mortality [Pope 2007], and respiratory, immunological, haematological, neurological and reproductive/developmental problems [Curtis et al 2006], sometimes with long time-lags between exposure and health effects. Pope et al [2002] found that each 10 μg/m³ increase in fine particulate levels was associated with a 4%, 6% and 8% increased risk of all-cause, cardiopulmonary, and lung cancer mortality respectively. There is particular concern about the effects of particulate pollution on infants. Woodruff et al [2008] found increases in infant deaths from respiratory causes with a 10 μg/m³ increase in PM2.5s. Pino et al [2004] found that a 10 μg/m³ increase in PM2.5s was related to a 5% increase in the risk for wheezing bronchitis.

Still smaller particles (≤ 0.1 μm (100 nm) diameter) are termed nanoparticles. They are able not only to penetrate most deeply into the lung, but are capable of being taken up systemically, entering cells, disrupting cell signalling and other processes [Wichmann & Peters 2000, Oberdster et al 2005, Gwynn & Vallyathan 2006].

There are several reasons that smaller particles are more dangerous. Firstly, as mentioned above, their small size enables them to penetrate the lungs and the body, although the precise mechanisms by which they exert their toxicity are not yet fully understood. Secondly, for a given weight concentration of particles, there are more of them if they are smaller; Livingston [2003] has estimated that one pound of very fine particles emitted from an incinerator will consist of 140 quadrillion (1,000,000,000,000,000) particles. Another way of appreciating this is to note that about 26,500 PM2.5s would fit on the dot of the letter i in normal print; for PM0.001s the figure would be 160 billion. Thirdly, for a given weight concentration, smaller particles have greater surface area. Even assuming sphericity, a given weight of PM0.1s will have 100 times the surface area of the same weight of PM10s; in fact, because of surface roughness, ash particles can have surface areas 20–30 times the surface area of equivalent spheres [Rose et al 2003].

Howard [2003] cited U.S. E.P.A. figures showing that for typical particulate incinerator emissions 48.8% of the surface area is provided by particles of < 0.7 μm diameter. The significance of this for toxicity is that toxic chemicals such as dioxins and heavy metals can be sorbed on to the surfaces of particulate matter and taken into sensitive areas of the body. Gómez-Moreno et al [2003] found, for a pilot-scale incinerator, that no particles above 1 μm diameter were emitted. Howard [2003] also quoted figures from Onyx showing that baghouse filter collection efficiency was 95–99% for PM10s, 65–70% for PM2.5s, and only 5–30% for particles smaller than 2.5 μm, even before the filters become coated with lime and activated carbon. Brown et al [2000] have pointed out that long-term exposure to even low concentrations of fine particles may be associated with reduced life expectancy.

Cormier et al [2006] have reviewed the evidence for potential health impacts of incinerator particulate emissions. They posed a series of questions that require answers:

- How are combustion-generated fine PM and ultrafine PM formed?
- How do their chemical properties differ from larger PM?
- What is the nature of association of chemicals with these particles?
- How is the chemical and biological reactivity of these chemicals changed by association with the particles?
- What is the role of PM-associated persistent free radicals in the environmental impacts of fine and ultrafine PM?
- What is the role of PM on cell/organ functioning at initial sites of exposure?
- What is the bioavailability of these particles to other tissues?
- How are these particles translocated to these secondary sites, and do their chemical properties change en route?
How does acute/chronic exposure lead to adverse organ pathophysiology? Is developmental timing of exposure important?

What effect does exposure have on predisposing to disease states or on disease progression?

Most important, what are the specific cellular and molecular mechanisms associated with airborne exposures?

It is clear from the above that medical science has only very recently started to recognise the serious problems that particulate emissions can cause, and it will be many years before the answers to the questions posed are available. Meanwhile it is essential that particulate emissions, especially those produced in conjunction with toxic chemicals, are reduced. It should be stressed here that cumulative effects on health due to continual exposure to environmental pollutants can be very serious even at levels below the national ambient air quality standards of America [Xia & Tong 2006]. Incineration is therefore a dangerous option for waste treatment.

4. Overall health risks from incineration

There are numerous publications on health risks from incineration, and many of these are cited in a recent comprehensive review [Thompson & Anthony 2005]. Some studies have found significant adverse health effects whilst others have not. There are two acknowledged difficulties here. One is that incinerators are almost invariably built in the vicinity of other polluting industry, so that it becomes very difficult to isolate the contribution of the incinerator. The other is that such studies are inevitably retrospective, and deal with plant that has been operating for a considerable time; new plant would be expected to have considerably lower emissions of potential pollutants.

A recent paper by Roberts and Chen [2006] has derived a quantitative measure of risk from a modern waste incinerator, based on current allowed emission levels. The authors calculate that the overall risk of dying in any one year from incinerator emissions is 2.49 x 10^-7. Interestingly, they found that the main contributors to that risk were cadmium (72%), dioxins (17%), arsenic (10%) and polyaromatic hydrocarbons (1%). The risk of dying from incinerator emissions over the 25 year operating life of an incinerator is 25 times the annual risk, or 6.23 x 10^-6, and the 70-year lifetime risk is 1.74 x 10^-5. Both of these values are well above the de minimis acceptable lifetime target level of 10^-6 (ie 1 in a million) used by the U.S. Environmental Protection Agency [Castorina & Woodruff 2003] and recommended by the Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment [COT 2007]. It should be noted here that the U.S. E.P.A. target level is for cancer risk alone; however, the four toxins found by Roberts and Chen [2006] to contribute most to mortality from incinerator emissions are all known carcinogens, so the comparison is valid. For better protection of local communities [Michaelson 1996], and through the use of the Precautionary Principle [Ricci et al 2004 and vide infra], a target level of 1 in a million should be used, rather than the 1 in 100,000 suggested by those in favour of incineration.

In their recent planning application for an 850,000 tonne/year EfW plant with CHP at Runcorn, IneosChlor included a Human Health Risk Assessment (HHRA) prepared by A. Hashm of RPS consultants, Chepstow [Hashm 2007]. The HHRA included an assessment of the cancer risk to local populations from the proposed incinerator; 37 “sensitive receptors” (eg a child, a farmer) at different locations in the villages and other areas around the IneosChlor site were selected, and the mortality risk for each was calculated using commercial software. For 23 of the 37 “sensitive receptors” the calculated lifetime risk of cancer from the proposed incinerator was greater than 10^-6, showing that the plant would indeed pose an unacceptable health threat to local populations.

What has been said so far in this submission has been directed towards demonstrating that even new incineration plant has the potential to cause serious health risks. This is primarily for three reasons:

4.1 It is likely that waste incinerators will have dioxin and other emissions much higher than is claimed.

4.2 Even very low intakes of dioxins have significant adverse health effects, especially if the intake is in utero or in infancy. It must be commented here that it is the practice of those who support incineration to point out that although breast-fed infants can take in high doses of dioxins, this is only for a few months until the infant is weaned. That argument completely misses the important point that it is in the early months in life (including gestation) that much damage is done by dioxins and other endocrine disruptors, and by neurotoxins such as mercury [Newland & Rasmussen 2003].

4.3 Compounds such as PCBs often possess dramatically different toxicities at low dose than at high dose [Mukerjee 1998], because of their potency as enzyme inducers.

4.4 Recent research is showing the significant damage that can be done by ultrafine particulates, which cannot be effectively removed from incinerator flue gases, and which can carry sorbed toxic pollutants into human and animal lungs and bodies, and on to growing vegetables and other crops.
4.5 Johnson [1994] of the U.S. Agency for Toxic Substances and Disease Registry, in congressional testimony given on 24.1.1994 drew attention to key data gaps relating to incineration technology:

(a) the often inadequate identification and quantification of waste feed as well as fugitive emissions associated with specific incineration facilities;

(b) the deposition rates to soil and water for all the potential incinerator stack emissions are not well known;

(c) the identification and quantification of emissions during incinerator process upsets are frequently not measured;

(d) when stack emissions are analyzed for metals the specific metal compounds or species present are not usually identified;

(e) concentrations of contaminants in environmental samples around incinerator facilities, eg, soil, water, and ambient air are typically not measured;

(f) there are limitations in the current stack testing, air monitoring, and air modelling methods. Some of these methods need further validation; and

(g) often there is a lack of data on the concentration of contaminants present in foods that are grown near a facility, such as vegetables from gardens, cattle, fish or shellfish, etc.

Although the situation has improved since 1994, most of these key data gaps still exist. Bell [2002] has emphasised the point made in (f) above. Modelling approaches usually require the input of a large number of parameters, many of which have to be estimated; for example, one scenario for estimating the carcinogenic risk to a subsistence farmer involves the determination or estimation of 42 parameters, including such values as daily poultry consumption rate and air-plant biotransfer rate for 2,3,7,8-TCDD.

Bell commented, not surprisingly, that the impact of most variable changes is not intuitively obvious.

Howard et al [2003] have termed these modelling approaches “fact-free modelling”, because most or all of the input data are calculated or theoretical values. Some key calculated parameters, such as partition coefficients, are then used to calculate other parameters, which themselves may then be used to calculate yet more parameters. Each time this is done, predictions errors increase, so that the final answers yielded by the model may bear little relation to reality. Dearden et al [2003] have assessed the performance of a number of software programs for the calculation of partition coefficients, and found that the best had a standard error (s) of 0.271 log unit (a factor of 1.9), whilst the worst had s = 0.654 (a factor of 4.5).

4.6 There are hundreds, if not thousands, of chemicals emitted by incinerators [Jay & Stieglitz 1995]. Table 2 lists the chemicals detected by Jay and Stieglitz, but these are by no means all of the chemicals emitted by incinerators. (Jay and Stieglitz could identify only 42% of the chemicals that they detected.) It is known that two or more chemicals present in an organism sometimes act synergistically (that is, their combined effect is greater than the sum of their individual effects) [Zeliger 2003], and that this can occur even at concentrations below the activity threshold of the individual chemicals [Howard 1997, Mukerjee 1998, Rajapakse et al 2002, Chen & Lin 2006], when it is known as the coaltive effect [Lang 1995]. Still other toxic effects are cosynergism (when two agents enhance the toxicity of each other) and potentiation (when one agent with no toxicity enhances the toxicity of the other). Virtually nothing is known of such effects, and they cannot, with our present knowledge, be predicted. This is yet one more reason for rejecting incineration as a means of waste treatment.

4.7 One of the central planks in toxicology is the rectilinear or sigmoidal dose-response relationship, with its assumption that higher doses produce greater toxic responses. A corollary to the dose-response relationship is there is usually (although not always) a threshold below which no observable adverse effect occurs. However, it has been known for many years that some toxicants could exhibit high toxicity at very low doses. In such cases a graph of toxicity (on the vertical axis) versus dose (on the horizontal axis) passes through a minimum. This phenomenon is termed hormesis. Calabrese [2005] has stated that the hormetic dose-response is far more common and fundamental than the dose-response models (threshold/linear no threshold) used in toxicology and risk assessment. It is known that in some cases the response at very low doses is qualitatively the opposite of that at higher doses; for example a toxin can promote health. However, Tuomisto et al [2004, 2005] found that the cancer risk from dioxins appeared to follow a hormetic pattern, with toxicity increasing at very low doses. Lippmann [2005] has also suggested that hormesis occurs in the cancer risks from dioxins and related chemicals. It appears [Kaiser 2000] that endocrine disruptors such as dioxins follow this pattern. Irigaray et al [2007] have suggested that very lipophilic pollutants may also have a rôle in obesity.

Thus evidence is accumulating that low, perhaps even very low, levels of dioxins and other toxicants can carry very serious health risks. THE IMPORTANCE OF THIS CANNOT BE OVER-EMPHASISED, for it turns environmental toxicology on its head. It means, in my view, that not a single new incinerator should be built, and existing incinerators should be closed down as quickly as possible.
5. **The Precautionary Principle**

Michaelson [1996], in a very blunt assessment of what he termed “toxic harm allocation”, has pointed out that toxics present a classic public choice dilemma: the balancing of desired goods against the threat they pose to human life. “Though its rules vary with the statutes and substances in question, toxic harm allocation may be understood as a game with three players—industry, producing the harm; (the regulatory authority), allocating it; and individuals, receiving it—who cooperate or compete to set, measure, and regulate the levels of toxins in the environment”.

In such situations, it has become customary to invoke the Precautionary Principle (PP) [Grandjean 2004]. There are a number of definitions of the PP [Ricci et al 2004], of which the most comprehensive is probably the so-called Wingspread Statement, quoted by Science & Environmental Health Network [2004]: “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof. The process of applying the precautionary principle must be open, informed and democratic and must include potentially affected parties. It must also involve an examination of the full range of alternatives, including no action”. The PP does not seek to establish zero risk, since all human activity involves some risk. It does, however, involve an assessment, either subjective or objective, of both risk and benefit from a proposed activity, leading to a decision as to whether or not the proposed activity should be permitted. Involved in such a decision are a number of factors, including whether or not valid and realistic alternatives are available.

It is submitted that in view of the evidence presented here concerning the toxicity and emission levels of substances emitted from incinerators and the lack of reasonable certainty about the toxic effects of many such substances, the proven viability of alternative technologies such as anaerobic digestion, the reduced need for waste treatment consequent upon increasing levels of recycling, the loss of property values and the mental health problems that can be caused by the building and operation of an incinerator, and the need to leave the best possible legacy to future generations, planning applications for waste incinerators should be refused.

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Memorandum submitted by Barry Moles and Hilary Tandy (Waste 70)

The UK produces over 1.5 million tonnes of textiles waste a year, generated by the 35 kilos of clothing the average person purchases a year. In fact unsurprisingly it was reported this week that already the UK has two million tonnes of clothing in landfill sites. The dyes and chemicals used in textiles are potentially toxic; this is a high risk especially considering that the plastic layer used at the bottom of a typical landfill site is only one tenth of an inch thick.

This coupled with the “Primark effect” which has increased the amount of clothing going to landfill, has increased to the environmental impact of textile waste. DEFRA state that within the EU-25, clothing and textiles account for approximately 5–10% of our environmental impacts. Without intervention and with growing consumption these impacts are likely to increase.

While there are about 3,000 textile banks nationwide, only about a quarter of the space in textile banks is currently used. Textile recycling currently at 14% mainly due to:

- Donations direct to charity shops only being utilised by 21.3% of people.
- Bring recycling sites only being utilised by 25.50% of people.

There is no planned national scheduled kerbside recycling scheme, yet statistically these schemes achieve 86.2%. The doorstep bag drop and collect charity schemes, inconsistent in delivery and focused on A + B households rather than the C, D, E’s where the greatest “Primark effect” is evident, is not effective in reducing the pressure on landfill.

The current landfill tax is £24 per Tonne (it will be £48 per tonne) so the cost of land filling textiles alone is £30,960,000 based upon the current figures of only 14% of textiles actually being recycled. The orangemonkeys company are looking to roll out a scheme nationally that is easy and low cost for councils, easy for households to participate in, while dramatically reducing landfill, and improve recycling which reduces cost to central government and local councils as well having a very positive effect on the environment.

Barry Moles and Hilary Tandy
Memorandum submitted by ASDA (Waste 71)

Waste Reduction

Following the publication by the House of Lords Science and Technology Committee of a report on “Waste Reduction” [20 August 2008] I thought you might find it useful to have a few points on what ASDA is doing to make progress on these issues.

Please find enclosed a briefing document that sets out our action to reduce waste. If you need any further information, please do not hesitate to contact me.

James Walsh
Public Policy Manager
ASDA

ASDA ACTION ON WASTE REDUCTION

Packaging Reduction

— By the end of 2008 we will have reduced our own-label food packaging by 25%, removing 47,000 tonnes of excess packaging—the equivalent of more than 6,700 London buses in weight. We have also committed to reduce all our other packaging by 20% by the end of 2008.
— We already use 18,000 tonnes less packaging each year. This means we have achieved the 10% reduction required under the Courtauld commitment.

Helping Customers to Reduce Waste

— We are reviewing our policy on date coding to help customers understand what the information really means and to avoid food being thrown away earlier than necessary.
— We use the ASDA Magazine to inform customers on issues such as food preparation, cooking with leftovers and shopping from a list—all useful skills that help to reduce household food waste.
— Our Company Nutritionist sits on an industry-wide working group on portion size reduction.

Zero Waste to Landfill

— We now divert 65% of our waste from landfill—putting us on course to hit our target of zero waste to landfill by 2010.
— Six trial stores have achieved a 90% reduction to landfill through the diversion of bio / bakery products. This will be increased to 92% by diverting and recycling office materials such as paper, drinks cans, plastic bottles, newspapers and magazines.
— At the heart of this programme are our regional ASDA Service Centres (ASCs). Waste is transported to these purpose built facilities using empty delivery vehicles on their return run (“backhauling”). Once at an ASC, the waste is bundled together and stored, ready to be sent for recycling. We have five ASCs, with three under construction. In 2007 they helped us to recycle more than 150,000 tonnes of cardboard and nearly 9,000 tonnes of plastic wrapping.
— Our goal is to eliminate the remaining 35% of our waste which is not currently reprocessed.
— While more than 90% of the packaging we produce is already recyclable, very few local authorities are able to collect it all, which means thousands of tonnes of ASDA packaging ends up in landfill, when it could have been put to better use. We’re calling for a consistent nationwide approach to recycling.
— We chair a Cross Industry Packaging Waste Group, working with waste collection companies, WRAP, local authorities and other retailers in the hope that collectively we can drive a strategy that makes recycling easier for everyone, regardless of where they live.
— Wherever possible, we use Forestry Stewardship Council (FSC) certified paper and board packaging, helping us to promote responsible management of the world’s trees.
Carrier Bags

— We have reduced the number of single-use carrier bags handed out to ASDA customers by 30%. We led the way with a nationwide removal of single use carriers from all of our checkouts, encouraging customers to choose one of our “bags for life” as a sustainable and affordable alternative.

— In addition to reducing their use, our aim is to limit the environmental impact of the bags themselves by decreasing their size and increasing their recycled content. We source the plastic material from our in-store recycling collections.

ASDA
August 2008

Memorandum submitted by Semple Fraser LLP for and on behalf of the Fuel Producing Group of Waste Oils Recovery/Recycling Companies (Waste 72)

Crisis for Waste Oils Collection and Recovery in the UK

I represent the leading companies who form the Fuel Producing Group in the UK waste oils collection, recovery and recycling sector. These companies are OSS Group Ltd; Oil Salvage Ltd; Duston Oils Ltd; Waste Oils Services Ltd; and Enva Northern Ireland.

Between them these companies are responsible for the collection, treatment, recovery and environmentally beneficial re-use of the vast majority of waste oils generated in the UK. OSS themselves have for some years led the industry in two respects: (a) in the amounts of waste oils they collect, treat, recover and provide for such beneficial re-use; and (b) in pioneering best available technology and expertise in research, development, chemistry, engineering and production of new generation products from these intractable, toxic wastes.

I am instructed to draw the Committee’s attention to a hazardous waste problem for the UK which has now reached crisis proportions. The key facts are:

(1) “Waste oils” are a hazardous waste comprising used transformer oils, gearbox oil, engine oils, fuel oils, solvents and other hazardous waste materials which emerge from a variety of industrial sources, but primarily from automotive garages and similar establishments which produce residues of lubricant oils from cars, buses, trucks, trains, ships and aircraft, as well as from some non-automotive industrial sources such as engineering workshops, coal mines, brickworks, and steelworks.

(2) The proper collection and processing of such wastes has for years been, and remains, a major problem for the UK. Thus, a European Commission Study reported in 2000 that more than 804,000 tonnes of lubricant products were purchased for use in the UK, of which around 484,000 tonnes were unaccounted for at the end of their useful life, and therefore that the majority of the hazardous wastes are either lost to the environment and/or illegally burnt.

(3) The only viable alternatives in the UK to such uncontrolled illegal disposal into our drains and soil, air and water environments are—(i) combustion in the Tata owned Corus blast furnace at Redcar, and/or (ii) proper processing into genuine recovered/recycled fuels.

(4) The Corus option is of highly dubious provenance, since it is incorrectly exempted by the UK from EU waste incineration laws. However, for the moment, that is irrelevant, because the Corus option has ceased for the foreseeable future, the use of waste oil as a fuel having been terminated by Corus in December.

(5) This only exacerbates the problem. Even with its dubious legal and environmental status, the Corus options prevented c. 2000 tonnes per week of waste oil from being illegally dumped. With that option removed, the glut of waste oils with no viable recovery or disposal option has been massively increased, and will have been exploited by rogue operators for a number of weeks now.

(6) The so-called “regeneration” option—of processing waste oils to a base oil—is an energy and investment intensive process that has been proven not to work, technically or commercially in the UK: like the Corus option, it is not a viable solution in the foreseeable future.

(7) The fuel recovery/recycling option has always been the optimum environmental and resource efficient option in the UK, and in recent years it has become an even better option, as the leaders in the industry have invested heavily to improve the quality of the end product—such that, in some instances, we are now dealing, not with mere wastes converted to fuels, but with genuine “next generation” secondary raw materials which pass the ECJ/Court of Appeal test for end of waste = optimum result for the environment and resource conservation, and firmly in line with the key objectives of both waste framework directives (2006/12/EC and 2008/98/EC); so what is the problem?
(8) The UK is required by EU law to levy a fuel duty on recovered/recycled fuel oils at a minimum rate set down by the EU. The problem is that the UK has chosen to levy this duty at nearly 10 times the rate applied in most of the EU member states. Aside from the incredulous position of the UK industry being put at such a competitive disadvantage by its own government, the accumulating and mounting effects of the recession + the duty = the end of this small but vitally important industry, imminently.

(9) Global oil prices have collapsed, and margins are tight to non-existent. Into that toxic economic mix, the imposition of this excessive rate of duty is the death knell, which destroys any prospect of this industry surviving the recession. The industry is realistic enough to accept that some duty has to be paid, and the industry could have coped with a competitive rate of duty, but not one levied at 10 times what its competitors pay in Europe.

(10) It should also be borne in mind that the relevant EU duty directive (2003/96/EC) actually expressly encourages Member States to apply differentiated rates of duty commensurate with increased product quality, recourse efficiency and environmental benefit. These are precisely the benefits which flow from the commercial manufacture from hazardous wastes of genuine “next generation” secondary fuel products. We have been pleading with HM Treasury and Defra for many months to see this glaringly obvious distinction, and we have warned them (long before the financial crisis) of the inevitable outcome for the UK environment; but they have refused to take the necessary action.

(11) Now we are in a different world altogether. As a direct result of this excessive rate of duty, combined with the global oil price collapse and the dire effects of the recession, there is no commerce in the collection of waste oils, far less in their (highly regulated) treatment and processing. There is no point, if these highly regulated operations run at a loss. The rate of duty imposed by the UK has been the tipping point. The rate of duty itself now exceeds the value of the waste oil.

(12) As a direct result, collections of waste oils are grinding to a halt, and very shortly they will cease altogether. Increasing amounts of waste oils are now log-jammed at their point of collection. This will open up the market even wider for those operating illegally who will see an opportunity for massive commercial exploitation of the current situation. More uncontrolled, unregulated, illegal dumping (to the significant and irrecoverable detriment of human health, biodiversity and the wider environment) is the inevitable and imminent outcome.

(13) In this context, a duty at 10 times the EU rate is an exercise in madness. It is all the more puzzling when one considers that, prior to the onset of the financial crisis; the UK Government actually lobbied the EU to continue with a total derogation from the duty directive for recovered/recycled fuel oils. This lobbying was ill-conceived for three reasons: (i) it did not emphasise critical environmental benefit criteria; (ii) it ignored the fact that EU law demands a minimum rate of duty; and (iii) in any event, it also ignored the fact that the Member States have the power to apply a light touch to duty on recovered/recycled fuel oils by setting the minimum EU rate. This is what the vast majority of other Member States have done. The UK applied a rate almost 10 times greater, and they applied it to coincide with the onset of economic meltdown in all commercial sectors of the UK!

(14) We and our clients have been pleading with HM Treasury and Defra for months to see the reality of this ludicrous situation. We have submitted detailed papers to Ministers, and we have the support of a cross-party body of very concerned MPs who have sought a response from the government, all to no avail. The industry is being ignored.

(15) Moreover, this is not simply a commercial disaster. It is socially and morally irresponsible. This over-taxation of the waste oils recovery/recycling industry in the UK flies in the face of the obligations of Member State under the waste framework directives to do all they can to encourage and nurture industries and technologies which produce secondary raw materials from waste and conserve the use of natural resources such as fossil fuels; as such, aside from reversing the Government’s “green agenda”, it is strongly arguable that it is a breach by the UK of Article 10 of the EC Treaty.

(16) The revenue generated by HM Treasury from this duty is the proverbial “drop in the ocean”. The Government could reduce the rate of duty to EU rates without any impact whatsoever registering. Conversely, the effect of the duty rate on the (legal) collection and processing industry is catastrophic to the point of extinction: the environmental consequences will be viewed as a lamentable disregard by the UK state of its duties.

(17) Meanwhile, this highly regulated, but seemingly doomed industry views with exasperation the daily rush by government to pump inordinate amounts of tax-payers’ money into propping up certain sectors of the economy, whilst not moving at all to alleviate a rate of duty which is minor in UK revenue terms but which has such dire consequences for industry and the environment if not alleviated.
This is all avoidable at little if any cost.

The financial crisis is unprecedented in our times, and all businesses are struggling. However, this industry is not holding out the begging bowl; it is simply drawing attention to an issue of gross unfairness and environmental insanity.

This industry is the last bulwark against complete meltdown of the environmentally responsible collection of waste oils and an endemic uncontrolled dumping of waste oils which will swamp any resources the Environment Agency or SEPA are able to apply to it.

All we have been asking the UK authorities (Defra, the Agency, HM Treasury and HMRC) to do is to co-operate to alleviate the worst effects of this crisis by making an adjustment in the rate of duty to a rate commensurate with that paid by our competitors in the EU.

At the very least, they could easily, and with marginal impact on revenue, defer the application of the current high rate of duty by way of an extra-statutory concession which is seen to be both (a) responding to the extra-ordinary circumstances of the recession, but which also (b) critically (and unlike the massive government hand-outs to other sectors) has a major environmental benefit for the UK.

The sort of concession of deferment which might breathe new life into this industry before it is too late is of the order of a duty rate of, say, 1p to 2p per litre, rather than the current 9.7p per litre.

Instead, we understand that there is a planned further increase in duty from 1st April this year.

Some of our parliamentary supporters have suggested that we draw the plight of this industry to the attention of your Committee, and this is the purpose of this letter.

We would respectfully request that the matter be considered as soon as possible by the Committee. It is vital that the Government accept the compelling nature of this proposition, in the interests of keeping alive an industry which is vital to a key area of UK environmental protection.

Thank you for your assistance and time.

Vincent Brown
Semple Fraser LLP for and on behalf of the Fuel Producing Group of Waste Oils Recovery/Recycling Companies

January 2009
Oral evidence

Taken before the Environment, Food and Rural Affairs Committee
on Wednesday 4 November 2009

Members present
Mr Michael Jack, in the Chair
Mr James Gray Lynne Jones David Lepper Miss Anne McIntosh David Taylor Paddy Tipping Mr Roger Williams

Witnesses: Dr Paul Leinster, Chief Executive, Ms Liz Parkes, Head of Waste and Mr David Jordan, Director of Operations, Environment Agency, gave evidence.

Q426 Chairman: Good afternoon and welcome to this additional evidence session with reference to the Committee’s inquiry into the Government’s Waste Strategy for England 2007. May I formally welcome Dr Paul Leinster, the Chief Executive of the Environment Agency, supported by Liz Parkes, the Head of Waste, and Mr David Jordan, the Director of Operations. Part of the reason that we decided to reconstitute ourselves in this inquiry was the concerning events over the summer when a number of containers, which contained waste of a less than savoury nature, ended up in Brazil. The committee felt that this was a serious enough event for us to want to quiz the Environment Agency and the Secretary of State on it, hence the fact that we have invited you back here. I do appreciate that there may be legal matters which may constrain what you are able to say on the particular subject, but I think the facts of what happened are well known. Can I start with a very simple question? From what you have learnt so far, what are the lessons that the agency has learnt from the fact that a relatively large consignment of waste managed to get out of the United Kingdom and end up in Brazil where it should not have been?

Mr Jordan: I understand that and you must go to all the trouble of loading up these containers, something of the order of 50 per cent of wastes arising. We have done a great deal of work in this arena in the intervening five years and I would say that the picture has been transformed in that period of time. Notwithstanding the fact that the export of these wastes is continuing to rise, our clear observations are that the quality of the waste exported as green list in the form, as I say, principally of paper and plastic has improved very markedly indeed. Although I think the Brazilian case is a very bad example, or in a sense a very good example, of where things have gone wrong, our very clear view is that this is now a relatively infrequent event and not a frequent example of abuse of the green list regulations.

Q427 Chairman: Help me to understand. Was the company that was involved, and I presume a company was involved, operating in the legitimate waste field or was it illegitimate?

Mr Jordan: Can I give you a generic example of how this might work by way of example? It may be that a country abroad wants to import some waste under the green list auspices to recycle in their own country; it happens a great deal. They might contact an exporter in this country, who might then source it through a broker. In theory, within that overall supply chain, we can have a whole series of legitimate operators. Somewhere in that supply chain you get an illegal operator, and very clearly that is exactly what has happened in this instance. I would rather not be too specific about this particular case.

Q428 Chairman: I understand that and you must stop yourself where you trespass over because there may be prosecutions pending. We understand that. I was going to ask you if you had any idea of the scope or is it the tip of a big iceberg or is there a small continuing export of these types of material, simply because of the difficulties in policing green materials where you get a large number of potential movements and there is a limited amount of enforcement potential? What I was trying to understand is this. For somebody to go to all the trouble of loading up these containers,
from the public representation of this, things like rotten nappies and real rubbish as opposed to a recyclable material, it must have been worth somebody’s while to spend all that money gathering them together, shipping them halfway round the world and for people at the other end to be going to make a return on the money in terms of what was happening. Can you just explain something of the economics of this?

Mr Jordan: Yes. Firstly, most of the containers which leave the UK are empty and so taking advantage of that opportunity is very cheap. Secondly, the disposal of waste in the UK is relatively expensive. You have landfill tax; you have the other costs associated with the disposal—transport and charges at the landfill operators and so on. There is a significant cost per tonne. If you can effectively sell what you describe as plastic waste for recovery abroad for, say, £40 per tonne, you are getting £40 per tonne, you are avoiding £60 per tonne landfill costs, you are avoiding the other costs associated with the disposal. You are actually making a good deal of money already and the costs of export are very low. If you do that, wilfully getting rid of what is essentially mixed domestic waste and a variety of other products as we have observed having opened most of the containers coming back from Brazil, you are probably taking a price that by the time it gets to the exporting country, they are not going to bother to send it back. In a sense, you have a criminal mind which is taking advantage of an opportunity and taking a chance on the product not being returned. In this particular case, very pleasingly, the authorities intervened and brought it to our attention and, as we have done in a number of cases, we have stepped in and repatriated it. We are now going through the process of examining those containers to find out exactly what was in there and, as you can imagine, building an enforcement case.

Q429 Chairman: Just to come back to the specific question, in terms of tempering your enforcement activities, we have to have some estimate of the scope and scale of the problem we are dealing with. Can you advise the committee, within the context of your opening comments which gave the impression that within the green list you thought the proportion of illegal exports was relatively low, what is your working hypothesis?

Mr Jordan: The green list covers metals, plastic, cardboard and paper. Those are the main products; metals are about 50 per cent by weight and largely not arising from households; a very significant proportion of the paper and plastic comes from households. The route to market is that essentially sorted and baled—to drive quality gradually improves. Part of our success, and it is a broad success and it is indeed a very successful story, has been working with the trade association, the Environmental Services Association, to drive quality through their businesses. We have worked directly with the materials recovering facilities—that is where it is essentially sorted and baled—to drive quality through that process as well. That has been very successful but we have, for example this year, undertaken something like 200 unannounced site visits to facilities of that nature to check the quality of the end product. We have also worked closely with WRAP, that is the Waste Resources Action Programme, that is very keen to ensure that the markets are sustained because one of their concerns, as indeed for all of us, is that if you have a poor quality product, then its salability is reduced. What we have actually seen in the recession is that because it has become a buyer’s market, the ability for the purchaser to specify a higher quality has increased. All of these factors have come together to combine to create a set of circumstances which is very different from five years ago. I cannot give you an estimate of the overall percentage which is non-compliant, but if you put that full package together with our interventions at a whole variety of points in the supply chain, if you like, we are very confident indeed that we have driven a significant improvement in the overall quality.

Q430 Chairman: We are going to come on to look in detail at compliance and enforcement, but obviously resources are a key part in terms of dealing with this. For the record, can you tell me if a shipper accepts materials on board to transmit and they are supposedly in accordance with the green list requirements, does the shipper have any responsibility for what is subsequently shipped? I understand in the case of the repatriation of the containers in the Brazilian case, the shipping companies have brought them back effectively at their expense. Do they have any obligation about what they carry?

Mr Jordan: Yes, they do. They have a legal responsibility and if indeed they do export products which are non-compliant, we can prosecute them. We have used this to good effect in building our relationships with the shipping lines. A good deal of the intelligence, in fact probably the majority of the intelligence, that we now get around illegal exports—and that includes electrical and electronic equipment by the way which we are concentrating on a great deal at the moment—comes from the shipping lines. They have been extremely co-operative.

Q431 Chairman: In that context, are shipping companies empowered to make inspections of what it is they are being asked to carry?

Mr Jordan: Absolutely. They supply the container; they know where the containers are located; they know in theory the products that are in the containers. They seal the containers and therefore
they have a responsibility for knowing what they contents are. Indeed, the contents are described in a very clear way and those descriptions are passed on to HMRC, so there is theoretically a very clear audit trail.

Q432 Chairman: You have mentioned HMRC; they are but one of a number of agencies and organisations that are central to this together with the security forces obviously, the UK police and yourselves. You were talking theoretically about an intelligence-led type of operation. In the nicest sense, without giving away the trade secrets of how you put all of this together, are you satisfied that there is sufficient understanding of the problem by others and is there sufficient co-ordination and communication about matters connected with illegal export of waste to give you comfort that everybody recognises the problem and is actually working in a properly co-ordinated fashion to deal with it?

Mr Jordan: I think there are still some gaps. We, the Environment Agency, have powers to intervene at ports. It is quite a cumbersome process, as you can imagine, because we need to gain access into some secure areas. We believe that there is a better model based on the Dutch model whereby the intelligence from the HMRC database, which I have just described as coming from the shipping lines, has a number of electronic flags in it which then trigger what we believe will describe waste being exported. We would like that information then to be passed to the UK Borders Agency to enable them, the practical on-site presence at the exporting port, to be able to intervene and undertake inspections in co-ordination with HMRC and the Environment Agency. There are a couple of legal impediments to that being enabled at the present time.

Q433 Chairman: We focused in our opening exchanges on the green list. I can remember from the time when the Committee did its work on hazardous waste that there are some pretty noxious substances around which are, for understandable reasons, becoming increasingly expensive to dispose of properly. You could imagine that the temptation stakes to cheat are rising. Is there any evidence that for example organised crime has seen this as an area of opportunity for exploitation and, if so, are we equipped to deal with that kind of challenge?

Mr Jordan: If you look at the regime which covers hazardous wastes exports, it is covered by the Transfrontier Shipment of Waste Regulations but we are the competent authority and the rules are extremely clear: if you want to export waste, it has to be for recovery; it has to be in agreement with the exporting country; and it has to be in agreement with the receiving country. There are many countries to which legally we cannot export such hazardous waste. We receive around 300 to 400 notifications a year for the export and indeed import of waste for recovery. That, in our view, operates extremely well. The engagement of organised crime in that area within the UK is not something that has come to our attention, nor is it causing us significant concern.

Q434 David Lepper: Could you say something about international co-operation between the Environment Agency that deals with these issues and your equivalent organisations in other countries, the countries to which the exports are going? What are the kinds and the sorts of contact there?

Dr Leinster: We work with the competent authority within those receiving countries. We check with them that they are content to receive the waste or, if we are receiving waste from those countries, they will contact us. There is a very structured way with clear timetables in which that information is exchanged. On illegal waste, we are working very closely with our colleagues internationally. In fact, we are leading an Interpol group working with the US, Canada, the Dutch and the Belgians primarily to look at some of these issues. We also have bilateral agreements that have been working for a number of years with colleagues in the Netherlands because so much material goes through Rotterdam at some stage. They do a lot of investigation work and we work very closely with them.

Q435 Paddy Tipping: Can I ask you about the legal framework? Are you satisfied with that? I think you told us just a minute ago, Mr Jordan, that there are a couple of areas where you have concerns. Could you spell those out for us?

Mr Jordan: Are you referring to my reference to the co-operation between the UK Borders Agency and HMRC?

Q436 Paddy Tipping: Yes.

Mr Jordan: My understanding is that HMRC is not legally entitled to pass on other intelligence to the UK Borders Agency. My understanding is that that could be resolved through a relatively minor change in legislation, through a statutory instrument.¹

Ms Parkes: More generally on our powers, in 2006 we worked very closely with Defra on the implementing regulations to go with the new European regulation. Since 2007, we have had much tighter powers, for instance to serve notices requiring information, stop notices. The point was made earlier about the shipping lines. Since 2007, they have been one of the responsible parties against whom we can take action, but obviously as a modern regulator we are actually working with them to get them to co-operate with us and thereby it is their intelligence-sharing with us that is really helping us to target our interventions where they can be most effective.

¹ Note by witness: HMRC have helpfully pointed out that HMRC can pass on other intelligence to the UK Borders Agency and so this statement was inaccurate. Mr Jordan had intended to refer to the legal bar on the transfer of information from HMRC to the Environment Agency. If the words “UK Borders Agency” were to be replaced by the words “Environment Agency” in the above answer that would represent an accurate statement of the problem that needs to be resolved by a relatively minor change in legislation referred to in the subsequent sentence.
Q437 Paddy Tipping: So the law does not need to be strengthened here? You are happy with the current framework?

Ms Parkes: We are content with the current legal framework around the export of waste.

Dr Leinster: There is one particular area that Defra has recently consulted on where again we would like to see changes, and that is around duty of care.

Q438 Paddy Tipping: They have just finished the consultation, have they not?

Dr Leinster: Yes. What we want is for the producers of waste to take responsibility for it all the way through to knowledge of where it is ultimately going. Too often, out of sight can be out of mind. We would like the originators of the waste to be clear about where their waste is going.

Ms Parkes: We would also like to see an origin where their waste is going. Where their waste is going?

Dr Leinster: Too often, out of sight can be out of mind. We would like the originators of the waste to be clear about where their waste is going.

Q439 Paddy Tipping: Does the duty of care consultation look at this particular point?

Ms Parkes: Yes.

Q440 Paddy Tipping: Has Defra now responded to this consultation?

Ms Parkes: I believe they intend to bring in regulations next year.

Q441 David Taylor: Have you been consulted on that?

Ms Parkes: We do work very closely with them on the regulation.

Q442 Paddy Tipping: Tell me a bit more about brokers. What kinds of bodies are brokers?

Ms Parkes: They are bodies that do not actually ever touch the waste. They just arrange for it to be sold on. They can be very challenging to take any action against them.

Q443 Paddy Tipping: They are capitalists?

Ms Parkes: I could not possibly comment on that! We have lots of parties in the chain and there is a great deal of evidence that, for instance with municipal waste, local authorities do take their responsibilities very seriously. In most cases they are using legitimate contractors, and brokers have always been one of the grey areas around the waste business. We are interested in whether more controls are needed and how you build up a body of legitimate brokers and encourage responsible waste producers to use those legitimate companies.

Q444 Paddy Tipping: That is an area that needs some further work?

Ms Parkes: It needs some further work, yes, and to make sure that we do not over-regulate but achieve the right balance here.

Dr Leinster: As Liz said, one of the issues with brokers is that they can be operating out of other countries and managing the waste out of the UK to a third party country. The jurisdiction on that is quite tricky.

Q445 Paddy Tipping: This is going to be a tough area to regulate. Presumably you are talking to colleagues in other countries about this?

Dr Leinster: Yes.

Q446 Paddy Tipping: When you have been to see us previously, you have talked a lot about fly tipping and the sanctions that the court can implement. Are you happy with the fines that are imposed where breaches occur in relation to illegal export overseas?

Mr Jordan: I think the fines themselves pretty rarely act as a deterrent to fly tipping. Local authorities tend to deal with the smaller scale stuff and we tend to deal with the larger scale stuff. Notwithstanding the fact we have seen fines for illegal waste disposal increasing over recent years, we do observe quite a lot of these criminals going back to the same level of activity. We are trying to get smarter in terms of the way we use the law, in terms, for example, of enforcement notices and increasingly focusing on the Proceeds of Crime Act, which we believe will be a more effective deterrent. Through the courts, we have obviously had a number of custodial sentences now, which we welcome.

Ms Parkes: It would be fair to say that the courts are not sentencing as high around exports as they are for domestic incidents.

Q447 Paddy Tipping: Why is that?

Ms Parkes: It may be that the area of illegal export is quite a new area. The courts have more experience in dealing with domestic tipping. Those that take these cases can present the experience and impact on local communities. The impacts of export are perhaps not always readily understood. It is early days yet and we are hoping that the work we are doing with the courts and the way in which we bring forward the cases will help the courts to appreciate the seriousness of these offences.

Q448 Paddy Tipping: To what level of court does this go and what are the maximum sanctions that the court could impose? In cases of fly tipping they can confiscate vehicles these days. Can ships be confiscated? That would be a way of stopping it?

Ms Parkes: Yes, we do have powers to stop ships, although obviously seizing a ship is a fairly major activity!

Q449 Paddy Tipping: Not in Somalia?

Ms Parkes: Once you have taken a ship, you have to decide what to do with it. The fines depend on which courts and there are, as David said, custodial sentences available now as well as hefty fines. We are starting to see the courts imposing custodial sentences very frequently for domestic tipping offences but not yet for the export. Those cases are more recent and they take quite some time to bring forward to court to prosecute.
Q450 Paddy Tipping: Would it be helpful if the courts exercised the maximum powers as a deterrent?

Ms Parkes: As David has said, they are unlikely to act as a deterrent but it would certainly be good to see the courts leveraging the highest rate of penalty that they can.

Q451 Mr Williams: When I contact court authorities about the seriousness of certain offences, I am told that I should not be trying to influence magistrates or judges in the execution of their duty. Does the Environment Agency have a different relationship with the criminal justice system?

Ms Parkes: We do undertake training exercises for magistrates and try to help them understand not just with the criminal justice system?

Q452 Chairman: Can I clarify a couple of points arising out of the last two areas of questioning? You were talking about Defra having committed itself to new legislation next year. Next year is quite a long, elastic piece of time. Are we talking about the first half of next year or an aspirational second half?

Ms Parkes: We have common commencement dates now for all legislation and it will depend on whether they have concluded their deliberations in time for the April commencement date.

Q453 Chairman: I see. To make certain we have it exactly right, could you drop us a note as to when legislation is proposed to be changed, the route and the timing? Obviously that is something we would like to follow up. The other point arises out of Paddy Tipping’s line of questioning. I am aware that you are able to use the Proceeds of Crime Act to recover monies for example to help the cost of repatriation of materials, but are you not able to go further with the Proceeds of Crime Act in terms of taking away for example those assets which could be directly attributed to the exercise of illegal waste moving and/or not just the physical assets but also the financial gains?

Mr Jordan: Yes, very much so, and we would try to secure the cost of repatriation through our costs in courts as opposed to the proceeds of crime. The Proceeds of Crime Act gives us the power to seize assets, including financial assets, potentially to a very high level indeed. The law then requires us to make use of that in our enforcement activities. There is a sort of circle here. We have started to develop the expertise within the last two years. We have had a number of successful Proceeds of Crime Act cases. Another area of success is the way in which we have joined up with other authorities, not just the police but also local authorities, tax authorities, Vehicle and Operator Services Agency (VOSA) and so on. In some cases, for example, we have had the vehicle licences removed through VOSA. We try a variety of tactics to disrupt the overall illegal activity, which of course is the classic way of addressing criminal activity.

Q454 David Lepper: I want to ask about the resources that you have to carry out this work. Could I come back to the question of brokers for a moment? I think you told us earlier that in this country at least there is no real sign of highly organised crime involved in these activities. You have also suggested that there is something a bit shadowy or grey about the issue of brokerage—and I forget which word you used. Are you telling us that there are connections or suspected connections between organised crime and the brokerage business elsewhere in the world?

Mr Jordan: The organised crime element has not appeared in the recovery of very strict hazardous waste import and export that is regulated under the Transfrontier Shipment Regulations. We do believe there has been evidence of organised crime in the green list. We have looked at a number of cases where we believe the origins are in Ireland; we have actually passed on the information to other authorities. So there has been evidence of organised crime engaged in some green list activities. There is probably a fairly serious organised component in the case of the export of waste electrical and electronic equipment of which we are still gaining understanding. I am not familiar with any direct link between organised criminal activity and brokers. I am simply unaware of it.

Q455 David Lepper: Can I come to the question of resources then? I think you told us in evidence in the past at the first stage of our inquiry that there were some problems about the funding of this element of the Environment Agency’s work. I think you received an additional £4 million worth of funding last year. Can you tell us what the funding is in terms of pounds and pence spent on this work? There are two elements to what you want to do. One is looking at the source of where stuff is being recycled and gathered for recycling, et cetera, and your work at the ports. What is the division of resources between your work before the ports and then what goes on at the ports and so on?

Dr Leinster: I think the outcome that we are trying to drive in this is to stop illegal waste exports, and therefore what we are looking at is the overall chain of events and the transfers that happen. The work on ports that we carry out has to be seen in that context. What we have found is that we are much more successful in our work at ports if it is informed by intelligence around what is going on so that we are able to target those activities that we think might be a problem rather than just randomly going to ports. One of the things that we have discovered is that as soon as there is quite a high level of activity in a particular port, then people start using a different port. It does not take all that long for the information to pass round the network of people who are exporting
material in this way. That is just some context around the total sum involved, which is around £16 million and that includes the £4 million of additional money that we received, particularly to deal with free riders and also waste exports.

Q456 Chairman: Free riders?

Dr Leinster: Free riders are people working illegally so that they do not come under the regulatory burden and they do not apply for permits; they do not apply for transfers. These are people who are managing waste illegally. That £4 million of additional money has been very helpful. What we would hope is that that can carry on as we go forward. To put it in context, the £16 million is about 5 per cent of our non-flood risk management money or about 15 or 16 per cent of the money that we spend on waste in total. At present, we most probably spend about 5 to 10 per cent on work at ports within that, but all of the intelligence work that we do in the background really is helping us understand where it is that we should go when we do go to a port.

Q457 David Lepper: In terms of staff, what is that?

Dr Leinster: In terms of staff, about 350 staff would be doing this, but that includes staff, as David was describing earlier, who are looking at the legitimate sites and helping them improve the quality of the outputs from those sites. Those sites are under waste management regulation and those are our people on site who are looking at working with those operators to improve their performance and improve their compliance.

Mr Jordan: We have had £4 million worth of temporary funding which is for a three-year period. We have created two small temporary teams which are highly specialised and very skilled at using crime analysis, the same types of intelligence materials and analyses as the police force, and indeed the teams are heavily populated by police assigned from their existing forces. So we have some very good skilled people as well as some of the top environmental crime people from within our own organisation in those temporary teams. That has enabled us to get a proper grip on this in a way that we could not have described as recently as 18 months ago.

Q458 David Lepper: Let us get this clear: that is not £4 million a year over three years; it is £4 million over a period of three years?

Mr Jordan: It is a total of £4 million over a three-year period.

Q459 Lynne Jones: We have in this country a very complicated system for collection and disposal of waste, which has largely arisen historically. To what extent is the complexity a problem for you in relation to enforcement? Are there any comments you would like to make about whether a more common framework for collection and disposal across the different areas would actually make enforcement easier?

Ms Parkes: I think one has to look at the challenges that local authorities have needed to meet—and even going back five years most of our domestic waste was just put in a bin and land-filled and so out of sight, out of mind—moving towards meeting the landfill targets and the need to recycle and separate out more waste. I think local authorities have had to strike the balance between making it simple and easy for householders to recycle by just collecting mixed recyclables and those that have chosen to go down a more complex route of actually requiring more sorting at the kerbside or in the household. It depends on the types of property you have; it depends on whether you have temporary residents or a large transient population. We do have a mixture of collection methodologies. In many cases we still have collection and disposal authorities. It does make for a more complex picture. What we try to do is to focus, as Paul has already said, on outcomes. Provided the quality is right, we really do not mind how local authorities achieve that quality, and obviously they have to balance maximising uptake of collection and recycling with actually making sure that they are collecting quality materials. The evidence shows that as long as you employ the right technology, you can produce quality outputs. The challenge we have found in the past is whether that is actually being achieved in practice, and hence we are working with the waste management industry, with their trade body, with Waste & Resources Action Programme (WRAP) and with local authorities to drive up the standards at the material reclamation facilities.

Q460 Lynne Jones: You have not answered my question as to whether the current complexity does make enforcement more difficult. We have the report from Policy Exchange and they recommend that we should move forward to standardisation of collection at households and that there should not be separation between small business and some public sector organisations in terms of the collection methods.

Ms Parkes: I do not think it makes our job of enforcement more difficult. It may make the challenge of generating enough—

Q461 Lynne Jones: If it is being done in different ways, coming from different sources and with different mixtures, it must be more difficult, I would have thought, actually to trace what is in what.

Ms Parkes: Irrespective of how you collect the waste, it is always going to be sold on the open market and there is going to be a large number of players involved. That is the challenge we face and the challenge we deal with every day.

Q462 Lynne Jones: Can I now move on to electrical and electronic waste, which you did say a little earlier was something that you are concentrating on a great deal at the moment. Your evidence highlights the problems with this equipment being exported purportedly for re-use but in reality it is illegal disposal. Have you any suggestions as to how this can be better tackled?
Ms Parkes: Our focus again is upstream here. We regulate the collection facilities under the WEEE Directive; this is for household waste at the civic amenity sites where most household waste electrical equipment ends up. We regulate those sites. We are working very hard to identify if WEEE is leaking out of the system, where is it leaking, why is it leaking and we are working with those operators to stop that happening. We have a number of investigations in hand on the back of that. The bigger challenge going forward is what is called the business-to-business WEEE, so WEEE from businesses and from public sector bodies that does not actually go through that system. Here we do need to see much more responsible behaviour not just by those who are getting rid of this equipment at the end of its life but much more responsible purchasing behaviour and making sure that sustainable procurement is not just about buying low-energy products but considers the whole life cycle and ensures that we have responsible waste management at the end of its life.

Q463 Lynne Jones: You suggested that the committee might like to consider whether greater responsibility should be placed on the manufacturers but what have you actually in mind? What kind of increased responsibilities are you suggesting?

Ms Parkes: We have a producer responsibility regime at the moment and that is proving very effective at allowing us to meet our recycling targets, so we are meeting those. It is proving very effective to collect household WEEE, as I have said, and to make sure that that is recovered safely. The bigger challenge is how you get manufacturers to look at the impact of the particular products they place on the market. That concept is known as individual producer responsibility; it is certainly something that the Commission has in mind and had in mind with the original WEEE Directive, and they are looking at it again as the WEEE Directive is being re-worked. Rather than just paying into a general fund and making sure WEEE is recovered more generally, how can you make individual manufacturers responsible for the take-back of their products. That is quite a nightmare to administer and that is what has put every other country in Europe off going down the path of individual producer responsibility. We do think it is a good time to be looking again at this, not as a replacement for the existing WEEE regime, which we think is working well, but in addition to that: how can we be more responsible as consumers and manufacturers in terms of the vast amounts of new equipment that are constantly put on the market.

Q464 Lynne Jones: Have you any suggestions as how you make it less of a nightmare?

Ms Parkes: We think you would need to focus on the items that are causing most concern. I would suggest that those are the ones that contain hazardous items, the larger items, those that have quite a high replacement rate—things like televisions and computers—and it is going to take a lot of dialogue and debate. We are very pleased to see that the WEEE Advisory Board has actually started that debate and is looking with the manufacturers and retailers at how this could be made to work in practice. It is a very real case where those initiatives have to come from the industry. We cannot just impose regulation; it has to be workable in practice.

Q465 Lynne Jones: How would that work? Would there be some kind of check on the different types of equipment being disposed of as to whether certain manufacturers’ equipment was more hazardous than others and they would pay more and therefore that would give them the incentive to reduce the hazardous nature of their products?

Ms Parkes: That is an aspect but it is looking at it right from the design end and making sure that you are designing a product with re-usable, safe disposal—safe recycling elements.

Q466 Lynne Jones: What is the incentive on the producers to go down that route?

Ms Parkes: It ought to increase their market share. I think we are seeing increasing awareness of environmental issues. Even with the WEEE Directive, it has become something a lot of companies now advertise, that they will do free take-back and recycling in store. Many companies are finding that there is a market edge if they promote the environmental footprint of their products. We are calling for them to look at the whole supply chain,

Q467 Lynne Jones: If it is a market advantage, why do you need to have greater responsibilities imposed?

Ms Parkes: That is a very good question and I think that is when one should draw back from saying one necessarily needs legislation and look at what industry is doing itself through voluntary initiatives.

Q468 Lynne Jones: The Environmental Services Association has suggested that exports of WEEE should be limited to fully-functioning equipment. Is this feasible and how might it be enforced?

Ms Parkes: One of the dynamics around this whole issue of waste exports is that it is about allowing waste to get to those countries that want it. The way the controls work is that you can export materials to countries provided they do want them and there is a demand out there for electrical equipment either as working whole items or for components. For as long as those countries say that they want to accept WEEE, we cannot unilaterally impose domestic controls that say you cannot export it. Even if one were to limit the export of waste electrical equipment, all electrical equipment reaches its end of life at some point and in fact working electrical equipment is becoming obsolete. Really the issue of whether it works or not is not the whole issue. We have a growing mountain of electrical equipment in this country and internationally and we need to tackle that at source and understand the impact of that.
Q469 Lyne Jones: You say that it is only exported when somebody is willing to receive it. They may be willing to receive it but they may want to melt it down to extract metals in a way which is unacceptable. Just wanting it does not necessarily mean that it is being disposed of appropriately.

Ms Parkes: Absolutely, and either countries have prohibited the import of hazardous WEEE or they are required to be notified. It is subject to very tight controls. The problems we have seen are around illegal export. It is not a question of the rules so much as those that are flouting the rules. We do take this very seriously. We think this is an issue of growing concern.

Q470 Mr Williams: A constituent who manufactures monitoring equipment or accounting equipment on a very small scale came to me the other day. He sends one of his products up to the Orkney Isles and then at the end of its life technically it is going to come back to him. Is that how it works? He was telling me that the WEEE Directive causes huge bureaucracy. Part of the problem is that the items are not collected together in a controlled area where you could control whether that was exported or not. He was talking about batteries and things like that.

Ms Parkes: With the producer responsibility regimes that we have in this country, they are under a legal obligation to ensure that take-back happens and it is funded, but that does not mean the company physically takes back the equipment that they put on the market. You may recall this debate happened first around the end-of-life vehicle concept and the whole challenge of what you do with orphan vehicles. It is a producer responsibility, if you like, more in kind than in practice.

Q471 Mr Williams: Is that not the cause of the problem here that because the responsibility is not carried out by local producers or it is very difficult and very bureaucratic, a lot of this equipment is not being taken back and exports can take place?

Ms Parkes: The system we have does work well and it does ensure the recovery. We have met more than double our UK targets for the recovery of WEEE from householders, so the system is working. It is not excessively bureaucratic. Companies have to register; they have to meet their obligations, and that does all happen. The concerns we have are about the illegal export of WEEE that does not enter the system.

Q472 Mr Williams: The concern I have is that that stuff does not enter the system because the schemes that are operating are not fit for smaller producers.

Dr Leinster: That gentleman should be able to dispose of his material. If he has sold items up to Scotland, the person who is using that material should be able to dispose of it in Scotland. It does not have to come back to the originator. The issue, as Liz says, that we are seeing is not around materials which have clear take-back systems; it is around business-to-business waste, which does not have a clear regime around it, and that is where we are seeing people who can make money and therefore act illegally.

Q473 Miss McIntosh: Can I ask first about environmental permitting? This is causing great concern in the industry. I wondered what consultation there has been with the industry. I gather the House is soon going to be asked to look at the amending regulations, and there are rather a lot of them. What consultation has there been with the industry on the environmental permitting regulations?

Ms Parkes: The environmental permitting regulations have been in for a number of years now.

Q474 Miss McIntosh: There is a statutory instrument out.

Ms Parkes: Yes, to amend and increase the scope of the environmental permitting regulations and Defra have consulted fully on those in the normal way.

Q475 Miss McIntosh: So you have not been involved in the consultation?

Ms Parkes: We would have been party to pulling together the consultation paper, but it would have been a government consultation. Where we then consult is on the guidance, the permits, that comes in under that regime, and we do that obviously working very closely with government to make sure the whole package fits together.

Q476 Miss McIntosh: In the particular waste area of oil products, in particular recovered fuel oil, there is a problem at the moment I understand on the definition, particularly if they wish to use it for the generation of power, heat or electricity. Are you aware of that and have you had discussions with DEF and Defra on that because you will be the implementing authority?

Ms Parkes: We have had extensive discussions not only on the definition of oil as waste but also on working with the sector to put in place a protocol such that they can demonstrate to us that the oil is being fully recovered and will no longer have a negative impact on the environment when burnt. I believe that work is coming to a conclusion but we can provide you with a separate note on that, if that would be helpful.

Q477 Miss McIntosh: If you could let the Chairman have that, we would be grateful. Where are we on the take-up of the private finance initiatives as part of the reduction of waste going to landfill?

Ms Parkes: That programme is administered by Defra’s Waste Implementation Programme. There has been quite wide-scale take-up of that and lots of new infrastructure is coming on stream as a result.

As ever, there have been some difficulties in securing planning permission for some of the infrastructure but some fairly major contracts, including the Manchester PFI, which was very recently awarded, are quite considerable and that does show you that
the system is working and is helping to deliver the infrastructure that is needed to divert waste from landfill.

Q478 Miss McIntosh: Presumably your local Environment Agency people have to give a permit for each application?

Ms Parkes: That is right. The way it works is that we do need to issue a permit but we administer that nationally. We have been working very closely with a team at Defra so that we can see what is in the pipeline. We then work with the company to make sure that we do not cause any delay and that they are very clear up front as to the permit conditions. In every case the permits are getting through on time and with the conditions that people expect to see.

Q479 Miss McIntosh: You did just say that there are problems with planning permission. What more can you or Defra do to make the public aware that perhaps they should not be as concerned about some of these targets as they appear to be?

Ms Parkes: Obviously the planning decision is one for the local authority to make but we do recognise we have a role to play, predominantly as a regulator through the issue of the permit but also by providing support to local authorities to help them demonstrate the need for facilities. In fact, we are just starting on a piece of work to pull together a national picture of infrastructure as to what is in place and what is coming on stream so that we have a better handle on it. In doing this work, we are working with Defra, DECC, WRAP and others so that we can build one national picture of where we are with the infrastructure and then better understand, if there are issues, what is behind those issues and what more all of us could do collectively to help give the public confidence about the need for such facilities.

Dr Leinster: One of the other things we have done as part of the environmental permitting regulations is to devise a number of standard condition permits so that an operator is able to know that for a particular type of facility these will be the conditions which will be applied to that facility. Again, that speeds up the process. They are able to design a plant in the clear knowledge of what they must meet.

Q480 Miss McIntosh: The point I am trying to make is that Denmark has a higher take-up of energy from waste and distance warming and their government states it is positively a good thing, that there are no environmental side-effects. We are not saying that in this country. As soon as you mention chimney stack emissions, then in local areas local planning authorities tend to get inundated with objections. How are we going to meet our landfill obligations if we do not overcome these fears?

Ms Parkes: There is evidence out there about the health impacts of alternative ways of dealing with waste and that demonstrates that there is no significant increased health impact resulting from these facilities. Defra has made that evidence widely available. You do raise a very important point about public confidence, public understanding. I think that is a challenge we have as a society where waste is still seen as a negative and a problem rather than as a provider of nutrients or energy and that we do need these alternative facilities if we are going to manage waste more responsibly.

Q481 Miss McIntosh: On the green list, you said that the majority of the movements are the green list. What are non-green waste products? How labour-intensive is it going to be for you to implement the new duty of care?

Ms Parkes: The waste that moves under the notifiable controls is predominantly hazardous waste; it is a relatively small community with about 180,000 tonnes of waste moved last year. It is hazardous waste that is moving for recovery, whereas the green list rules apply to recyclables, dry recyclable materials. In terms of duty of care, it is intended to be a self-policing system. One of the key aspects will be making sure that all parties in the chain are clear as to their obligations, and that is an area where we would work closely with government to help promote the new requirements as and when they come in.

Q482 Miss McIntosh: I know that some local authorities may seek to contract out some of the waste disposal/waste collection. I understand that there is a problem with definitions of municipal waste for this purpose. Is that strictly a matter for Defra rather than you?

Ms Parkes: It is, yes.

Chairman: Thank you very much indeed. We are most grateful to you for your further help to this committee. You have sent us lots of further additional submissions, for which we are very grateful. We are still wading through those. Nonetheless, we are glad that you have been able to assist us further. Thank you all very much indeed.
Witnesses: Hilary Benn, MP, Secretary of State, Mr Roy Hathaway, Head of Waste Regulation and Business Waste, and Mr Andy Howarth, Head of Hazardous and International Waste, Defra, gave evidence.

Q483 Chairman: Secretary of State, thank you very much for making yourself available for us in our re-opened inquiry into matters connected with waste. We note that today you are supported by Mr Roy Hathaway, Head of Waste Regulation and Business Waste, and Mr Andy Howarth, who is the Head of Hazardous and International Waste. That does re-emphasise the complexity of matters connected with waste. We were concerned by the summer developments of the illegal shipment of waste to Brazil, and felt that our report on waste and your strategy for 2007 would not be complete unless we had a look at this particular matter. Can I just start, Secretary of State, with a very straightforward question? We recognise from our previous witnesses, the Environment Agency, that there are prosecutorial limitations on what may be said about the question of the Brazilian shipment, but what did Defra learn from what happened?

Hilary Benn: One cannot pre-judge the outcome of those investigations, but we know from other cases that sometimes some people try and use the system—which I believe, Chairman, to be a good framework for dealing with the export of waste—for the wrong kind of purposes. The fact that the Brazilian authorities identified that there was a problem—as you know, with the EA we repatriated them to Felixstowe, where I think they are. This was very much a case on the basis of the facts as they are known, about this Brazilian episode suggest that the framework is right then it is down to the effectiveness of the enforcement and how you can deal with things in a practical way. I suppose the final bit of the picture is that where people are found to have done things that they should not have done, what message does the legal system and the courts, including in relation to the fines that are imposed, send to folk about how seriously we all regard people doing the wrong thing?

Q484 Chairman: Obviously, the kind of inquiry and questions when you get the note that says “this is what happened”, I suppose what was in my mind was, what questions you asked. You say the framework is fine, but obviously as we again had confirmed from the Environment Agency, the use of the green list to a degree is a self-policing operation and can only ultimately be looked at if there is intelligence information that comes forward that is not what it says on the container in this particular case, and there had been three arrests and the investigations are continuing. That is principally what we have learnt, but my view, having looked long and hard at this, is that the legislative framework we have got is the right one: the question is, do people comply with it, and is there effective enforcement?

Hilary Benn: As you can imagine, Chairman, we looked quite carefully at this, both because of that case and because of the Committee deciding to re-open this bit of the inquiry. I know you have just been taking evidence from the EA, but on resources I suppose the additional £4 million that we have given to the EA over three years is quite prescient; certainly from my conversations with the EA I think they are making really, really good, effective use of that. You will have heard, I am sure, that they have got more investigative and intelligence-gathering capacity, so I think that has clearly been the right thing to have done. Secondly, we just have to be straight about this: as you yourself acknowledge, this is a large trade. Nobody can say for sure, but if we are talking about 700,000 containers’ worth of green list stuff every year, you can never have a system where someone is going to peer at every container before it leaves the country. Therefore, an intelligence-led approach, and acting on the basis of that is absolutely the right thing to have done, and in addition to the work, okay after the event, that the EA has done in the Brazil case, there are a couple of other examples—I do not know whether you talked about Operation Boron and Operation Iodine earlier—where intelligence-led operations have resulted in things being uncovered. For me, those are the two principal things, because if you think the framework is right then it is down to the effectiveness of the enforcement and how you can deal with things in a practical way. I suppose the final bit of the picture is that where people are found to have done things that they should not have done, what message does the legal system and the courts, including in relation to the fines that are imposed, send to folk about how seriously we all regard people doing the wrong thing?

Q485 Chairman: We may go into the resources in a bit more detail, but as I understood it—and correct me if I am wrong—the extra £4 million that you gave took the enforcement budget to, what was it, £16 million for this?

Hilary Benn: Yes.

Q486 Chairman: You spend £12 million a year, as a department, on enforcement in the fisheries industry, and the value of the UK fishing industry is about £600-700 million in terms of the landed catch. Do you think that spending £12 million on enforcement in that area is proportionate to the enormity of the task in this area?

Hilary Benn: I am sure that those who are responsible for enforcement would always say, “It would be nice if we could have some more money to do more of this” because whenever one talks to those responsible for enforcing law, that is what they do and that is what they do very efficiently, and they would like to be able to do more of it in those circumstances. I think the harder question to answer in relation to what you put to me, Chairman, is what in truth do we know about the scale of the problem?

Q487 Chairman: I love it when people ask the next question, so you carry on and answer.

Hilary Benn: The answer is you cannot uncover a negative, because unless you peered in all 700,000 of the containers, then you would not know the answer to the question. Even with the biggest enforcement budget in the world, that is not going to be a practical proposition. Certainly with more enforcement capacity and greater intelligence capacity, then you ought to be more likely to find out when things are being done in the wrong way than
would be the case if you did not have them but it is quite hard to say what is the trend. I do not know if that question was raised with the Environment Agency witnesses a little earlier and I would be very interested when I get to read the transcript to hear what they had to say about that. It is quite hard to say what is the trend overall.

**Q488 Chairman:** One of the things that clearly comes across is that if anybody is going down the illegal route, they are doing it because there is some serious money to be made, and enforcement is part of the deterrent effect. In other words you can argue about how courts see things, but the one thing you have under your control is the ability to make certain that if people think the odds are against them, i.e., that they will be caught, then it deters people from doing things because they will do it if they think they can get away with it. I appreciate you cannot give an absolute number—it is needle in a haystack stuff—but do you have a working hypothesis which guides your thinking about resources which says, “roughly speaking we are working on X percentage and this is the current situation”, so if we do X minus we might find a different situation; in other words, maybe we put up the enforcement budget by a certain amount and get a proportionate reduction in incidents?

**Hilary Benn:** The straight answer is that I do not know what formula was applied when the £4 million was allocated because I think we are in the second of three years, as I recall it. I do not know whether my colleagues can assist the Committee. It was a recognition that the EA wanted and needed more capacity, and clearly it was the right thing to have done to have put the money in; but I am not sure whether it was done on a formula basis assuming some level of criminality and bad conduct that one was trying to uncover.

**Mr Howarth:** There was not a particular formula. We worked very closely with the Agency in developing the model. In doing so, we have set up a compliance enforcement project, on which the Agency, the Scottish Environment Protection Agency and the Northern Ireland Environment Agency, as well as Customs and BIS, who have an interest, all sit. We together devised and learnt very heavily on the agencies to tell us what resources they needed to sufficiently tackle this area.

**Q489 Chairman:** Is this compliance and enforcement project at official level?

**Mr Howarth:** It is official, yes, chaired by Defra. It monitors the allocation of these resources and the activities of the agencies in this area.

**Q490 Chairman:** How often do you report to Ministers about the progress of this work?

**Mr Howarth:** As and when needed. We do so on occasions when there is an incident, and we inform them about the activities of the agency in that way, but it is not a reporting mechanism directly to Ministers on a regular basis.

**Q491 Chairman:** Have you been entirely happy with the harmony and co-operation that the compliance exercise has generated, or have you come back thinking, “Cor blimey, we have got a lot of work to do to get that lot to come together”?  

**Mr Howarth:** It is fair to say there has been a very good working relationship between all the parties and a recognition that there is a job to be done. I think it has taken some time for the agencies to get their resources together and their effective people in post, but now that they have done that, things are happening on the ground, as evidenced.

**Q492 Chairman:** That is a wonderfully diplomatic way of saying---“the recognition that there is a job to be done”. Do you think you have moved on from first base to working out a work programme? I just ask this because one of the points that the Environment Agency made to us was that to enable, for example, HMRC to fully engage in the process, there may have to be some small changes via a statutory instrument in the legal base. As always, trying to get co-operation in government can sometimes be a very tough and difficult thing to do; but are you satisfied you have moved on from first base and now have a clear work programme for improving co-operation?

**Mr Howarth:** Absolutely, yes. That is one of the issues we have looked at in this group, and it is one that we are addressing.

**Q493 Chairman:** If we just take the generic subject of environmental crime, Secretary of State, do you have any kind of bilateral discussions with other colleagues, for example in the Home Office or other departments, about the challenges that you are facing, in order to ensure that from the top of the office the right degree of awareness and co-operation is engendered, to help efforts that we have just heard described in the context of the compliance project?

**Hilary Benn:** No, not on a formal basis. One thing I would say to the Committee is that the group that Mr Howarth has just referred to has met five times in two years, and one of the things I will do as a result of this is indeed to ask that I get reported to, we will have to decide on what is a reasonable basis, just to keep an eye on what is happening and what progress is being made. As I say, as a result of this resumed inquiry one thing I have done is to write a letter to one of my ministerial colleagues on precisely the issue that you have raised about ways of working with the UK Border Agency, because I think it is a very good point that is made. If you have got somebody who may be peering into a container for another reason but are not themselves responsible for dealing with waste exports, you want to make sure that they have an understanding of why somebody else might be interested, have the power, if asked, to detain, which is the case currently, and then invite the EA to come along and have a look, so that we can enforce these laws on an effective basis. The establishment of the group that has just been described to the Committee is a very good step in making sure that everybody understands what each of us is trying to do in the job we have got because
our experience certainly is that if you do that you will get a better outcome than if people are just ploughing their own furrows.

Q494 Chairman: Obviously, when something like this Brazilian incident takes place, it does bring Britain’s reputation in these areas into ill repute.

Hilary Benn: Yes.

Q495 Chairman: Because a government finding this lot on its doorstep is going to say, “What kind of systems did you lot have to stop this arriving with us?” There is reputational damage, and there is also the potential for environmental damage. There are so many competing forces in the field of intelligence-gathering, but given the stakes involved in this type of shipment, whether it be green list type material or hazardous waste, do you think the enforcement authorities do give work in this field sufficient priority?

Hilary Benn: Certainly the EA does. I agree with you completely that when we all first heard about this, it does not reflect well on the country from which the shipment came, and it certainly does not reflect well on whoever was responsible for trying to do this. Gladly, this has been discovered, and I am sure that due process will follow in time. From discussions I have had with the EA, and having heard from them directly about the way in which they have used the additional funding that we have put in, the team of 16 investigators and 12 intelligence-gatherers is taking it very, very seriously indeed.

Q496 Chairman: Without going into too much detail, are you satisfied that, if necessary, the Agency and those involved in this work, would have access to the full range of intelligence services which are at the disposal of Government if really serious wrongdoing was suspected?

Hilary Benn: Do you have something particular in mind?

Q497 Chairman: I am trying to be circumspect, but you know as well as I do what I am talking about.

Hilary Benn: Yes. As I understand it, the intelligence gatherers do sensible things like watch premises and try and find out what is coming in and going out, and they can make use of the powers under RIPA but to be honest I have not thought about whether there are circumstances in which they would want to go and ask other people, “Is there any light you can shed on this?” I would have to ask, and maybe respond in an appropriate way.

Chairman: That would be very helpful indeed.

Q498 Paddy Tipping: You told us you were broadly happy with the framework. Does that include the legislative framework? Do you think we need to strengthen anything?

Hilary Benn: I think that apart from a couple of examples that you alluded to, Chairman, a moment ago about HMRC, I would say relatively small things. I think the legislative framework dealing with hazardous waste—what is prohibited, what could be sent where, for what purpose or cannot at all—and the green list system—what you have to demonstrate in either case—yes having looked at it in some depth, broadly speaking that is the right framework to deal with it. I cannot see any obvious holes in terms of the controls. Obviously, they have evolved over time from high-profile incidents internationally that led the world to say, “What are we going to do about it?” The Basel Convention was really important, the EU Waste Shipment Regulations, and so on, and our own Trans-Frontier Shipment Waste Regulations, yes I think it is broadly right.

Q499 Paddy Tipping: I think you have been consulting during the summer on revising the duty of care. How are you going to take that forward?

Hilary Benn: I think it is a good idea—and this is something the EA has asked for—because it would further clarify where responsibilities lie, maybe looking back at the legislation where, as I understand it, there is a little lack of clarity in relation to exporters as opposed to others, but it would require primary legislation, so we would have to look for the next available opportunity to do that. That is another example of what I would describe as not unimportant tweaks to the system, but I do not think anybody who is exporting, notwithstanding the fact that that change has not been made, is under any doubt at all about what it is they are meant to be doing.

Q500 Paddy Tipping: The courts have got fairly hefty sanctions they could impose, but my impression is that this is not top of their agenda. Would you like to see the courts imprisoning people and maximising the fines?

The Committee suspended from 4.17 pm to 4.28 pm for a division in the House

Hilary Benn: It is, of course, not for me to advise the courts what to do. You will be aware that the fine is unlimited, and it is up to two years in prison. From my point of view, clearly I want the penalties imposed to help deal with the remaining problem, so that, as you indicated earlier, Chairman, those engaging in this activity understand that there is a consequence. Whether there is any difference in perception about activities in the UK, where the courts may see more visibly the consequence of that, as opposed to something that is happening in another country, might be an interesting point. As with all of these things, to the extent that there can be fostered a good understanding on the part of all of the people who have responsibility for trying to deal with this problem, right the way from constructing the law, enforcing it and then applying penalties in the court, everybody understands why it matters and then they hope that the system will produce the right result to discourage people from doing it again.

Q501 Paddy Tipping: In my constituency, and I guess in yours, people are pretty fed up about environmental crime. It is not a victimless crime, it affects us all. Perhaps I should criticise the courts: I think the courts should take a tougher line. I do not think they take this seriously. What can you do to help them?
Hilary Benn: One would be to find a way of having a conversation with those who give guidance to the courts, be it the magistrates’ courts or the Crown courts, if a case is taken on indictment, to think about how others see it in making recommendations about the appropriate tariff for these particular cases. I am not quite sure how exactly one does that, but it is something I would happily undertake to take away and reflect upon in the light of the question you have just put to me.

Q502 Paddy Tipping: I would be very happy if you would do that.
Hilary Benn: I will.

Q503 Chairman: We had a discussion with the Environment Agency about the Use of Proceeds of Crime Act. Do you think that the use of that needs to be strengthened, because it strikes me that what really hurts people who want to do what the people who went to Brazil did, is by taking away as much of their money, assets and resources as possible. The Agency, from what we can see, has certainly not been inactive in that area, using some resources to deal with waste that has to be repatriated, but do you think it should go further?
Hilary Benn: My understanding is that the EA has seized assets in two cases under POCA, and it gets to keep just over a third of any assets seized, which can then be used for enforcement. That is obviously an encouragement to the EA because it means they have got more resources to get on and deal with it. The principle of the Proceeds of Crime Act is a very, very good one, and it has been used in other respects, in relation to drug dealers and so on, and it is another way of making the point, “There is a consequence if you do this”. I think that it is something that should be supported. I do not know whether the EA says there is any obstacle to them making greater use of it, but if that was a problem I would be very happy to look at it.

Q504 Mr Williams: Following up on Paddy Tipping’s questions about the courts and punishments, we were told by the Environment Agency that they offer and deliver training to the courts. I am not quite sure how the training is enforced but that is one way of approaching it because very often magistrates will not be aware of environmental crimes or the seriousness of them. Another way is to establish within the public perception the idea of the seriousness of the issues you are dealing with. I think people do not really understand that. Is there any way in which you can promote the concept of the seriousness?
Hilary Benn: I think it is an extremely sensible thing to do, to offer training in that way, for the reasons I set out in answer to Mr Tipping’s question a moment ago. I think that cases like this, unhappy though they are, are also an opportunity to bring this problem to the attention of a wider audience, to make people aware of why it is a problem. If one turns to the most extreme cases, if you think of ship-breaking, I will never forget as long as I live meeting representatives of the trade union that was trying to organise ship-breaking workers in Bangladesh. They painted this picture of a Dantean hell, where people would line up outside the gates every morning—the ships, as we know, are driven on to the beaches—and they decide who is going to get work today. The organiser told me that about two weeks earlier three men had been found dead in the bottom of a ship, they had been missing for two weeks and had been overcome by fumes. He said: “We rip out asbestos, and do you know what I get given to protect myself? The answer is, a pair of rubber gloves and I have bought a pair of plastic spectacles to try and protect myself.” I sat there and heard them tell me that story, well, if you can convey that to people and say, “this is not a victimless crime if you are breaking up a ship with dangerous stuff in it”, then at that end of the spectrum you realise why we should take this very, very seriously indeed.

Q505 David Lepper: We have talked already a little about the resources that are available for this work, Secretary of State, and mention has been made of an additional £4 million over the next three years. Do you feel that brings up to about the right level the resources for doing this work?
Hilary Benn: I am sure those responsible for doing it would like to have more, but when one looks at what the EA has been able to do in the first half of 2009: 200 premises had unannounced visits, I am informed; 600 containers were inspected; 54 notices were issued asking for more information; and 50 notices ordering a halt to the export of waste; and since 2004 they have had 19 successful prosecutions. It seems to me that that demonstrates a good level of activity. Obviously, when we get to the end of the period that the £4 million additional money has been given for, then we and the Agency will have to reflect on how it has gone, what they think the scale of the problem is, what we think, and take a decision at that time but it has certainly had a big impact.

Q506 David Lepper: The Environmental Services Association said in its evidence to us that the Government should consider resourcing the Agency in this work partly through funding from landfill tax revenue, but that is not happening at the moment. Is it something that is being considered?
Hilary Benn: Not as far as I am aware currently. Obviously, there is quite a lively debate with the local authorities about landfill tax revenues. I can understand why everyone has got their eyes on what they think are sources of finance, but there is a number of different pots into which that money needs to go.

Q507 David Lepper: One final point on resources: if we look at comparisons of the funding of enforcement and inspection work in other areas of Defra’s responsibilities, then how do you feel the funding of this work by the Environment Agency fares?
Hilary Benn: I just have to be straight and say that I have not sat down myself and looked at the resources that are devoted to different kinds of
inspection in the different areas that Defra has got responsibility for—and, as the Committee knows only too well, they range extremely widely. As I indicated earlier in answer to your question, Chairman, it seems to me that the £4 million is being very effectively used, given the level of activity that the Environment Agency is able to undertake. The real problem in trying to answer the question is that we do not yet quite know the scale of the problem in those circumstances, and it would be jolly helpful to have that information in order to be able to answer the very fair question that you put to me.

Q508 Chairman: You have twice emphasised the important impact that the £4 million extra funding is having. The Environment Agency said they had put in two temporary investigation teams. At what point do you have to make a decision as to whether temporary becomes permanent?

Hilary Benn: We will have to discuss that with the Agency when we come to an appropriate point in the third year. Obviously, that has to be looked at in the context of Defra’s budget and all the other pressures there are at a time when we know that public expenditure is under a lot of pressure.

Q509 Chairman: I appreciate that, but part of having good quality enforcement is the deterrent effect it has. If the word gets out on the street that all of a sudden those two teams are not there any more, it is terribly tempting for ne’er-do-wells to want to have a go.

Hilary Benn: I take that point entirely, Chairman.

Q510 Chairman: To be more specific, when will the discussion take place with the Environment Agency?

Mr Hathaway: The current money goes as far as March 2011, in other words the end of the financial year—

Q511 Chairman: There is another financial year.

Mr Hathaway: There is another financial year to come, so I would suggest that sometime early in the next financial year would need to have that conversation.

Q512 Lynne Jones: Is there any prospect of this becoming self-financing in the sense that the proceeds of crimes detected could fund continuation of these teams?

Hilary Benn: It would be great if that was a possibility, because everyone would feel very happy about that outcome. The difficulty, picking up your point, Chairman, is obviously you have to plan, you have to employ people and you have to have some certainty. From the EA’s point of view, I presume they would not be able to say, “We can guess that during the course of the year we will be able to seize this amount of assets and therefore generate this amount of revenue, which we will then be able to use to pay for the investigative and enforcement teams that we have got.” It would be very hard to rely on that, but maybe over time, depending on how POCA is used and the level of cases in which it can be used—and that is the other thing you cannot be sure about—maybe that will give us a better basis on which to answer the question.

Q513 David Taylor: Can we turn to waste electrical and electronic equipment, sometimes stupidly called the WEEE—let us call it W-treble-E—that sounds a lot better! I remember, Chairman we had an earlier inquiry on this quite some years ago, when myself and the Honourable Member for Sherwood went to the Netherlands and elsewhere, and they seemed to be well established then. We seem to be rather slow to be able to implement a satisfactory system in the UK. The Environment Agency, in its submission to us, talks about WEEE being used as a disguise of non-waste for re-use, but in reality being dismantled. The Environmental Services Association said right at the head of its evidence: “We consider that the WEEE regime is insufficiently robust to prevent damage to the environment and human health.” Your own evidence recognises the reasonableness of those sorts of comments, so what is Defra planning to do, Secretary of State, on the back of the provisions to the WEEE directive to ensure these problems are rather better tackled than they are at the moment?

Hilary Benn: With respect, I would not agree that the legal framework governing this is deficient, because it is very clear. WEEE is classified as hazardous waste, and there are all of the processes that have to be dealt with. As you know, hazardous waste can only be exported for recovery to the EU and the OECD, but if the equipment is working, and that is the key question: is it working or not? If somebody wants to buy it somewhere else and it is working, then it is not a problem. The difficulty is of course, as we know, that some people export what they claim is E and actually it is WE.

Q514 David Taylor: It is not the framework, it is the policy enforcement.

Hilary Benn: It is people who are trying to get round the rules. One of the things the Commission wants to do, and we are supporting it, is to change the WEEE directive so it will be a legal requirement if you are exporting what you claim is E that you have actually tested it to show that it is functioning, as opposed to saying, “we think it functions”. I think that that would be a helpful change to all of us who are trying to enforce the regulations properly.

Q515 David Taylor: What scale of spot checks are you doing?

Hilary Benn: The checking that is being done by the Environment Agency covers a whole range of waste.

Q516 David Taylor: In this specific area.

Hilary Benn: I was just about to say that I do not have any information, and I will see if the EA can provide it, about the number of those checks that relate in particular to WEEE.
Q517 David Taylor: Can you write to us then?  
Hilary Benn: One of the two operations that I referred to, Operation Boron, which the EA undertook, was indeed, as I understand it, an intelligence-led operation that was focusing on WEEE. It involved a number of companies and seven people were arrested as a result of it. If I can provide some further information, if it is available, I will gladly do so.

Q518 David Taylor: This question is possibly one for Mr Howarth, and again it is drawn from the evidence given to us by the Environmental Services Association. They invited us to suggest that the WEEE regime be tightened to ensure that it is properly directed into a legitimate treatment system and that the re-use sector is subject to proper controls to ensure that only fully functioning equipment is exported. Is that a practical proposition, and how might it be enforced, Mr Howarth?  
Mr Howarth: I have responsibility and look after the controls that govern the movement of waste, and as far as we are concerned, they allow free movement of waste for recycling, and there are generally only limited controls you can put on that. If it is hazardous waste, as the Minister said you cannot send that to non-OECD countries. In terms of the difficulties here, it comes down to the definition of what is working equipment and what is what we call e-waste, which is another term you can use. In that regard the European Commission, together with the Member States, has drawn up quite clear guidelines for the regulators and what is working equipment and what is e-waste. That is the piece of guidance that the Commission is now taking forward and putting within the WEEE directive, if it is agreed.

Q519 David Taylor: I am sorry to interrupt, but can it really be that difficult to define what is meant by fully functioning equipment? It seems to be a relatively unambiguous description.  
Mr Howarth: The guidance is clear, and that is that it has to be tested; it has to be labelled that it has been tested; and it has to be properly packaged—in the same way that a product that you buy from a shop will be similarly packaged. If it has not got that information and that packaging, then the direction of the legislation is that that is presumed to be waste and therefore subject to the controls here, which can then be applied, and all the enforcement controls we have been talking about then come into play.

Q520 David Taylor: Do you think it makes sense, then, to restrict any export of WEEE, to fully functioning equipment in the way that we are discussing it now?  
Mr Howarth: It was said earlier by the Agency that there is a global demand for electrical equipment. There is a huge demand to bridge the digital divide in Africa, and it is legitimate that we send working computers to help them and bridge that divide. I do not think we should necessarily be targeting that legitimate sector; it is the illegitimate sector, for want of a better phrase, that should be targeted.

Q521 David Taylor: Back to the Secretary of State: Defra has agreed with BIS about giving attention to enforcement of controls on WEEE, and it was said that changes to the Directive are anticipated by February 2010. Is that still on track, Secretary of State, as far as you are aware?  
Hilary Benn: I do not know the answer to that in terms of the timing, I am sorry.  
Mr Hathaway: As far as I am aware that is true, but the lead department for those changes is the department that—

Q522 David Taylor: You are keeping a watching brief on that.  
Mr Hathaway: We certainly are, yes.  
Hilary Benn: But I will check and come back to you.

Q523 Paddy Tipping: This is an area of policy that I am concerned about. These are waste oils that are being refined, but the rate of duty on them makes it almost impossible for the industry to take off. I know it is not entirely your responsibility, but what is your view?  
Hilary Benn: Rates of duty absolutely are not, and somebody else takes responsibility.

Q524 Paddy Tipping: The Treasury and the courts.  
Hilary Benn: Yes.

Q525 Paddy Tipping: You cannot take these on.  
Hilary Benn: And you know where you should fear to tread! If one takes waste lubricating oils—and of course there has been this court case brought by OSS. I am sure the Committee will know that on appeal the court concluded: “It should be enough that the holder has converted the waste material into a distinct, marketable product which can be used in exactly the same way as an ordinary fuel and with no worse environmental impact.” The issue for waste cooking oil, which was not the subject of that particular case but obviously is a concomitant concern, is that there are regulations applying environmental controls to fuel manufactured from waste, and that means that the controls would apply to the burning of fuel produced from this waste even if it met the test that the courts have now applied. The Government is prepared to consider amending the regulations. The issue really is timing because as a result of the Appeal Court case the Environment Agency and the Department were instructed to produce an end-of-waste protocol for waste lubricating oils, which we have done; we have notified the Commission under some technical process, and they have until 30 November to say ‘okay’ or ‘not okay and we have got some objections’ and so on. To be honest, we are waiting currently to see whether they come back and say that is fine or not. In essence this is a test case. If the approach we have taken with the protocol works, then it will be easier for us to look at it to apply it to other types of oils that can be used as fuel, if that is helpful.
Q526 Paddy Tipping: It is helpful, but it is purely illogical at the moment not to be converting waste, some of which is being dumped illegally, into products that can be put to good use.

Hilary Benn: I must say I have a lot of sympathy with that view. A lot of these things come back to the definition of waste, which covers the whole of the European framework, and one can absolutely see why that definition has been put in place, because it is all-encompassing and allows you to make sure you have a decent structure in place to deal with all kinds of waste. On the other hand, there are occasions where doing what appears to be the sensible thing tends to run up against that particular definition.

Q527 Mr Williams: Surely the problem with the issue that Paddy Tipping has raised is that some fuel derived from oil that is not waste is not sustainable, and it is getting the definition between fuel that is derived from waste and fuel that is derived from unsustainable plantations of palm oil in far-away places.

Hilary Benn: That is absolutely right. That is why (1) we asked Ed Gallagher to do his review of the Renewable Transport Fuel Obligation last year, why (2) if we are talking carbon and greenhouse gases you need to compare bio-fuel with the petrol and diesel that you are hoping to replace. The truth is we know on direct impact there are some bio-fuels that are better than the carbon and diesel from the climate point of view—a good thing—and some are worse. Why would you want to do that? I do not know why you would want to do that. The complicated thing is the indirect land use impact, where we are arguing in Europe and internationally for criteria to be drawn up which would enable you to judge the sustainability. As the Committee will be only too well aware, it is quite a complex and difficult process to follow it all the way down the chain.

Q528 Mr Williams: I am sorry, it is just this business about the tax rebate, is it not? We should have the 20p tax rebate, I think Paddy is arguing, on the fuel that is produced from waste oil but not from oil that comes from unsustainable sources, and it is getting that definition between the two is the difficult thing.

Hilary Benn: That is absolutely right. That is why (1) we asked Ed Gallagher to do his review of the Renewable Transport Fuel Obligation last year, why (2) if we are talking carbon and greenhouse gases you need to compare bio-fuel with the petrol and diesel that you are hoping to replace. The truth is we know on direct impact there are some bio-fuels that are better than the carbon and diesel from the climate point of view—a good thing—and some are worse. Why would you want to do that? I do not know why you would want to do that. The complicated thing is the indirect land use impact, where we are arguing in Europe and internationally for criteria to be drawn up which would enable you to judge the sustainability. As the Committee will be only too well aware, it is quite a complex and difficult process to follow it all the way down the chain.

Q529 Paddy Tipping: We talk a lot about household waste, domestic waste, but the big producer is commercial waste. Why do we not put more focus on that? That is an area where we can make real progress, can we not?

Hilary Benn: It is, and that is exactly why we published our new strategy on commercial and industrial waste about a month ago. One of the things we need is better information about the make-up of that waste, so we are going to do a survey so that the policies that we then pursue can be best informed. The last time we did this was 2002, so it is a bit old and we need to understand the composition. Second we want to make it as easy as possible for people, so one of the things we are going to pilot is looking at providing recycling facilities on an industrial estate, because it is not always easy for small businesses to do the right thing in those circumstances. I have to say I am very impressed on my travels when I see people out and about that are doing this. I was at a shopping centre in Peterborough a couple of months ago. They have certainly got this, and they have reorganised the way in which they deal with the waste and are having a big impact. Provided the incentives are there and the information is there, we can make progress.

Q530 Paddy Tipping: But the information is pretty sketchy, is it not? There is an occasional survey—should we put more resources into this?

Mr Hathaway: I am tempted to say that we need better information on commercial and industrial waste, which is why the national survey, but such a survey also imposes a cost on the businesses responding to the survey, which is why we do not survey them every year. We want to move to electronic data collection whereby when a business applies for a permit from the Environment Agency then certain information can be logged electronically without imposing such a burden, and we want to move towards that progressively. At the moment we need a survey to refresh our knowledge from 2002–03. Perhaps I could also add that we are developing policy instruments that bear equally on household and commercial and industrial waste. A prime example that is already there is the landfill tax, and there is plenty of evidence that that is driving improvements in commercial and industrial waste as well as household waste. Looking further forward, issues about whether certain material should be restricted from landfill in future would apply, or could apply, equally to all types of waste.

Hilary Benn: The landfill tax and the prospect of certain products not going to landfill in future are two pretty powerful policies that have been principally, not exclusively but principally, responsible for the big changes we have seen already.

Q531 Paddy Tipping: But you have also set targets for increasing recycling for household waste. Why could we not set similar targets for the commercial and industrial sectors?

Mr Hathaway: Once we have the results from the survey and have a baseline against which to judge that—remember commercial and industrial waste comes from every sector of the economy, so to have a flat-rate target across the whole lot might not prove to be the right approach, but we do need to survey first. I would just point out that on construction and demolition waste, which is a big part of commercial and industrial waste—in fact the biggest by far—there are targets. The Government has a target of halving that type of waste going to landfill by 2012 against a 2008 baseline, and the new revised waste framework directive requires 70 per cent of those type of wastes to be recovered by 2020.

Q532 Chairman: Why did it take you seven years to get round to refreshing the knowledge you have about commercial waste? It seems an awful long
time. So much emphasis is being put on the domestic waste stream, with many initiatives and lots of figures and lots of targets, but you seem to have waited a long time to come back to commercial waste—why?

**Hilary Benn:** In terms of the survey, Roy has just answered the question in relation to the frequency with which it would be sensible to do that. I think a lot of effort, understandably, has gone into trying to make progress in the household waste stream, but I do not think it—

**Q533 Chairman:** That is the minority waste stream in the country, is it not?

**Hilary Benn:** I was just going to say that it is not the case there has not been progress in relation to commercial and industrial waste. There certainly has been.

**Q534 Chairman:** When we went and did one of our visits in connection with this, I remember standing with the company down near Croydon and they were saying, “We are always sending information back to the Environment Agency; there is no shortage of data; it is just that nobody seems to be collecting it and updating it.” It is all very old and I am delighted you are doing it, but the simple question is, why did it take you so long?

**Mr Hathaway:** There are a couple of things I can say about that. One is that the focus has been to some extent on household waste because the Landfill Directive, landfill diversion targets, which impose huge penalties on Member States that do not meet them, apply solely to biodegradable municipal waste. Obviously, a government has to prioritise reaching those targets for 2010, 2013, 2020. I would also say that when the Agency did last measure C&I waste in 2002–03 we found that the waste of recycling recovery was higher even at that time than it currently is for household waste. So we do not want to be complacent about this but actually you could argue that the evidence was that it was the household sector that really needed to catch up.

**Chairman:** Two colleagues have supplementaries, David Taylor and then Roger Williams.

**Q535 David Taylor:** One relates, Chairman, to this area of commercial waste recycling, and I would like to ask the Secretary of State whether he thinks we are missing an opportunity here in the re-use of cooking oil, which is used in great amounts in restaurants and elsewhere and it straddles both the domestic and the commercial divide. The present position, as I understand it, talking to a representative of the trade association and organisations involved in this area, is that because the recovery and conversion process of cooking oil into bio-fuel requires about 10 per cent of the volume to be from ethanol from non-renewable sources, so we have 10 per cent ethanol from non-renewable sources and 90 per cent of the volume from what would otherwise be a waste product, we cannot get the European interpretation of RTFO to accept that that is an acceptable process. That 10 per cent apparently imperils the whole classification process as RTFO. Could the Secretary of State look at this, because for want of that (a) we are wasting a small but very useful industry, and (b) we are wasting an awful lot of heating oil that can contribute something like a billion litres of RTFO fuel a year?

**Hilary Benn:** I would simply say, Mr Taylor, that it is not a problem I have been aware of, but I will gladly look at it now you have raised it with me and come back to you and the Committee.

**Q536 Mr Williams:** Small businesses locally tell me that where private individuals are encouraged to recycle there is a huge disincentive for them because they get charged by the local authority. Even if they sort out their waste and then take it to the recycling centre they are not allowed to deliver it in there. Is there a common approach to local authorities or best practice or advice on this matter? If we are going to make an impact on commercial waste we want to be encouraging people not discouraging people, it seems to me.

**Hilary Benn:** I agree with that. Greater convergence in the way waste is dealt with—because in the end it matters less where it originated from and it matters more that it is dealt with in a sensible way. Local authorities are in the position to collect if they want. Question: how do we encourage those who are collecting commercial waste to recycle more of that?

**Mr Hathaway:** That is why one of the things in the commercial/industrial waste strategy was indeed this pilot project I talked about to see if you can make it easier for businesses to do that. Another example would be that if a bin lorry is going down a street and you have house, house, house, small shop, small business, small business, house, house, house, it would be pretty sensible, if you are collecting recyclates, to do that while you are at it.

**Q537 Lynne Jones:** Can I go back to your discussion about your survey? Will you be making use of the data collected by the National Industrial Symbiosis Programme, because they do collect a huge amount of data about commercial and industrial waste?

**Mr Hathaway:** Not directly we will not, no, because the idea is to take a sort of stratified sample of businesses across representative sectors of the economy, representative size of businesses and weighted by region rather than to take the information from existing databases, which may not have representative sample sizes of the different bits of the economies.

**Q538 Lynne Jones:** Can I just urge you that, in devising a strategy, since these are only periodic surveys that you actually ensure that the information you are collecting is relevant to information collected from other sources, so that we can compare. That will allow you to use information collected through other routes to tie in with the results of the survey, so you will get meaningful figures on a more regular basis. I just raise that as an issue. You mentioned the commercial and industrial waste strategy, and I am sorry I have not read it, but I am aware of the landscape review of the business and resource efficiency programme. Is that included...
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in that? Can you tell us a little bit about how you are going about implementing that? It is mentioned in your update that it will be implemented in 2010, and that that will be the delivery body. Can I put in a plea for the National Industrial Symbiosis Programme (NISP) because it has delivered fantastic results! You mentioned the Treasury and I am sure they would be very interested. In three and a half years they have saved 3.5 million tonnes of carbon dioxide at a cost of 63p a tonne, which is streets ahead of any other means of saving greenhouse gases. Their approach, which began with Advantage West Midlands supporting the programme, has now been adopted overseas, and we are a global leader now in this industrial symbiosis programme. It has been adopted in Mexico, and now they have got a big contract in China. Can I urge you to ensure that the good work that has been delivered through this programme is not lost in the new way in which you are delivering it? I still think it would have been better to have kept this programme as it is because, after all, if it ain’t broke, don’t fix it!

**Hilary Benn:** We absolutely do not want to lose the achievements and expertise that is to be found in NISP, and I would echo everything you say about what it has achieved. The landscape review is all about trying to make sure that we provide all of this support in the most cost-effective way possible because we have to have regard to how we are spending the money. The aim of doing it is to get that efficiency, but not to undermine the importance of the work that the various partners have done, be it WRAP, BREW, NCAMS or NISP. I hope that those who have valued the work will not see that any of that disappears. It seems to me there are benefits if you can bring together people who are working in some cases distinct and in other cases similar areas so that from the point of view of the businesses out there that want support and advice, because they may be saying, “when should I go to NISP for one, and what do BREW and NCAMS, now tell me about WRAP”—if one can provide as seamless a service as possible to help businesses that want to make the change on the basis of good advice, it strikes me as a pretty sensible way to do it.

**Q539 Lynne Jones:** I think it is sensible to rationalise it. It was confusing but I think NISP has a particular niche and it is very important, it is streets ahead in terms of what it has delivered compared to the other programmes, that is that is enabled to continue. Can I move on to food waste. Over the summer I read a book by Tristram Stuart called *Waste*. I did not realise it had a subtitle *Uncovering the Global Food Scandal* when I picked it up from the library because there was a sticker covering that bit and I thought it might help this inquiry. When I read it I wished I had read it prior to us producing our report on food because it really was a shocker some of the information in that. A lot of the emphasis on food waste has been on household waste and obviously we have had the “Love Food, Hate Waste” campaign which has been excellent and the composting of household waste, but by far the largest element of food that is wasted is before it even gets to the consumer in terms of the demands the supermarkets make on their suppliers, not just the agricultural suppliers but also those that produce the ready-made meals for example. I have not got my notes with me, I left them at home, but two anecdotes from the book struck me. One was that the company that supplies Marks and Spencer’s sandwiches chops off the crusts at each end of the loaf and they are discarded so 17 per cent of every loaf that is used is just wasted. The other story is that in 2007 because of the floods about a third of the potato crop was lost and yet the supplies to the supermarkets were not diminished in any way, largely because the supermarkets reduced their quality controls, as it were, on the size of the crop that they were prepared to accept but before that huge amounts of crops were just being wasted. We need to address this. I know there has been a lot of emphasis on anaerobic digestion and I welcome that but the top of the waste hierarchy is prevention and reuse. There are also other statistics about the amount of food that we waste. In effect, we are taking land resources from developing countries, so we really do need to give attention to this area. Of course, food is about a third of our carbon dioxide emissions. Are food retailers doing enough to cut down on food wastage from their own operations and what is Defra doing to ensure that they do so? For example, should it be mandatory to report food waste tonnage as part of their routine waste reporting requirements?

**Hilary Benn:** Well, I have only just started the particular book that you refer to.

**Q540 Lynne Jones:** I recommend it.

**Hilary Benn:** Certainly lots of people have done so. I think it is really good that this has been highlighted. There are lots of things that can be done and need to be done. One is to recognise the scale of the problem so when we published the research WRAP had done a year and a half ago—and it got a lot of coverage—people probably had not thought a great deal about this beforehand. Out of this came the Lovefoodhatewaste campaign that you have kindly referred to which I think is good. I was listening to one of the supermarket chiefs only this morning talking about how they deal with carrots. He was saying they make a virtue of the fact that they take the standard size ones and sell them for one price and then they sell the big ones in a value pack and the small ones they sell in a different way but they try to use all of the food because they were very keen on not wasting anything from the suppliers they get their food from.

**Q541 Lynne Jones:** That is Waitrose?

**Hilary Benn:** The person who was speaking this morning was Marc Bolland of Morrisons as it so happens at a WRAP conference that I spoke at first thing. Others have made commitments that they are going to send zero food waste to landfill and they are organising it. Since you mention anaerobic digestion, frankly that is a wonderful source of energy generation and we have put a lot of incentives in place, we doubled the Renewable Obligation...
Certificates (ROCs) last April. The Environment Agency now classifies what comes out at the end of it as a product and not a waste and we have put £10 million into demonstration plants. Frankly, it is just waiting as a technology to take off and I think will have an important contribution to make. The Landfill Tax of course has an impact here because it costs if people do that. There is the ban that I referred to that we are going to consult on. I think the final thing I would highlight is labelling because a little while ago I talked about some of the labelling that we as consumers find a bit confusing. Not “use by” because use by is really, really important, that is food safety, but when it comes to “sell by”, “display until”, “best before” some clarity there for us as consumers would be helpful. Another issue that is being highlighted is BOGOFs. You can offer half the quantity for half the price, which is the same difference. I was very interested to see one retailer very recently saying they are going move to “buy one now and get one free later”, so these are all examples, it seems to me, of things that can be done and some people are doing already to try and deal with the problem that you have rightly identified.

Q542 Lynne Jones: But you are concentrating on not sending stuff to landfill and possibly using anaerobic digestion instead. What about the fact that we are wasting good food? It is immoral to be sending good food to anaerobic digestion when it either could be consumed by humans but more easily perhaps consumed by animals for example. It is not just in the supermarkets, it is also in the production, these factories—Northern Foods producing huge amounts of ready meals, they are producing an enormous amount of good food that is wasted. We can separate the meat from the non-meat if necessary. Why are we not feeding good food to humans where we can and where we cannot feed it to humans at least put it into the animal feed chain?

Hilary Benn: I like crust but you would have to ask the supermarkets why, if that is their practice, they chop the ends off. If consumers say they are quite happy to have one of their sandwiches that has crust and the rest that do not, maybe that would help change it. As far as feeding waste food to animals is concerned, as you will be only too well aware, we have had some real difficulties in the past that this Committee has looked into.

Q543 Lynne Jones: For example that factory that is chopping off its bread, that is just bread, why is that being sent to anaerobic digestion?

Hilary Benn: I do not know the particular factory and I do not know what else they are producing and what other food waste there is and whether any of it is meat waste, but I think one would have to be pretty darn cautious given what has happened in the past about returning to a practice that we know created real difficulties. The best thing absolutely is to reduce the production of the waste in the first place and we and consumers have a part to play in that because we know from the WRAP research that about a third of food goes into the bin and about half of that is useable and it costs the average family 400 quid a year and if you have children it is 600 quid a year so we have a pretty strong incentive to try and make sure that we only buy what we know we will be able to consume.

Lynne Jones: I hope you finish reading the book.

Q544 Chairman: That last point you were making about the consumer, Secretary of State, the consumer is certainly confirmed in evidence that the Committee has received from the Co-op who are doing some very good things in reducing food waste, but they do comment that consumers have been identified as the largest source of food waste, so there is clearly a lot of public education to be done. Just before we move on, can I just take us back to the discussion we were having a moment ago about commercial and industrial waste. I have just refreshed my memory by looking at Defra’s vision for commercial and industrial waste and whilst it is perfectly true it confirms the improved data on commercial and industrial waste that you are collecting, as far as I can see, it is a target-free zone. Why have you not espoused any kind of target-setting in this particular area whereas in domestic waste you are very strong on targets?

Hilary Benn: I think for the reason that Roy gave a moment ago because the character of commercial and industrial waste differs enormously depending on which bit of commerce or industry you are talking about. It would not be sensible to have an overall target and that seems to me a very well-made point. The second thing is when you have got an up-to-date picture, given that we have not done a survey since 2002 of what the make-up is, which is why getting all of the samples in all of the areas and for all of the industries is so important, then that is something that we can consider, but did not strike us as terribly sensible to do that in advance of having a reasonable evidence base on which to set a target.

Q545 Chairman: If it is in the ‘too difficult’ column and when you have got your up-to-date information, are you going to keep it up-to-date with the idea of being able to at least publish trend data on an annual basis so that the waste industry can see collectively how it is doing in the categories that you are collecting information about?

Mr Hathaway: We will see. I accept that seven years is too long between surveys. I do question whether doing a survey of businesses’ waste every year would be the right thing to do.

Q546 Chairman: If it is about behaviour and attitude, and I accept the point you make about the commercial imperatives occasioned by, for example, the cost of landfill for business and the fact that companies are becoming more environmentally conscious in all the ways that you have described, and if you want to effect some behavioral change, comparisons/league tables are perhaps crude but nonetheless quite effective ways of putting pressure on people to do better. If for example you have an individual enterprise that says we are beating the national average for recycling in this area, some people would say tick the box, jolly good, but unless
you at least have some regular update on the data then you cannot have that as a benchmarking exercise for business and commercial waste producers.

**Mr Hathaway:** In the long run we will have the electronic data from the information that is routinely provided to the Environment Agency from the regulated community. When that is fully in place on an electronic basis we will have in real time much more up-to-date data. In the meantime while we are working towards that I think there is a question as to how frequently is the right frequency to carry out a national survey which is quite expensive for us as a department and for the taxpayer and it is also a little bit narrow for the receiving businesses.

**Chairman:** We will move back to the area of local authorities and close with some questions from David Lepper.

**Q547 David Lepper:** On food waste can I put in a plug for the Fair Share Scheme, of which I think you will be aware, which operates in my constituency and elsewhere in the country with very good results. However, I agree it is reducing the amount that is on the shelves rather than what is left over on the shelves that is important. This time last year when we were doing the first stage of our inquiry into waste, the economic downturn meant that there was a concern about the market for recyclable material and the 12 months exemption was introduced to enable the storage of recyclates. I think it is the Environmental Services Association again which have suggested to us that that 12-month exemption period might not have been long enough. Has Defra done any work to look at how wide the market is and the 12 months exemption is being taken up and if there is a need to extend it or have market conditions changed so much that we do not really need it any more?

**Hilary Benn:** Just very briefly commenting on Fair Share, I did indeed have the chance to see them at work in Brighton and it was very interesting talking to them about which companies were prepared to give them surplus food, going back to Ms Jones point, and which were not, particularly bigger companies that worry, “Will we be held responsible for what happens to the food after the event?” There was a lot of attention and concern expressed at the time of the recession beginning and I think some of the reporting gave the suggestion that the whole food chain was collapsing around our ears. We know that was not actually the case. Sure, prices dropped because people stopped buying for a while, including in China, but there is no doubt that prices have recovered and, as I understand it, and Roy will correct me or add to this, there were a relatively small number of applications for additional storage capacity which I think were dealt with. To be honest, I have not looked recently at whether anyone is making the argument that we need to continue with those exemptions but Roy might be able to assist us.

**Mr Hathaway:** No, in fact the market within six months or so returned more or less to normal. The prices were not quite back to the peak that they were a year or two before the recession but they were back to the average long-term prices for recyclable commodities. Thus the market has resolved the problem and there are no requests for additional storage coming through at the moment. Even in 2008 with a big turn down in the fourth quarter, as a country, we were able to meet our packaging recycling targets under the EU Packaging Directive and of course we have not got the full year figures yet for 2009 but certainly for the vast majority of materials the signs are quite good that we should be able to meet those recycling targets this year as well.

**Q548 Lynne Jones:** Can I come back to this point about the amount of food waste from manufacturing compared to household. I have got a report from the Institute of Civil Engineers and they said in 2005 there was 2.6 million tonnes of household food waste and 7.19 million tonnes of manufacturing food waste, so before it even gets to the consumer there are huge amounts of waste and they said that 1.8 million tonnes was discarded to landfill. That may have gone down since then, but it is a huge amount and I would urge that we need to give as much attention to this side of food waste as to household food waste.

**Hilary Benn:** I accept that entirely. When it talks about industrial food waste, presumably that is not just those who are making and preparing food but it would also be food being thrown out from canteens and businesses and premises up and down the country. I will get a copy of that report and have a look at it.

**Q549 Chairman:** Can I conclude by asking one question about local authority waste. There has been a sea change and many local authorities are doing extremely well with their recycling targets, but there is still a diversity of recycling services that are offered by authorities. I appreciate it is a matter which is devolved to the authority but I think people get a bit frustrated when they hear that next door they recycle this but where they are they do not do it. What efforts are being made to try and improve the uniformity of recycling services? For example, we have just been talking about food waste. That is one of the bones of contention because not everybody has their own little digester in the garden and some people would like to have a more collective service just as for example they would with green waste but they are not always as well dealt with. How are we going to get improved overall performance?

**Hilary Benn:** We have said, from memory, by the time we get to 2020 there is a range of materials that we would be expecting local authorities to collect. The truth is if you look back at where this all came from, yes, the Government could at some time in the past have said, “All of you, you are all going to do the following things: you are going to have a blue box and a green box and collect this on a Monday and this on a Wednesday,” and so on but I think the truth is the better policy was to say, “It is going to cost you an arm and a leg if you carry on chucking this stuff away,” which is what the Landfill Tax does and it has worked very effectively. The reason I say that is because the price you pay for the diversity, to which you have drawn attention Chairman, and I
absolutely understand the point, is it does allow local authorities to come up with things that work for them and their types of housing tenure, the geography of their streets and so on and so forth. I think it would be quite hard to prescribe that from the centre. I am not persuaded that it would be a sensible thing to do. The other end of the equation is the frustration that we have as consumers when we buy something and we peer at the bottom and it says “not currently recyclable” because there is the point as to whether your local authority is going to collect it—and I would certainly like more local authorities to be collecting food waste; it works a treat—but also when you see, peering at the bottom of this cup “not currently recyclable” is that because physically and technically you cannot do something with this or is it that there is not a market. I think from the consumers’ point of view, since increasingly people are committed to trying to do the right thing, one of the additional ways in which we can help is to make sure that the things that they do find when they have finished their shopping and eating and sorting are products that can be recycled in that way. I think it is a combination of those things that will enable us to see further significant improvements in the recycling rate. We have done not bad, albeit from a low base, to move from eight per cent to 37 per cent in the space of 12 years.

Chairman: I take that as an appropriate chastisement of the fact that before us we have bottles of water and plastic cups. I did attend a meeting held by the Sustainability Forum on Water at which the water was dispensed from a jug into a glass so I think we could do better. Lynne has a closing question.

Q550 Lynne Jones: Just going back to the collection of food waste, yes, by all means encourage local authorities to collect food waste where people are throwing it away but it is also possible to encourage people to compost all food waste. There are systems now like the Green Cone for people with gardens. I do not throw any food waste away. I compost everything using that system and I think that more people could be encouraged to do that and it gives you an awful amount of satisfaction as well!

Hilary Benn: I could not agree more. There are many paths to virtue when it comes to this.

Chairman: There you are, Secretary of State, when you are next looking for an adviser on food waste and after Lynne steps down as being a Member of Parliament she has just identified a new career! Thank you and your officials very much indeed for your contributions.
Written evidence

Third supplementary memorandum by the Environment Agency (Waste 30c)

SUMMARY

The Environment Agency welcomes this opportunity to provide evidence to the Committee’s re-opened inquiry into the Government’s Waste Strategy, with particular reference to the export of wastes.

Exports for environmentally sound recycling are integral to a sustainable waste management strategy where the goal is to reduce waste disposal. The amounts and types of recyclables are increasing and the UK is increasingly reliant on export markets to meet Government’s recycling ambitions.

There are two regimes for waste exports: one for notifiable wastes, and the other for green list wastes. Notified waste shipments are largely legitimate and well regulated but they are a minor fraction of all waste exported.

Green list wastes, or non-notified commodity wastes, are intended to be essentially self-policing. However, there is evidence that the system is being abused.

Using additional Defra funding we have significantly increased our understanding of this growing issue and are successfully employing a range of tactics to tackle illegal movements.

There is a growing legitimate waste export market for high quality waste materials and we do not wish to impede the free flow of quality materials. Ultimately we would hope that the markets will drive up the quality of material that is being internationally traded, as happened as a consequence of the recent economic downturn.

In the meantime the overall approach to the way in which waste is collected and processed needs to ensure quality materials are produced. We envisage needing to continue to take action against those that flout the rules.

1. Introduction

1.1 There is a large and rapidly growing international market for the export of waste for recovery and reprocessing. The UK export market doubled from around 7 million tonnes in 2002 to 14 million tonnes last year. Similar rates of growth are seen in other parts of Europe.

1.2 Recyclable wastes are international commodities subject to normal market supply and demand drivers. Policy measures which divert waste from landfill have increased supply. For example, the amount of paper collected from households has doubled to 1.6 million tonnes in the last eight years and the amount of co-mingled recyclable household waste has increased from 200,000 tonnes to over 1.6 million tonnes today. The UK exported only a few thousand tonnes of waste paper to China at the turn of the century; this increased to 2.5 million tonnes last year.

1.3 All companies exporting waste from the UK must comply with the European Waste Shipments Regulation (WSR).

1.4 Under the WSR the export of any waste for disposal, or of hazardous waste for recovery to developing countries, is prohibited, apart from some very restricted exceptions. Where the rules do permit waste to be exported, the WSR sets out two distinct systems of control: “notification” and “green list”. The system that applies to any particular export for recovery depends on the nature of the waste being exported and its intended destination.

1.5 Under the notification system, prior written permission must be obtained from the regulatory authorities in the countries concerned before the waste is moved. About 180,000 tonnes of waste are moved under notifiable controls per year. This is mainly small quantities of hazardous industrial waste moving for recovery within Europe.

1.6 The green list control system is much less onerous than the notification system—no prior permissions or applications need to be made to the regulatory authorities before the waste is moved. There is no definitive data on the amount of waste exported under this system. Analysis of UK trade data suggests around 14 million tonnes of waste were exported outside the EU under this control system in 2008 comprising of commodity materials, such as scrap metal or waste paper, being sent for recovery to countries that want them.

2. Roles and responsibilities

2.1 Anyone involved in importing or exporting waste, including persons who transport it, must take all necessary steps to ensure the waste is managed in an environmentally sound manner. They must understand what wastes they are handling and the controls applicable in all countries of transit and destination.

2.2 We are the competent authority of dispatch and destination for England and Wales and worked closely with Government on the Transfrontier Shipment of Wastes (TFS) Regulations 2007 to ensure we were given the necessary powers to carry out our functions. We also produced simple guidance to help all
parties understand their obligations. Charges are payable for the movement of notifiable waste, to cover our costs in determining applications and undertaking compliance activities. The movement of non-notifiable (green list) wastes does not require pre-notification and hence no charges are payable.

2.3 The WSR requires Member States to put in place enforcement mechanisms, including spot checks on waste shipments. We undertake such checks at ports and work closely with our European counterparts (particularly through the IMPEL network of European regulators) to share intelligence on movements. We have worked particularly closely with Dutch customs who have developed systems to interrogate the data that customs authorities receive from all exporters. This has allowed them to target inspection efforts on shipments that are likely to comprise illegal waste exports. Increasingly we also target our activities further upstream in order to prevent (and not just detect) potential illegal shipments.

3. Notified waste shipments

3.1 In our experience there is a well established and mature community of businesses involved in moving waste under these controls. Before we give consent to the movement of notifiable waste, we check that appropriate contracts and financial guarantees are in place and that the country of receipt has given its consent. These operations are largely compliant. Such movements almost entirely comprise waste from industrial processes moving from the UK to other EU countries for recovery, or vice versa.

3.2 We receive approximately 400 applications per year to ship waste from around 200 different companies. In 2008 there were 6,100 notifiable shipments of waste exported from England and Wales, amounting to 187,000 tonnes. A further 4,066 notifiable shipments, totalling 123,000 tonnes, were imported.

3.3 We are required to ensure corrective actions are taken when notified waste movements cannot be completed as envisaged in the application or where waste has been moved illegally. This may involve repatriation to the country of dispatch. We have repatriated 40 loads since 2002 because they were prohibited or had no prior permission.

4. Green list waste shipments

4.1 The vast majority of waste movements involve green list wastes. There has been tremendous growth in such materials in recent years, driven by the shift away from landfill and changes in global demand. Different types of waste, such as plastics and paper are now being exported and more participants have become involved.

4.2 The green list regime is intended to be self-policing. Companies must determine whether their waste is accepted by transit and destination countries by reference to an internationally agreed list. They must set up contracts to ensure that the waste is managed in an environmentally sound manner while it is being moved and recovered. Documentation needs to accompany each waste movement but there is no requirement to seek prior consent, nor to notify the competent authority.

4.3 Destination countries, China being a notable example, are increasingly strengthening their own controls on waste import. Given the continuing scale of exports to such countries that proceed without incident, it is our view that the majority of exports made under the green list system are entirely legitimate and play a crucial role in bringing about the recycling of waste materials.

5. Tackling illegal waste exports

5.1 Illegal exports can only be tackled if they are detected. In the case of waste exports made under the notification system we are told where the exports take place from and generally regulate the site of origin under other regimes. We concentrate our checks on the site of export. In our experience the operators involved in making exports under this system are largely compliant.

5.2 Detecting illegal waste exports made under the green list control system is more challenging. The scale of exports is very much larger. Over 50 times as much waste is exported each year under this system than under the notification system. We do not have accurate information on where the exports take place from and have a less well-defined regulatory role, although we have powers to take actions against offenders.

5.3 The main cause for concern within the green list system is the export of mixed household waste under the guise of clean waste paper or plastic. It is illegal to export recyclables that require separation before final processing under green list controls. As we are not informed about such shipments, we have had to develop our intelligence to best target our interventions where the green list regime is being subject to abuse.

5.4 There have also been illegitimate shipments of waste under the guise of non-waste such as used electrical goods allegedly for reuse which, in reality, are destined for dismantling. Such shipments to non-OECD countries are prohibited. We suspect two principal origins of these items:

- Household Waste Electrical and Electronic Equipment (WEEE), collected through local authority Civic Amenity (CA) sites;
- Business to business WEEE that never enters the formal waste management system.

It is unlikely that this material would be handled in an environmentally acceptable manner in the receiving country. In many instances it would be burned to recover some of its metal content, causing serious pollution, harming peoples’ health and wasting otherwise recoverable resources.
5.5 In April 2008, in light of these challenges, we secured an additional £4 million of funding from Government, spread over three years, to allow us to put in place a more comprehensive programme of work around securing compliant waste exports.

5.6 As a result, we have been able to increase the number of port inspection days in England and Wales to 132 in the first six months of this year. However, port inspections only tackle the problem of illegal exports as they leave the country. We are now focussing on stopping problems before they reach the ports.

5.7 In the case of mis-described recyclables we are also inspecting material recovery facilities (MRFs) to ensure that waste is being properly sorted. In the first six months of 2009 we carried out 166 unannounced inspections of waste exporters and transport checks rose to 616. We also placed stop notices on 53 shipments and made eleven arrests. Since 2004 we have taken 18 successful prosecutions for illegal waste shipments. Fines were imposed totalling £224,650 and we recovered over £190,000 in costs from defendants.

5.8 The additional funding has also allowed us to provide advice and guidance. We have worked with the waste industry, through the Environmental Services Association, to engage with the major MRF operators and to support the development of ESA’s voluntary Recycling Registration Service. We are also working with WRAP and local authorities to improve the quality of material and to stress the importance of knowing where waste is going.

6. Long term solutions

6.1 There is clearly a growing legitimate export market for quality waste materials. We do not wish to impede unnecessarily the free flow of quality materials. The green list system for exports allows this but it has been subject to a degree of abuse. Some companies operate on the fringe of legality and others operate at a high level of criminality. Improved co-operation and interaction with Customs, the Borders Agency and Ports Authorities would greatly assist our intelligence-led approach, especially concerning mis-described shipments. We must also continue working with Government and other organisations to identify how existing UK waste management practices may increase the risk of waste being illegally exported.

6.2 With regard to household waste, waste management services must be designed around ensuring quality outputs that meet the needs of the market. Local authorities need to be able to provide reassurances on the destination of recyclables to the public in order to maintain confidence in the value of recycling. We have also asked for the obligations under the duty of care regime to be strengthened to place an obligation on those involved in the export of waste to ensure they take all reasonable measures to prevent a breach of the WSR controls. Furthermore, we have suggested that there be a specific offence to those transferring waste where that person knows, or ought reasonably to suspect, that the waste will be illegally exported.

6.3 In relation to WEEE from householders, there is a need to ensure that it is properly delivered into the legitimate WEEE treatment system and that it is effectively tracked to prevent leakage from the system. Any diversion of WEEE for reuse needs to be managed properly and audited to ensure the segregated equipment is being refurbished in the UK and not illegally exported. More work needs to be done to expand and promote a high quality WEEE refurbishment sector producing equipment genuinely capable of reuse.

6.4 The Committee may wish also to consider whether any greater responsibilities could be placed on the original manufacturers of WEEE products, to assist with their safe and responsible re-use, recovery or disposal.

6.5 We do not believe that WEEE from businesses is necessarily getting into the WEEE system. All businesses must take greater responsibility for the fate of their replaced electrical equipment, ensuring they are not inadvertently contributing to illegal exports. We have suggested that changes be made to the duty of care regime that would require businesses disposing of WEEE to ensure their WEEE is sent to an authorised treatment facility. They need to understand better the risks to their reputation from not managing used electrical equipment responsibly. This extends to the harm that can be done if sensitive information on storage media falls into the wrong hands.

6.6 Public sector organisations should be exemplars of best practice in the procurement, maintenance, reuse and recycling/disposal of electrical equipment.

7. Concluding remarks

7.1 Where waste exports are notified to us, we have sufficient powers and resources through the fees we charge to discharge our obligations.

7.2 The regulation of exports ostensibly made under the green list system and the regulation of exports of WEEE made under the guise of used electronic and electrical equipment is much more complex. This is a new area of work for us and we have had to adopt very different approaches from those we employ to regulate the relatively few waste exports made under notification controls. We have used the additional time-limited funding provided by Defra to focus on this work.

7.3 The funding has increased our ability to detect illegal waste exports and to take effective action using the new enforcement powers given to us by the changes made in the TFS regulations. The funding has also supported the partnership and influencing work aimed at driving up the quality of recyclables generated by the waste management industry and tackling illegal exports of WEEE.
7.4 In our view these strands of work must continue. The UK as a whole is but one of many relatively small suppliers of recycled materials to international markets. If overseas countries are not confident that the UK is exporting quality recyclables and is properly policing its exports, buyers will look elsewhere for their materials, with severe consequences for the UK’s waste recycling ambitions and international reputation.

*September 2009*

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**Fourth supplementary memorandum submitted by the Environment Agency (Waste 30d)**

**A. ENVIRONMENTAL PERMITTING**

The new Environmental Permitting regime came into force on 6 April 2008. It replaces over 40 separate sets of regulations with a single streamlined regulatory system. The new system means we can cut down on red tape while maintaining high environmental standards. It helps us focus our effort on high risk activities and outcomes, leading to better environmental protection. This is a major better regulation initiative and has been well received by customers. Alongside Defra and the Welsh Assembly Government, we are looking to include other permitting systems in the second phase of the Environmental Permitting Programme.

*October 2009 Additions*

Have there been any recent developments following consultations on EPP. Issues were raised in oral and written evidence around whether thresholds were set at the right levels to encourage material re-use/recycling.

The second phase of EPP is concerned with radioactive substances regulation and water abstractions and discharges, with no direct bearing on waste issues. The principal development in the waste area concerns exemptions. In July 2008 the joint Defra, WAG and Environment Agency exemption review project consulted on proposals to amend the waste exemptions, maintaining the exempt status of some activities and bringing others into permitting.

The consultation closed in October 2008 after which there was further extensive discussion with stakeholders. As a result of this process a number of the thresholds proposed in the original consultation have been amended in order to promote efficient resource use and recovery while maintaining environmental protection and guarding against abuse. Regulations implementing the review have been laid before Parliament. We will continue to work with industry to develop the right levels for the thresholds to balance cost and risk.

**B. REVISED WASTE FRAMEWORK DIRECTIVE**

We broadly welcome the proposed revisions to the Waste Framework Directive which we expect will need to be implemented in UK by 2010. We strongly support the proposed simplification, modernisation and clarification of European waste legislation and that the UK will be able to retain its approach to waste exemptions.

We are particularly pleased to see support for the concept of “ceasing to be waste.” and believe the provisions for “end of waste criteria” will help to ensure resources are recovered while maintaining a high level of environmental protection. We welcome the move to promote legal certainty and clarity on the meaning of waste and a number of important definitions such as recycling. We support the new recycling targets and the strengthened provisions on waste prevention.

*October 2009 Additions*

Has the issue of waste classification been resolved. EA informed the committee of work on protocols around specific waste streams—which protocols have been completed and which are still in progress. Will changes to definition of municipal waste be coming in—how will this affect municipal waste activities?

**Definition of waste**

It is important to be clear that the actual definition of waste remains unchanged by the Revised Waste Framework Directive. There has been considerable European case law developed over the years that has clarified and harmonised the interpretation which has been a necessary process for this important definition. This case law will therefore continue to apply.

We have been working closely with Defra on the preparation of guidance on the definition of waste. A consultation paper was scheduled for publication by Defra on 10 November 2009.

A particular aim of the Defra guidance is to help to ensure that the right decision is taken in every case, including the more difficult ones. The guidance seeks to make the principles established in case law more transparent to those in industry/business who need to take these day-to-day decisions. Where possible, examples are provided to clarify what is and is not waste. Within the guidance we have prepared a simple, four-page, practical guide to assist businesses to classify their wastes correctly.
Quality Protocols

Five Quality Protocols have now been published fully: compost, anaerobic digestate, biodiesel, flat glass and non-packaging plastics. Work is advanced on Protocols for tyre crumb and shred, gypsum, processed fuel oil (PFO), paper sludge ash (PSA), pulverised fuel ash (PFA) incinerator bottom ash (IBA) and steel slag. Additionally we have recently started work on Protocols for marine dredged materials, tyre bales, cathode ray tubes (CRT), non-virgin wood and poultry litter ash. We are also reviewing the Quality Protocol for production of aggregates from inert waste which was produced by WRAP in 2005.

This work continues to be shared with Europe through the various Technical Advisory Committees on end of waste and the Technical Standards Directive notification committee.

Municipal Solid Waste

We believe this question alludes to an issue concerning the European definition and that definition used by England and Wales to benchmark targets. We believe this is more appropriate for Defra to comment upon.

Fifth supplementary memorandum submitted by the Environment Agency (Waste 30a)

Following Evidence Session on 4 November 2009

Processed fuel oil quality protocol

The consultation on the Quality Protocol (QP) for production of Processed Fuel Oil from waste lubricating oil (the PFO QP) has been completed and was passed to Defra in September 2009.

Defra passed the Protocol to the EC for notification under the Technical Standards Directive in September 2009. We do not expect to hear back from Defra before December 2009. The EC may comment and may extend the notification period.

In addition, the PFO QP has been notified to the World Trade Organisation, as it may constitute a Technical Barrier to Trade (TBT). We also do not expect to hear from Defra on this until at least 8 December 2009.

The final PFO QP should be published in April 2010, subject to no substantial difficulties arising from the notifications under the Technical Standards Directive and the World Trade obligations.

Until the PFO QP is fully published the Environment Agency will continue to regulate the production and use of processed fuel oil materials in accordance with our interim regulatory position statement. This states that we will not regard fuel oils that are derived wholly or partly from waste lubricating oils, and that are used as fuel, as waste, if they are processed to meet certain specifications.

November 2009

Supplementary memorandum by the Environmental Services Association

ESA is the sectoral trade association for the United Kingdom’s regulated waste and secondary resource management industry, a sector contributing around £9 billion per annum to GDP. We help our Members to recover more of the value contained in the UK’s waste whilst protecting the environment and human health.

Executive Summary

— England is now achieving its highest ever levels of recycling as a result of HMG’s policy driven by EU law, effective cooperation between local authorities and ESA’s Members, and investment in new infrastructure by ESA’s Members.

— England will for the foreseeable future be dependent on exports of recyclables for reprocessing as the rapid rate of increase in recycling means there is insufficient reprocessing capacity in the UK. Legitimate export of sorted recyclables for reprocessing overseas is an essential element in the UK’s success in meeting recycling targets.

— ESA’s Members have a positive working relationship with the Environment Agency to ensure that shipments of recyclables are lawful and we support the Agency’s enforcement activities.

— Legitimate global trade in recyclables such as cans and paper should not confused with the increase in exports of waste electrical and electronic equipment (WEEE), ostensibly for reuse, from the UK. We consider that the WEEE regime is insufficiently robust to prevent damage to the environment and human health.
Are the legal and regulatory controls on waste exports adequately robust?

1. Clear and consistently enforced regulation is the foundation of the business of ESA’s Members. We consider that the international, EU, and UK legal framework for waste exports is sufficiently robust to provide the necessary level of protection against the inappropriate transfrontier shipment of potentially harmful wastes. ESA supports HMG’s policy that waste should not be exported for disposal, but that it is legitimate and often desirable for materials lawfully to be exported for recycling in accordance with the Basel Convention, the EU Waste Shipment Regulation, and the UK Transfrontier Shipment of Waste Regulations. The position on shipment of WEEE is, as discussed below, less satisfactory.

2. As the UK’s success in extracting materials from the waste stream for recycling has grown, so has its reliance on overseas reprocessing markets. Many manufactured goods bought in the UK are now produced in developing countries, such as China and India, where there is demand for the raw materials extracted from the UK waste stream, such as recovered paper and plastics. This, and the availability of low cost transport on ships which would otherwise return empty to the Far East, facilitates a strong international trade.

3. Everyone involved in handling waste and in the recycling chain—from the person who produces the waste to local authorities who collect material for recycling and deliver it to sorting facilities, to operators of sorting and bulking facilities and to the final reprocessor—has a legal duty of care.

4. Further, EU law requires that material exported for recycling is handled by a facility operating to standards broadly equivalent to EU standards. Implementation of the revised EU Waste Shipment Regulation in 2007, in particular, has given developing countries better protection against receiving unwanted foreign waste. The revised EU “Green List” controls, which cover the export of non-hazardous recyclable materials from the EU, are now routinely updated formally to record the wishes of countries outside the OECD that have expressed an opinion about the recyclable materials they are willing to receive. Where a country has not expressed an opinion, its agreement must be given before every shipment.

5. The legal framework is designed to prevent countries from receiving materials they do not want, while facilitating trade in recyclable materials for which there is a legitimate demand. There is a double environmental benefit from this trade: it permits more sustainable use of the world’s resources, cutting the consumption of virgin raw materials, while allowing recycling levels to rise and reducing our reliance on landfill.

6. ESA considers that it is completely unacceptable to abuse the legitimate international trade in recyclables as a cover for dumping unwanted materials on countries that have no use for them, or do not have the capacity to recycle them safely.

7. We have particular concerns over the shipment of WEEE as non-waste to developing countries, in order to bypass lawful treatment of WEEE as waste in controlled facilities in the UK. It appears that much of this equipment is not reusable, and is not shipped in a manner to allow it to be reused at its destination. As such, this trade is illegal, is reportedly causing damage to the environment and human health and is imposing unaffordable costs on overseas governments.

8. We invite the Select Committee to propose that the regime be tightened to ensure that WEEE is properly directed into the legitimate WEEE treatment system, and that the reuse sector is subject to proper controls to ensure that only fully-functioning equipment is exported, and is properly packaged to ensure its safe arrival overseas. We observe that organisations generating business WEEE, including the public sector, are among those required to observe their duty of care.

Are sanctions and penalties for their infraction sufficient?

9. Under the UK Transfrontier Shipment of Waste Regulations, a person found guilty of an offence and convicted in the Crown Court is liable to an unlimited fine or imprisonment for a term of up to two years, or both. Penalties in the Magistrates’ Courts are limited to a fine of up to £5,000 or imprisonment not exceeding three months, or both. The Environment Agency also has various other powers within its remit, such as the ability to enter premises where it suspects wrong-doing and issue stop notices to prevent the movement of material in order to gather evidence of transgression of export regulations.

10. ESA considers these sanctions to be appropriate, and believes the proper functioning of the regulations to be more an issue of enforcement than of any need to strengthen the Courts’ powers.

Are monitoring and enforcement activities effectively resourced and managed?

11. In recent years the Environment Agency has adopted a more robust approach to enforcing the rules on waste shipments, and has seen greater success in bringing illegal operators to justice. We understand that the Agency follows an “intelligence-led” approach which enables it to focus its limited resource at the point where there is a greater likelihood of prosecution. This tends to be at the location where the waste material is bulked up and loaded into shipping containers, rather than at the dockside where it is difficult to outwardly identify illegal shipments as containers are not routinely opened before shipment.

12. ESA supports the Agency’s approach, but it continues to be difficult for the regulator to monitor all sites handling recyclables for export, particularly as the barriers to entry in this market are low, and operations can be set up and closed down rapidly. We urge the Government to ensure that the Agency is
adequately resourced to perform export enforcement activities to ensure the protection of the environment and human health. We consider that funding could be obtained from landfill tax revenues to resource additional Agency enforcement.

13. The Agency has been undertaking active monitoring of permitted Material Recovery Facilities, many of which are operated by ESA’s Members, to assess their compliance with Green List rules. ESA supports this activity. However, we are concerned that there have been allegations implicating facilities not included in this monitoring initiative, which separate mixed materials for export under an exemption from waste licensing controls. It appears that exempt facilities are receiving insufficient scrutiny, and we urge the Agency to step up its regulation of such sites.

14. ESA also believes that greater scrutiny of waste brokers handling international shipments of waste would reduce the likelihood of illegal shipments being made from the UK. It should be made a requirement that waste brokers are able to demonstrate their technical competence to the regulators as are operators of permitted facilities under the environmental permitting regime.

15. ESA has developed an externally audited compliance scheme, the Recycling Registration Service (RRS), which enables those exporting UK-sourced recyclables to demonstrate that they are operating in compliance with Green List rules. The RRS aims to sustain the confidence of the public, regulators and local and national government in this trade, and has particular relevance to those companies working with local authorities which increasingly focus on their duty of care for waste following collection and sorting.

16. RRS was established and piloted by ESA during 2006 in consultation with the Environment Agency and DEFRA, with the aim of allowing the waste management sector to demonstrate the traceability of materials sent overseas for recycling. An independent audit of each facility’s operations is completed on application to join the scheme and regular subsequent audits ensure ongoing compliance with relevant laws.

17. Eleven facilities are currently registered under the RRS, with more facilities currently undergoing audits in preparation for joining during 2009/10.

18. We would suggest that a similar independent audit scheme would be appropriate for the WEEE refurbishment sector, to ensure that such businesses only ship overseas properly packaged equipment genuinely capable of reuse.

2 October 2009

Supplementary memorandum by Defra on Waste Exports (Waste 45b)

SUMMARY

The Select Committee has invited evidence to answer the question as to whether the legal and regulatory controls on waste exports are adequately robust, whether sanctions and penalties for their infraction are sufficient and whether monitoring and enforcement activities are effectively resourced and managed. Defra considers that the legal and regulatory controls are adequately robust. Prior written notification and consent is required for all shipments of hazardous waste to or from the UK. The shipment of any hazardous waste to non-OECD countries is prohibited. Non-hazardous waste may be exported to non-OECD countries for recovery (recycling), where that country has consented to receive such wastes. Sufficiently robust powers for the regulators and penalties are in place, including the power to issue stop notices to prevent waste moving, and we believe that the resources allocated to the UK regulators for enforcement are sufficient—some over £5 million extra funding already committed over the three years 2008-09 to 2010-11. The challenge is securing compliance with the controls, given the amount of waste that is exported, especially of non-hazardous waste.

INTRODUCTION

1. The amount of waste being exported from the UK for recycling and recovery outside the EU has grown from a total of seven million tonnes in 2002 to some 14 million tonnes in 2008. Within that total and over the same period, UK exports of waste paper for recycling grew from just over one million tonnes to an estimated five million tonnes.

2. Exports of waste for genuine, environmentally sound recovery are good for the environment. The recycling of waste from the UK and other developed countries helps to divert waste from landfill, reduces greenhouse gas emissions and provides valuable raw materials for the manufacture of goods in less developed countries. This improves global resource efficiency, and leads to important environmental, social and economic benefits for developing countries. In the case of waste exported to China, research1 shows that because waste paper and waste plastic generally travels to China on otherwise empty container ships, there is a carbon balance in favour of export over landfill in the UK.

1 WRAP study on CO2 impacts of exports to China, (http://www.wrap.org.uk/wrap_corporate/news/shipping_our_plastic.html)
3. It is recognised though that the uncontrolled transboundary movement of waste, and especially hazardous waste, has led to problems. In the 1970s and 1980s, hazardous waste was exported from developed countries to developing countries, partly in order to avoid the higher costs of treatment and disposal of those wastes in the exporting country and there were a number of pollution incidents. This led to global action, resulting in the agreement and adoption of a global treaty on transboundary movement of hazardous waste—the UN Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which was signed in 1989. The controls in the Convention are implemented in the EU through a directly binding regulation—the EC Waste Shipments Regulation (the WSR) (EC/1013/2006). This regulation, which extends beyond the requirements of the Basel Convention to cover also non-hazardous wastes, is the principal regulation that controls transboundary waste movements, although it is supplemented by additional legislation, both at the EU level and nationally.

LEGAL CONTROLS

4. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is the pillar of the controls that apply to waste imports and exports. It is the only global agreement on waste, was agreed in 1989 and entered into force in 1992. The Convention has 172 Parties and aims to protect human health and the environment against the adverse effects resulting from the generation, management, transboundary movements and disposal of hazardous and other wastes.

5. The principal purpose of the Convention is to set the framework for global controls on movements of waste by introducing a system of “prior informed consent” for the movements of hazardous waste. Under this system one country must inform another before hazardous waste is moved and the receiving country must consent to the movement and to receiving the hazardous waste. An amendment to the Convention adopted in 1995 at the Convention’s third meeting, known as the “ban amendment”, prohibits the export of hazardous waste from countries who are members of the Organisation for Economic Cooperation and Development (OECD countries) to non-OECD countries. The ban amendment has not yet entered into force globally, although the EU has ratified it and applies it in the Waste Shipments Regulation.

6. While the scope of the Convention is on movements of hazardous waste, and thus it does not apply controls to movements of non hazardous waste such as waste paper, plastic or some scrap metals, the EU has extended its controls on waste shipments to cover non hazardous wastes.

OECD DECISION

7. Under the umbrella of the Basel Convention, the OECD has agreed a legally binding decision on the movement of wastes between OECD countries for recovery. In particular this allows for trade in hazardous waste for recovery between OECD countries. Prior notification is required for such movements of hazardous waste. The OECD decision is transposed in the EU through the EC Waste Shipments Regulation.

EC WASTE SHIPMENTS REGULATION (1013/2006/EC)

8. The Waste Shipments Regulation (WSR) is the principal instrument that applies the legal obligations under the Basel Convention and the OECD Decision within the EU. As a Regulation it is directly legally binding. The WSR was revised and updated in 2006, replacing the earlier WSR dating from 1993. In the UK the WSR is supplemented by the Transfrontier Shipment of Waste Regulations 2007, which establish the competent authorities (CAs) in the UK for the waste shipment controls, set out the offences and penalties for contraventions of the controls, and provide the CAs with powers to take enforcement action. At EU level the WSR is further supplemented by a Commission regulation (the “green list regulation”) which lists the controls that apply to the export of non-hazardous waste to individual non-OECD countries.

GREEN LIST REGULATION (1418/2007/EC)

9. This Commission Regulation which works in tandem with the WSR sets out the controls which apply to the export of non-hazardous waste to non OECD countries. The WSR obligates the European Commission to write to every non-OECD country with a questionnaire seeking information from each country on the controls they wish to be applied to shipments of “green list” waste from the EU to their country for recovery. Green list wastes are the non- hazardous wastes such as paper, plastic and some scrap metals which are routinely recycled around the globe. The choice of controls that each non-OECD country can make for each waste stream is:

(a) prohibition on imports,
(b) prior written notification controls apply,
(c) no notification or prohibition, and
(d) domestic controls only in destination country.

10. The results of the replies to the Commission’s questionnaire are listed in tabular form in the Regulation. The fourth option of domestic controls in the destination country is in recognition that an individual country has in place their own controls which they apply to imports of waste. For example, China
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does not prohibit or require prior written notification for some green list waste imports but requires that companies exporting waste to China be subject to prior inspection by an agency appointed by the Chinese authorities and included on a list of approved exporters.

11. If a non-OECD country does not respond to the Commission’s questionnaire, then the default controls are that every shipment of green list waste must receive prior informed consent from the destination country. In practice non-OECD countries do not normally respond to notifications, and the practical implication is that where notification controls are required, wastes cannot be sent to that country.

SUMMARY OF WSR AND GREEN LIST REGULATION CONTROLS

12. In broad terms the controls in the WSR and the green list regulation are as follows:

— All waste shipments for disposal (e.g., landfill or incineration) from the EU and additionally all shipments of hazardous waste for recovery from the EU to non-OECD countries are prohibited.

— Certain waste shipments are subject to notification and consent requirements: shipments of hazardous waste within the EU and to other OECD countries, shipments of any waste for disposal within the EU, shipments of waste to new EU members, and some shipments of non-hazardous waste to non-OECD countries.

— Certain waste shipments do not require prior notification and consent: non-hazardous waste shipments (green list waste) for recovery within the EU, to OECD countries and to some non-OECD countries.

— Green list waste exported for recovery should be accompanied by a form (the Annex VII form) with certain information including a description of the waste, the waste producer, the receiving facility and confirmation that a contract is in place with the consignee.

TRANSFRONTIER SHIPMENT OF WASTE REGULATIONS 2007

13. The EU controls are supplemented in the UK by this important set of regulations (SI 2007 No 1711) as amended (SI 2008 No 9). The regulations set out the competent authorities (CAs) for the waste shipment controls in the UK. These are the Environment Agency for England and Wales, and the Scottish Environment Protection Agency and the Northern Ireland Environment Agency for their respective areas. The Regulations set out the offences and penalties for contraventions of the controls. They also give the CAs wide powers in relation to enforcement, and against a wider range of people and organisations than under the previous regime, including anyone involved in the shipment of waste, from the original notifier, the freight forwarder and the shipping company. These powers include the ability to serve notices requiring information to be supplied to the CA, or to require certain action to be taken or to prohibit certain action (for example to prevent the movement of a waste consignment), and powers to seize waste. The Regulations give a power to Her Majesty’s Revenue and Customs, which if requested by one of the CAs, can detain imported waste or waste due for export for up to 5 working days.

14. The Regulations also require the Secretary of State to prepare a waste management plan containing policies on waste shipments to and from the UK for disposal. The UK Plan for Shipments of Waste was published on 9 August 2007.

PENALTIES

15. The maximum penalties for persons found guilty of an offence under the TFS Regulations is for conviction on indictment an unlimited fine or imprisonment for up to two years.

UK PLAN FOR SHIPMENTS OF WASTE


17. There are exceptions to the general prohibition relating to emergency situations, shipments of waste for trialling new technology, shipments between Ireland and Northern Ireland, shipments of hazardous waste produced in such small quantity that the provision of new specialised disposal installations would be uneconomic, and finally imports of waste into the UK where a CA had acceded to a duly reasoned request from the exporting country, typically from a developing country which does not have the technology to deal with the waste in question.
Duty of Care

18. The duty of care in section 34 of the Environmental Protection Act 1990 applies to the movement of waste within England and Wales. If waste is going to be exported the duty still applies to the storage, transfer and carriage of that waste before it is exported. Defra is taking steps to tighten up the statutory guidance on the duty of care to encourage holders of waste to ensure that those they pass the waste onto do not breach the waste export controls. The changes seek to improve the profile of checks that should be carried out to comply with the duty of care through the Code of Practice. The Code now includes a section on waste exports to explain that while the waste is still in the country the duty of care still applies. The Code goes further to explain the type of checks that should take place to identify when waste might be sent for export without the holder’s prior knowledge.

19. This is supported by the waste export controls themselves which require that the producer, notifier and other undertakings involved in a shipment of waste take the necessary steps to ensure that the waste shipped is managed without endangering human health and in an environmentally sound manner throughout the period of shipment and during its recovery and disposal.

Trends in Waste Exports

20. Waste moved under the Waste Shipments Regulation controls of prior notification and consent have remained reasonably stable over recent years and represent a small proportion of the waste shipments to and from the UK. In 2008, there were 6,100 shipments of waste from England and Wales under these controls totalling 187,000 tonnes of waste. In the same year, imports to England and Wales were 123,000 in approximately 4,000 shipments. These notified shipments are generally for hazardous waste being traded for recovery between the UK and other Member States. The shipments involve a generally compliant community of companies. The movements are known about, and in general cause little problem for the regulators. The processing of the notifications is subject to charging which the competent authorities use to fund the system of processing notifications. There is also a comprehensive data collection system so that shipments are recorded and information gathered on amounts, destinations and trends.

21. In contrast, some shipments of non-hazardous waste such as waste paper, waste plastic and some scrap metals are not subject prior notification and consent requirements and can be exported and imported under commercial controls, although as noted above such shipments within and from the EU require the completion of an Annex VII form. Because the shipments of this green list waste are not generally subject to prior notification and consent, no comprehensive data on the shipments is collected in relation to England and Wales. Nevertheless some information is available from export data collected by HMRC on green list exports, although in some cases the same customs codes are used both for waste and for the non-waste equivalent, so the data has to be seen against that background.

22. From this data, it is possible to deduce that the trend in exports of non-hazardous waste for recovery has grown significantly in recent years, reflecting the growth in international trade in recyclables and the emphasis on increasing the recycling waste and other forms of recovery. It is estimated that some 14 million tonnes were exported from the UK under the green list controls in 2008. This is a significant increase in the amount from earlier years.

Role of Defra in Relation to Waste Exports

23. Defra is the lead Government Department in relation to policy on waste shipments. This is principally because the controls that are in place to regulate such shipments are there for environmental reasons—essentially to protect countries from the uncontrolled export of wastes and hazardous wastes where they are not in a position to manage the waste in an environmentally sound manner. Defra’s role is to ensure that the proper legal controls are in place. This involves discussion with other Parties to the Basel Convention and members of the OECD at the global level, discussion with the European Commission and other Member States on the development and application of the controls at EU level, and development of the necessary UK legislation and policies to support the legal framework. Defra’s role is also to ensure that the competent authorities in the UK are in a position to enforce the controls, with sufficient resources and powers at their disposal, and to encourage key stakeholders such as those in industry and local government to be aware of their obligations under the waste shipment controls.

24. Defra has established a dedicated Compliance and Enforcement Project to consider compliance and enforcement of the green list controls. Members of the project include the three competent authorities (Environment Agency, SEPA NIEA), BIS, HMRC/UK Border Agency and WRAP (Waste and Resources Action Programme). This project was established in 2007 and has met five times in the last two years. The project’s aim is to oversee the process of improving compliance and the provision of enforcement of the green list waste export controls.

25. In particular Defra has provided additional financial resources for the three UK competent authorities for them to increase enforcement activity in this area. This is in recognition of the fact that because there are generally no notifications on such green list waste shipments, there is no revenue to the CAs from charges, as there is with the system of notified waste shipments.
26. Defra funding for the Environment Agency is through grant-in-aid, and with Defra’s encouragement and the provision of extra resource, the Agency has been able to allocate an additional £4 million over three years to undertake work on enforcement and regulation of the green list waste shipments regime. Defra also provides direct funding for SEPA and NIEA to enforce the green list waste regime. £517,000 and £132,000 per annum respectively was allocated in each of the years 2008–09 and 2009–10, with subject to final confirmation, the same funding envisaged for 2010–11. Funding for future years beyond 2010–11 will be considered alongside other priorities. Defra’s view is that this funding has been sufficient to enable the regulators to increase and target their enforcement activity which will help improve compliance with the export controls.

27. Defra works actively with other Member States to develop EU-wide guidance on a number of issues. This includes guidance to help to distinguish waste electrical and electronic equipment (WEEE) from non-waste electrical and electronic equipment. This has been welcomed internationally and key elements of this guidance are currently being incorporated into the revised WEEE Directive.

**AREAS FOR ENFORCEMENT EFFORT**

28. Through the work of the Compliance and Enforcement Project, we have agreed with the Environment Agency and colleagues in the Department for Business Innovation and Skills (BIS) that particular attention should be given to the enforcement of controls on exports of WEEE. Evidence has suggested that there is scope for such waste to be exported illegally under the guise of working equipment for re-use in developing countries, especially televisions and computer equipment. With the support of Defra and BIS, who are the lead Department on WEEE, the Environment Agency is committed to targeting illegal activity in this area. It is hoped that the proposed changes to the WEEE Directive being put forward by the European Commission if they are agreed will also improve compliance in this area. The Commission are aiming for the adoption of a recast WEEE directive, incorporating new elements aimed at the reduction of illegal movements of WEEE, in February 2010.

29. Another priority area of enforcement effort is exports of recyclable waste from material recovery facilities (MRFs). A substantial proportion of waste recyclables from MRFs are destined for the export market and for this to happen legitimately under the green list controls, the waste must be recyclable in an environmentally sound manner. The waste should not be contaminated to such an extent that prevents this from happening; nor should it be a mixture of wastes. Thus, waste recyclables from MRFs destined for export under the green list controls should be clean and separated into individual recyclable wastes. Enforcement effort at MRFs is thus an important part of improving compliance with the controls. It is part of the effort directed further up the chain of waste management, which is regarded by the CAs as a more efficient way of improving compliance than for example on road or port checks, particularly when the amount of containers being shipped is considered. Enforcement effort includes making unannounced visits and inspections, placing stop notices to prevent waste moving illegally, and where necessary making arrests, and taking out prosecutions.

30. In support of this work, the Environment Agency has set up a dedicated team to gather and use intelligence to combat illegal activity. The Agency has been able to use this team to develop a better understanding of how e-waste derived from a variety of sources, such as households, retailers and businesses is brought into the illegal waste export chain. The Agency has been able to intervene in a variety of ways to disrupt this illegal trade including stopping illegal shipments at sites of origin and loading, in transit at ports and in collaboration with European regulators at their ports and borders, and by closing sites when possible and taking enforcement action against offenders. The aim is take out the key operators acting illegally, to break up the illegal waste chain and to prevent those routes being used for illegal export and to divert e-waste back into the legal recycling system.

31. Spot checks at ports are an important part of the Environment Agency’s enforcement strategy and can be used to test compliance with the controls. It is worth noting that spot checks on shipments are specifically required by the Waste Shipments Regulation (Article 50).

32. In terms of enforcement effort, during 2008 and in the first six months of 2009 the Environment Agency carried out 577 unannounced inspections of waste exporters and transport checks rose to 616. They issued stop notices on 132 shipments and made 11 arrests. Since 2004 the Agency has brought 18 successful prosecutions for illegal waste shipments. Fines totalling £224,650 were imposed and the Agency recovered over £190,000 in costs.

33. The Northern Ireland Environment Agency carried out 35 unannounced inspections of importers and exporters of waste in the first six months of 2009. 335 vehicles and containers were checked during port and road inspections and 36 stop notices were issued. There are presently 14 investigations pending and one case due to be forwarded to the Public Prosecution Service. To date there has been one successful prosecution this year for illegal waste shipments which resulted in two suspended prison sentences and assets worth £300,000 being confiscated under the Proceeds of Crime Act.
34. During 2008 and thus far in 2009 SEPA has carried out 504 unannounced inspections and detailed checks of waste exporters covering over 40,000 shipping containers. SEPA has also issued one prohibition notice and four information notices. SEPA has referred one case to the Procurator Fiscal service, and since 2008 SEPA has investigated 15 cases of suspected illegal activity, six of which are still ongoing and may be referred to the Procurator Fiscal in due course.

CONTAINERS RETURNED FROM BRAZIL

35. The recent case involving the return of some 100 containers of waste from Brazil to the UK has attracted a considerable amount of media attention, and the Committee referred to the case in its call for evidence. The case is the subject of an ongoing investigation by the Environment Agency. The UK was made aware of the containers by the Government of Brazil and that they were alleged to be contaminated with potentially hazardous waste materials. The containers had originated from the port of Felixstowe. As the competent authority for the waste shipment controls in England and Wales, the Environment Agency commenced an investigation. As a result of those initial investigations, three men were arrested in the Swindon area by Wiltshire Police in July.

36. In terms of the containers themselves, the shipping lines contracted to transport them from the UK to Brazil agreed to repatriate them to the UK at their own expense. Since their arrival back in the UK in September, the containers have been held in a secure place, fumigated and are being investigated. Following the conclusion of their investigations, the Agency will ensure that the waste is handled and disposed of correctly.

FUTURE DEVELOPMENTS

37. Defra is working with the UK competent authorities, HM Revenue and Customs and the UK Border Agency to improve the co-operation between these organisations in order to better combat illegal waste exports. For example HMRC have access to information in customs declarations. Other agencies do not have automatic access to such information. In order for HM Customs to be able to share the data they hold, there must a provision in the relevant legislation that expressly provides for the data to be shared. Defra is working with HMRC to put in place the necessary changes to the Transfrontier Shipment of Waste Regulations to allow access to such information by the competent authorities for the waste export controls.

38. We are working within the EU to tighten up the controls on the exports of waste electrical and electronic equipment. The aim of the controls will be to put greater onus on the exporters to show that the equipment being exported is genuine working equipment, that it has been properly tested, and is safely packaged and clearly labelled. We are also currently working within the EU on guidance to help distinguish between waste and non-waste vehicles for export.

39. Defra is also working closely with other countries at the global level under the Basel Convention’s initiative “the Partnership for Action on Computing Equipment (PACE)”2 to develop clear guidelines for the refurbishment, re-use and recycling of computer equipment. This will be of particular use for developing countries as they manage these products within their own borders.

Supplementary Note by Defra (Waste 45c)

Question 1. What engagement does Defra and its agencies have with intelligence gathering services to coordinate information on criminal activity linked to waste crime, particularly illegal waste exports.

Answer:

The Environment Agency via its Securing Compliant Waste Project (SCWEP) in conjunction with its National Environmental Crime Team (NECT) engages with the following intelligence gathering services/organisations in order to co-ordinate information on criminal activity linked to waste crime:

- Serious and Organised Crime Agency (exchange of intelligence and enquires abroad via Interpol London National Central Bureau (NCB), external enquires, flagging and interest markers).
- Interpol HQ in Lyon—Environmental Crime Group.
- HMRC—Memorandum of understanding in existence—information and intelligence sharing.
- UK Borders Agency—involvement in intelligence sharing and multi agency operations.
- Numerous Police Services in the UK—intelligence sharing and multi agency operations.
- SEPA—intelligence sharing and operations.
- NI EA—intelligence sharing—future operations planned.
- Netherlands Ministry of Housing, Spatial Planning and the Environment (VROM)—MOU in existence—intelligence & operations.

2 See: http://www.basel.int/industry/compartnership/index.html
— US Environmental Protection Agency—intelligence sharing—major partner in newly formed
  Global Crime Group.
— Canadian EA—intelligence sharing and partner in Global Crime Group.
— World Customs Organisation—exchange of information and intelligence.

Question 2. (a) How many spot checks of loads for export are carried out to detect illegal exports of electronic and electrical equipment? (b) What is Defra’s estimate of the volume/tonnage of such exports illegally carried out each year?

Answer:

Using an intelligence led approach the Environment Agency (EA) have targeted checks on 80 shipping containers at ports in England and Wales so far this year to detect illegal exports of electronic and electrical equipment.

In addition to these checks they have conducted unannounced inspection visits at a further 277 sites where intelligence suggested containers were being loaded with waste electrical and electronic equipment (WEEE) bound for illegal export.

Question 2(b) What is Defra’s estimate of the volume/tonnage of such exports illegally carried out each year?

Answer:

To date Defra and the EA have not identified any robust way to estimate the extent of illegal exports of WEEE each year and therefore any figures put forward would be largely speculative and unlikely to be of assistance.

EA have however undertaken analysis of published UK Trade data which is produced from the information submitted by exporters on customs declaration forms.

Exporters are required to provide commodity codes and values for items they are exporting from the UK. There are a wide range of commodity codes covering different types of electrical equipment. However these codes do not distinguish between new, used and waste equipment.

Whilst this analysis cannot provide any accurate estimate of the extent of illegal exports it does provide a useful indication of the potential scale of the trade that is likely to include an element of illegal activity and helps identify key destination countries of concern. This helps EA to better target its inspection and enforcement activity.

Looking at the codes most likely to represent household electrical equipment, exports to Nigeria have risen from around 11,000 tonnes per annum with an average value of £557/tonne in 2000 to nearly 30,000 tonnes with an average value of £716/tonne in 2008. Over the same period exports to Ghana rose from just over 3,000 tonnes per annum (average value £751/tonne) to nearly 20,000 tonnes (average value £637/tonne).

These figures in themselves do not provide a measure of illegal exports of waste to these countries. However they clearly demonstrate a rapidly increasing scale of exports of low value electrical items to these key countries. The low value per tonne of the exports is consistent with a proportion of the exports comprising waste rather than new or genuine used equipment destined for further use. To put the figures in context, in 2008 the UK exported just over 1,000 tonnes of the same commodity types to Russia with an average value of over £15,000/tonne.

Question 3. What is Defra’s understanding of the timescale for completion of the EU WEEE Directive’s revision, transposition and implementation?

Answer:

The Swedish Presidency is pushing for political agreement on the recast WEEE Directive in the Environment Council by the end of 2009. It is however unlikely that this will be reached.

The European Parliament will not be considering the proposed recast Directive in plenary until April or May 2010.

It is expected that transposition would be likely to be required 18 months after adoption of the instrument, so implementation in the UK is unlikely to be before 2012.

Question 4. What engagement has Defra had with the relevant government departments to address barriers to the use of waste oils under the Renewable Transport Fuel Obligation (RTFO) due to small proportions of non-renewable substances being mixed with waste oils?

Answer:

My officials are in regular contact with other Government departments, including the Department for Transport and the Department of Energy and Climate Change on the use of waste cooking oil as a fuel. DECC advise that so long as the contamination of cooking oil is less than 10% then the cooking oil will meet the biomass definition under the renewables obligation, eg 90% biomass. It can then be used in any
generation station and will receive the ROCs awarded to that station. To date, where cooking oil is used for the RO it has been pure biomass. We are not aware of any specific barriers under the Renewable Transport Fuel Obligation (RTFO) as suggested by the question.

Paperchain response to the re-opened inquiry into the Waste Strategy for England 2007 (Waste 73)

Please find the Paperchain response to the EFRAre-opened inquiry into the Waste Strategy for England 2007 attached.

PaperChain Recycling Ltd (PaperChain) is a UK Membership organisation for paper and board reprocessors that recycle recovered waste paper into new paper and board products.

In 2008, PaperChain Members:
- recycled over 3.3 million tonnes of recovered waste paper and board into new paper and board products; representing 84% of the UK’s capacity for paper and board recycling and 38% of all waste paper and board collected for recycling from the UK waste stream;
- realised 4.4 million tonnes of carbon savings to the UK against disposal of the material through landfill and incineration;
- saved waste producers over £180 million pounds in disposal costs.

Illegal exports of waste under the guise of recyclables do not simply represent an issue for exporters; they can undermine public and business confidence in the whole recycling process and starve the UK industry of a quality raw material. They can also tarnish the reputation of the UK as a global environmental leader and restrict the UK recycling performance in terms of meeting several European Directives.

Collection systems for recyclables that have inherent high risks to quality, and therefore ability to meet Trans-frontier Shipment Regulations, should be controlled through greater regulatory control.

23 September 2009

EXAMINATION OF THE GOVERNMENT’S WASTE STRATEGY FOR ENGLAND 2007

1. PaperChain (www.paperchain-recycling.org.uk)

This submission to the above investigation into England’s 2007 Waste Strategy is made on behalf of PaperChain Recycling Ltd (PaperChain). PaperChain is a UK Membership organisation for paper and board reprocessors who recycle recovered waste paper into new paper and board products.

In 2008, PaperChain Members:
- recycled over 3.3 million tonnes of recovered waste paper and board into new paper and board products; representing 84% of the UK’s capacity for paper and board recycling and 38% of all waste paper and board collected for recycling from the UK waste stream;
- realised 4.4 million tonnes of carbon savings to the UK against disposal of the material through landfill and incineration;
- saved waste producers over £180 million pounds in disposal costs.


1. The UK consumed around 13.1 million tonnes of paper, tissue and board products.
2. The UK only produced 5.0 million tonnes of paper, tissue and board with one million tonnes exported.
3. The UK imported 7.8 million tonnes of unconverted paper, tissue and board products.
4. The UK imported, through a trade imbalance, 1.3 million tonnes of converted paper and board products and paper packaging around commodity goods.
5. Of the 13.1 million tonnes consumed, around 10.6 million tonnes was available for recovery and recycling from the UK waste stream.
6. The UK collected just over 8.8 million tonnes of recovered waste paper and board, representing a collection rate of 67% (collection/consumption).

4 http://www.wrap.org.uk/downloads/W504GateFeesReport_FINAL.2a0f98cf.5755.pdf
6 http://www.wrap.org.uk/downloads/W504GateFeesReport_FINAL.2a0f98cf.5755.pdf
7 http://www.confederationofeuropeangepaperindustries.org/
7. The UK domestically recycled 4 million tonnes of recovered waste paper and board (including some imports), representing an utilisation rate of 80% (usage/production).

8. The UK domestically recycled just 45% of its waste paper and board collection (usage/collection).

9. The UK exported 4.8 million tonnes of recovered waste paper and board for recycling (55% of its collection). The main markets for this material were China, Europe, India and Indonesia.

10. New UK papermaking capacity utilising recovered waste paper as its raw material is due to come on stream in 2009; however, lost capacity over the same period is likely to offset any gains.

3. Executive Summary

The UK recovered paper industry is the most successful recycler in the UK. However, it currently requires overseas markets to recycle the majority of the recovered waste paper and board it collects (see 2, above). This massive dependence on export markets makes us very susceptible to issues within the global recovered waste paper export market, such as falling demand and instances of questionable exports as seen in the recent Brazilian case.8

Exports of UK waste described as “recyclables” will continue to be found at overseas destinations (most likely through container leakage and smell) until UK recycle collections are designed to minimise contamination at source and high-risk sorting processes are regulated to ensure material output is fit for purpose. Enforcement at the point of export from the UK will not achieve this as it is a “needle in a haystack” scenario.

Illegal waste shipments and press exposures of exported waste disguised as recyclables found overseas impacts on many aspects of the UK recycling industry:

— it undermines public and business confidence in the effectiveness of taking the time and effort to sort material into valuable secondary resources;

— it undermines the legitimate UK trade in valuable high quality recyclables;

— it contravenes UK, EU and global obligations to deal with waste in a way that minimises the impact on the environment and human health;

— it undermines the UK’s reputation in global policies such as climate change reduction initiatives; and

— it may lead to the UK failing to meet many of its EU Directive targets.

Export markets are critical to the UK’s success in meeting many European Directive targets, such as Waste, Packaging and Landfill, and it is imperative that questionable recyclate exports are prevented, with the perpetrators brought to account throughout the waste management chain in line with their “Duty of Care”. At the same time, it is essential that the majority of perfectly legal exports of high-quality recyclables are not excessively regulated against to ensure the UK remains competitive within the global recyclate market. It would appear that the Brazilian case is centred on mixed plastics; however, old newspapers appear to have been part of the shipment, according to initial reports, and no matter what the material, the whole issue of UK exports of recyclables will be questioned.

To ensure situations like this are minimised, whilst allowing recyclate collectors to be competitive on the global market, PaperChain would suggest the following course of action:

— the UK “Duty of Care” legislative system should be rigorously enforced throughout the waste recyclate management chain. This includes identifying the source of the material and the subsequent waste management chain when an illegal movement is determined and bringing the full weight of the law against all stakeholders involved in the preparation of such material. Simply prosecuting the final exporter (who is, in many instances, a broker who has never seen the material) will not act as a sufficient deterrent to bad practice in the UK;

— higher-risk collection systems for recyclate, such as single-stream co-mingled collections with subsequent sorting at material recovery facilities (MRFs), should only be used where it can be proven that segregation at the point of production is not feasible for economic, technical or environmental reasons. Segregation at source significantly reduces the risk of contamination through the waste management chain and reduces the likelihood of illegal movements;

— MRFs should have increased regulatory control applied, in line with the risk-based approach promoted by the Environment Agency, to ensure all outputs meet the requirements of the various global recycling industries and Waste Shipment Regulations. This must be done with rigid quality control and measurement systems agreed with the regulator, and in line with recognised recyclate standards such as PAS 105 for recovered waste paper and board;

— greater levels of inspection must be undertaken by the regulator at identified higher-risk waste output sources, particularly when operations are registered to move material onto the export market. If illegal activity is found, Environmental Permits should be suspended or revoked;

8 http://news.bbc.co.uk/1/hi/world/americas/8157165.stm
4. **Details**

4.1 Questionable exports of waste will continue to be picked up in overseas destinations until the UK manages the overall collection systems for recyclables in a way that reduces the risks of contamination. Managing the export process at the UK dockside will NOT prevent suspect exports of waste. There are likely to be approaching quarter of a million container exports of recovered waste paper per annum alone.

4.2 PaperChain Members, by far the biggest recyclers of recovered waste paper in the UK, have serious concerns that the use of mixed dry recylcate (co-mingled) collections, followed by subsequent sorting at materials recovery facilities (MRFs), currently cannot deliver to the paper and board reprocessing industry a quality of material fit for efficient recycling.

4.3 If this material is unfit for efficient recycling in the UK without further sorting or without significant amounts of material being rejected for subsequent disposal, it is likely that the material is marginal in terms of meeting the Waste Shipment Regulations governing EU exports of waste.

4.4 PaperChain worked closely with the Confederation of Paper Industries (CPI), the Local Authority Recycling Advisory Committee (LARAC), the Waste and Resource Action Programme (WRAP), the Environmental Services Association (ESA) and the British Standards Institute (BSI) in the development of a publicly available standard (PAS 105)\(^9\) in an attempt to overcome significant quality issues associated with material emanating from the UK municipal waste stream by setting clear, agreed standards. However, PaperChain Members have seen a further deterioration in the quality of recovered waste paper from most UK co-mingled/MRF collections rather than an improvement. Subsequently, a minority of recovered waste paper leaving MRF operations is consumed in UK paper and board recycling mills as the majority of material DOES NOT meet the PAS 105 quality standard. This means that the vast majority of poorer-quality recyclate is currently being exported with little environmental control of the waste contaminants present in the material.

4.5 PaperChain is aware that WRAP has contributed significant resource into looking at the issue of co-mingled/MRF collections and has produced a report stating that MRFs, when run well and within strict process parameters, can produce material suitable for the paper recycling industry. However, this is, in PaperChain’s view, the exception rather than the norm. Without clear regulatory control over MRF type sorting systems, PaperChain believes that the UK is storing significant issues for the future. This issue is highlighted by reference within the recently released UK Packaging Strategy, *Making the most of packaging*, to a call for MRF operators to take part in future WRAP work over the next two years in an attempt to raise standards, and to take part in the ESA’s Recycling Registration Service. This suggests that a significant number of MRF operators are currently doing little to improve the situation on a voluntary basis and enforcement will be required.

4.6 PaperChain applauds the Welsh Assembly Government (WAG) Waste Strategy proposal of limiting the use of co-mingled/MRF collection systems to a percentage of overall municipal collections, and only centrally funding collection systems which provide kerbside sort to ensure that the quality of material being sent for recycling meets industry standards. This should allow WAG to comply with the UK Minutes Statement tabled at the Environmental Council on 20–21 October 2008, where the UK intends to “encourage the separate collection of wastes”. It is not clear within England’s Waste Strategy 2007 how Defra intends to “encourage” this and meet its EU obligation within the revised Waste Framework Directive currently being transposed into UK legislation.

4.7 For a limited number of municipal waste situations, co-mingled/MRF collections may have a place; this is reflected in the new WAG Waste Strategy proposals. However the current trajectory of English Local Authorities suggests that these systems are being rolled out to households that do not need them and certainly are not constrained by technical, environmental or economic practicality. This is especially significant when WRAP has just released a report, *Choosing the right recycling collection system*,\(^10\) which clearly states that kerbside sort provides the best fit for a service to provide recyclate material quality, cost efficiency, cost effectiveness and public acceptability.

4.8 As much of the recovered waste paper emanating from MRF operations in the UK is not suitable for UK domestic recycling, it is being sold into the export markets. Lower labour and waste disposal costs, particularly in the Far East, mean that the material can be further sorted or the rejects from the sorting or paper recycling process can be disposed of at a much lower cost, making lower-quality material economic to use. However, there is a real risk that some of this material is being shipped in contravention of the EU

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\(^10\) [http://www.wrap.org.uk/downloads/Choosing_the_right_recycling_collection_system.21cb991e.7179.pdf](http://www.wrap.org.uk/downloads/Choosing_the_right_recycling_collection_system.21cb991e.7179.pdf)
Waste Shipment Regulations and is undermining public confidence in recycling where this is discovered. It is also likely that environmental legislation will be increased in Far East destinations and low quality UK recovered waste paper will become less desirable. This could leave the UK in a particularly vulnerable position with regards meeting EU Directives such as Waste, Landfill and Packaging.

4.9 New producer responsibility agreements and increased recycling targets put further pressure on current recyclate collection systems and can significantly impact material quality. Most are introduced with isolated impact assessments relating solely to the material in question and do not look at the holistic recyclate collection systems. The cost borne by the producer is also looked at in isolation and if current recyclate collection systems are used as a vehicle to reduce the cost to the producer, they fail to take on their full responsibility. This issue has never been addressed within England’s 2007 Waste Strategy and has led to a further erosion of current recyclate collection quality. This may have, in part, led to the reports from PaperChain members that recovered waste paper quality has been eroded further over the last few years.

4.10 To PaperChain’s knowledge, all UK instances of detected illegal waste shipments to date have been met with a guilty plea from the exporter, suggesting that the level of fine associated with this crime does not act as a sufficient deterrent. The perpetrator has also been allowed to continue with their operations with little or no sanction; again sending out a clear message that there is little significant impact on your business if caught.

PaperChain would be happy to expand on any of the points raised above if the Committee thinks it useful.

September 2009

Memorandum by Peter T Jones (Waste 74)

Thank you for the opportunity to respond to your enquiry.

I. SYNOPSIS

I have 20 years’ experience in the waste sector having recently retired as a Director of one of the largest companies operating in the UK sector. I am now involved in a wide variety of work in the public and private sector, most notably for the West Midlands Regional Development Agency and as the Mayor of London’s Advisor on the London Waste and Recycling Board (LWARB). This response is undertaken in a private capacity, however. My central point is that, it would be relevant to look further back to the policy failings which have got us to where we are. For this reason, I make no apology for referring to earlier written Submissions and verbal Evidence before House Select Committees stretching back to June 1997. The UK Waste Strategy is now in need of an urgent update, something that no doubt a new Administration in 2010 will consider [Appendix I, HC103 2003,11 suggests these omissions are still relevant]. Any such review will need to address the three fundamental weaknesses which have inhibited sound policy making right at the heart of this issue. Those three central weaknesses are:

(i) the absence of a “double-entry book-keeping” material flow mapping system embracing all those with waste licences in the UK to create a map of unwanted materials;
(ii) a confused and contradictory implementation of Producer Responsibility in the UK compared to systems which operate far more effectively in mainland Europe; and
(iii) a failure to treat waste as a substitute material to displace fossil carbon inputs to the economy (a marketing opportunity), and instead treat it as a supply-side problem.

Dealing with each of these in turn–

II. THE ABSENCE OF MATERIAL FLOW MAPPING SYSTEMS

“If you can’t measure it, you can’t manage it” is a hackneyed phrase but nowhere is it more apposite than in the case of waste management. As a Director of Biffa and as an advisor to their Biffaward Landfill Tax Funding body, I was instrumental in commissioning expenditure of around £11 million on more than 60 material flow mapping exercises based on geographic-, sectoral- and material-specific systems. Part of that programme was as a prime initiator of what is now the Municipal Waste Dataflow System which has transformed the understanding of waste material profiles and management in relation to household arisings controlled by municipalities. At the time, the suggestion that there was need for such a scheme was greeted with derision in many quarters, in the late 1990’s. If every site with a waste management licence was obliged to report inputs and outputs of materials based on weight and (preferably) composition common to each other site, through a single database management system, any discrepancies would be immediately apparent on an exceptions basis, enabling the Environment Agency to pinpoint with far greater accuracy and speed any unexplained inputs and outputs across the network or internationally.

11 Not printed.
The following abstracts from earlier submissions also apply

Environment, Food and Rural Affairs Committee End Life Vehicles and WEEE Directives\textsuperscript{12} HC103 2003/4 [Appendix II].

\textbf{III. PRODUCER RESPONSIBILITY}

The UK has opted for different versions of the Producer Responsibility frameworks in packaging, electrical goods, possibly batteries and, in future, products such as nappies, household hazardous chemicals and so forth. Possibly because of preferences for a greater number of competitive systems on the part of DTI/BISS, we have opted for a multiplicity of compliance schemes, which has proved to be an opportunists’ charter for manipulation, ignorance of material flows and a complete lack of transparency with regard to how compliance payments are managed and distributed. In Europe the Green Dot (in Germany) and the Ffost Plus place the entire end life management of materials in the hands of associations of producers of the original products (as single bodies responsible for all packaging). These associations then implement nationally-standardised systems which all consumers understand, they bid collection contracts by competitive tender and dispose of materials for recovery and recycling by similar means while all data relating to the costs and physical flows across the system are public knowledge. National recycling of all packaging in Belgium operates at around £6 per person compared to higher unidentified costs in the UK, and higher levels of recycling. Local authorities in Europe are paid to operate the standardised system and/or relieved of the costs of any recycling. The system operates at lower cost than in the UK, is standardised throughout the country, educates consumers more comprehensively on the standard methodologies and identifies immediately any rogues and charlatans who attempt to enter the market opportunistically when prices of commodities are high, or to export material illegally.

This approach was rejected by our own Government with the consequence that over 360 local authorities each apply their own recycling systems, incur the cost of retrieval as part of the Community Charge, confuse the public on the overall logic of recycling systems, and the overall logistics inefficiency is far higher in terms of carbon emissions. No doubt, when our approach was decided, it represented an alliance between the industry-facing (then) DTI responding to efforts to keep the cost of recycling off the producer supply chain and, at the same time met the requirements of local authorities fearful of losing control over the management of municipal waste. Combined with the poor information in relation to data flows, we have a breeding ground for illegal flows of material. These criticisms in 2010 merely echo those in former evidence—EFRA Committee ELV and WEEE Directive 2003/04 HC 103 Ev29: [Appendix V] and EFRA Committee October—December 2002 HC 673/H C103 (Disposal of Refrigerators).\textsuperscript{13}

\textbf{IV. PLANNING AND WASTE AS A RESOURCE}

As Chair of a committee charged with redesigning the regional waste strategy for Advantage West Midlands, I have started from the precept that waste is a resource, not a problem. From this simple precept, underpinned by imminent significant increases in real commodity prices (due to sterling devaluation) of oil, gas, electricity, coal and road fuel, 40 million tonnes of carbon based material currently landfilled is an attractive substitute for such fossil based resources. As a consequence, the West Midlands committee has spent £150,000 developing a software package to define all the most attractive locations consuming over 1MW of fossil energy equivalent as logical places in which to co-locate waste conversion activities. The sites then drive the energy profile—the energy profile drives the conversion technology—the technology drives the fuel feedstock, the feedstock determines the logistics which in turn determine the message to producers.

I am sure Advantage West Midlands will commend this to you as a necessary central plank in the Waste Strategy Review and can provide further information on request.

This absence of data capture, coupled to the fudges we have created around the issue of Producer Responsibility and our lack of vision regarding the resource potential of waste lie at the heart of the current malaise of materials being illegally shipped overseas to developing and developed nations. Our so-called compromise on these issues has led to the creation of a system which lacks coherence, transparency and credibility which stems from an absence of clear ownership of the waste. Criminal elements are tempted to try their hand at making a quick profit, with accompanying reputational loss, both to the waste industry and to the regulatory framework which surrounds it, by attempting to manipulate traded pollution permit regimes or illegal exports or both. In the meantime, the substantial contribution that waste carbon going to landfill as food, plastic, clothing, wood and similar materials is largely ignored. When are we going to wake up?

3 October 2009

\textsuperscript{12} Not printed.
\textsuperscript{13} Not printed.
Memorandum from The Co-operative Group (Waste 75)

INTRODUCTION

1.1 The Co-operative Group is the UK’s largest mutual retailer. It is the fifth largest food retailer, the third largest network of community pharmacy branches, the number one provider of funeral services and the largest independent travel business and one of the largest commercial farmers in the United Kingdom. It also has strong market positions in banking and insurance. The Group employs over 120,000 people, has three million members and around 4,900 retail outlets.

1.2 The Co-operative Group’s contribution to this inquiry is predominantly as a food retailer, but we are also committed to reducing waste on our farms.

— The Co-operative Food is the largest independent convenience store operator in the UK. This year, The Co-operative Group announced its completion of the acquisition of the Somerfield supermarket chain. The combined food business now operates around 3,000 grocery stores throughout the UK with over 17 million customer visits each week.

— The Co-operative Farms is the one of the largest commercial farmers in the UK, with over 10,000 hectares of land in ownership in England and Scotland and farming a further 20,000 hectares on behalf of our other landowners. The Co-operative Farms produces food that is sold in our food stores under the brand name “Grown by Us”. Produce sold varies according to the season and location of the farms.

1.3 The Co-operative Group welcomes the opportunity to provide evidence to the Environment, Food and Rural Affairs Committee as part of its re-opened inquiry into the Waste Strategy for England 2007.

2. GENERAL COMMENTS

2.1 In 2007 The Co-operative Food launched its Food Ethical Policy consultation; this was a first for UK retail and the world’s largest consumer poll on ethics. Over 100,000 of our member owners came forward to give their backing to a range of ethical commitments. The vast majority, some 97% of all respondents, agreed that we should seek to reduce waste. This provided clear indication that waste reduction is a key priority for our customers and members.

2.2 The Co-operative Group’s overall approach to waste management focuses on waste reduction (both internally and in terms of packaging passed on to customers), increasing reuse and recycling opportunities, improving the biodegradability of waste and the provision of finance for more sustainable waste management options.

2.3 Better waste management is a very clear priority for our business. The Co-operative Group have been a signatory to the voluntary Courtauld Commitment since 2005. We are involved in discussions on the next phase of Courtauld and its proposed targets, Courtauld II, which will run from 2010 to 2012.

2.4 The majority of the Group’s waste outputs are associated with The Co-operative Food.

3. ANNUAL FOOD WASTE LEVELS—ENGLAND AND WIDER UK

3.1 As a family of businesses, we report total waste levels across all of our businesses (this includes packaging waste and operational waste). In 2008, we reported 78,973 tonnes of waste—this was a reduction on the previous year of approximately 5%. This occurred in spite of an increase in year-on-year sales of 15% and a fast-growing business.

3.2 The Co-operative Group is a business that operates UK-wide. We have not, to date, disaggregated our waste levels into units as defined by devolved administrations. The environmental impact of waste is not confined to one nation or another, and whilst we welcome the waste reduction schemes of the devolved areas of the United Kingdom, we would caution against different regulatory schemes.

3.3 Greater collaboration at all levels, including local Government, would instead ensure more coherence for businesses that are seeking to minimise their waste outputs. This approach will ensure that waste is dealt with more cost-effectively.

4. AVOIDING WASTE

— Packaging is much reduced over the past two years—we have achieved a 22% reduction on our own-brand packaging, as verified by WRAP. We have our own Packaging Policy for own-brand food, which prioritises packaging reductions and governs acceptable packaging materials based on food safety and environmental concerns.

— We have cut waste to landfill to less than 50%. In 2008 we did landfill c31,500 tonnes, of which it is estimated that 13,000 tonnes was food waste.

— Principles are being developed in relation to promotions—the first choice for perishables is deep discounting not BOGOFs or TWOFFERS.
— We have reduced use of single-use carrier bags by 65% across our food retail estate compared with 2006.

— In 2009, we became the first food retailer to include storage instructions for fruit and vegetables on our bags for loose fresh produce to help tackle the problem of growing household waste.

— We have closely examined waste in our distribution system. This included stock issued to stores for reduced price sale (not on promotion) or written off at depot because it was near the end of life. This review has resulted in wastage levels being reduced by over 30%, albeit in terms of cash value, and in improved control on an ongoing basis.

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5. What happens to the waste that we generate?

5.1 In 2008, 51% of The Co-operative Group’s waste outputs were recycled or reused—this includes back-of-store recycling of plastic and cardboard, recycling of waste cooking oil into biofuel, and closed-loop recycling of paper from our offices into bathroom tissue and kitchen towel. This was an increase on the previous three years.

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6. What happens to our food waste?

6.1 As mentioned above, in 2008, we sent to landfill approximately 13,000 tonnes of food. However, this is not the only route for food waste.

6.2 We have investigated the use of alternative waste management technologies, such as in-vessel composting and anaerobic digestion for non-animal by-product food waste from The Co-operative Food.

6.3 A trial has been carried out in the Nottingham area. This sought to evaluate the concept of backhauling food waste from stores to depot, where the waste is consolidated with a view to determining the volume of waste and whether anaerobic digestion was a viable proposition. The trial proved that money could be saved if this route of waste handling was adopted. We are also considering composting as a possible way to manage waste.

6.4 The concept of backhauling waste from stores to depot is about to be tendered with technologies such as anaerobic digestion and composting being considered.

6.5 Consumers have been identified as the largest sources of food waste in the United Kingdom. We therefore encourage customers to reduce food waste. As noted above, we are the only food retailer to include storage instructions for fruit and vegetables on our bags for loose fresh produce. In addition, throughout 2009, our regional membership teams have held food waste roadshow events across the United Kingdom to help tackle the growing problem of household food waste.

6.6 Each event features a community chef, who cooks a selection of recipes using food items commonly thrown away, as well as giving tips on food planning and management. We also encourage staff to attend the events as well as customer members, so that they can advise customers in-store about food waste issues and minimise their own food waste at home.

6.7 By the end of 2009, we will have held 40 events across the United Kingdom. So far we have held 28 events in England and Wales with an average of 100 attendees. Events in Scotland and Northern Ireland will commence in the first week of November 2009.

6.8 WRAP Love Food, Hate Waste literature is available at all of the events, and WRAP representatives have attended some of the events.

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7. Rejecting products on aesthetic grounds?

7.1 As one of the UK’s largest commercial farmers, we are acutely aware of the importance of minimising waste in this way, and seek to make best use of everything we grow.

7.2 The majority of Co-operative Brand produce is sold as either class I or II. Where no marketing standard exists we still work to the principles of the Defra classification system to ensure that the quality of product reflects what our customers want to buy.

7.3 Produce sold under the Simply Value brand (which is our value range) is specified such that with the exception of progressive rots and moulds, less aesthetically pleasing examples can be packed. There are a total of nine lines including potatoes, peppers, apples and citrus.
8. **Our Policy on Giving Away Food which is Past its Sell-by Date and Therefore Not Able to be Sold to Customers?**

8.1 We are acutely aware of the importance of preventing food-borne illnesses. We have worked with the Food Standards Agency on a number of its awareness-raising campaigns in this area. Giving away food that is past its use by date is illegal and not something that we would sanction because of the obvious health risks.

8.2 However, we have historically worked with the food redistribution charity, Fareshare, to distribute food still safe and legal for consumption but which, for various reasons, is not saleable in store.

8.3 We have written to all suppliers advising them that they may use Fareshare as a route for the disposal of Co-operative Brand product.

9. **Working with Suppliers?**

9.1 As noted above, we encourage suppliers to distribute unwanted food to Fareshare.

9.2 In February 2007, we also staged a conference to communicate the Packaging Policy to 500 own-brand suppliers and subsequently announced a target to reduce own-brand primary packaging by 15% by 2010 based on 2006 levels.

9.3 Some citrus fruit from Valencia will in future be delivered by train in temperature-controlled containers. This will create a faster distribution route for produce with less spoilage and a lower carbon footprint.

10. **Waste on our Farms**

10.1 The farming business has a recycling centre covering a large area of Lincolnshire, taking in waste chemical and fertiliser packaging and cardboard. All farm agrochemical packaging on every farm is recycled.

11. **Customers and Recycled Packaging Waste**

11.1 We do not have a central record of customer recycling facilities at our food stores, but we undertook a survey in 2006 of over 1,300 stores (approximately 40% of our current food retail estate) and found the following:

- 102 stores had glass recycling facilities;
- 79 had aluminium recycling facilities;
- 35 had plastic recycling facilities; and
- 87 had textile-recycling facilities—a proportion of which is provided by the Textile Recycling for Aid and International Development (TRAID). Through the use of TRAID facilities, customers have recycled 122 tonnes of unwanted clothing since 2005.

11.2 Reverse vending systems are also being investigated for our stores.

12. **Community Involvement—Waste Works**

12.1 In September 2007, The Co-operative Group opened Waste Works, which is an education facility based at our Manchester recycling centre (at the head office complex). It promotes effective waste management, and raises awareness of wider environmental issues, such as climate change and the use of renewable energy at The Co-operative Group.

12.2 The Waste Works facility is designed to be an exemplar of recycling in action. It has tables made from recycled plastic bottles and Forest Stewardship Council (FSC) plywood. It is heated by a biomass boiler run on FSC wood pellets. The centre is managed by the environmental charity, Waste Watch, and offers a curriculum-linked education programme to Key Stage 2 pupils (aged seven to 11) and community groups. As of February 2009, there have been more than 7,000 visitors to Waste Works.

13. **Conclusion**

13.1 We know that there is a growing need from consumers for information about waste reduction measures, and aim to focus on education through both our food retail stores, membership teams and Waste Works facility. We have, as a business, long been committed to reducing our environmental impact, hence our own internal policies to reduce waste. This is an area of work that is both challenging and ongoing.
Memorandum by Tesco (Waste 76)

We are committed to minimising the amount of food waste that we produce and in our supply chain. All of our stores measure and monitor food waste against specific targets, which allows them to identify problem areas and deal with them and allows us to help stores where food waste is a particular problem. We therefore perform regular code checks and rotation, proactively reduce products as they near their sell by date and have a dedicated training programme on managing waste for our fresh food managers.

Our approach means that we are particularly efficient in minimising the amount of food waste from our stores. As a result, we have not been able to form a partnership with Fareshare or other similar charities to provide food for local organisations, as our stores do not provide enough food waste on a regular basis to make it viable. However, we continue to be in dialogue with Fareshare about other ways in which we might help.

We perform quality assessments of products at our Distribution Centres on a range of issues to ensure that they meet the agreed quality standards. We are currently working with our suppliers to undertake a trial in our Doncaster Distribution Centre where products that we cannot transport to store are collected by Company Shop for use in their network of retail outlets in companies throughout the UK. As well as helping suppliers who do not otherwise have to pick up several tonnes of food from our distribution centres, we have raised nearly £30,000 for a range of charities, including Fareshare.

We have recently announced a new approach to help customers manage the amount of food they buy while being able to take advantage of our offers. In a speech announcing our intention to become a zero-carbon store by 2050, Sir Terry Leahy, our Chief Executive also explained that we will shortly be launching “Buy One Get One Later” so that customers can pick up the free item in such deals at a later date when it suits them. Further information is enclosed separately. We are also a signatory to the Courtauld Commitment and we are supporting WRAP in meeting the targets, including on food waste.

Our trial in Ilminster and Guildford was designed to understand whether there are further reductions we can make on packaging that are particularly important to customers. We have already reduced the weight of packaging by 15% since 2008 and currently have over 3,000 projects in place to deliver further reductions.

Our findings from the trial, was that far less packaging was left behind than we were expecting, and when customers were asked what they would remove, most felt that actually the packaging that was present played an important role and removing it would cause negative impacts eg cooking instructions lost, food label information lost, protective qualities lost etc. While we are continuing to reduce packaging, we do not currently have plans to roll out the trial further.

News release . . . For immediate release: Friday 16 October 2009

Tesco Introduces “Buy One Get One Free—Later” in Global Zero-Carbon Push

Tesco today pledged to introduce “Buy One Get One Free—Later” and to help households lower their energy bills among a string of new measures to help consumers and suppliers reduce their carbon emissions.

Customers using “Buy One Get One Free—Later” will be able to pick up their free product when they need it, helping to keep waste down. And they will be able to use a new complete home energy service from Tesco to get advice on insulation and renewable sources of energy in their homes, and to carry out the work needed.

These latest initiatives continue Tesco’s groundbreaking work to introduce clear low-carbon choices for the consumer, giving them the power to reduce their carbon footprints.14

Speaking at the launch of a new report—Consumers, business and climate change published by Manchester University’s Sustainable Consumption Institute (SCI)15,16—Tesco CEO, Sir Terry Leahy, warned that targets and technology alone will not achieve the low-carbon transition the world needs and that consumers must be part of the solution.

Sir Terry was speaking alongside leaders of some of the World’s most influential consumer businesses including Unilever, Coca-Cola, SC Johnson and Reckitt Benckiser, who together have today agreed to collaborate on helping consumers reduce emissions created by their products. Conservative leader David Cameron was the keynote speaker at the conference in London.

In a clear message to world leaders before they gather in Copenhagen in December Sir Terry said:

14 Tesco was the first major retailer to introduce carbon labelling on products. Currently there are labels on 114 everyday products with plans to work out the carbon footprint of 500 products by the end of the year. Tesco also introduced green Clubcard points earned by recycling carrier bags. In 2009 Tesco announced that they would trial the use of electric car recharging points in stores.

15 The Sustainable Consumption Institute (SCI) was established at the University of Manchester in 2007 with £25 million of support from Tesco. Its purpose is to research solutions to help the move towards low-carbon consumption.

16 This is the first major conference of the SCI at which it will launch its report on the role of consumers and business in tackling climate change. The Rt Hon David Cameron MP will give the keynote speech. There will be a discussion with a panel of Chief Executives of major global businesses. Paul Polman of Unilever, Muhtar Kent of Coca-Cola, Bart Becht of Reckitt Benckiser and Fisk Johnson of SC Johnson will be on the panel with Terry Leahy. Delegates will be invited to debate the issues with them. Also speaking will be David Nusbaum, CEO of WWF and international academic experts including Prof Robert Putnam, the Harvard-based political scientist and Prof Mohan Munasinghe, SCI Director General.
“It is only by releasing our potential—as people, as consumers, as users—that we can turn targets into reality. It will be a transition achieved not by some great invention or a grand act of Parliament, but through the millions of choices made by consumers every day all over the world. The answer to climate change lies in this and succeeding generations finding ways of living that are satisfying, rewarding, and exciting, but that do not degrade life for our children and our grandchildren.

“People will always seek a better life. We now know that a better life must mean a low-carbon life. So we must take that universal desire for a better life, and that awareness of climate change, and build on the immense power of both. We must decouple economic growth from emissions growth by creating a second consumer revolution: building and fulfilling a demand to live a low-carbon life.”

Sir Terry committed Tesco to becoming a zero-carbon business by 2050 without purchasing offsets. He announced a raft of new initiatives to achieve this, to work collaboratively to reduce emissions in the supply chain and to help customers to reduce their own emissions.

These include:

— a challenge to achieve a 30% reduction by 2020 in the carbon impact of the products in Tesco’s supply chain, starting in the UK;

— spreading green systems and technology pioneered by Tesco businesses in developed countries to its operations in developing countries;

— working with others, to identify and communicate clear ways in which customers can halve their personal and domestic carbon footprints by 2020;

— the creation of a Tesco Home Energy and Emissions Service to provide a trusted one-stop solution for customers seeking to cut emissions and bills at home through energy saving and use of renewable energy;

— extending green Clubcard points to encourage environmentally friendly, carbon-conscious purchasing; and

— support for a universal accountancy standard for carbon in products and services which will provide a basis for carbon co-operation between businesses and promote carbon numeracy among consumers.

Explaining why it was important for Tesco to take a lead on climate change Sir Terry concluded:

“Of course, we are taking action because it is the right thing to do, because we don’t want our children and grandchildren to face the chaos of climate change. A low-carbon strategy is also vital if we are to minimize the risk to our business: the physical threat of climate damage to our supply chains, the resulting economic damage; and the serious effects of rushed and inefficient regulation if we fail to act in time and governments are forced to take draconian action.

But this is about more than just mitigating risk. For Tesco a revolution in green consumption is a fantastic opportunity: once and for all to break the link between consumption and emissions, and in doing so to satisfy a new consumer need, and grow our business. That is the goal of a sustainable business.”

Memorandum submitted by A Lhoist Group Company (Waste 77)

WHAT IS HINDERING THE LIME-MANUFACTURING INDUSTRY FROM USING GREEN TECHNOLOGIES?

A BRIEFING FOR PARLIAMENTARIANS

RECYCLED USED WASTE OILS

Toxic waste oils pose a considerable risk to the environment and public health if they are not disposed of properly. At present, over half of all the UK’s discarded waste oils are either sent to landfill or illegally fly-tipped rather than collected and disposed of safely.

However, waste oils, including toxic and hazardous oils, can undergo a recovery process to turn these waste materials into safe and environmentally friendly fuel products called Recovered Fuel Oil (RFO). RFO is versatile and can be used to generate heat, power and/or electricity. It is a greener alternative to using fossil fuels, especially since all stages of the manufacturing process must undergo stringent testing to ensure compliance with all aspects of environmental protection legislation under the Waste Incineration Directive (WID). In addition, it must also abide by Defra and EA standards on emissions control and air quality. Lhoist is the only UK lime manufacturing plant that has obtained permission to burn RFO as a fuel on an industrial scale. Lhoist UK is part of the Lhoist Group, a specialist supplier of lime products, operating in 24 countries. Lhoist has become increasingly concerned by the inconsistency between tax regulation and environmental policy in the UK.
A Perverse Incentive to Use Virgin Fossil Fuels rather than Recycled Fuels

RFO is recycled waste and therefore does not exhaust the ever shrinking supply of natural resources. However, despite RFO being more environmentally friendly than fossil fuels like gas, it is currently much costlier to use than virgin fossil fuels due to the UK’s bizarre tax regulation.

A new UK taxation regime came into force in November 2008 raising the level of taxation on RFO when used in the lime industry to 10 pence per litre. This equates to €120 per ton in excise duty, which stands in stark contrast to the EU requirement of a minimum rate of duty of €15 per ton. The excessive level of duty levied on RFO makes it exponentially more costly to burn than fossil fuels like natural gas: RFO costs 60p/therm (half of which is tax) whilst gas costs 30p/therm (1p of which is tax). UK industry therefore has a perverse incentive to use fossil fuels rather than more sustainable renewable energy sources.

The Benefits of Using RFO in Lime Production

Lime is used to make products for a wide range of markets, ranging from water purification to steel manufacturing and in applications as diverse as fire protection, agriculture and as a biocide for disinfection. What all lime products have in common are their environmentally friendly characteristics and benefits. For example, by using a mix of hemp fibres and lime, a sustainable product is now available that provides such high insulation and carbon capture properties that cost-effective zero-carbon housing is now realistically achievable.

Lime is a key tool in reducing carbon emissions and thereby combating global climate change while offering practical flexibility to users throughout the construction process. However, manufacturing these lime products requires substantial energy supplies. Lhoist would like to use RFO as a recycled energy source in a WID facility that meets stringent emissions controls and complies with all relevant regulations. Utilising a recycled fuel in this way ensures tighter controls than when burning a natural gas and thereby provides the most suitable solution for RFO from an environmental perspective whilst also reducing fossil fuels consumption. Indeed, if not utilised in WID compliant facilities as used by Lhoist, this fuel could be used in less tightly controlled facilities, or worst of all illegally dumped.

Detriment to UK Industry

Since the UK duty on RFO is 10 times higher than the minimum EU level, the current situation directly favours competitors in other European member states, where some have exempt RFO. In fact, the use of energy products in mineralogical processes (which includes lime manufacturing) lies outside the scope of the Energy Products Directive (EPD), meaning it is a matter of national policy whether or not to impose a tax and to what level. Despite this, the UK government has put in place an excessive level of duty to the detriment of the UK industry.

This has removed all commercial incentive for UK businesses to develop greener manufacturing processes and invest in burning greener fuel oil alternatives. Current UK regulations therefore render it pointless to invest in green technologies which meet the environmental performance criteria of EU emissions legislation, thereby discouraging environmental innovation and industrial commitment to controlling emissions.

Further, the UK lime manufacturing industry is put at a competitive disadvantage to other manufacturing sectors in the UK due to the inconsistent interpretation of EU legislation. The UK honours the exemption of RFO in the steel industry, meaning that no tax is applied to this sector, despite lime manufacturing industry falling under the same section of the EPD, which states that both these processes lie outside its scope. Additionally, the UK electricity industry can use RFO without having to comply with the stringent controls of the WID as well as receiving a duty rebate to avoid potential “double taxation”.

The Environmental Risks of the Current Situation

The problem is aggravated as the UK not only provides a disincentive to using recycled fuels; it also hinders UK industries from utilising waste oils. This has resulted in hazardous waste oils not being collected and instead being left to pollute land, water and air in the UK. This has been acknowledged and documented in numerous ways and most notably by a European Commission report.17

The only other use of these hazardous oils is regeneration. This means the oil is recycled and reused again as eg engine oil rather than being burned as a fuel. The government has stated that a waste hierarchy dictates that regeneration of waste oils should be prioritised above recovering energy and that a high level of taxation will force a switch from recycling energy from waste to the regeneration of waste. However, this crucially omits the fact that not all waste oils can be regenerated, especially the type of toxic oils which are recovered into usable RFO. More importantly, the UK still has a very limited capacity for oil regeneration and considering the current economic situation, it is very unlikely that investment will build that capacity in the short to medium term.

17 http://ec.europa.eu/environment/waste/studies/oil/waste_oil.htm
A Freedom of Information request undertaken by Lhoist UK in October 2009 with regards to illegal dumping in the UK revealed that there were 2,735 litres of waste oils illegally dumped to both land and water in 2008, whereas since April 2009, 55,177 litres of waste oils have been illegally dumped! The overall trend quite clearly indicates a significant increase, some 2000%, in the volume of illegal dumping since the introduction of a duty on the use of RFO, especially considering that there is still effectively six months left of the 2009–10 period. Further, there has been a 10% increase in the authorisation of Small Waste Oil Burners (SWOBs) from 2008 to 2009 so far. Under the WID the maximum SO2 emission limit is < 50mg/m3, whereas when burnt in the non-WID compliant SWOBs SO2 emissions can be well in excess of 400 mg/m3! It would therefore seem that the direct consequence of the duty upon this type of plant is to encourage illegal disposal/dumping and non-WID compliant combustion.

**Conclusion**

As a socially responsible company Lhoist agrees with the principle of the polluter pays. Yet, the UK’s current policy ensures that the polluter does not pay since it encourages illegal dumping of waste oils, as opposed to recycling it as a fuel. The UK is already in danger of missing its heroic targets for generating energy from sources other than fossil fuels: 15% by 2020. The lime manufacturing sector can play a considerable part in contributing to this target, yet at present there is no commercial argument for doing so.

It is clear that the current regulation is a result of the lack of joined up thinking between Defra, DECC and the Treasury. In order to promote UK industry and recycled energy the government must:

1. drastically reduce the tax levy on RFO used in rigorously controlled WID compliant facilities or
2. introduce an exemption for WID-compliant facilities.

**Annex**

**FOI—ILLEGAL DISPOSAL OF WASTE OILS**

**Context of FOI**

In November 2008, the UK introduced a tax on the heating of Recovered Fuel Oil (RFO). It is our belief that this tax has had the direct consequence of increasing illegal disposal of waste oils. Therefore, in October 2009, Lhoist UK made some freedom of information requests to Defra, the EA, HMRC and all the local authorities in England and Wales (294 responded, with answers from 40 awaiting). Below are the facts and figures that are of concern.

**Local Authorities in England and Wales**

1. **How many instances of illegal dumping, or any other disposal to land or water, of waste oils (whether contained within containers or otherwise) are you aware of having taken place within your local authority area in: (i) 2007, (ii) 2008 and (iii) 2009?**

   **Answer:**

   - (i) 2007 = 14,765 litres
   - (ii) 2008 = 2,735 litres
   - (iii) 2009 = 54,642 litres

   Many of the Councils record their data according to the financial year (April–April), and as such there is effectively six months left of the 2009–10 period for many Councils. Overall, the trend clearly indicates an increase in the volume of illegal dumping.

2. **How many small waste oil burners (SWOBs) did you authorise for use in: (i) 2007, (ii) 2008 and (iii) 2009?**

   **Answer:**

   - (i) 2007 = 622
   - (ii) 2008 = 653
   - (iii) 2009 = 673

   This clearly shows an increase in the number of SWOBs being authorised, which would indicate an alternative disposal route by those who do not wish to pay for their waste oils to be dealt with.

**Environment Agency**

1. **How many instances of illegal dumping of waste oils (whether contained within containers or otherwise) is the EA aware of having taken place in 2007, 2008 and 2009 respectively?**

2. **On how many instances has the EA referred for prosecution individuals and/or companies in connection with the illegal dumping of waste oils (whether contained within containers or otherwise) in 2007, 2008 and 2009 respectively?**
The number of instances of people being referred for prosecution for illegal disposal of waste oils were as follows:

Answer:

(i) 2007 = 2 
(ii) 2008 = 6 
(iii) 2009 = 5

(4) What was the total volume of waste oils consigned as waste for processing within the UK in 2007, 2008 and 2009 respectively? To which UK facilities and/or companies were these waste oils consigned?

The total volumes of waste oils consigned as waste within the UK in each of the years was as follows (in tonnes):

Answer:

(i) 2007 = 918,173.26 
(ii) 2008 = 832,637.88 
(iii) 2009 = 415,298.05

There appears to be a significant decrease in the volume of waste oils being consigned as waste for recovery of disposal in 2009, which may suggest an increase in illegal disposal, or a decrease of the volume of waste oils arising, or both.

(7) Please provide me with a list of all of the Waste Incineration Directive (WID) compliant plants in the UK, and their respective operators.

Answer:

The EA has provided a spreadsheet showing 128 installations which are permitted to operate in compliance with the WID. The purpose of asking this question was to show how few WID-compliant outlets for RFO are available in the UK. Of these installations, a recent Parliamentary Question revealed that only six accept RFO as a fuel type.

HMRC

(1) How much revenue has been collected by HMRC on sales of RFO since the introduction of duty in November 2008?

Answer:

(i) November 2008 to March 2009 = £3 million
(ii) April 2009 to October 2009 = £8.8 million

At first, HMRC declined to release the information on the basis that “disaggregated monthly data” would enable identification of individual businesses. However, they eventually agreed to release these aggregated figures, which clearly indicate that the tax does not generate any significant revenue.