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Environmental Audit Committee

Government Response to the Committee's Fourth Report of Session 2006–07: Pre–Budget 2006 and the Stern Review

Fifth Special Report of Session 2006–07

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The Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

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A list of Reports of the Committee in the present Parliament is at the back of this volume.

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References

In the footnotes of this Report, references to oral evidence are indicated by 'Q' followed by the question number. References to written evidence are indicated by page number as in 'Ev12'. number HC *-II

Fifth Special Report

Pre-Budget 2006 and the Stern Review—Government Response

1. The Environmental Audit Committee published its report on ***Pre-Budget 2006 and the Stern Review*** on Monday 19 March 2007 as HC 227.

2. The Government's Response to the Committee's Report was received on Wednesday 23 May 2007 in the form of a memorandum to the Committee. It is reproduced as an Appendix to this Special Report.

Appendix - Government response

GOVERNMENT RESPONSE TO ENVIRONMENTAL AUDIT COMMITTEE REPORT: "*Pre-Budget 2006 and the Stern Review*" (Fourth Report of Session 2006-07)

1. While Stern has used economic calculations to inform his choice of targets, we are reassured by the way in which he has very firmly suggested an upper limit to concentrations of greenhouse gases above which we should not go, paying close attention to the scientific evidence of the increasing risks of more serious and irreversible impacts at higher concentrations. (Paragraph 11)

2. In publicising the headline cost figure of 1% of global GDP, the Treasury has implicitly chosen to set its sights at the maximum limit of greenhouse gases suggested by the Review—the level which Stern characterises as "a dangerous place to be, with substantial risks of very unpleasant outcomes"—as the target to aim for. (Paragraph 12)

The 1% estimate in the Stern Review is based on a broad assessment of the latest literature. The Review makes clear that the 1% figure is an expected approximate cost within a range of + / - 3%. As the most recent IPCC report on mitigation confirms, the economic literature has only recently begun to focus on the costs of stabilisation paths below 550ppm CO_2e, and this has limited the sources of data available for a broad comparison. The Review is clear that the 1% cost of action applies specifically to the achievement of stabilisation at 500-550ppm, and that 550ppm is at the top of the stabilisation goal range suggested by the Review. In quoting this figure, the Government is not trying to imply that 500-550ppm is the appropriate target for which to aim; it is using the evidence provided by Stern. 1% of world GDP is not trivial and it is in the mid-range of most respected modelling studies. It represents a very significant change in the patterns of energy investment, in line with the replacement cycles for capital stock, towards low-carbon energy technology. The Stern Review has highlighted the need for greater research into the costs of more stringent targets, using a robust estimate based on the most extensive and relevant modelling studies. The Government is also aware that minimising the costs of action relies on adopting a timely, flexible, global policy, employing a variety of economic instruments to control emissions of a broad range of greenhouse gases. On the other hand, there are also likely to be significant co-benefits of reducing emissions, which are not accounted for in these cost estimates.

3. While the Stern Review offers a target range of between 450 and 550ppm greenhouse gas concentrations, and while its costings of the efforts required to meet these targets focus on the upper limit of this range, governments should not treat the upper figure of 550ppm as *the* target endorsed by the Review and the one which they should in practice aim for. Sir Nick Stern himself has made it very clear that the Review did *not* suggest 550ppm as the main target to work towards. Rather, he has emphasised strongly that 550ppm is the maximum stabilisation limit for 2050 we should possibly consider, and that the further beneath this level at which we can stabilise greenhouse gases by 2050, the lower the risk of catastrophic climatic events in the future. We therefore urge the Government, in promoting the findings of the Stern Review, to ensure that this is the message that is widely understood. (Paragraph 18)

4. Our own view is that 550ppm CO_2e would be an excessively dangerous target, and that a prudent approach would be to aim for 500ppm or below if this could be achieved. Especially considering the dangers of slipping from and exceeding initial targets, we urge the Government to work with international partners towards selecting a global stabilisation goal at a level very considerably below 550ppm CO_2e. (Paragraph 19)

The Government agrees with the Committee's conclusions that it is essential to promote the findings of the Stern Review, and that the world community must collectively agree on ambitious, equitable and feasible long-term goals urgently in order to avoid dangerous climate change. The Stern Review analysis considered both the scientific and economic aspects of climate change, and recommended aiming for a stabilisation range of 450-550ppm. Global atmospheric concentrations of greenhouse gases are currently at 430ppm and are increasing at a rate of at least 2.5ppm per annum. Getting below 450ppm could be very difficult and costly. But going above 550ppm could be very dangerous. The Government recognises that the relationship between temperature changes, concentration goals and emissions reductions is a complex one, on which our understanding is improving all the time. What is clear is that global emissions need to peak within the next 10-15 years if the world is to maximize its ability to reach stabilisation goals lower than 550ppm in order to avoid dangerous climate change. The Government is committed to finding a lasting international solution to the challenges of climate change, and will continue to use the scientific and economic evidence and its influence to make the case for action, and to demonstrate that action can be taken in a cost-effective way. If countries are to invest in making the transition to a low-carbon global economy, they need to know that their actions will be reciprocated by others. Chapter 7 of the Budget and the Pre-Budget Report affirms these messages and sets out a range of policies to respond to the challenge of climate change.

5. The Government is right to emphasise Stern's arguments as to the benefits of an aggressive programme to cut emissions. Aside from decreasing the risk of the most damaging impacts of global warming in the future, rapid mitigation can be expected to deliver a number of benefits in its own right, speeding the deployment of new technology, and thereby increasing economic efficiency as well as reducing pollution. (Paragraph 22)

6. At the same time, the Government should not minimise the challenges of rapid mitigation. Rather, it should be honest with businesses and consumers about the price impacts on emissions-intensive processes and activities which accelerated emission-reduction policies imply. This may help to develop the social consensus needed to make rapid progress. (Paragraph 23)

The Government agrees that there will often be benefits to mitigation beyond those associated with a reduced risk of the severe impacts associated with irreversible climate change. These include opportunities for growth and innovation in sectors and firms affected by climate change policy. In addition to these potential benefits, action on climate change can also have benefits in terms of reductions in local air pollution, improved energy security and access, and so on. Most estimates for the costs of reducing emissions do not currently include such co-benefits. Furthermore, the Stern Review is clear that in order to minimise the costs of mitigation, coordinated, timely, flexible, global policy, which employs the optimal balance of instruments to control emissions of a broad range of greenhouse gases is key.

The Government agrees that the likely costs of action should not be underestimated. It is possible that if any individual country moves too far ahead of others, there is a risk of placing its businesses at a competitive disadvantage while simply exporting carbon-intensive production processes, thereby failing to achieve any actual reduction in global emissions. However, the most recent IPCC report on mitigation suggests that large uncertainties remain as to whether such effects occur in practice. This is because, as the Stern Review notes, other factors such as access to infrastructure, proximity to markets, and differential labour costs tend to be more important in driving relative wages and competitiveness. However, the competitiveness of some highly energy-intensive trading sectors could be affected by mitigation policy. Good policy design, perhaps using sector-specific frameworks that involve all major producing countries of energy-intensive products, can be used to reduce such effects. Flexible, timely, credible, well-designed policy is also necessary to make the most of the potential highlighted in the Stern Review, which Government ministers have also stressed, for early moving countries such as the UK to become leaders in the emerging markets created by environmental industries, diversify its energy sources and avoid locking into long term investments in high-carbon infrastructure that will increase the costs of moving to a low-carbon economy.

7. We are not in a position to engage in the full detail of the economic arguments over the size of the projected costs of unchecked climate change—estimated by the

Stern Review to be between 5% and 20% of global GDP. However, we most certainly endorse the Review's use of a very low value for its "pure time discount rate", meaning in effect that Stern treats future generations as being of equal importance to those alive today. To think otherwise would be morally reprehensible, condemning future generations to an uncertain and, in many parts of the world, possibly calamitous future, out of sheer indifference. (Paragraph 30)

8. Secondly, we would point out that there are many ways in which Stern's projected figures for the costs of global warming are likely still to be underestimates. While the Stern Review offers calculations for the "non-market impacts" of global warming on human health and the environment, it does not, as it makes clear, offer cost estimates for such "socially contingent responses" to climate change as "conflict, migration and the flight of capital investment". Indeed, Sir Nick told us: "I do think it is an important way in which some of what we have done may have been underestimating, rather than overestimating." (Paragraph 31)

9. Thirdly, we would argue strongly that, while economic analysis may have its place within climate change policy it should be strictly subordinated to a scientific understanding of the levels of mitigation required to give us best-estimated probabilities of avoiding important thresholds in the climate system, which might trigger very serious and irreversible impacts. In short, global warming should not be treated like any other economic issue. The effects of global warming do not easily lend themselves to being quantified and expressed in terms of economic utility, given that they may radically alter, not simply purchasing power or productivity, but entire ways of life. Indeed, in several parts of the world they threaten to make what are currently densely populated areas literally uninhabitable. (Paragraph 32)

10. We are pleased to note that the Stern Review itself acknowledges the limitations of economic analysis. As the Review states: "These models should be seen as one contribution […] They should be treated with great circumspection. There is a danger that, because they are quantitative, they will be taken too literally. They should not be. They are only one part of an argument. […] Nevertheless, we think that they illustrate a very important point: the risks involved in a 'business as usual' approach to climate change are very large". (Paragraph 33)

The Government recognises that climate change has a number of features which means that it differs from other economic and social issues. In particular, the fact that it is global in both its causes and its impacts, and that the consequences are uncertain and occur over the long run, and there are potential large and irreversible effects, means that it differs from other market failures. Economic analysis of climate change requires consideration of how countries can work together, of equity across and between generations, of the economics of risk, and it needs to go beyond the marginal, small changes that most economics is concerned with. For example, the approach to discounting used in the Stern Review reflected the special nature of climate change with respect to these four qualities, and we think this approach is appropriate for climate change. The most recent IPCC report on mitigation finds that decision-making about the appropriate level of global mitigation over time involves an iterative risk management process. For these reasons, the Government believes that there is significant value in using an economic framework—which considers all these issues—to help assess the risks associated with climate change and course of action for managing those risks.

As the Stern Review highlights "if economics is used to design cost-effective policies, then taking action to tackle climate change will enable societies' potential for well-being to increase much faster in the long run than without action." While science gives a greater understanding of where the thresholds for catastrophic climate change might lie, economics has an important part to play in quantifying the costs and benefits, assessing the risks and determining the most cost-effective ways of achieving the required emissions reductions. This can facilitate both national and international policy making on climate change. Cost-effective reductions produce dual benefits of allowing developed countries to meet their climate change targets at the least cost to the economy and facilitating the movement of developing countries to a low carbon intensity growth path.

11. The Stern Review is, indeed, explicit about being "based on a multi-dimensional view of economic and social goals, rather than a narrowly monetary one". Taken altogether, the range of evidence on the natural and human impacts of climate change presented in the Review supplements and intensifies its headline conclusions on the quantifiable economic costs and benefits of taking action. Whatever the detail of the economic analysis, and whatever one's views of the estimated costs, the dangers of reaching important thresholds in the climate system are surely so great that the need for urgent and aggressive mitigation is overwhelming. (Paragraph 34)

12. The Government should do more to publicise the size of the challenge as summarised in the Stern Review. As Stern makes clear, the stabilisation of greenhouse gases—whether at 450 or 550ppm CO_2e—will require ongoing reductions in emissions beyond 2050, ultimately necessitating possibly the complete decarbonisation of every other human activity beyond agriculture; and that further into the future, net emissions must be cut even more deeply, possibly to just a fifth of the present day emissions from agriculture alone. The Review is clear that quantifying these limits is very difficult and still uncertain. It is also clear that the first of these limits would probably only need to be met in the second half of the next century, while the second will probably not need to be met for several centuries. Nevertheless it might still be valuable to raise awareness of these long term limits; or at least to the conclusion that emissions must continue to decline, even if we meet Stern's targets for 2050. If nothing else, this might help to increase popular consciousness of the ultimate inevitability of radical changes to familiar technologies and habits of living if climate change is to be tackled, which might help to stimulate innovatory thinking and support for more radical measures in the short term. (Paragraph 37)

13. The Government should do more to highlight another key conclusion from the Stern Review: stabilising greenhouse gas concentrations at a chosen level does not simply depend on *how much* we cut annual emissions by, but *how quickly* we do so. Stern repeatedly emphasises the dangers of overshooting a target stock level of greenhouse gases in the atmosphere: once we go above a certain level, it will be very difficult and could take a prolonged time to reduce it again. (Paragraph 39)

We know little about the size of the risks involved in overshooting a concentrations target and expecting temperatures to reduce when higher concentrations eventually come back down, but we take seriously the caution counselled in the Stern Review about relying too much on this possibility. Analysis on the risks is on-going. The Government is working with international partners to secure a global agreement for emissions reductions that will reliably avoid dangerous climate change.

14. The Treasury can indeed point to already having developed a number of policies which fall under Stern's three main recommendations for government action. Indeed, in commissioning and promoting the findings of the Stern Review around the world, the Government is clearly playing a very important role in helping to influence international opinion and rally support for concerted and urgent action. But it must respond to Stern's conclusions in its own domestic policies; the profound issue which remains is the scale and urgency of its programme. The true test of its policies is very simple: how fast the reduction in UK emissions accelerates. (Paragraph 46)

15. In this respect, we are very disappointed by this Pre-Budget Report. This was the Treasury's first opportunity to incorporate the findings of the Stern Review in a major policy statement. It did not take it; we did not see any escalation of the Treasury's climate change policies in this PBR. (Paragraph 47)

The Government has a range of policies in place to mitigate the effects of climate change, and this is proved by the UK's performance towards its Kyoto target, where the UK is currently on track to almost double its commitment to reduce emissions by 12.5% by 2012 through taking measures to reduce emissions in the UK and abroad. The approach taken in the Kyoto Protocol is taken forward in the UK's draft Climate Change Bill, which proposes a series of clear targets for reducing carbon dioxide emissions - including making the UK's targets for a 60 per cent reduction by 2050 and a 26 to 32 per cent reduction by 2020 legally binding. The Bill proposes a new system of legally binding five year "carbon budgets", with at least 15 years always set in legislation, to provide clarity on the UK's pathway towards its key targets and increase the certainty that businesses and individuals need to invest in low-carbon technologies.

It is important to look at Government policy in the round—PBR 2006 is only one element of the Government's continuing strategy to tackle climate change. Furthermore, whilst reductions made by the UK through domestic and international action are an important indicator and focus of policy, the UK's role in tackling this global threat though our part in helping secure wider international action and agreement is also a proper focus for our policies. In the Climate Change Programme in March 2006 and the Energy Review in July 2006 the Government set out a package of policies to meet its targets for emission reductions, including the 8 MtC reduction per year achieved by the UK cap for Phase II of the EU Emissions Trading Scheme. The Energy White Paper takes these policies forward. Following Stern, the Pre-Budget Report in November 2006 announced increases in air passenger duty and an ambition for all new homes to be zero carbon by 2016. Budget 2007 built on this by announcing future increases in fuel duty and vehicle excise duty, further support for improving household energy efficiency, and a new competition to develop the UK's first full-scale carbon capture and storage demonstration, the result to be announced next year. It also announced that in the 2007 Comprehensive Spending Review, the Government will create a new international window of the Environmental Transformation Fund with £800 million of official development assistance to support development and poverty reduction through environmental protection, and help developing countries respond to climate change. The Government's response to the Committee's conclusions 37-40 contains further examples of the action the UK is taking to ensure international progress.

16. The Government currently uses a figure of £70 per tonne of carbon as its Social Cost of Carbon. The Stern Review suggests that the current SCC might be around £238 per tonne of carbon, or over three times the Government's SCC value. In discussing this point with us, the Financial Secretary told us that the Government does not accept that Stern's figure is applicable for Government decisions within the UK. We find this argument hard to follow. After all, the Government frequently makes the point that the global warming impacts of a tonne of carbon do not differ depending on where those emissions are made. The corollary of this should surely be that the Social Cost of Carbon should be the same for any emissions, no matter where they are made. We accept that Defra are currently reviewing the UK's SCC, but we can see no convincing reason why the UK should not adopt Stern's suggested SCC value for the current global emissions trajectory. If the Government accepts the findings of the Stern Review, it should surely accept its conclusions on the Social Cost of Carbon. (Paragraphs 49-51)

The Social Cost of Carbon (SCC) is dependent on the path of emissions and will rise over the medium term—meaning that the SCC will be lower at any given time with climate change policies in place than under business as usual. Estimates of the SCC can be used to inform assessments of the costs and benefits of alternative outcomes and policies. The Stern Review has given estimates of the future path of the SCC under business as usual as well as under different stabilisation paths. Stern suggests that the expectations of the ultimate achievements or goals of global climate change mitigation policies are one of the important factors to consider in deciding what SCC is appropriate for use in the UK and other countries, so it would not be appropriate to focus on the £238 figure alone. The Government is currently considering how to update its estimate of the SCC in the light of the Stern Review as well as previous work by Defra in this area, with the aim of agreeing and publishing any changes to the methodology by summer 2007.

17. The Government's 2050 target for reducing UK CO_2 emissions is out of step with the global targets recommended by the Stern Review. Indeed, the global target limit for atmospheric concentrations of CO_2 which underlies the UK's domestic target for 2050 is some 50-60ppm CO_2, or 10-12%, higher (that is, more lax) than Stern's *upper* limit, the level of emissions which Stern makes clear would itself be dangerous. (Paragraph 52)

18. The Government has explained that even if its current domestic carbon reduction target, included in the Climate Change Bill, becomes law, it may still be altered and made tougher, should the science develop and suggest the need for a lower limit to emissions. This is indeed welcome. However, the science has already moved on since the UK's domestic target for 2050 was first framed. The Government ought to adopt a domestic target in line with Stern's target for global greenhouse gases. (Paragraph 55)

19. It is useful to go back to the original RCEP report from which the Government's 2050 target was drawn. For a global 2050 target of 450ppm CO_2 (roughly in the middle of Stern's 400-490ppm CO_2 target range), RCEP recommended that UK annual emissions ought to be cut by 79% from 1997 levels by 2050. Putting this in the form in which the Government adopted RCEP's 550ppm target, this equates to around an 80% cut in UK annual CO_2 emissions from 1990 levels: a reduction from annual emissions of 592.13Mt CO_2 in 1990 down to around 118.43Mt CO_2 in 2050. To illustrate what a difference this would make to the Government's current domestic target, a *60%* cut from 1990 levels would result in annual emissions in 2050 of around 236.85Mt CO_2. In other words, a new target for the UK, based on roughly the mid-range of Stern's global targets, would mean that UK CO_2 emissions in 2050 would have to be just *half* what they would be under the Government's current target, the one that is currently included in the Climate Change Bill. We need hardly point out that the choice between such target values must have the profoundest implications for the entire array of public policy decisions, starting today. (Paragraph 56)

20. This highlights the need for greater public debate on what the UK's longer term emissions targets should be. Even more, it highlights the need for much greater international focus on a global target. The Stern Review makes a powerful argument for an urgent new international agreement on climate change, and for it to be framed in terms of a target for the global stock of greenhouse gases in the atmosphere in 2050. The Government should work urgently to influence international negotiations in this direction. (Paragraph 57)

The Government notes the Committee’s concerns about the targets proposed in the draft Climate Change Bill. The draft Bill is being considered by a Joint Committee of both Houses and by the Commons' Environment, Food and Rural Affairs Committee, and is also open to public consultation. The Government welcomes the opportunity the draft Bill gives for public discussion of these issues.

The UK target of a 60 per cent reduction in carbon dioxide emissions by 2050 is consistent with the EU's recognition that to avoid temperatures rising higher than 2 degrees Celsius above pre-industrial levels, global greenhouse gas emissions need to fall by between 15 and 50 per cent by 2050, with reductions in developed countries of between 60 and 80 per cent against 1990 levels. The UK's target is also consistent with the range of stabilisation goals proposed in the Stern Review and represents a crucial step towards these goals, noting also that UK cuts in greenhouse gases overall have been deeper than those in carbon dioxide alone. The UK target is both challenging and credible, but the Government has made provision in the draft Bill that would allow for this target to be revised in the light of significant developments in scientific knowledge about climate change or in international law or policy.

The Government agrees with the Committee that there is a need for a much greater international focus on the need to stabilise greenhouse gases in the atmosphere and to identify appropriate goals. In its paper *Emissions Trading: UK Government Vision* published in October last year, the Government called for the EU to identify this level and to negotiate to secure a future international agreement which will achieve this. But most individual countries' emissions form a small proportion of the total. As the Stern review notes "a shared global perspective on the urgency of the problem and on the long-term goals for climate change policy, and an international approach based on multilateral frameworks and co-ordinated action, are essential to respond to the scale of the challenge."

Pre-Budget 2006: Shifting the burden of taxation

21. The picture is of an ongoing retreat from the Treasury's announcement in 1997 of a policy to shift the burden of taxation towards taxing environmentally damaging activities. As the latest figures show, the proportion of all taxation made up by green taxes is markedly less than in 1997, and is indeed at a lower proportion than as far back as 1994. This Pre-Budget does contain some limited announcements of rises in green taxes, but these are still very modest when set in the context of several Budgets and Pre-Budgets in recent years in which many environmental taxes have not even been raised in line with inflation. (Paragraph 61)

It is essential that the right instrument is used by the Government in each particular circumstance so that the pursuit of environmental objectives takes account of wider economic and social objectives. The Stern Report reiterates this point, and does not require that any particular instrument is used for any particular mitigation policy; rather, Stern suggests that each country should use the appropriate mix of taxes, trading, spending and regulation as befits its national circumstances. As such, the UK

Government has looked to introduce an innovative range of measures to tackle environmental challenges—including, where appropriate, tax measures—but tax is not the only lever.

Since 1997, the Government has put this commitment into practice through the introduction of the climate change levy, the aggregates levy and the landfill tax escalator. The climate change levy and climate change agreements (which offer opportunities for business to reduce their liability to the levy) are together estimated to deliver carbon emissions savings of over 6MtC a year by 2010. The aggregates levy has reduced the use of virgin aggregate by 8% between 2001 and 2005 and landfill tax has contributed to a drop of active waste disposed of at landfill by 14% between 1997-98 and 2005-06. These measures were introduced in a way that has shifted the burden of taxation from goods to bads. The introduction of the climate change levy was accompanied by a 0.3 percentage point cut in employers' National Insurance contributions; and the introduction of the aggregates levy and the landfill tax were accompanied by a 0.1 percentage point and 0.2 percentage point reductions in employers' NIC respectively.

The Government's principled approach to using environmental tax was also reflected in PBR 2006 and Budget 2007 announcements on environmental taxation, which included: an increase in all rates of air passenger duty; an inflation increase in the climate change levy in April 2008; raising the landfill tax escalator from £3 per tonne per year to £8 per tonne; an increase in the aggregates levy to £1.95 per tonne from April 2008; increases in fuel duty and vehicle excise duty rates for the next three years. The additional revenue raised from business by the £8 per tonne rise in the standard rate of landfill tax each year from 2008 until at least 2010-11 will be recycled to business through the other corporation tax changes announced in the Budget.

But tax is not the only instrument the Government has used to tackle environmental challenges. Over the last ten years, new kinds of policy instrument have been developed, especially emissions trading and tradable regulations like the Renewables Obligation and Energy Efficiency Commitment—which have been successful in reducing emissions. In particular, the EU Emissions Trading Scheme (EU ETS) has been the centre-piece of our climate change strategy and the UK's contribution to Phase II (2008-2012) will be emission reductions of 8MtC a year by 2010.

The Government uses the most appropriate instrument in each circumstance; therefore any assessment of the success of the Government's environmental policy needs to consider the full range of measures announced. Focusing on the proportion of all taxation derived from environmental taxation is not necessarily a useful measure of the success of environmental policy. For example, the climate change levy supports the delivery of the aims of EU ETS by encouraging business energy efficiency; however, climate change agreements, which form part of the climate change levy package, actually reduce environmental tax revenues whilst delivering real and valuable environmental impacts. Tax also plays a supporting role in developing the biofuels market; the 20 pence per litre duty differential on biofuels has played a part in doubling biofuels sales last year, but it is the Renewable Transport Fuels Obligation (RTFO) that is the primary mechanism for supporting the biofuels market.

Overall, the package of measures introduced by the Government since 1997 have supported wider efforts to protect the environment and have put the UK on track to meet its Kyoto commitments, whilst also ensuring that progress towards wider economic and social objectives—in particular, strong and stable economic growth – is supported.

Aviation

22. While we welcome the Treasury's decision to double Air Passenger Duty rates, we do not feel this goes nearly far enough. Notably, the doubling of APD rates announced in this PBR is, for the majority of flights, only a restoration of the tax rates of five years ago—and in real terms, of course, it still represents a cut. This rise will do nothing to stabilise aviation emissions, merely slow their growth slightly. Moreover, it does nothing to impose an environmental charge on air freight, which lies outside the APD regime. (Paragraph 68)

23. The Treasury should once more look at reforming Air Passenger Duty, possibly levying it per flight rather than per passenger, a reform which would capture air freight (and empty flights), and might also incentivise airlines to increase the efficiency of their passenger loading further. Equally, the Treasury should look at varying APD rates according to the emissions of each flight; if this is not to be adopted, the Treasury should give a clear reason why not. Above all, however, the Treasury should increase APD so that it becomes more effective in curbing the demand for flights. To inform and embed this approach, the Treasury should look very seriously at proposals outlined by the Oxford University Centre for Environmental Change for introducing an annual APD escalator. (Paragraph 69)

24. We are also concerned by the manner of the Pre-Budget's raising of Air Passenger Duty rates. The travel industry has argued strenuously against the timing of this rise, coming into effect less than two months after its announcement. This contrasts with the previous reform of APD, for example, which was announced in Budget 2000 but not implemented until April 2001. Our main concern here is that in its handling of this rise, the Treasury may have caused unnecessary antagonism, with the potential consequence of provoking more opposition to environmental tax rises. (Paragraph 70)

The Government notes the Committee's comments on the Government's decision to raise air passenger duty, and its suggestions for reforms to air passenger duty to improve environmental incentives. The Government recognises that air passenger duty is not the ideal policy instrument for tackling emissions from aviation. Decisions on aviation need to be taken in the light of the tight restrictions of international law which apply to the aviation industry, such as the restrictions on the ability to tax aviation fuel, and it is right for the Government to look at the tools which it has readily to hand. In a Swedish case (Braathens Sverige), the European Court of Justice held that a tax which resembled a tax on fuel (such as a tax relating to carbon dioxide emissions) was incompatible with legislation pre-dating the current Energy Products Directive. In the light of such restrictions it is right for the Government to look at the tools which it has readily to hand. The change announced to air passenger duty at PBR will have a climate change impact equivalent to saving 0.75 million tones of carbon per year by 2010/11.

At the same time, the Government continues to argue for the inclusion of aviation within EU ETS. Inclusion of aviation within EU ETS will provide incentives for airlines to reduce their emissions of each flight and to increase the load factors of their flights, and will cover freight aircraft as well as passenger aircraft. This has made significant progress with the publication in December 2006 of a legislative proposal by the Commission and the UK will continue to push at a European level to ensure that an environmentally effective scheme is implemented as soon as possible.

The Government will continue to keep the role, rates and structure of air passenger duty under review in the future, taking into account the points raised by the Committee alongside the tight constraints of international law which apply to this sector, and striking the right balance between economic, environmental and social factors.

25. We cannot understand why the entire aviation industry is zero-rated for VAT, meaning that airlines and other aviation companies are able to reclaim the VAT they pay on a whole range of goods and services. As a first step towards greater public consideration of this issue, and to aid Parliamentary scrutiny, the Treasury should publish figures of the full costs to the Exchequer of reimbursing aviation companies in this manner. (Paragraph 73)

Air passenger tickets are zero rated for VAT purposes consistently with other passenger transport tickets. Air freight is either zero rated (if international) or standard rated subject to the normal VAT place of supply rules (if domestic or intra-EU). "Zero rating" means that the input VAT payable on expenses can be reclaimed by the airline company. Changing the VAT treatment of these services so that input VAT could not be reclaimed would require unanimous agreement by all EU member states. In addition there is likely to be a significant behavioural change as aviation companies seek to purchase their products in countries in which no VAT is chargeable on their expenses. In view of these significant obstacles the Treasury has made no detailed assessment of the revenue which would accrue from such a change.

26. The Treasury should end the anomaly by which airport vehicles are allowed to use "red diesel", taxed at 7.69 pence per litre, rather than ordinary road fuel, carrying the normal duty rate of 48.35ppl. While airport vehicles may not indeed be running on public roads, it seems utterly perverse to offer them such a large tax reduction,

considering the large impacts of airports, not just on global warming, but on local air quality. (Paragraph 74)

Vehicles using public roads have a number of externalities including congestion, climate change, local air quality and road infrastructure costs. Where vehicles do not use public roads or use them only incidentally they are entitled to use rebated gas oil ("red diesel"), taxable at a reduced rate.

Budget 2007 announced above-inflation increases in the duty rates for red diesel and the Government will continue to keep the rates and scope of red diesel taxation under review consistently with the provisions of European laws such as the Energy Products Directive. However airport vehicles are taxed consistently with the treatment of other vehicles which do not use public roads and the Government does not currently regard the treatment of airport vehicles as an anomaly.

Motoring

27. We are disappointed with the Treasury's arguments surrounding its fuel duty policies. What was widely reported as a rise in fuel duty in this year's Pre-Budget Report was only a rise in line with inflation, and this was only the second time it had been revalorised since 2000. As the PBR confirmed, what this means is that fuel duty is 15% lower in real terms than in 1999; and, that moreover, this real terms cut has offset the rise in oil prices over this period. Finally, there is surely a strong case for building on what instruments are already available and which could achieve rapid results—ongoing, real terms rises in fuel duty being one of the prime examples. (Paragraph 77)

The Government's policy is that fuel duty rates should rise each year at least in line with inflation as the UK seeks to reduce polluting emissions and fund public services. Budget 2007 has now set out fuel duty rates for the next three years. Main fuel duty rates for 2007-08 will increase by 2 pence per litre (ppl), from 1st October 2007. Main fuel duty rates will then rise by 2 ppl on 1st April 2008 and 1.84 ppl on 1 April 2009. As set out in the Budget documentation the Budget forecast for Q3 RPI inflation in the current year is used to revalorise all excise duties in the current year, and to uprate income tax allowances and bands for certain social security benefits in the following year. The increases announced at Budget imply percentage increases of 4.14%, 3.97% and 3.51% respectively. These are all slightly above the Budget forecasts for Q3 2007 RPI inflation.

The Government recognises that emissions are rising faster in the transport sector than in any other sector in the UK. UK transport emissions are primarily priced through a taxation framework—mainly through fuel duty—which provides incentives to individuals and to business to drive less and use other modes of transport. In setting fuel duty rates, the Government also takes into account other external costs of motoring, such as congestion and air pollution, and the need to maintain sound public finances.

The Budget announcement on main fuel duty will lead to carbon savings of 0.16MtC a year by 2010.

Alternative fuel and vehicle technologies also have the potential to deliver significant environmental benefits. That is why the Government published the Alternative Fuels Framework in 2003, reaffirming the need for fiscal incentives to reflect environmental benefits of new fuels and committing the Government to a three-year rolling guarantee for biofuel and road fuel gas duty rates, offering greater certainty to support investment. In line with this, Budget 2007 also announced a package of additional support for biofuels, alongside progress in developing the Renewable Transport Fuels Obligation, including extending the 20ppl duty incentive for biofuels to 2009-10; an extension of the 40ppl biogas duty incentive at least at its current rate until 2011-12; a payable Enhanced Capital Allowance for the cleanest biofuels plant; and a 2% discount in Company Car Tax for vehicles which can run on high-blend biofuels (E85).

In addition, Budget 2007 announced VED rates for 2007-08 and the subsequent two years to further sharpen environmental signals to motorists to purchase more fuel efficient vehicles and continue to support the development of the low-carbon market. This included raising the rate for the most polluting cars (band G) to £300 in 2007-08 and £400 in 2008-09; and reducing the rate for low carbon band B cars to £35 in 2007-08, with that rate then frozen for the subsequent two years.

28. We recognise the environmental benefits of a properly sustainable and well-regulated expansion in the use of high-blend biofuels such as E85. Under the current fiscal regime, however, it is unlikely that the market for high-blend biofuels will take off, due to its increased costs. The Treasury should therefore increase the duty differential available to high-blend biofuels in order to make them cost-competitive. (Paragraph 80)

Government recognises the importance of delivering and developing biofuels such as E85. The Alternative Fuels Framework, published in PBR 2003, affirmed the need for fiscal incentives to reflect environmental benefits of new fuels. Budget 2007 announced the extension of the 20ppl biofuels duty incentive until 2009-10, which will offer further support high blend biofuels. In addition, Budget 2007 also announced that the Government will introduce a 2% discount in Company Car Tax for vehicles which can run on E85 from April 2008.

Government has already provided grants through the Energy Savings Trust to support the development of refuelling infrastructure—some major supermarkets have committed to having flex-fuel pumps on their forecourts—and extended the alternative fuel rate of VED to E85 cars. Furthermore, the Department for Transport are currently consulting on design aspects of the Renewable Transport Fuel Obligation (RTFO). The consultation will consider the role of high-blend biofuels such as E85 in delivering RTFO targets.

29. Our over-riding concern regarding biofuels is that in increasing the volume of biofuels imported into the UK, the Government must ensure that these come from sustainable sources, do not encourage deforestation of tropical rainforests to be replaced with biofuel crops, and minimise the carbon inputs which go into growing the crops and transporting and refining the resulting fuel. On this point, given that a coalition of major environmental organisations has such reservations that it is refusing to support the Government's Renewable Transport Fuels Obligation - in stark contrast, for instance, to their support for the Renewables Obligation in energy generation—we cannot but be disquieted. The Government must do more to implement a truly effective and convincing international sustainability assurance scheme for biofuels. (Paragraph 80)

As highlighted in the Government's response to the Committee last year, the Government is very clear about the need to consider sustainability issues in taking forward the RTFO. A key purpose of the RTFO is to ensure that biofuels are sourced in a sustainable way so as to not damage natural habitats, and to deliver real carbon savings over fossil fuels. That is why the Government will require all transport fuel suppliers supplying biofuel and registering for an RTF certificate to report on the carbon saving and sustainability of the biofuels they have supplied from the start of the obligation. As set out in Budget 2007, work on developing a framework for these reporting schemes is being led by the Low Carbon Vehicle Partnership and is progressing well. The Government will consult on this draft framework shortly. This is being done in partnership with the Dutch Government and the European Commission with the aim of demonstrating how such systems could be developed on an EU-wide basis. We are continuing to press the Commission to develop mandatory minimum standards for carbon and sustainability at EU level.

Ahead of this the Government intends to do everything possible to encourage the use of only the most sustainable biofuels with the lowest carbon intensity, in a way that is compatible with international trade rules. Once experience with reporting has been established, the Government’s intention is to move beyond this and reward different biofuels on the basis of their relative carbon saving performance under the RTFO.

30. Vehicle Excise Duty ought to be reformed to widen the differentials between each band. Band G in particular ought to be raised substantially in cost. The Treasury should at least publish its rationale for the VED differentials it adopts, in terms of the overall impact on the new car market and on average CO_2 emissions per kilometre of new cars it seeks to achieve, and also in terms of the VED charge as a proportion of an average car's sales price and g/km for each VED band. The Treasury should also examine whether differential rates of VAT can be charged on new cars to benefit lower carbon models. (Paragraph 82)

Budget 2007 announced VED rates for 2007-08 and the subsequent two years to further sharpen environmental signals to motorists to purchase more fuel efficient vehicles and continue to support the development of the low-carbon market. This included raising the rate for the most polluting cars (band G) to £300 in 2007-08 and £400 in 2008-09; and reducing the rate for low carbon band B cars to £35 in 2007-08, with that rate then frozen for the subsequent two years. Indeed, the differential between the lowest VED rate and the highest increases by £85 - £90 this year, and by a further £100 next year. When considering the level of VED the Government takes account of all relevant economic, social and environmental factors—including proportionality and fairness to motorists—to ensure that there are appropriate signals across the VED system to encourage the development and purchase of fuel-efficient vehicles.

To push forward technological development, the EU established voluntary agreements with car manufacturers to reduce the average level of carbon dioxide (CO_2) per grammes per kilometre (g/km) for new cars to 140 g/km by 2008-9. Discussions on the detail of a successor regime to the voluntary agreements are currently being held. The European Commission recently published its 'CO_2 from cars' communication, which calls for new mandatory targets for average new car CO_2 to be reduced to 130 g/km by 2012. Coupled with vehicle improvements, for example, tyre pressure monitoring systems, and an increase in the use of biofuels, the Commission proposed that the overall target should be to reduce average new car CO_2 to 120 g/km by 2012. The Government's view is that the objective beyond 2012 should be to reduce average new car emissions to 100 g/km of CO_2. In Budget 2007, the Chancellor announced that Professor Julia King, Vice-Chancellor of Aston University, and Sir Nicholas Stern will lead a review to examine the vehicle and fuel technologies which over the next 25 years could help to 'decarbonise' road transport, particularly cars.

Long-standing agreements with our European partners allow the UK to keep our existing VAT zero rates, but we may not extend them or introduce new ones. Therefore we could not introduce a new zero rate for low carbon emission cars. EU law also sets down a list of goods and services to which a reduced rate of VAT may be applied - of no lower than five per cent. However this list does not currently contain provision for a lower rate to be applied to low emission motor cars.

Waste

31. While we welcome the ongoing decreases in amounts of waste going to landfill, we remain unsure as to the direct impact of the Landfill Tax at current levels in terms of disincentivising landfill use. To aid Parliamentary scrutiny of the workings of this tax, the Treasury should publish analysis which clearly isolates and accounts for the direct disincentivising impacts of Landfill Tax to date. The rate of Landfill Tax should then be increased, steeply, to the level at which it imposes an effective driver against landfill use in its own right. (Paragraph 85)

The Government already provides details of the impact of landfill tax and its other waste policies in the Red Book. Also the quantity of waste sent to landfill is publicly available on the 'UK tradeinfo[1]' website. The Committee will be aware that in PBR 2006 the Government announced that the standard rate of landfill tax, applying to active wastes (those that give off emissions) would increase by a further £3 per tonne to £24 per tonne from 1 April 2007. The Government also stated in Budget 2007 that, from 1 April 2008 and until at least 2010-11, the standard rate of landfill tax will increase by £8 per tonne each year.

32. We are sympathetic to the idea of a broader use of Landfill Tax, or other financial instruments, to guide the development of waste disposal, in particular to incentivise the organisation of waste so as to maximise the material which is recycled, and maximise the energy that can be gained from the rest while minimising the resulting emissions. As a first step, the Treasury should consult on the introduction of an Incineration Tax. (Paragraph 87)

The Treasury keeps all tax options under review. However, the Government confirmed at PBR 2004 that it was not convinced that there is a strong case for the introduction of a tax on incinerated waste.

In 2004, the Government published reports detailing the health and environmental impacts of waste management options, including incineration. The Health and Environment Report (May 2004) showed that the health effects of incineration are small compared with other day-to-day risks. And environmental standards that incinerators have to meet have significantly tightened over recent years and are set to become even tighter.

Incineration has a part to play in the UK meeting its legally binding and demanding Landfill Directive targets, particularly in dealing with the residual waste left even after the much higher levels of waste minimisation and recycling the Government is aiming for are achieved.

However incineration plays a relatively small part in UK waste management. Taking these factors into consideration, the Government does not agree with the Committee's recommendation to consult on the introduction of an incineration tax.

The Government has set and met challenging targets to raise the rate of recycling of household waste. In addition, the Landfill Allowance Trading Scheme limits the volume of waste that local authorities may send to landfill, with authorities able to trade, bank and borrow allowances, incentivising authorities to provide good recycling services to local residents. As a result of these policies and the hard work of local authorities, household recycling rates have increased from 7.5% in 1996/97 to 26.7% in 2005/6.

33. We are not especially convinced by the Treasury's reasons for failing to introduce any taxes on environmentally inefficient products, such as plastic bags,

[1] www.uktradeinfo.com

non-recyclable batteries, and incandescent lightbulbs. There would be a double purpose to such taxes: not only would they disincentivise the use of such products in themselves in favour of more efficient alternatives, but they would help to raise awareness generally as to the desirability to shift whole arrays of purchasing decisions and other daily habits in an environmentally friendly direction. Such taxes would surely not harm the economy or provoke great popular opposition. In cases such as this, the onus should be on the Treasury to provide a convincing reason why *not* to introduce such taxes. (Paragraph 90)

Whilst the Government recognises a potential role for the use of fiscal instruments in encouraging consumers to change their behaviour, there are a number of factors which must be taken into consideration when choosing the most cost-effective and best targeted measure including the distributional impact of such a measure, as well as the cost to both business and Government of administration and collection. Other measures, such as information campaigns or voluntary agreements with manufacturers, may be more effective.

The Committee suggests that such a tax could 'disincentivise the use of such products…in favour of more efficient alternatives', but in the case of the Irish Plastic Bag tax, evidence suggests that the introduction of the charge has led to the use of heavier alternatives, which use more energy to produce and are in fact more harmful to the environment. Indeed, when considering a similar levy in Scotland in 2006, the Scottish Environment and Rural Development Committee concluded: "there are a number of unintended consequences that appear likely to be connected with using the proposed levy to achieve a large reduction in the number of single-use plastic bags issued at checkouts. The net environmental impact of the proposed levy is an issue of considerable dispute in a range of areas."[2]

The Government has instead been working on alternative measures to reduce the impact of such bags and on February 28th announced a voluntary agreement with retailers to reduce the environmental impact by 25% by the end of 2008 across the whole of the UK. Retailers will be reducing the impact of bags by: encouraging customers to reduce the number of carrier bags they use; reducing the impact of each carrier bag (e.g. by using less material or incorporating recycled content); and by enabling the recycling of more carrier bags where appropriate. There will also be further work to encourage carrier bag re-use.

The Chancellor made a similar announcement in relation to light bulbs in a speech to the Green Alliance on 12th March which was reiterated in the Budget. Following work with UK manufacturers, retailers and trade associations, the UK Government aims to become by 2011 the first European country to phase out the use of inefficient general lighting service (GLS) light bulbs, where an efficient alternative exists.

[2] http://www.scottish.parliament.uk/business/committees/environment/reports-06/rar06-12.htm

Acknowledging the potential role of a fiscal measure in supporting this voluntary initiative and encouraging consumers to purchase more efficient alternatives, alongside this announcement the Chancellor also wrote to the European Commission and other European Finance Ministers urging them to introduce a reduced rate of VAT for energy saving materials and energy saving products, including low energy light bulbs.

Energy

34. Our main verdict on the PBR's new announcements on energy policy is that these were welcome but only small steps in the right direction, and that much swifter and bolder action is required. The new measures in this PBR tended to be either well-defined but rather modest in aim, or ambitious but rather vague or lacking in teeth. On Carbon Capture and Storage, for instance, the *main* announcement is of an intention to issue a tender for consultants to help the Government assess whether to fund one demonstration project. As for the headline announcement on household energy efficiency, that all new homes are to become "zero carbon" by 2016, we note that the PBR refers to this as an "ambition", and that the building regulations which are to make it happen will only be "progressively strengthened". Overall, these measures do not represent the kind of radical acceleration of policies and funding we would expect to see following the Stern Review. (Paragraph 91)

The Climate Change Bill sets out the Government's ambitious targets to tackle Climate Change, and the forthcoming Energy White Paper will set out measures to achieve these targets, and also to meet other government objectives, such as security of supply and fuel poverty. The issues and policies are complex so a series of consultations are being held. On many of the issues raised by the Committee, there will be more details to follow in the forthcoming Energy White Paper.

The timetable for the development of government policy on the commercial demonstration of carbon capture and storage (CCS) has been determined by the development of possible projects in the UK. The appointment of consulting engineers announced in the PBR was the appropriate step to understand the costs of the projects which had been developed by the private sector over the previous 18 months since the Government's original expression of interest in Budget 2005. In light of the consultants' report, the Government announced in the Budget the next step, a competition to fund demonstration of Carbon Capture and Storage (CCS) in the UK. Further details will be announced in the Energy White Paper.

The Government consulted industry closely in reaching the 2016 date for making all new homes zero carbon, which they have said is challenging but achievable. Setting a date for zero carbon standards any earlier than 2016 could jeopardise the number of homes that need to be built (Kate Barker's 2004 report into housing supply in the UK made clear that, unless we intervene, only a third of young couples will be able to afford a home of their own in 2025.) It is important that the building regulations are progressively tightened over time to help the housebuilding industry move towards the zero carbon standards and test out new techniques and technologies.

The 2016 timeline is currently an ambition because we needed to consult before we could make it policy. We will be launching our final policy statement later this year which will confirm the timetable to zero carbon homes.

New homes contribute only 1% to the total housing stock each year. That is why are also working to tackle emissions from existing homes, e.g. through Energy Efficiency Commitment (EEC), Decent Homes and Warm Front. And we will be saying more on our approach to reducing emissions from existing homes in the Energy White Paper.

35. Where grant monies are distributed to subsidise heating bills or to subsidise the installation of central heating, this must be complemented in all cases by programmes to make energy efficiency improvements to the same properties. This year's PBR contains a welcome announcement of "£7.5 million to improve the coordination between, and effectiveness of, Warm Front and the Energy Efficiency Commitment". However, when we asked the Treasury whether this means that all households which receive warm front grants will have energy efficiency measures fitted as well, the answer did not suggest such universal coverage. It seems clear to us that the Treasury, for reasons not just of reducing carbon emissions but of social equity and simple value for money, should do more to ensure that grants to subsidise central heating are always paired with energy efficiency improvements. Otherwise, public money will be leaking through doors and rooftops as surely as warm air. (Paragraph 92)

The Government agrees that there are benefits to energy efficiency measures both to those in fuel poverty via reduced fuel bills, and to the environment through reduced energy demand. Indeed, it is expected that carbon dioxide savings from Warm Front and other fuel poverty programmes are expected to be 1.8MtC0_2 by 2010.

Warm Front is the Government's main tool for tackling fuel poverty in the private sector in England, and is a major grant programme for the installation of a range of energy efficiency measures and the provision of energy advice in the private sector. Since the introduction of the Scheme in June 2000 over 1.4 million households have been helped to be warmer and more comfortable in their homes.

We also agree that coordination of efforts is key in minimising cost and maximising efficiencies. For example, Warm Front has a fruitful and symbiotic relationship with energy suppliers working towards their EEC priority group targets. Through a number of forward trading contracts, the Scheme can offer its customers the benefits of both the Warm Front Grant, and EEC measures. Of course, not all households are suitable for cost effective EEC measures and, as such, a commitment that all households receiving Warm Front measures will also get EEC assistance, cannot be provided. That aside, the Government are committed to tackling the issue of fuel poverty, and will continue to explore new and enhance existing opportunities for joined up working, and the potential benefits this could bring to the public.

The Warm Front Scheme was boosted by an additional £140 million announced in the 2004 Spending Review, and augmented further by the Chancellor's announcement in PBR 2005 that an additional £300 million is to be made available across the UK for tackling fuel poverty over the 2005-08 period, of which some £250m will be allocated to boost Warm Front in England. This means that funding for the Scheme during that period will be over £800 million.

At PBR in December 2006, the Chancellor announced a new investment of £7.5 million to improve the effectiveness of Warm Front and the Energy Efficiency Commitment, with about £6.3 million of this being made available for England. This will fund projects aimed at using an area-based approach to identify households and provide a coordinated set of advice and measures to them, reaching up to 300,000 of the most vulnerable pensioner and other vulnerable fuel poor households.

Company reporting

36. We welcome the Government's amendments to the environmental reporting requirements of listed companies, following consultation during the passage of the Companies Bill last year. However, these requirements still fail in certain important respects. Most of all there is no mandatory guidance on the form they must take, nor are there any requirements to have the information that is published independently audited. The former is particularly bad: not only does this undermine transparency and comparability (and thus the main purpose of the requirement), but it also poses a problem to companies themselves. The Government must implement mandatory reporting standards when it reaches its two-year point at which it is to review the workings of the Act. (Paragraph 100)

The requirements for a Business Review contained in section 417 of the Companies Act 2006 will commence on 1st October 2007 and will replace the existing requirements in the Companies Act 1985 for financial years beginning on or after that date. Under section 417, the Business Review is prepared by companies for the benefit of their shareholders to help them in assessing how the directors have performed their duty to promote the success of the company. Section 417 will also introduce an expanded Business Review for quoted companies requiring them, to the extent necessary for an understanding of the business, to report on environmental and other matters.

The Government decided, following public consultation, that it would not make provision for mandatory guidance, on the basis that this would encourage a box-ticking culture rather than encourage directors to give proper consideration to the issues on which they are reporting. Guidance is, however, prepared by the Accounting Standards

Board in the form of a reporting statement, which they will be reviewing and updating as necessary.

The Business Review is part of the Directors' Report and as such is subject to the requirement in section 496 of the Companies Act 2006 that the auditor must state in his report on the company's annual accounts whether in his opinion the information given in the directors' report is consistent with those accounts. Directors are also subject to the duty in section 418 of the Act to make a statement giving assurances as to disclosure to auditors. The Government reached the view following consultation that the significant additional cost burdens of a higher level of audit compliance were not justified.

The Government will conduct an assessment after two years of whether the provisions are working in the way that is envisaged.

Conclusion

37. The Stern Review highlights what is perhaps the central problem of tackling climate change: the need to take profound action before the more serious effects of global warming have begun to be felt. Because of the time-lag between emitting greenhouse gases—especially CO_2—and experiencing their ultimate effects, it means that today's generation will be asked to make sacrifices, change habits, and face higher costs of carbon-intensive activities, in order principally to benefit future generations. To a considerable extent, given the unequal nature both of current per capita emissions and long-term vulnerability to climate change, it also means those in the UK and other Western countries taking bigger actions in the interests of people in poorer countries. All this means that reducing emissions according to the trajectories suggested by Stern will not just be *practically* but—perhaps an even bigger problem— *politically* very challenging. (Paragraph 102)

38. On the practical challenge, the Government can rightly point to a variety of activities which fall within the main policy areas recommended by Stern. But what is required now is for the Government seriously to accelerate its policies, to begin to achieve the kind of steep cuts in emissions Stern demonstrates are necessary. For this reason, we were very disappointed in this year's Pre-Budget Report. The PBR was a grossly inadequate response to the hardening evidence as to the increasing risks of major and irreversible impacts of climate change. Coming in the wake of the Stern Review, the PBR's lack of boldness raises major doubts as to the Treasury's seriousness about implementing Stern's recommendations in domestic policy. However, Pre-Budget 2006 was simply the first major opportunity for the Government to implement the conclusions of the Stern Review. There are many others to come, beginning with Budget 2007, the Climate Change Bill and the forthcoming Comprehensive Spending Review. We look forward to seeing an appropriate response to Stern from the Government in its forthcoming fiscal policy, legislation, and, potentially, machinery of government changes. (Paragraph 103)

39. Beyond this, there is still the political challenge. Most importantly, there needs to be more and better informed discussion of the science of climate change. The Government needs to do more with the Stern Review in this respect, using it as a springboard to raise levels of public discussion about the risks and impacts of global warming and what needs to be done to mitigate them. (Paragraph 104)

40. If there is one key conclusion to draw from the Stern Review it is that we today are living at an important moment: we still have a limited window of opportunity to prevent greenhouse gases growing to dangerous levels. As Stern underlines, once we overshoot a target stock of greenhouse gases it will be very difficult and may be a very slow process to reduce it again. Thus if we fail to act swiftly enough, it may be impossible to reduce greenhouse gases to safer levels for decades or centuries to come—during which time the risks of major irreversible impacts will grow ever larger. But Stern's accompanying argument is that the sooner the world begins to cut its emissions, the easier and less costly mitigation will become. Both conclusions need to be widely discussed. (Paragraph 105)

The Government agrees with the Stern Review that responding effectively to climate change will require tough choices over a prolonged period of time, with significant long-run changes in the structure of the economy. However, it is clear that the global economic consequences of not acting could be disastrous. The Government agrees that there are significant practical and political challenges involved. But, through the Climate Change Programme Review, the Energy White Paper and the draft Climate Change Bill amongst others it has already set out a credible approach to meeting these challenges, and will continue to do so. It is misleading to focus on the PBR which just happened to be the first Government announcement following the publication of the Stern Review; or to judge the Treasury's commitments on the basis of this. PBR was not the appropriate place to announce most of the Government's policies on climate change; and the Treasury's involvement in Government policy-making is not limited to the Budget and PBR.

As the Stern Review highlights, fiscal policy is only one element of a mitigation strategy to avoid the most serious impacts of climate change. Three elements of policy are key: carbon pricing, either through tax, trading or regulation; technology policy to provide support for research, development and deployment; and measures to encourage behavioural change and overcome barriers. The Stern Review made clear the importance of trading across international borders and expansion of trading schemes to cover more sources of emissions, where appropriate and cost-effective. The EU Emissions Trading Scheme (EU ETS) is the Government's carbon pricing instrument of choice, and the UK is committed to building on the EU ETS to ensure that emissions are effectively limited. The more we can trade emissions reductions across international borders, and the more emissions that are covered, the more cost effective it will be for all to achieve challenging emissions reduction targets. Making the carbon market deeper, wider and more liquid will increase its effectiveness in delivering greater emission reductions, and do so at least cost.

Alongside the UK's domestic policies, the Government recognises that if we are to secure an international framework, we must make climate change a priority for Heads of Government and all the key departments in each country that will be affected by climate change, including finance ministries and those responsible for national security, energy, development and foreign policy. Climate change must stop being purely an environmental issue. In advance of the formal UN process that will culminate in Bali in December 2007, the Government is engaging the leaders of the G8 + 5 which includes all the major greenhouse gas emitters, through a series of activities in 2007, including: the G8 + 5 meeting of Environment Ministers in Potsdam in March, the G8 + 5 Development Ministerial, the G8 + 5 Summit in Heiligendamm in June, leading to the Gleneagles Dialogue with Energy and Environment Ministers in September. The EU also has a critical role to play here and the Government will be working closely with the Commission and other Member States following on from Heads of State and Government Spring Council meeting. The International Financial Institutions meetings, especially the World Bank spring and annual meetings are also a key opportunity to push this agenda forwards.

HM Treasury
May 2007

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