The Revision of the EU’s Emissions Trading System

Report with Evidence

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Oral evidence, 2 July 2008

Mr Murray Birt, Senior Policy Adviser, Energy and Mr Matthew Farrow, Head of Environment, Confederation of British Industry; Mr Dwight Demorais, Special Adviser, Lafarge Cement UK
Oral evidence, 9 July 2008

Mr Phil Woolas MP, Minister for the Environment and Mr Niall Mackenzie, Deputy Director Climate and Energy, Europe, Department for Environment, Food and Rural Affairs
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Dr Terry Barker, Director and Miss Annela Anger, PhD Student, Cambridge Centre for Climate Change Mitigation Research
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Mr Miles Austin, Head of European Regulatory Affairs, Ecossecurities; Ms Coralie Laurencin, Associate, Market Development, International Carbon Investors and Services (INCIS); Mr Nick Haslam, Research Analyst, IDEAcarbon, and Mr Sam Fankhauser, Research Fellow, LSE, and Adviser, IDEAcarbon
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Mr David Brash, General Manager, Emissions Trading Group, Ministry for the Environment; Mr John Scott, Senior Analyst, New Zealand Treasury; Mr Stuart Dymond, Senior Policy Officer (Climate Change), Environment Division, Ministry of Foreign Affairs and Trade; and Ms Louisa Gault, Policy Officer (UK, Ireland and Italy), European Division, Ministry of Foreign Affairs and Trade, New Zealand Government
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Mr Damien Meadows, Deputy Head of Unit C.2 ‘Market Based Instruments including Greenhouse Gas Emissions Trading’, Directorate of Climate Change and Air, Directorate-General Environment, European Commission
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http://www.climnet.org/EUenergy/ET/270208NGOETS_briefing.pdf

We would like to take the opportunity to thank all our witnesses for their submissions to our inquiry.

NOTE: References in the text of the report are as follows:
(Q) refers to a question in the oral evidence
(p) refers to a page of written evidence
Both the United Kingdom and the European Union have pinned much of their climate change policy on the effective operation of the EU Emissions Trading System (ETS). Now in its second trading period, scheduled to last until 2012, the fledgling scheme has yet to demonstrate that it can deliver the substantial greenhouse gas emission reductions that will form the yardstick of its success.

In this report, we examine the European Commission’s proposed revisions to the ETS, which would take effect in the scheme’s third trading period, scheduled to last from 2013 to 2020. EU negotiations on these proposals are taking place in parallel to international negotiations on a potential successor to the Kyoto Protocol, which are expected to culminate at the UN Climate Change Conference in Copenhagen in December 2009. We therefore also consider the strategic ramifications of the choices facing the EU as it adapts its Emissions Trading System.

In our view, the EU ETS has tremendous potential: it could deliver sizeable emissions reductions cost-effectively, while also providing a platform for future cooperation with other countries on the creation of a global carbon market. In a number of areas, we therefore call on the UK Government to press for ambitious revisions to the ETS. We support the auctioning of emissions allowances in most sectors from 2013; advocate a stringent, evidence-based approach to the risk of carbon leakage; and recommend that additional sectors be brought within the scope of the scheme providing that their emissions can be reliably monitored and verified.

Balanced against the great promise of the ETS, however, we see considerable risks. Monitoring, verification and enforcement could in our view become a significant challenge: the scheme’s effectiveness hinges on compliance, without which the ETS would not only fail to deliver the desired emissions reductions, but also distort competition among designated participants. This risk is magnified at the international level, and we therefore note with concern that the Kyoto Protocol’s enforcement mechanisms have failed to deter non-compliance. We consequently urge the Commission and the Member States to place a high priority on robust auditing and enforcement mechanisms in adapting the ETS and in the course of international negotiations on a successor to the Kyoto Protocol.

If the EU’s emissions trading scheme is to live up to its full potential, the ultimate aim must be to link it up with emissions trading schemes in other parts of the world so as to make the most of emission reduction opportunities in additional countries and sectors. We warn, however, that the establishment of such links could prove arduous, particularly where alternative designs and approaches lead to significant differences in the price of carbon across different emission trading schemes. We anticipate that the EU may eventually face stark trade-offs between maintaining the environmental integrity of the ETS and extending its reach.

In other policy areas, these risks might signal that prudence is called for, and that the ETS is not yet ready for extension and expansion. We consider that the threat posed by global warming merits a bold response, and therefore support the Commission’s proposal to press ahead with ambitious revisions to the ETS. We nonetheless emphasise that the environmental and economic stakes are formidable.
Revision of the EU’s Emissions Trading System

CHAPTER 1: INTRODUCTION

The Inquiry

1. Last year, the Fourth Report\(^1\) of the United Nations Intergovernmental Panel on Climate Change\(^2\) warned that “eleven of the last twelve years (1995–2006) rank among the twelve warmest years in the instrumental record of global surface temperature (since 1850)”. The report concluded that most of the observed increase is “very likely to result from” an increase in greenhouse gas concentrations caused by human activities.\(^3\) In the previous year (2006), the Stern Review of the Economics of Climate Change described climate change as “a serious and urgent issue” that could be viewed as “the greatest example of market failure” that has ever been seen.\(^4\)

2. Europe has warmed even more than the global average.\(^5\) The cornerstone of the European Union’s strategy for tackling climate change is its Emissions Trading Scheme (ETS). Introduced in 2005, the ETS is the first international trading system for carbon dioxide emissions in the world. Over 10,000 installations in the energy and industrial sectors currently participate in the EU ETS, which is now in its second phase (2008–2012). They are collectively responsible for close to half of the EU’s carbon dioxide emissions and 40 per cent of its greenhouse gas emissions.\(^6\)

3. In January 2008, the European Commission published its proposals for the third phase (2013–2020) of the EU ETS, in the form of a series of revisions to the current scheme.\(^7\) Our inquiry sought to examine these proposed changes, and their implications for climate change policy at national, EU and international levels. The inquiry was motivated by the recognition that both the European Union and the UK Government have placed the EU ETS at the centre of their climate change policy: the scheme’s effectiveness will therefore have far-reaching implications for both the EU and the wider international community’s efforts to tackle global warming.

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2. The IPCC was established by the World Meteorological Organisation and the UN Environment Programme. Recognised as the definitive source of advice on climate change, it publishes regular scientific assessment on climate change.
3. Greenhouse gases, such as water vapour, carbon dioxide and methane, absorb thermal infrared radiation, and in doing so warm the Earth’s atmosphere. They also radiate thermal infrared radiation, and consequently affect the Earth’s surface temperature.
6. The importance of different greenhouse gases in contributing to the greenhouse effect is a function of their strength and their abundance. Methane for example, is a more powerful greenhouse gas than carbon dioxide, but it is present in smaller concentrations. Carbon dioxide (released through activities such as the combustion of fossil fuels and deforestation) is the most significant driver of man-made greenhouse gas emissions.
4. Our report begins with a brief explanation of the basic economic principles underpinning the ETS, an outline of the international and EU-level developments that preceded the Commission’s legislative proposal, and a summary of the proposal itself. We then examine the key provisions of the proposal in detail in Chapters 2–8, presenting our witnesses’ views and our own conclusions and recommendations. We conclude in Chapter 9 by identifying what we regard as the key conditions for a successful EU ETS over the period 2013–2020 and beyond.

5. The inquiry that led to this report was carried out by EU Sub-Committee D, whose Members are listed in Appendix 1. We received written evidence and took oral evidence from a range of witnesses, who are listed in Appendix 2. We are grateful to them all for their contributions and would also like to thank our Specialist Adviser, Alyssa Gilbert (Consultant, Ecofys UK). We make this report to the House for debate.

How does emissions trading work?

6. Emissions trading schemes like the EU ETS are based on the insight—drawn from environmental economics—that markets left to their own devices can fail to provide the signals that would prompt individuals or organisations to factor the environmental costs of their actions into their behaviour. This can result in environmental degradation. Emissions trading schemes are designed to rectify this so-called “market failure” by creating a price signal that should raise the cost of pursuing activities that produce environmentally harmful emissions, and thereby promote changes in behaviour.

7. The EU ETS is a “cap and trade” scheme, meaning that regulatory authorities place a “cap” or ceiling on the overall level of emissions to be permitted, and then issue emissions allowances (permits) that add up to that cap. In the EU ETS, one allowance gives the holder the right to emit one tonne of carbon dioxide, or its equivalent in other greenhouse gases. These allowances are then traded among participants in the scheme, who must surrender allowances equivalent to their emissions to the regulatory authorities at the end of each year.

8. The regulatory authorities overseeing an emissions trading scheme may use one of a number of methods to allocate emissions allowances to participants in the scheme. Allowances can be allocated to participants for free on the basis of their historical emissions (“grandfathering”). Alternatively, allowances can be allocated to participants for free on the basis of their potential emissions if they use a particular technology (“benchmarking”). Lastly, the regulatory authorities may choose to auction allowances to participants in the scheme, allowing those who value the ability to emit the most to bid the highest price. The highest bidders will usually be those who find it particularly difficult or costly to reduce their emissions.

9. The cap on the overall quantity of allowances—reflecting the overall cap on emissions—is what creates scarcity in the market, and therefore makes allowances valuable. For participants, the incentive to reduce emissions lies in the prospect of making money from the sale of unused allowances, or the prospect of losing money by having to buy allowances to cover their emissions. Emissions trading schemes are supposed to deliver emissions reductions cost-effectively because they should prompt those that find it cheap to reduce their emissions to do so, either in order to avoid having to buy emissions allowances or in order to sell excess allowances already in their...
possession. Emission reduction efforts should therefore be concentrated where they are easiest and cheapest.

10. In time, however, even participants who find it relatively expensive to reduce their emissions in the short run may find it worth their while to invest in the development of new technologies that may allow them to cut their emissions in the future and thereby reduce their ongoing expenditure on emissions allowances. An emissions trading scheme with a clear and predictable future trajectory ought therefore to encourage innovation.

The International Context

11. The aim of the EU ETS is to help European Union Member States achieve their commitments to limit or reduce greenhouse gas emissions. These commitments stem from the adoption of the Kyoto Protocol (see Box 1)\(^8\) under the United Nations Framework Convention on Climate Change (UNFCCC).\(^9\) In signing up to the Protocol, the EU committed itself to reduce its greenhouse gas emissions by 8 per cent by 2012 compared to 1990.

**BOX 1**

**The Kyoto Protocol**

Recognising that industrialised countries are primarily responsible for the high levels of Greenhouse Gas (GHG) concentrations in the earth’s atmosphere, the Kyoto Protocol set legally binding emission reduction targets for 37 industrialised countries (so-called “Annex I countries” under the UNFCCC) and the European Community.

Under Kyoto, industrialised countries agreed to reduce their collective GHG emissions by 5 per cent against 1990 levels over the five-year period 2008–2012. Individual emission reduction targets vary from country to country.

Each country’s emissions allowance is expressed in the form of “Assigned Amount Units” (AAU). Should a country have AAUs to spare, these can be traded between countries through an emissions trading scheme.

Under the “Joint Implementation” (JI) scheme, countries may sponsor emissions reductions in other countries with reduction commitments under the Protocol. In so doing, they earn Emissions Reduction Units (ERU) that count as credits against their own targets.

Under the Clean Development Mechanism (CDM), emission reduction projects in developing countries can earn Certified Emissions Reduction (CER) credits, which can be sold and traded, and used by Annex I countries to help meet their emission reduction targets.

Land use, land use change and forestry activities such as reforestation can earn Removal Units (RMU) which can again be used as credits.

The UN maintains the International Transaction Log\(^10\) (ITL) to verify that transactions are consistent with the rules of the Protocol.

12. The Kyoto Protocol was signed in 1997 and entered into force in February 2005 once it had been ratified by the required number of signatories. It has not been ratified by the United States, which accounts for almost 20 per cent of global emissions.

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\(^8\) [http://unfccc.int/resource/docs/convkp/kpeng.pdf](http://unfccc.int/resource/docs/convkp/kpeng.pdf)

\(^9\) [http://unfccc.int/resource/docs/convkp/conveng.pdf](http://unfccc.int/resource/docs/convkp/conveng.pdf)

\(^10\) [http://unfccc.int/kyoto_protocol/registry_systems/itl/items/4065.php](http://unfccc.int/kyoto_protocol/registry_systems/itl/items/4065.php)
man-made greenhouse gas emissions. Meanwhile other large emitters, such as India and China, were exempted from Kyoto’s emission reduction targets due to their status as developing countries. As the Kyoto Protocol is due to expire at the end of 2012, international negotiations on a successor agreement are now underway, with the aim of reaching agreement on a new treaty in December 2009, at the UN Climate Change Conference in Copenhagen, Denmark.

The Evolution of the European Union’s Emissions Trading System

13. The European Union’s Emissions Trading System (EU ETS) was launched on 1 January 2005 and is based on a Directive adopted in 2003.\(^{11}\) The first trading period (Phase 1), described by the Commission as a “learning by doing”\(^ {12}\) phase, ran for three years to the end of 2007. The second trading period (Phase 2) began on 1 January 2008 and runs for five years until the end of 2012, coinciding with the period in which the Kyoto Protocol applies (see Box 2). For the duration of Phase 2, national emissions in sectors covered by the ETS have been capped at an average of around 6.5 per cent below 2005 levels, in order to help ensure that the EU as a whole, and Member States individually, meet their Kyoto targets.

BOX 2

Main Features of the EU ETS 2005–12

**Phase 1 (2005–7)—The “pilot phase”**

- The scheme applied to heavy industries such as electricity generation (but not nuclear and renewable energy); iron and steel; cement, glass and large-scale ceramics production; pulp and paper processing industries; and some other large combustion installations.
- Each Member State was allowed to set its own national emissions limit to reflect its own commitments under the Kyoto Protocol.
- At least 95 per cent of allowances were allocated free of charge. Member States could choose how to allocate these free allowances.
- Member States presented “National Allocation Plans” (NAPs) to the Commission for adjudication, indicating the total quantity of allowances to be allocated, and the allocation methodology to be used.
- Only carbon dioxide emissions were covered by the scheme.

**Phase 2 (2008–12)**

- Building on Phase 1 experience and data, the Commission was able to promote tighter cap-setting through more rigorous oversight of the NAP process.
- At least 90 per cent of allowances will be allocated free of charge.
- More installations are being brought within the scope of the scheme.
- Member States may extend the scope of the scheme to other greenhouse gases.
- The aviation sector is to be brought within the scope of the scheme from 1 January 2012.

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\(^{12}\) European Commission, Memo/08/35, 28.01.2008
14. A number of lessons have been drawn from the first trading period of the EU ETS. The scheme has put a price on carbon dioxide emissions in the sectors to which it applies, and created a market in emissions allowances, as it was intended to do. Trading volumes have risen steeply: over two billion EU allowances worth €37 billion were traded in 2007—a near six-fold increase compared to 2005.

15. However, too many emission allowances were allocated to participants in some Member States and some sectors, with grave repercussions: when it emerged (from 2005 verified emissions data published in 2006) that allowances would not after all be scarce, the price of allowances plummeted. This in turn reduced participants’ incentives to cut their emissions, by bringing down the price of acquiring additional allowances and reducing the profits to be made from selling unused allowances. The environmental benefits delivered by the scheme in Phase 1 are thus expected to be far more limited than had been hoped.

16. The Commission attributes the price crash observed in Phase 1 to Member States’ freedom to set their own “overoptimistic” national caps. This allowed Member States to limit the compliance costs faced by their industries by issuing a large number of emission allowances.

17. Three further problems were also observed in Phase 1. One was the phenomenon of windfall profits in some industries. This occurred when companies that had received emissions allowances free of charge from the authorities nevertheless put up the price of their products or services to reflect the market price of those allowances (the price for which they would be able to sell them on to other participants in the ETS), thus turning a profit.

18. The Commission also observed distortions of competition within and among participating sectors across the Member States, and attributes this to the different approaches taken in different countries to the allocation of allowances and the selection of installations for inclusion in the scheme. Meanwhile the approval of National Allocation Plans (NAPs) proved to be a “long lasting, cumbersome and complex process” according to the Commission, creating considerable uncertainty.

19. In Phase 2 of the EU ETS, the Commission has attempted to rectify some of the problems encountered in Phase 1, for example by evaluating National Allocation Plans for the second trading period more stringently, and by introducing an aggregate emissions cap across the Member States. As Phase 2 of the EU ETS has only just begun, it is too early to tell whether these adjustments will be sufficient to ensure that the ETS delivers the desired environmental results by 2012.

Proposals for the Third Phase of the EU ETS

20. Although some of the lessons learned in Phase 1 of the ETS have already led to adjustments in Phase 2, a more significant overhaul of the scheme was proposed by the Commission in a draft Directive published in January 2008. The proposed changes, which are the subject of this report, would apply from 2013, and create a third trading period lasting until 2020. The main elements of the Commission’s proposal are summarised in Box 3 below, and explored in detail in the rest of our report.

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21. The draft Directive revising the EU ETS is part of a package of energy and climate change measures designed to give effect to a commitment made by EU leaders at the March 2007 European Council to reduce the EU’s greenhouse gas emissions by 20 per cent by 2020 compared to 1990 levels. EU leaders pledged to raise that target to 30 per cent if an international agreement on global emissions reductions meeting certain criteria can be reached.  

**BOX 3**  
Proposed Revisions of the EU ETS  

| A single EU-wide cap on emissions, as opposed to national caps, would be set. The proposed cap would reduce greenhouse gas emissions in sectors covered by the ETS by 21% compared to 2005 levels. In Chapter 2, we consider some of the issues at stake, including whether the ETS sectors are making an appropriate contribution to the EU’s overall emissions reduction target relative to non-ETS sectors, and whether an EU-wide cap is desirable. |
|---|---|
| A number of new industries—for example petrochemicals, ammonia, and aluminium—would be brought within the scope of the EU ETS from 2013. Emissions of some new gases, namely nitrous oxide and perfluorocarbons, would also become part of the scheme. In Chapter 3, we consider whether the sectors to be included and excluded from the ETS are appropriate, and at what stage and under what conditions additional sectors might be brought into the scheme. |
| Over the 2013–2020 period, a much larger proportion of emissions allowances would be auctioned, rather than allocated to participants free of charge. Harmonised, EU-wide rules for allocating free emissions allowances would be adopted. In Chapter 4, we consider what the best method for allocating allowances is, whether that may vary across sectors, what uses auction revenues should be put to, and whether this should be prescribed at EU level. |
| Sectors deemed at risk of “carbon leakage”—that is, the relocation of emissions-intensive activities to third countries, or the loss of market share in emissions-intensive industries to third countries—would receive special protection. In Chapter 5, we consider how sectors at risk of carbon leakage should be identified, what protective measures might be appropriate, and the timetable for such decisions. |
| It is proposed that the Commission guidelines for monitoring and reporting emissions be replaced by two Regulations, on monitoring and reporting and on verification and accreditation, in order to ensure consistency across the EU. In Chapter 6, we consider whether such harmonisation is necessary, and whether the compliance regime associated with the ETS is adequate. |
| From 2013, access to external credits (from emission reduction projects in third countries) to meet ETS obligations would be restricted substantially. Should a satisfactory international agreement replacing Kyoto be reached, this restriction would be loosened. In Chapter 7, we consider what proportion of emissions reductions should be taking place within EU borders rather than in third countries, and what type of qualitative restrictions on external credits would be appropriate. |
| It is proposed to extend the linking provisions of the ETS to include not only links with the emissions trading schemes of other industrialised countries that have ratified the Kyoto Protocol, but also links with any national or regional cap-and-trade system whose design features would not undermine the environmental integrity of the ETS. In Chapter 8, we consider whether such links would be feasible, and under what conditions they should take place. |

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22. The package includes proposals on greenhouse gas emission reductions in sectors not covered by the ETS\textsuperscript{19}, on carbon capture and storage (CCS)\textsuperscript{20} and on renewable energy\textsuperscript{21}. The aim of the latter proposal is to ensure that by 2020, 20 per cent of total EU energy consumption will come from renewable sources. We examine that target and its implications for the UK in our recent report, “The EU’s Target for Renewable Energy: 20\% by 2020”\textsuperscript{22}.

23. In order to achieve an overall reduction in EU greenhouse gas emissions of 20 per cent by 2020 compared to 1990 levels, the Commission has calculated that the EU ETS should contribute a 21 per cent reduction in emissions (compared to 2005 levels) in sectors within the scope of the ETS by 2020. This translates into a linear tightening of the overall “cap” on emissions of 1.74 per cent per year between 2013 and 2020. For sectors outside the scope of the EU ETS, emission reductions of around 10 per cent (again compared to 2005 levels) will be necessary.

24. The Commission’s proposals for the third phase of the EU ETS are the subject of ongoing negotiations in Brussels among the European Union institutions. As the European Parliament and the Council of Ministers have equal responsibility for the legislation, negotiations have been taking place with the European Parliament on the basis of the amendments to the draft Directive adopted by its Environment Committee on 7 October 2008\textsuperscript{23}. At the time of writing, it is expected that political agreement on the draft Directive will be sought in December 2008.

\textsuperscript{19} COM (2008) 17, 23.01.2008
\textsuperscript{20} COM (2008) 18, 23.01.2008 Carbon capture and storage (CCS) is the capture of CO\textsubscript{2} from industrial installations and its storage in geological formations.
\textsuperscript{21} COM(2008) 19, 23.01.2008
\textsuperscript{22} European Union Committee, 27th Report (2007–08) (HL 175)
\textsuperscript{23} European Parliament, A6–0406/2008

The issue

25. In this chapter, we consider whether the EU’s overall 20% emissions reduction target is appropriate, and whether it should be automatically increased to 30% in the event of a new international agreement on global emissions reductions. The issues at stake include the desirability of an EU-wide cap, the appropriate level of environmental ambition, the degree of predictability required by industry and the desired content of an international agreement.

Content of the proposal

26. The proposal forms part of the overall package of measures (see paras. 21–22 above) through which the EU aims to reduce greenhouse gas emissions by 20 per cent by 2020 compared to 1990. At the March 2007 European Council, EU leaders pledged to raise this target to 30 per cent by 2020 should an international agreement committing developed countries to mandatory reductions of GHG emissions “in the order of 30 per cent by 2020 compared to 1990” 24 and economically more advanced developing countries to an adequate contribution “according to their responsibilities and respective capabilities” 25 be reached.

27. In order to ensure that the EU can achieve the minimum 20 per cent emission reduction target, the Commission proposes that an EU-wide emissions cap should be introduced for the EU ETS trading sectors, replacing National Allocation Plans (see Box 2), which included national caps. Starting from 1,974 million tonnes of carbon dioxide in 2013, the EU ETS cap will decrease by 1.74 per cent per year, arriving in 2020 at a reduction of 21 per cent below reported 2005 emissions. This corresponds to a reduction of 11 per cent compared to the average Phase 2 cap of 2,082.68 million tonnes. These provisions will be amended if an international agreement is reached.

28. The proposal’s reference to a future international agreement refers to the commitment made in December 2007 at the UNFCCC’s 13th Conference of the Parties (COP) in Bali, in the so-called “Bali Road Map”, 26 to reach agreement on a successor to the Kyoto Protocol at the 15th COP in Copenhagen in December 2009. In the Road Map, the Parties to the UNFCCC recognised that deep cuts in global emissions will be required to achieve the ultimate objective of the UN Convention, namely limiting human-induced climate change to a safe level 27, and considered that a future agreement should encompass climate change mitigation, adaptation to climate change, provisions on technology development and financial mechanisms.

24 European Council Conclusions, 8–9 March 2007, Paragraph 30
25 Ibid, Paragraph 31
27 According to Article 2 of the Convention, its ultimate objective is “to achieve stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”.
29. Any future international agreement would be ratified by the Community and the Member States. Depending on whether or not the Lisbon Treaty comes into force, the European Parliament would either be consulted on ratification, or would be required to give its formal assent to the agreement.

EU-wide Cap

30. All witnesses supported the setting of an EU-wide cap that diminished over time. The Confederation of British Industry (CBI) considered that the robust cap with a clear trajectory over a fixed time period provided business with the necessary certainty (position paper, p.3). This view was echoed by Niall Mackenzie (Deputy Director, Climate and Energy, DEFRA28), who stated that the Commission proposal “is giving certainty to investors by sending a long term signal as to where the carbon price is going, by gradually reducing the cap” (Q 95). The Cambridge Centre for Climate Change Mitigation Research (4cmr) felt that the progressive tightening of the cap was required to demonstrate climate leadership (Memorandum, para.4).

31. Euracoal and the British Cement Association (BCA) expressed concern about the 21 per cent reduction in emissions to be delivered by the cap. They considered that, by choosing 2005 as the reference year and by imposing an identical reduction of 21 per cent for all Member States, “reductions achieved between 1990 and 2005 are penalised” (Euracoal Memorandum, p.162 and BCA Memorandum, para. 8.2).

Overall target

32. Witnesses’ opinions were divided on the level of the overall target (20 per cent) and the automatic move from a 20 per cent target to a 30 per cent target should an international agreement be reached. DEFRA supported the certainty provided by an automatic move from 20 per cent to 30 per cent (Q 89). The CBI warned, however, that an automatic change on the basis of a weak international deal would leave EU business exposed (Q 131). Other witnesses such as the British Cement Association (BCA), British Lime Association (BLA) and Centrica, pointed out that doubts about the nature of an international deal created uncertainty for business (BCA Memorandum, para. 8.5; BLA Memorandum, p.117; Centrica Memorandum, para. 2).

33. In order to protect EU business against the possibility of a stringent emissions reduction target in the context of a weak international agreement, the CBI argued that any international agreement should be evaluated against criteria written into the ETS Directive and that the decision on how and when the EU’s emission reduction targets are increased as part of an international agreement should be scrutinised through the co-decision29 procedure (Q 131). The Spanish Government agreed that the co-decision procedure should be applied in this instance (Memorandum, para. 7). The European Commission explained that the switch to a 30 per cent reduction would happen automatically from the year after the EU as a whole had ratified the Copenhagen agreement, a process that would itself involve the European Parliament (QQ 395–6).

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28 Department for Environment, Food and Rural Affairs

29 The co-decision procedure is the EU decision-making procedure under Article 251 of the EC Treaty, whereby the European Parliament and the EU Council of Ministers have equal powers in the adoption of a piece of EU legislation, following a proposal by the European Commission.
34. On the level of the overall target, the World Wide Fund for Nature (WWF) and the Church of England favoured the imposition of an immediate 30 per cent target, a reduction to be achieved entirely within the borders of the EU without the possibility of offsetting emissions in the EU with emission reduction projects outside the EU (WWF Memorandum, p.179 and Church of England Memorandum, para. 8). The Royal Society for the Protection of Birds (RSPB) and Client Earth took the view that the EU should be advocating emissions reductions of around 40 per cent (RSPB Memorandum, para. 1.3; Client Earth Memorandum, para. 2.4) by 2020. A 40 per cent target would still be in line with the levels (25–40 per cent) recommended by the IPCC in its Fourth Assessment Report as those required to achieve the EU’s target of limiting the global temperature increase to 2°C over pre-industrial levels. The latter target was most recently endorsed by the EU’s Council of Environment Ministers on 20 October 2008.

35. Dr Terry Barker (Chairman of the Cambridge Centre for Climate Change Mitigation and Research—4cmr) went one step further by proposing an overall 50 per cent reduction target (Q 221). 4cmr argued in its written evidence that the low level of ambition of the overall 20–30 per cent target was reflected in the prevailing carbon price (€20–25 per tonne of CO₂ emitted), which is too low to induce substantial emissions reductions. In its view, a tighter target would lead to a higher carbon price and greater incentives to invest in expensive new technologies such as carbon capture and storage (Memorandum, para. 4). Client Earth emphasised, however, that carbon pricing on its own would not deliver new technologies and that specific strategies, such as the new proposed legal framework for carbon capture and storage (see Box 4) setting out the conditions under which carbon may be captured and stored, were required (Memorandum, para. 2.7).

International Negotiations

36. The CBI expressed concern that international negotiations might result in “a fairly loose and weak agreement” that was then accepted as the best possible deal (Q 131). This element of uncertainty was also highlighted by the International Chamber of Commerce (ICC) UK, which emphasised the need to provide certainty and predictability for operators and investors through to 2020. The ICC UK also recognised that this need must be balanced against the importance of flexibility in the Directive in view of ongoing international negotiations (Memorandum, para. 18).

37. In view of those international negotiations, DEFRA emphasised that it was useful to take a 20 per cent target as the starting point, given that the EU’s interlocutors were likely to press the EU to move further than it had already (Q 89). Speaking on behalf of the New Zealand Ministry of Foreign Affairs and Trade, Mr Dymond noted that it would be useful for the EU ETS “to retain some flexibility in its design to reflect what agreement comes out of the UN process” (Q 362).

38. Ms Coralie Laurencin (Associate, Climate Change Capital and Associate, Market Development, INCIS—International Carbon Investors and Services)

32. COM(2008) 18, 23.01.2008
deplored the uncertainty surrounding the move to a 30 per cent target but recognised that the Commission’s conditional approach was intended to encourage other countries to sign up to a strong international deal (Q 308). She considered that the uncertainty was justified by the higher ambition of providing a global framework that would create business opportunities and provide emissions reductions on a wider scale (Q 310).

39. Phil Woolas MP, Minister of State, suggested that EU negotiators had two strong cards in their hands in international negotiations. First, they should demonstrate that the ETS was delivering emissions reductions. The Commission has indicated that the EU ETS will deliver emissions reductions of 6.5% in the second trading period compared to 2005 verified emissions. Second, negotiators should demonstrate that the ETS was delivering a flow of finance to developing countries (through external credits and direct assistance for adaptation to climate change) and, in turn, successfully reducing emissions in those countries (Q 167).

40. Dr Barker (4cmr) proposed three key arguments that might be deployed to persuade the BRIC advanced developing countries (Brazil, Russia, India and China) to agree to emissions reductions. First, he highlighted the health care savings that could be secured by reducing air pollution. This argument was supported by a February 2008 OECD paper which explained that the largest benefits from air pollution improvements would occur in some of the most rapidly urbanising areas of South Asia, as well as in China, Russia and North America. Second, he stressed the economic benefits to be derived from technological development. Third, he argued that there could be potential for developing countries to secure more funds from the “old economies” to help them to adapt to climate change (Q 294).

41. Speaking in April 2008, Mr Shyam Saran (Special Envoy of the Indian Prime Minister on Climate Change) emphasised that it was to India’s advantage to build a low-carbon economy due to the constraints of existing energy sources on economic growth. He stressed, however, that such efforts would be a national decision dictated by India’s own growth choices rather than by multilateral negotiations on climate change (Memorandum).

42. Mr Saran explained that India’s negotiating stance for any post-2012 international agreement would be founded on the “polluter-pays principle”, on the basis of which it would not be reasonable to oblige India to make any emissions reductions. In support, he argued that over the period 1850–2000, the US represented 30 per cent of cumulative carbon dioxide emissions and the EU-25 represented 27.2 per cent of such emissions. Over the same period, China represented 7.3 per cent and India was responsible for only 2 per cent of cumulative emissions. It was therefore appropriate that developed countries should assume their “historical responsibility” for past emissions (Memorandum). Looking forward, however, the OECD (see para. 40) projects that emissions from the BRIC countries are likely to increase by 63 per cent by 2050 compared to 2005. This is contrasted with a projected

33 SEC(2007)52, p.15
35 The polluter-pays principle is the economic principle under which any polluter should face the full social costs of pollution caused.
increase of 26 per cent in emissions from OECD countries, most of which are developed countries.

43. EU Environment Ministers concluded on 20 October 2008\(^{36}\) that, on the basis of IPCC information (see para. 34), developing countries would have to reduce their emissions by 15 to 30 per cent below business as usual\(^ {37}\), which could be achieved initially through slowing emissions growth and then reducing emissions. Ministers underlined that the least developed countries should not be subject to obligatory emission constraints, but that economically more advanced countries “should contribute adequately according to their responsibilities and capabilities”. Finally, they called on developed countries to propose, by mid-2009, economy-wide medium-term targets that involved a comparable level of effort to that proposed by the European Union.

Conclusions and Recommendations

44. Like all of our witnesses, we welcome the application of an EU-wide cap supported by a clear trajectory for emissions reductions over time, as it should deliver a level playing field and provide industry with the certainty that has been lacking in the ETS thus far.

45. We agree with the UK Government that the proposed change from a 20 per cent emissions reduction target to a 30 per cent target by 2020, conditional on reaching an international agreement, is desirable. A unilateral 20 per cent target would be less helpful in achieving the desired global reductions than a 30 per cent target alongside an international agreement. A 20 per cent target would also fall below the 25–40 per cent target range recommended by IPCC scientific advice. However, we believe that the change should be conditional on a credible and robust international agreement so as to ensure that EU businesses are not placed at a competitive disadvantage in world markets.

46. As agreed by the European Council in March 2007, an international agreement should include a commitment by developed countries to mandatory reductions of greenhouse gas emissions in the order of 30 per cent by 2020 and a commitment by economically more advanced developing countries to an adequate contribution according to their responsibilities and respective capabilities. We urge the Commission and the Member States to adhere to these minimum conditions.

47. Some advanced developing countries’ argument that developed countries ought to take “historical responsibility” for the cumulative impact of their historical emissions is compelling, but we consider that the threat posed by climate change—not least to the very countries taking that position—is sufficiently grave that advanced developing countries must commit to binding emissions reductions. Persuading these countries to take on such commitments will be particularly difficult and, as a quid pro quo, we accept the UK Government’s contention that increased financial flows to developing countries, through external credits and direct assistance

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\(^{37}\) The level of emissions if no mitigation actions were to be taken.
for adaptation to climate change, will be an essential bargaining tool in the negotiations.

48. We believe that a final decision on the emissions reduction target for 2020 should be reached as early as possible following the conclusion of negotiations on an international agreement, in order to provide the certainty that would enable industry to make the appropriate investment. We see no compelling reason for the decision to be adopted through the co-decision procedure as this would prolong the period of uncertainty, and risk re-opening negotiations on the climate change package as a whole, which will already have been agreed by the European Parliament and Council through the co-decision procedure. It is crucial, however, that the details of the agreement are scrutinised by the Member States and the European Parliament as provided by the Treaty.
CHAPTER 3: SCOPE

The issue

49. In theory, an emissions trading scheme should include as wide a range of sectors and installations within its scope as possible. This chapter explores which sectors appear to be ripe for inclusion in the ETS and considers the factors that should be taken into account in future when deciding whether to extend the scope of the ETS.

Content of the Proposal

50. The revised ETS clarifies and extends the scope of the scheme which, according to the Commission will increase the overall coverage of the EU ETS by up to 150 million tonnes of carbon dioxide, or an increase of 7.1 per cent compared to Phase 2. An important clarification is the inclusion in Article 3 of a definition of a “combustion installation”. Alternative interpretations of this led to inconsistent application of the Directive across the EU in Phase 1.

51. The new sectors to be brought within the scope of the scheme include non-ferrous metals, rock wool or stone wool, gypsum products, various petrochemicals, ammonia, soda ash and sodium bicarbonate. CO₂ emissions from these new sectors will be included, as will nitrous oxide emissions from some specific petrochemicals and perfluorocarbon (PFC) emissions from the aluminium sector.

52. Installations providing for the capture, transport and geological storage (CCS) of GHG emissions will be included in the Directive but emissions that are then captured and stored safely will not count as emissions. Consequently, installations would be able to sell their allowances back onto the market rather than surrender them to the regulatory authority at the end of the compliance period. The proceeds raised from the sale create the incentive to invest in the new technology. Carbon dioxide, methane, nitrous oxide, PFCs, hydrofluorocarbons and sulphur hexafluoride are all included as gases eligible for inclusion in the scheme under the capture, transport and storage provision.

BOX 4

Carbon Capture and Storage

Carbon dioxide capture and geological storage (CCS) involves the capture of carbon dioxide (CO₂) from industrial installations, its transport to a storage site and its injection into a suitable geological formation for the purposes of permanent storage. The major application for CCS technology is to reduce CO₂ emissions from fossil fuel generated power and it can also be applied to other CO₂ intensive industries. CCS is at a demonstration phase, but the Commission considers that its uptake on a commercial scale is likely to begin some time around 2020, by which time all new coal-fired power stations should be built with CCS, and existing plants should progressively follow suit. The Commission is committed to stimulating the construction and operation of up to 12 demonstration plants by 2015.

53. Aviation is also to be brought into the scope of the ETS from 1 January 2012 following the recent agreement between the European Parliament and the
Council\textsuperscript{38}. The existing provision allowing for the unilateral inclusion of additional activities and gases by Member States is unchanged.

54. As far as the sectors excluded from the proposal are concerned, the Commission is insistent that the ETS should only extend to emissions which are capable of being monitored, reported and verified accurately. For this reason shipping, road transport, agriculture and forestry are not included, although shipping in particular may be included at a later stage following a “fully fledged dedicated impact assessment”\textsuperscript{39}.

55. The revised scheme aims to reduce administrative costs by allowing small emitters to be subject to alternative measures as such businesses are responsible for a very small proportion of total emissions. Currently, the scheme is limited to combustion installations with over 20MW of rated thermal input but this will now be combined with a \textit{de minimis} threshold allowing businesses emitting less than 10,000 tonnes of carbon dioxide per year and with a rated thermal input of less than 25MW to be excluded from the scheme.

56. Small emitters and emitters in sectors excluded from the ETS will be subject to alternative GHG emissions reduction measures. According to the proposal relating to non-ETS sectors (the “burden-sharing” proposal\textsuperscript{40}), efforts in those sectors should contribute a 10 per cent reduction in emissions across the EU by 2020 compared to 2005, with each Member State responsible for different levels of effort. The United Kingdom is required to reduce its emissions from non-ETS sectors by 16 per cent. Reductions can be achieved by EU-level or national-level measures such as the UK’s Carbon Reduction Commitment (CRC). This is a new domestic climate change and energy saving carbon trading scheme covering around 5,000 large business and public sector organisations\textsuperscript{41}.

**Overall Scope**

57. A DEFRA official explained that “the ultimate aim is to have a global carbon market”, including as many sectors as possible in order that “the emissions reductions are done at the least cost in the most economically efficient manner” (Q.90). He indicated, however, that further analysis was required, noting that “if you include a big sector like transport or forestry it will have an impact on the price of allowances in the ETS” (Q 95).

58. The Environmental Industries Commission (EIC) recognised that “a central principle of emissions trading is that it allows for required carbon savings to be achieved in the most cost-efficient way” but that “for this to be the case the EU ETS must include as many sectors as is practical” (Memorandum, para.2). Similarly, the CBI explained that “the broader the scope of an emissions trading scheme (both in terms of sectors and gases included), the

\textsuperscript{38} European Parliament legislative resolution of 8 July 2008 on the Council common position for adopting a directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community


\textsuperscript{40} Proposal for a European Parliament and Council Decision on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020.

\textsuperscript{41} http://www.defra.gov.uk/Environment/climatechange/uk/business/crc/index.htm
more effective the scheme should be in identifying and realising the most cost-effective abatement opportunities” (Position Paper, p.3).

Exclusion of agriculture and forestry

59. Most of our witnesses, including the Environment Agency (EA), WWF, 4cmr, RSPB and the Scottish Executive agreed that agriculture and forestry should not be included in the ETS at this stage, emphasising that further work was required on monitoring, reporting and verification (EA Memorandum, para. 3.2.3; WWF Memorandum, para. 2; 4cmr Memorandum, para.2; RSPB Memorandum, para. 2.2 and Scottish Executive Memorandum, p.176). The Aluminium Federation shared the view that agriculture and forestry should be excluded but differed in its reasoning, arguing that these sectors should not be included because “the costs of abatement … are not comparable to those of an industrial installation” (Memorandum, para.2).

60. By contrast to most witnesses, the New Zealand government took the view that agriculture and forestry could be included in the EU ETS, pointing out that those sectors were to be included in New Zealand’s emissions trading scheme (Memorandum, para. 14). On behalf of the New Zealand Treasury, Mr John Scott explained that their inclusion in the New Zealand scheme was driven by the fact that they accounted for around 70 per cent of the country’s GHG emissions (Q 345). This contrasts with the UK where, according to DEFRA, the agriculture, forestry and land management sector accounted for around 7 per cent of GHG emissions in 2004, with a particularly high concentration of nitrous oxide and methane emissions.

61. Forestry is being integrated into the New Zealand scheme from 2008 and its emissions are assessed on the basis of change in land area (deforestation and afforestation), and average growth rates. Mr Scott considered that this basis for assessment “is giving a pretty powerful economic signal and is certainly driving behaviour now” (Q 345). Agriculture would not be included in the scheme until 2013 and the precise design was still being finalised, but emissions were likely to be assessed largely at a processor level, rather than at the individual farm level (Q 345). Mr David Brash of the New Zealand Environment Ministry noted that there would be significant compliance costs if the scheme were to be applied at the farm level as there were 30,000 farms compared to 100 processors (Q 348).

62. DEFRA indicated that the UK Government was undertaking analysis on the inclusion of agriculture, taking into account the New Zealand approach (Q 92). Officials warned, however, that, “you have to avoid creating an incentive whereby you reduce the number of cows and sheep in our fields but we import more meat and lamb” (Q 109).

Exclusion of Road Transport and Shipping

63. The Environment Agency suggested that the inclusion of road transport and shipping in the ETS should be subject to further analysis, including an assessment of the administrative cost in comparison to alternative measures to cut emissions (Memorandum, para. 3.2.5). The CBI was more sceptical about bringing both shipping and surface transport in. It considered that the

ETS had gone as far as it could and that “it might be better for some of the other sectors to work on other policy measures”, such as the Carbon Reduction Commitment in the UK (Q 160).

64. Greenpeace UK and the Environmental Industries Commission (EIC) supported the inclusion of shipping (Q 44 and EIC Memorandum, para.2) but Greenpeace considered that other legislation, such as the draft Regulation on CO₂ emissions reductions from new passenger cars⁴³, was the more appropriate tool to deal with emissions from road transport (Q 45).

65. The European Commission explained with regard to shipping that “the data is generally of very poor quality” (Q 398), with estimates of annual emissions ranging from 500 million tonnes to one billion tonnes. The Commission recognised that shipping should be included in the EU’s overall emissions reduction target, whether that be within the ETS or within the non-ETS burden-sharing Decision. We were told that “the Commission sees shipping as a promising candidate to include in emissions trading” and a proposal “may come in 2010” (Q 398).

66. EU Environment Ministers⁴⁴ concluded on 20 October 2008 that any international agreement reached in Copenhagen should include both the aviation and shipping sectors, and that there was a need for enhanced cooperation with the International Civil Aviation Organisation (ICAO) and the International Maritime Organisation (IMO) to decide on measures to control emissions in those sectors. The Commission noted that the IMO had previously been slow to act and very recently had failed to make progress (Q 398).

67. On 7 October 2008, the European Parliament’s Environment Committee took the view that shipping should be incorporated into the EU ETS from 2013 following a proposal from the European Commission accompanied by an impact assessment. In the meantime, the Committee argued that shipping should be included in the proposal on the reduction of greenhouse gases outside the ETS.⁴⁵

Carbon capture and storage

68. Commenting on the inclusion of Carbon Capture and Storage, DEFRA officials explained that it was generally considered that if CO₂ were to be buried, the holders of the allowances for those tonnes of CO₂ should not be forced to surrender them, and that this emerging technology should therefore be included (Q 94) as proposed by the Commission. Euracoal anticipated that CCS probably could not make a substantial contribution to climate protection before 2020 (Memorandum, p.162). The Confederation of UK Coal Producers (CoalPro) explained that CCS technology could not be retro-fitted to the UK’s existing coal-fired power plants for efficiency reasons and, while it could be fitted to new plants, CCS would not be demonstrated commercially until 2014 (Memorandum, para.4).

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⁴⁵ European Parliament, A6–0406/2008 Amendments 2 and 24
69. In its impact assessment, the European Commission considered that “recognition of CCS under the ETS will have a major impact on CCS deployment and thus on relevant research and development”. The recognition of CO₂ captured and stored will, according to the Commission, provide the incentive for the deployment of CCS where it is cheaper to do so than to surrender allowances. The Commission emphasised in its Communication, “Supporting Early Demonstration of Sustainable Power Generation from Fossil Fuels” that efforts to make CCS commercially feasible in the EU by 2020 must be supported by public policy, including investment of around €1billion on research and development.

Exclusion of small emitters

70. There was widespread support among witnesses for the exclusion of small emitters from the scope of the scheme. explained that this was necessary to avoid high administrative costs for governments and businesses (Memorandum, para.2). The CBI emphasised that, while small emitters should certainly be excluded, they should nonetheless be subject to a comparable domestic carbon restraint (Position Paper, p.7). Phil Woolas MP (Minister of State, DEFRA) explained that in the UK, any installation eligible for exclusion would be covered by a Climate Change Agreement or the Carbon Reduction Commitment.

71. Some witnesses considered that the threshold defining small emitters was too low. The Aluminium Federation (AlFed) and the CBI proposed that the threshold be raised from 10,000 to 50,000 tonnes of CO₂ per annum (AlFed Memorandum, p.109 and CBI Position Paper, p.7). The CBI explained that this would remove 70 per cent of emitters but only five per cent of emissions from the scheme (Q 151). DEFRA officials explained that the UK Government was proposing to raise the minimum threshold to 25,000 tonnes of CO₂ per annum. They noted, however, that this would be a complicated task, as the threshold would cut through the middle of some sectors and might therefore distort competition (Q 92). Business Europe agreed that the threshold should be at least 25,000 tonnes (Memorandum, para. 1).

72. The Aluminium Federation expressed particular concern that secondary aluminium companies above the de minimis threshold would be included in the ETS. It anticipated that this would affect UK recycling operations which, according to the Aluminium Federation, should be exempted due to the energy savings of up to 95 per cent that result from recycling of aluminium compared with the production of primary aluminium (Memorandum, p.106).

Emissions reduction instruments outside the ETS

73. The reduction of emissions in sectors outside the ETS was not a focus of our inquiry but we did receive comments on the share of emission reductions to be borne respectively by ETS and non-ETS sectors. The CBI considered that the balance “may actually be broadly appropriate for the UK” (Q 153). The

46 SEC(2008)52, p.50
48 Climate Change Agreements allow energy intensive business users (in the UK) to receive an 80 per cent discount from the Climate Change Levy (a tax on the use of energy) in return for meeting energy efficiency or carbon saving targets.
British Cement Association (BCA), however, took the view that the non-traded sectors should do more to combat climate change (Memorandum, para. 8.4). Business Europe considered it “essential that the right signals are given to Member States to reduce emissions within all sectors, particularly households, where cost-effective investments can be found” (Memorandum, para. 2.6).

74. In relation to action in the UK outside the ambit of the ETS, Mr Woolas (Minister of State, DEFRA) noted that the overall regulatory framework was to be found in the Climate Change Bill (Q 196) which, at the time of writing, was completing its passage through Parliament. The legislation sets a long-term legally binding framework for the reduction of GHG emissions in the UK. On 16 October 2008, the Secretary of State for Energy and Climate Change, the Rt Hon Ed Miliband MP, announced that the Climate Change Bill would be amended to increase the UK’s emissions reduction target from 60 per cent to 80 per cent by 205049.

75. Mr Woolas argued that the Carbon Reduction Commitment (CRC—see para. 56) “will have a much bigger effect than anything else we have done” in changing the behaviour of public and private sector finance directors (Q 196). DEFRA officials explained that the CRC would complement the ETS by incentivising businesses further to use energy efficiently (Q 88).

Conclusions and Recommendations

76. If the EU’s Emissions Trading Scheme is to achieve its fundamental objective of delivering GHG reductions as cost-effectively as possible, it must eventually include as many sectors as possible. However, sectors should only be included if their emissions can be reliably monitored and verified. In view of the quality of data and methodology currently available, we support the proposed scope of the EU ETS from 2013, but recommend that this aspect of the Directive be kept under regular review.

77. We note that the inclusion of agriculture and forestry sectors in the EU ETS may pose particular practical difficulties due to monitoring and verification problems and the large number of small enterprises involved. We nonetheless consider that these sectors have a major role to play in reducing greenhouse gas emissions, and urge both the Commission and the UK Government to accelerate work on assessing how those sectors can contribute most cost-effectively to a reduction in greenhouse gas emissions, drawing lessons from the experience of other countries.

78. Swift action must also be taken to tackle emissions from shipping. If a sectoral agreement cannot be reached through the International Maritime Organisation in the near future, we believe that the sector’s inclusion in the EU ETS should be given serious consideration, and should be delayed no further than 2013 for the largest emitters in the sector.

79. The development of a reliable and commercially viable method of decarbonising coal is urgently necessary, as coal is likely to remain a significant—and growing—source of energy. We therefore wish to see significant investment in carbon capture and storage, to establish

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49 HC Deb 16 October 2008 cols 935–7
whether this technology could meet that need. We support the provision in the draft Directive stipulating that operators need not surrender allowances for emissions that have been captured and stored, as it should help to stimulate such investment.

80. We accept that the *de minimis* emissions threshold proposed in the draft Directive may be too low, and that a large number of small emitters accounting for a relatively small proportion of overall emissions could be removed from the scope of the ETS in the interests of better regulation. **We would therefore support a raising of the *de minimis* threshold as proposed by a number of our witnesses.**

81. We note, however, that unintended consequences may flow from a *de minimis* threshold, such as incentives to build smaller, possibly less efficient installations, **and recommend that such effects be monitored closely and pre-empted where possible.** In this respect, we welcome the Government’s assurance that small installations in the UK that are excluded from the scope of the ETS will instead be covered by the Climate Change Agreement scheme or by the Carbon Reduction Commitment.

82. We note that the UK Government is making some efforts outside of the ETS to tackle climate change but we **would urge the Government to intensify its pursuit of cost-effective emissions reduction measures across the economy, particularly in sectors remaining outside the ETS such as agriculture, forestry and road transport.** Emissions reductions in other parts of the economy are no less important than those within the sectors and installations covered by the ETS.
CHAPTER 4: ALLOCATION AND AUCTIONING

The issue

83. The fair and transparent allocation of emission allowances is an important principle of emissions trading. In this chapter, we consider whether allowances should be given away for free, or whether they should be auctioned, and what the implications of these different allocation methods are.

BOX 5

Case Study—Phase 1 and 2 allocation of allowances in the UK

<table>
<thead>
<tr>
<th>Phase 1 (2005–07)</th>
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<tbody>
<tr>
<td>• Permits in the UK were allocated for free to each sector of industry within the scope of the ETS on the basis of projected emissions over the period 2005–07.</td>
</tr>
<tr>
<td>• Within each sector, permits were then allocated on the basis of historic emission levels.</td>
</tr>
<tr>
<td>• A New Entrants Reserve provided that allowances would be made available to new entrants to each sector from a reserve comprising 6.3 per cent of total allowances.</td>
</tr>
<tr>
<td>• No auctioning took place in Phase 1.</td>
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<table>
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<tr>
<th>Phase 2 (2008–12)</th>
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<tbody>
<tr>
<td>• 7 per cent of allowances are to be auctioned. Governed by the Community Emissions Trading Scheme (Allocation of Allowances for Payment) Scheme 2008, the first auction of ETS allowances took place in the UK on 19 November 2008.</td>
</tr>
<tr>
<td>• The remaining 93 per cent of allowances continue to be allocated for free (including 6.6 per cent towards a New Entrants Reserve) on the same basis as in Phase 1, apart from a change in the baseline period (2000–03).</td>
</tr>
<tr>
<td>• In Phase 2, the UK’s total amount of allowances was reduced, a reduction that was borne entirely by the Large Electricity Producers sector.</td>
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</table>

Content of the proposal

84. Under the revised scheme, auctioning will be the basic mechanism through which emission allowances are allocated. The Commission explains that “auctioning best ensures efficiency of the ETS, transparency and simplicity of the system and avoids undesirable distributional effects.” The Commission proposes that the power and carbon capture and storage sectors be made to buy 100 per cent of their emissions allowances at auction from 2013, which should mean that at least two thirds of the total quantity of allowances under the EU-wide cap will be auctioned in 2013.

85. For installations in other sectors, a more gradual transition is deemed appropriate, starting in 2013 with free allocation of 80 per cent of an
installation’s share of allowances, with the remaining 20 per cent bought at auction. The share of free allowances relative to allowances bought at auction will decrease over time by equal amounts each year, arriving at zero free allocation (i.e. “full auctioning”) by 2020. Community-wide and fully harmonised implementing measures for the allocation of free allowances will be adopted by 30 June 2011. Special arrangements will apply to sectors deemed at risk from “carbon leakage” (see Chapter 5).

86. The Commission proposes that at least 20 per cent of the revenues generated from the auctioning of allowances should be earmarked by Member States for spending on various climate change-related measures, including the development of new technologies (such as renewable energies and carbon capture and storage), assistance to developing countries to facilitate their adaptation to the impacts of climate change, and measures to address fuel poverty. This system of earmarking is otherwise known as “hypothecation”.

87. It is proposed by the Commission that five percent of the Community-wide quantity of allowances be set aside for new entrants to each sector, although no free allocation will be available to new electricity producers entering the market.

88. Finally, for reasons of fairness and solidarity and taking into account national circumstances, the Commission proposes that 10 per cent of the total quantity of allowances to be auctioned should be redistributed away from Member States with an average income per head of more than 20 per cent above the EU average. It is proposed that 19 Member States benefit from the redistribution of allowances to varying degrees depending on income levels per head (poorer Member States to benefit more), growth and emissions prospects in those Member States, and compliance costs.

Allocation

89. The CBI and the Scottish Executive supported the Commission’s approach to the level of auctioning (CBI Position Paper, pp3–4 and Scottish Executive Memorandum, para. 6). A CBI representative explained that companies outside the power sector that were not at risk from carbon leakage needed time to adjust “before they bear a full carbon price, but that should be the aim” (Q 135).

90. The RSPB and WWF, on the other hand, supported a move to 100 per cent auctioning for all sectors from 2013 (RSPB Memorandum, para. 6.1 and WWF Memorandum, para. 7). The WWF explained that “within a trading scheme auctioning allowances is a key design feature which helps to ensure that the progression towards a low carbon economy takes place in the fairest and economically most efficient way”. Similarly, the Centre for European Policy Studies (CEPS) argued that free allocation “constitutes a weakening of the price signal and thereby reduces the incentive for innovation” (Memorandum, p.137).

91. Dr Barker (4cmr) agreed that all of the allowances should be auctioned but proposed that some of the money raised could then be returned to industry as an explicit subsidy. He emphasised the importance of such transparency for markets to work well (Q 217). A representative from the European Commission, however, dismissed the idea of 100 per cent auctioning across the board from 2013 as politically improbable (Q 374) and suggested that
the same result could be achieved through free allowances if these were allocated through a transparent, evidence-based approach (Q 375).

92. A number of witnesses were highly critical of the Commission’s proposal to apply full auctioning to the power sector from 2013. Euracoal warned that the proposal “would lead to citizens and the national economies of the Member States with a considerable share of coal in their energy mix having to carry the financial burden of the European climate protection policy” (Memorandum, p.162). On behalf of the Polish Government, Professor Jerzy Buzek MEP explained that Poland was one such Member State. Poland’s concerns were due primarily to the fact that coal and lignite, both of which have high carbon content, represent over 90 per cent of Poland’s energy mix. Professor Buzek feared that the Commission’s proposal would have a disproportionate impact upon Polish consumers for whom, he claimed, electricity prices as a proportion of household expenditure would rise from 10 per cent to 16 per cent (Q 407).

Levels of auctioning

93. The UK Government believes that Member States should not be constrained by fixed levels of auctioning, and expressed its support for a harmonised minimum level of auctioning instead (QQ 101–2). The Scottish Executive concurred, arguing that “this would provide flexibility to allow Member States to auction more should national circumstances call for it” (Memorandum, para. 6).

94. Other witnesses took a different view, favouring a harmonised level of auctioning in order to ensure fairness across the European market (British Cement Association Memorandum, para. 14.1 and CBI Q 141). The Centre for European Policy Studies (CEPS) argued that Member State discretion should be avoided because of problems in the past caused by different national approaches. By way of example, CEPS indicated that a new natural gas combined heat and power plant would, under the Phase 1 rules, have received allowances in Germany corresponding to 130 per cent of its expected emissions, whereas the corresponding figure in Sweden would have been 60 per cent (Memorandum, p.138).

Allocation Methodology

95. Some debate centred on the method of allocating allowances that would be made available for free. The Environment Agency (EA), Aluminium Federation (AlFed), CBI, the British Cement Association (BCA) and the Polish Government considered that this should be done on the basis of benchmarking within sector caps, whereby the least efficient technologies received fewer allowances.52 (EA Memorandum, para. 3.6.1; AlFed Memorandum, para.7; CBI Position Paper, p.5; BCA Memorandum, para. 14.9; Q416). Professor Buzek (Poland) explained that, under a system of EU-wide benchmarking, free allowances would be awarded for the use of Best Available Technology (BAT)53. Those companies not deploying BAT would still need to top up their allowances at auction, thereby maintaining the

52 A system whereby allowances are allocated within each sector according to expected future performance. The performance assessment might often assume the use of best available technology.

53 Best Available Technology (BAT) refers to the most environmentally effective production techniques that are considered to be economically and technically viable.
incentive to introduce better technology. The Environment Agency added that the proposal for European benchmarks could be an important step towards achieving global sectoral emissions reduction agreements.

96. The RSPB and 4cmr considered that decisions on free allocation methodology should be made at the EU level “in order to prevent a race to the bottom by Member States” (RSPB Memorandum, para. 6.2 and 4cmr Memorandum, para.6). The Aluminium Federation asserted that an EU-level decision on this issue was required as soon as possible (Memorandum, para.6), a view shared by the Scottish Executive, which argued that the date for determining EU rules governing free allocation should be brought forward from 30 June 2011 to December 2009 (Memorandum, para. 6). 4cmr anticipated that a harmonised allocation methodology would increase fairness.

97. The Centre for European Policy Studies (CEPS) pressed for early certainty on allocation methodologies, along with a reasonable level of predictability as to how allocation methodologies would change over the medium to long term. This increased predictability should enhance the extent to which the scheme promoted technological innovation (Memorandum, p.136).

Redistribution of Allowances

98. Most witnesses were opposed to the Commission’s proposal that 10 per cent of the allowances to be auctioned be redistributed away from relatively wealthy Member States to other Member States. On behalf of the UK Government, Mr Mackenzie (DEFRA) noted that “the ETS should be about creating the commercial incentives to reduce emissions, not a means of transferring wealth around Europe” (Q 86). The RSPB and the Aluminium Federation (AlFed) both considered that the ETS should not be a mechanism for supporting the economies of poorer countries (RSPB Memorandum, para. 8.1 and AlFed Memorandum, para.8). By contrast, the Church of England argued that the proposed redistribution made economic sense given the weak economic performance of many of the new Member States (Memorandum, para. 21).

Use of Auction Revenue

99. Phil Woolas MP (Minister of State) explained that the UK viewed hypothecation (see para. 86) as “an inefficient means of determining public expenditure priorities” but that policies would be considered on their merits, including the need to encourage carbon capture and storage (CCS) (Q 189). Mr Woolas also argued that hypothecation breached the EU’s principle of subsidiarity54, whereby decisions should be taken at the lowest appropriate level of governance. Similarly, the CBI feared that allowing the EU to decide on how the revenue should be spent “is perhaps a slippery slope towards more tax harmonisation” (Q 141). A CBI representative indicated that the UK’s position on hypothecation was shared by other Member States (Q 84), a view confirmed by the Spanish Government (Memorandum, para. 4).

100. A number of our witnesses, however, supported the principle of hypothecation, at the EU level, including the Church of England, RSPB and

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54 “Subsidiarity” is a principle laid down in Article 5 of the Treaty establishing the European Community (TEC), under which the Community shall take action only if the objectives can be better achieved by Community level action.
the British Cement Association (Church of England Memorandum, para. 23; RSPB Memorandum, para. 4.1 and BCA Memorandum, para. 14.13). On behalf of Greenpeace, Dr Parr suggested that 50 per cent of auctioning revenues be earmarked for climate change related measures in the EU and 50 per cent be channelled towards assisting emissions mitigation in developing countries (Q 62). His suggestion was echoed by the WWF (Memorandum, para. 7).

101. Earmarking of funds for climate change related measures also received support among those witnesses who had rejected the principle of hypothecation at the EU level. The CBI, for example, recalled that auction revenues would be coming from industry and consumers in order to pay a carbon price and therefore “given the challenges that as a country we face in terms of R&D [research and development] into energy technology and adaptation, it is right that the Government earmark a certain proportion of that revenue for spending in those areas” (Q 141). Business Europe agreed that the revenue should be used to improve the competitiveness of domestic business (Memorandum, para. 2.3). CBI representatives suggested that an acceptable package of spending might split funds between R&D, adaptation and fuel poverty (Q 145). They referred to the Stern Review, reminding us that it had identified the pricing of carbon and increased investment on public R&D and demonstration of new technologies as two (of three) pillars of climate change policy. The argument in favour of spending auction revenues on climate-related measures therefore followed, they claimed (Q 143).

102. Speaking on behalf of Lafarge Cement UK, Mr Dwight Demorais noted that carbon capture and storage technology was currently out of his company’s reach but that the company would gladly seize “the option to recycle auction revenues back into R&D in these sorts of areas” (Q 141). Similarly, Euracoal took the view that auctioning revenues should be used primarily for climate protection, measures including power-plant related R&D and carbon capture and storage (Memorandum, p.163).

103. On behalf of the Polish government, Professor Buzek MEP was enthusiastic about carbon capture and storage (CCS), noting that its development would allow the EU to consider coal as a “very, very important source of energy” in the long term. This, he argued, would have energy security benefits because it would not be necessary to rely on imports of oil and gas, a view supported by the European Commission in its Impact Assessment of the proposed Directive. Professor Buzek also anticipated that CCS would bring economic benefits as it was a technology that the EU could sell to third countries, such as China (Q 411), where almost 40% of total emissions from the power sector were projected to be captured by 2030, rising to two thirds in 2050. He added that Poland was already planning two CCS demonstration plants and appeared confident that the technology could be ready by 2020 (Q 433).

104. Dr Barker of 4cmr pointed out that auction revenues could be used to accelerate technological change, in the same way that low carbon technological investment had helped Germany to develop a comparative global advantage in this area (Q 229). He explained that allocating revenues to innovation in low carbon technologies was economically sound because,

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55 SEC(2008) 52, p.51
without the subsidy, “innovators cannot capture all the rents from their innovation because other innovators take it from them” (Q 245).

105. On behalf of the European Commission, Mr Meadows confirmed that Member States were able “to use auction revenue or, indeed, any public revenue, in many, many ways to tackle climate change, for research and development, for carbon capture and storage” (Q 377). He noted that, over the last seven years, the Commission had approved 98 per cent of environmental state aid notifications made to it. The environmental state aid guidelines were reviewed when the energy and climate change package was published in January 2008 to increase the range of activities covered and the permitted amounts of aid.

New Entrant Reserve

106. The CBI and the British Lime Association (BLA) took the view that the proposed definition of a New Entrant should be broadened to include expansion and upgrading of existing facilities as well as the building of new facilities (Q 154 and BLA Memorandum, p.117). This, the CBI noted, would be in line with the current, Phase 2, definition of New Entrant.

107. The European Federation of Energy Traders (EFET) and Business Europe warned that the size of the New Entrant Reserve was too high (EFET Memorandum, p.163 and Business Europe Memorandum, para. 2.8). EFET noted that the reservation of too many allowances “may cause unnecessary uncertainty in the market”. The CBI felt that the New Entrant Reserve should either be reduced to 2 per cent of the cap or alternatively there should be no cap, and allowances for new entrants should instead be drawn down from the auction pool as needed (Position Paper, p.7). A CBI representative explained that the UK Government’s own analysis suggested that a 1.2 per cent reserve would probably be sufficient to accommodate needs, and that the CBI’s proposal of 2 per cent allowed for some flexibility in that calculation (Q 154). EFET emphasised that, in order to improve transparency and predictability, “the proposal should also include clear rules about what happens to unallocated [allowances from the] New Entrant Reserve”.

108. A new suggestion for use of the New Entrant Reserve was adopted by the European Parliament’s Environment Committee on 7 October 2008. The Committee proposed that up to 500 million allowances in the Reserve (around two thirds of the Reserve) be awarded for free to large-scale demonstration projects that were undertaking the capture and geological storage of carbon dioxide (CCS) either in the EU or in developing countries and countries with economies in transition outside the EU that ratify any future international agreement. In its justification, the Committee explained that the amendment “works within the EU emissions cap to provide an immediate, certain and European financial mechanism to enable the first promoters of CCS projects to meet development costs which initially make the technology commercially unviable”.

Conclusions and Recommendations

109. We support in principle the 100 per cent auctioning of allowances from 2013 in all sectors other than those deemed subject to carbon leakage. Free

57 Community Guidelines on State Aid for Environment Protection, OJ C82 pp 1–33, 1.4.2008
58 European Parliament, A6–0406/2008 Amendment 56,
allocation of allowances can lead to windfall profits and should for that reason be avoided wherever possible.

110. We acknowledge, however, the concerns of those Member States whose energy mix is fossil fuel-intensive and who therefore fear that the Commission’s proposal may have a disproportionate impact upon them. We believe that time-limited derogations from the principle of 100 per cent auctioning in the power sector from 2013 could be granted to Member States with particularly fossil fuel-intensive energy sectors, on the condition that the transition period is used to develop and trial carbon capture and storage technology. Derogations should be phased out by 2020 at the latest, by which time full auctioning should be in place for the power sectors of all Member States.

111. Should the Commission’s proposal for a gradual transition towards 100 per cent auctioning over the period 2013–20 for all but the power sector be adopted, we consider that a harmonised level of auctioning should be set across the EU, with no flexibility for Member States to either raise or lower the level set. This is crucial in order to prevent distortions of competition across the European Union. In any transition towards 100 per cent auctioning, free allocation should be based on sector-specific EU-wide benchmarking that rewards the use of Best Available Technology and stimulates further innovation.

112. With regard to how auctioning revenues are spent, we agree with the UK Government that it would be inappropriate for this to be prescribed at the EU level as it breaches the principle of subsidiarity. Without such earmarking, we do not see any remaining justification for the redistributive element of the Commission’s proposal, under which a proportion of the rights to auction allowances would be redistributed towards Member States with low income per capita or particularly high compliance costs.

113. We are conscious, however, that the redistributive element of the Commission’s proposal commands wide support among Member States. If this aspect of the proposal were to be accepted, and if any derogations from the principle of 100 per cent auctioning in the power sector were to be permitted, the levels of redistribution of auction rights among Member States should be re-considered. If the levels are not re-considered, the EU risks compensating the same Member States twice over for the compliance costs they face.

114. It is our firm view that Member States should invest considerable funds in climate change-related measures—including R&D and demonstration projects, as well as adaptation measures—and in measures to help ease the social problems that may arise as a result of the ETS, such as increases in electricity prices. In our view, this will be essential to secure the credibility of the scheme, by signalling that governments are willing to foot part of the bill that they are imposing on the private sector.

115. It is critical, however, that the measures into which such funds are invested should not cancel out the carbon price signal altogether by compensating industry and consumers fully for price increases arising from the ETS, as this would undermine the scheme’s raison d’être.
Investment should instead focus on providing viable, low-carbon alternatives and promoting the necessary transition.

116. The balance of evidence presented to us suggests that the proposed level of the New Entrant Reserve is too high, which would have the effect of creating a large reserve of allowances whose deployment is unpredictable. We accept our witnesses’ contention that the New Entrant Reserve is too large, but would support the redeployment of unallocated allowances from the Reserve towards large-scale carbon capture and storage demonstration projects free of charge, as proposed by the European Parliament’s Environment Committee. A provision along these lines would stimulate the development of this important technology without undermining the overall cap on allowances.
CHAPTER 5: CARBON LEAKAGE

The issue

117. Carbon leakage, as explained in Box 6, is one of the most controversial aspects of the EU ETS. In this chapter we consider how and when the sectors or sub-sectors affected should be identified, and the policy measures that should be adopted to tackle the problem.

BOX 6
Carbon Leakage

“Carbon leakage” refers to an increase in carbon emissions in one country or region as an indirect and unintended consequence of emission reduction measures in another country or region. This may occur as a result of the relocation of greenhouse gas emitting installations away from countries/regions where emissions are penalised (because certain businesses are particularly mobile), or it may occur as a result of producers in the “cleaner” country losing market share to producers in the “dirtier” country/region.

The prospect of carbon leakage is of particular concern in industries that—due to their exposure to intense international competition—are not able to pass on through product prices their increased operating costs, for example the additional cost of purchasing ETS allowances or the cost of higher energy prices resulting from the impact of the ETS on the power sector.

A number of policy options are available to address carbon leakage:

- installations could receive some or all of their emission allowances free of charge rather than having to purchase them at auction;
- the inclusion of importers of carbon-intensive products in the ETS;
- global sectoral deals on emissions reductions in particular sectors could be pursued;
- border adjustment measures, such as direct import tariffs or the imposition of taxes on carbon intensive imports, could be applied.

Content of the proposal

118. The Commission proposes to identify by 30 June 2010, and every three years thereafter, those sectors deemed to be exposed to a significant risk of carbon leakage. In determining which sectors are at risk, the Commission will take into account the extent to which it is possible for the sector or sub-sector concerned to pass on the cost of the required allowances in product prices without significant loss of market share to less carbon efficient installations outside the Community.

119. Once the decision has been taken on which sectors or sub-sectors are in principle at risk from carbon leakage, the Commission proposes to submit (by June 2011) an in-depth assessment of the position of those industries and their exposure to the risk of carbon leakage following the possible conclusion of an international agreement and/or binding global sectoral agreements. The report would form the basis for proposals on the treatment to be afforded to those industries still deemed at risk of carbon leakage.
Sectors at risk from carbon leakage

120. DEFRA indicated that reports it had commissioned suggest that “the risk of leakage and moving overseas exists but probably only for a limited number of sectors” (Q 83). Phil Woolas MP (Minister of State at DEFRA) identified particular sectors that may be at risk: aluminium, steel, cement and food processing (Q 179) and suggested that the best prospects of a sectoral deal were in the cement sector (Q 181).

121. The European Commission’s initial analysis suggested that, in some industries, only specific sub-sectors are at high risk of carbon leakage. The Commission would thus consider clinker, a carbon-intensive intermediate product involved in the cement industry, to be particularly trade exposed rather than the cement sector as a whole, and it would consider primary aluminium, but probably not secondary aluminium (recycled aluminium), to be at risk of carbon leakage (Q 371). This analysis was supported by Professor Buzek MEP on behalf of the Polish government, who made the point that aluminium was more at risk of carbon leakage than cement because it was lighter to transport, and therefore easier to import if production were to be displaced (Q 447).

122. The British Lime Association (BLA), British Cement Association (BCA) and the Aluminium Federation (AlFed) all argued that their respective sectors would be subject to carbon leakage (BLA Memorandum, p.117; BCA Memorandum, para. 14.7; AlFed Memorandum, para.2). According to the Aluminium Federation, aluminium was at threat “due to the global nature of the aluminium market” while the BCA argued that cement was vulnerable due to the large number of ports, easy access by sea and proximity of major conurbations to maritime distribution centres. The BCA estimated that 20 per cent auctioning in 2013 rising to 100 per cent by 2020 would cost the UK cement industry around €1.9 billion, to which a further €0.5 billion of electricity costs should be added.

123. Brunner Mond, a UK producer of soda ash and sodium bicarbonate, claimed that its business too would be susceptible to carbon leakage. According to its calculations, the cost of emission permits would represent a 13 per cent increase in its production costs which would have to be passed on in full to their customers if the business were to remain viable. Brunner Mond warned, however, that its ability to pass on that cost would be highly constrained by its international competitors, most notably in Russia and the USA (Brunner Mond Memorandum, pp119–132).

124. Other witnesses expressed scepticism about the prospect of carbon leakage. Greenpeace emphasised that there was little evidence to suggest that carbon leakage would be a problem (Q 33) and urged the Commission to scrutinise properly the claims in this regard (Q 42). The RSPB rejected this type of concern, noting that concerns about competitiveness were invariably offset by other factors (Memorandum, para. 6.1).

Criteria for assessing carbon leakage

125. As regards the criteria for assessing whether a sector was at risk from carbon leakage, the CBI considered that the key criterion should be whether

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59 Based on an indicative carbon allowance price of €30 per tonne CO₂

60 Such as labour and transport considerations
additional costs could be passed through to customers without losing market share internationally or undermining the sector’s ability to attract investment (Q 133). On behalf of the CBI, Mr Farrow explained that, in order to make this assessment, one would need to consider: the cost of carbon; what that represented as a proportion of profit margin; value added; trade exposure of the company; significant trade internationally; and the sensitivity of the market price. He concluded that “this needs to be as far as possible an evidence-based discussion”.

126. DEFRA agreed that it was crucial to “have a thorough evidence-based approach” to the assessment of carbon leakage as the analytical work undertaken thus far had demonstrated that the issue was very complex (Q 83). Commenting on that analytical work, Mr Demorais ( Lafarge Cement) stressed that the modelling and analysis undertaken thus far had been historical, and that there was a need to look at what was likely to happen in the future (Q 134).

**BOX 7**

**The Commission’s carbon leakage assessment criteria**

The Commission proposes to take into account the following considerations when assessing whether a sector is able to pass the cost of allowances through to product prices:

- the extent to which auctioning would lead to a substantial increase in production costs;
- the extent to which it is possible for individual installations in the sector concerned to reduce emissions levels;
- market structure, relevant geographic and product markets, the exposure of the sectors to international competition;
- the effect on the sector of climate change and energy policies implemented, or expected to be implemented, outside the EU.

This was further supplemented by a Commission “Non-Paper”

127. New Zealand government officials confirmed that the question of international competitiveness was also an issue in the New Zealand scheme and that New Zealand would base its assessment of the extent to which an industry was threatened by carbon leakage on trade intensity and on exposure to carbon costs, as defined by the proportion of ETS costs relative to other costs (Q 358).

128. The British Cement Association (BCA), British Lime Association (BLA) and the Aluminium Federation explained that a problem in their respective industries was “cost pass-through” from the power sector, which could not then be passed on to the consumer. According to the Aluminium Federation this affected an energy-intensive industry such as aluminium, whose pricing was set at the global level on the London Metal Exchange (Memorandum, para.7). The BCA pointed out that energy prices represent 35–40 per cent of variable costs in the cement industry (Memorandum, paras. 3 and 14.6). The BLA explained that the manufacturing of lime was “an energy intensive

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process ... with limited opportunities to pass the cost on to consumers” (Memorandum, p.117).

129. In the BCA’s view, key criteria to be used when assessing the threat of carbon leakage were: the ability to pass through to customers the cost of buying allowances at auction; vulnerability to imports; and the proportion of carbon dioxide emissions relative to product profitability (Memorandum, para. 14.3). The BLA queried the Commission’s proposed criteria for assessing carbon leakage, particularly the use of GVA (gross value added) as an indicator (Memorandum, p.117).

Timing of the decision

130. A number of witnesses expressed concern about the Commission’s proposal to identify the sectors deemed at risk from carbon leakage by June 2010. The CBI took the view that the Commission’s proposed timetable for identifying vulnerable sectors “does seem far too leisurely”, creating undesirable uncertainty (Q 133). The British Cement Association (BCA) considered that the decision should be made much sooner than proposed (Memorandum, para. 14.10), and the British Lime Association (BLA) considered that certainty would be improved by bringing the decision forward to mid-2009 (Memorandum, p.117). The Centre for European Policy Studies took the view that the whole process\(^{62}\) could be completed by mid-2010, giving certainty to industry on the rules applicable from 2013 over two years before the rules took effect (Memorandum, p.137). The Spanish Government agreed that the dates should be brought forward in order to provide industry with greater certainty (Memorandum, para. 8).

131. DEFRA considered that the criteria used to identify sectors at risk of carbon leakage should be settled as part of this year’s political negotiations (2008). A decision on the sectors deemed to meet these criteria should then be reached by June 2009 and a decision on the appropriate protection measures should be taken once the outcome of the international negotiations at Copenhagen in December 2009 was known (Q 83). In this way, every industry would know where it stood and what measures would be put in place to protect them by the middle of 2010, a year earlier than proposed by the Commission (Q 107).

132. Commenting on the uncertainty over which sectors would be designated as being at risk from carbon leakage Dwight Demorais of Lafarge Cement stressed that “from a business certainty point of view, there is no question ... that it is affecting our investment decisions” such as the building of a new cement works in Kent (Q 131).

133. The European Commission was adamant, however, that it would only be possible to establish a definitive list of affected sectors in 2010, once an international agreement had been secured (Q 370). It questioned what help it would be to produce a list in 2009 that then had to be changed in 2010 to reflect the international agreement (Q 399).

Measures to address carbon leakage

134. Several of our witnesses recognised the need for policy measures to address carbon leakage, such as free allocation, the inclusion of importers in the

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\(^{62}\) Of determining both the “at risk sectors” (due by June 2010) and the measures to be taken to protect them (due by June 2011).
scheme, global sectoral agreements or border adjustment measures. The CBI, Aluminium Federation (AlFed), British Cement Association (BCA) and British Lime Association (BLA) anticipated that any such policy measures (including free allocation) would only be necessary until a satisfactory international agreement that placed an equivalent burden on international competitors was in place (CBI Position Paper, p.4 and AlFed Memorandum, para.7). Neither the BCA nor the BLA rejected “border adjustment” measures relating to importers, such as the imposition of taxes on carbon intensive imports (BCA Memorandum, para. 14.8 and BLA Memorandum, p.118).

135. The International Chamber of Commerce UK questioned the concept of border adjustment measures, noting that: the cost of inputs could be pushed up; there would be high administrative costs; there would be legal implications, notably in relation to the WTO; and there could be an impact on the EU’s trade relations (Memorandum, para. 16). The CBI also rejected border adjustment for similar reasons (Position Paper, p.3).

136. A European Commission representative explained that the measure that would take effect immediately was free allocation and that “the issue of border measures … would only come later” (Q 370). He explained that it would not be wise to float the prospect of border measures in the draft directive as “it is not helpful in reaching the right international agreement” (Q 372). Global sectoral agreements should be looked at very seriously as a potential solution to the threat of carbon leakage, but probably only after the December 2009 Copenhagen meeting.

Conclusions and Recommendations

137. While the EU ETS remains a regional scheme, we believe that some sectors of industry may be at risk of carbon leakage. The evidence we received suggests that vulnerable firms are concentrated in a handful of sectors, and in some cases, sub-sectors, such as clinker and primary aluminium. We consider that it would be appropriate to award special treatment to the industries or sub-sectors at risk in the third phase of the ETS until an international agreement or a global sectoral agreement putting these industries on an even footing with their non-EU competitors can be reached.

138. Identification of the sectors or sub-sectors at risk should be evidence-based. We support the Commission’s proposed criteria for arriving at these judgments, but emphasise that the analysis should distinguish between potential competitiveness lost as a direct result of the ETS and other influences on competitiveness (e.g. regulatory standards more generally) that arise from trading in a global context. The extent to which cost savings are possible through energy efficiency measures should also be considered.

139. In order to create a predictable policy environment, decisions on the sectors or sub-sectors at risk ought to be taken as soon as possible. We therefore believe that the decision-making process should be speeded up. Sectors potentially at risk of carbon leakage should be identified by 2009 so as to minimise uncertainty for all other sectors within the scope of the ETS. Decisions on the treatment to be afforded to sectors at risk of carbon leakage should be taken in 2010 after the December 2009 UN Climate Change Conference in Copenhagen, when the full extent of that risk (or lack of it) will become clear.
Free allocation of emissions allowances should in our view be the preferred policy response to the threat of carbon leakage, but international sectoral agreements on emission reductions in particular sectors must be the eventual aim as there is a risk that free allocation could, in the long term, become a protectionist measure. Border adjustment measures should be avoided, due to their potential to breach WTO rules.
CHAPTER 6: COMPLIANCE AND ENFORCEMENT

The issue

141. EU environmental legislation that places costly obligations on companies must be enforced effectively by Member States if environmental results are to be delivered and distortions of competition avoided. Poor compliance would, in the case of the EU ETS, jeopardise the entire scheme. Compliance is also a critical consideration at the international level.

BOX 8

Monitoring and verifying emissions

Greenhouse gas emissions are calculated in different ways according to the type of installation and the product concerned. By way of example, CO₂ emissions from fuel (such as coal) are calculated by multiplying the energy consumption of the fuel in terms of kilowatt hours by an emission factor for each fuel. The emission factors have been independently established by the Intergovernmental Panel on Climate Change and they reflect the emission intensity of the fuel relative to its use.

These calculations for each installation are then verified by a competent, independent, accredited verification body. Should the verifier decide that an installation’s report is unsatisfactory, the operator may not make any further allowance transfers until the irregularities have been dealt with. Member States may also apply penalties in accordance with the Directive.

Content of the proposal

142. The Commission states in its impact assessment that “monitoring, reporting and verification (MRV) … are indispensable for the environmental integrity of the EU ETS”. Under the scheme at present, monitoring and reporting of emissions is implemented on the basis of Monitoring and Reporting Guidelines (MRG) issued by the Commission. However, Member States have applied the MRG differently, employing varying penalties, inspection methodologies and definitions of key terms such as “installation”. The Commission consequently concludes that there is no level playing field across the EU for monitoring and reporting.

143. The Commission proposes to replace the Monitoring and Reporting Guidelines with EU-wide Regulations on monitoring and reporting and (separately) on verification and accreditation in order to promote greater harmonisation across the EU. It is also proposed that the 2008–12 emissions penalty of €100 per tonne of excess emissions should increase in line with the European Index of Consumer Prices.

144. An important aspect of monitoring the implementation of the ETS and assisting its effective functioning is the maintenance of allowance registries. Under the proposal, the current system of national registries will be replaced from 1 January 2013 by a Community registry, which should simplify the current system and ensure that the EU ETS can link to other emissions trading systems around the world.

Witnesses’ Views

145. The Environment Agency, the body responsible for enforcing the ETS in the UK, asserted that “the backbone of a robust carbon market is monitoring, reporting, verification (MRV), compliance and enforcement” (Memorandum, para. 3.3.2). It expressed the view that the current Monitoring and Reporting Guidelines (MRG) Commission Decision should be maintained and amended to introduce verification standards rather than including current MRG provisions, which provide little in the way of verification standards, in a new Regulation, as proposed by the Commission.

146. The UK Government shared the Environment Agency’s scepticism about the need for a Regulation on monitoring and reporting standards to replace the existing MRG Decision. Phil Woolas MP, Minister of State, argued that the current legal arrangements “provide sufficient direction for Member States to work within the boundaries of the MRG” and that it would be easier to update the MRG in the future under the existing arrangements (Correspondence with the Minister).

147. However, the Government did not concur with the Environment Agency on the desirability of incorporating verification standards into the MRG. DEFRA favoured a Regulation that would harmonise verification rules, because “having a harmonised system across Europe will be easier to enforce [compared to Phases 1 and 2]” (Q 126). Officials indicated that independent verifiers would have to come and audit emissions and, once the EU had harmonised rules, it would be possible to “rely to a significant extent on competitors telling tales on each other if they are not happy with the level of checking up by the national regulator in different countries” (Q 202).

148. The Environment Agency emphasised that the system must be underpinned by confidence that one tonne of CO₂ meant the same in each Member State (Memorandum, para. 1.2). For that purpose, it argued, it is necessary to develop EU-wide electronic tools to manage the MRV process (Memorandum, para. 3.3.3). 4cmr emphasised that the Commission “should continue working with Member States to ensure that all relevant installations are covered and comply” (Memorandum, para.3)

149. DEFRA recognised that the Commission could take action against Member States that were not fulfilling their responsibilities in this regard. Officials acknowledged that “everyone who is involved in policing the system knows that it only takes a few cases to devalue the whole system, and then the carbon price would collapse” (Q 202).

BOX 9

Commission infringement procedures against Member States

The documented cases in which the Commission has begun infringement procedures against Member States over violations of EU climate change legislation, include:

- warning letters to five Member States for failure to link their national allowance registries to the EU-wide system;
- warning letters to five Member States for failure to submit information on their greenhouse gas emissions and the policies taken to reduce them;
- warning letters to four Member States for failure to prepare for international emissions trading under the Kyoto Protocol.

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66 Reference

67 If the Commission considers that there has been an infringement of EC law, it can send a first written warning, followed by a second written warning (the “Reasoned Opinion”) and, finally, if the Member States is still in breach of EC law the Commission may choose to bring the case before the European Court of Justice.
150. The European Commission emphasised the importance of compliance, warning that “it must be cheaper to comply than not to comply or the ETS will not work, and we have the €100 per tonne penalty applicable to ensure companies comply” (Q 393). The Environment Agency took the view that civil penalties must remain effective as a deterrent against non-compliance, and it therefore supported the proposal that civil penalties be index-linked. 4cmr agreed but went one step further by suggesting that penalties should be linked to the carbon price, in order to avoid situations “where the carbon price exceeds the penalty” and it is therefore cheaper to pay the penalty rather than comply (Memorandum, para.3).

151. Commenting on international compliance and enforcement, the European Commission pointed out that it was more difficult to enforce commitments under international law than it was within domestic legal systems or within EC law. A Commission official explained, by way of example, that when parties to the Kyoto Protocol met in Marrakech in 2001 to finalise the procedures needed to make the Protocol operational, agreement was only secured by dropping the EU’s demand for a strong compliance system. He added that Canada had openly stated that it would not necessarily comply with its Kyoto target during this period and that little action could be taken against Canada in that regard save for threatening to inflict a more stringent target on it in the next commitment period (Q 393).

Conclusions and Recommendations

152. The practical application and enforcement of the EU ETS is critical to its success. It is clear to us that, without effective enforcement, the integrity of the scheme would be severely prejudiced. We therefore welcome the European Commission’s proposal that monitoring, reporting and verification rules should be harmonised across the European Union with the aim of guaranteeing a level playing field. The Commission has been vigilant in monitoring Member States’ compliance with climate change legislation thus far and we urge it to continue to pursue this approach in future, taking all necessary action against Member States that are not fulfilling their responsibilities. We are not persuaded by the argument that the performance of national regulators will be kept in check by competitors in different Member States informing on each other.

153. We note with serious concern that the enforcement mechanisms of the Kyoto Protocol have been shown to be weak and consider that these deficiencies must be addressed in any successor agreement if international efforts to address climate change are to produce the desired result. The Commission and Member States must therefore place high priority on this issue during negotiations on a new international climate change agreement.

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68 See Commission Press Release IP/06/469, 06.04.2006
CHAPTER 7: EXTERNAL AND DOMESTIC CREDITS

The issue

154. External credits raise a number of issues. One is the extent to which it is sensible for one country to pay for an emissions reduction in another country rather than reducing emissions in its own territory. Another is how the system of external credits should be monitored and verified.

BOX 10

External credits

The Kyoto Protocol (see Box 1) establishes a number of different types of environmental project-based mechanisms that provide credits which can be used to meet Kyoto targets. The underlying principle is that credits from projects that reduce emissions in other parts of the world can achieve the same environmental objective of reducing global emissions but at a lower cost.

The Clean Development Mechanism (CDM)69

The CDM allows emission reduction projects in developing countries (e.g. rural electrification projects using solar panels) to earn Certified Emissions Reduction credits (CERs), which can be traded and sold, and used by Annex I countries (37 industrialised countries listed in Annex I of the UNFCCC70) to count towards their own emission reduction obligations. The projects must be part-funded by an Annex I country. Any CDM project must be “additional” (See Box 11) and they must contribute to sustainable development. The administration of the mechanism is overseen by the CDM Executive Board, which is answerable to those countries that have ratified the Kyoto Protocol.

Joint Implementation (JI)71

JI allows Annex I countries to earn Emission Reduction Units (ERUs) from an emission reduction/removal project in another Annex I country. As with the CDM, JI projects must provide reductions that are additional to those that would otherwise have occurred.

Content of the proposal

155. The Commission proposes that, until a future international agreement has entered into force, the use of ERUs and CERs over the period 2013–2020 should be restricted to unused credits from the period 2008–12. Explaining its proposal, the Commission noted72 that a large number of credits could enter the EU ETS in Phase 2 but that, if full use were to be made of these by 2012, few domestic EU reductions would occur. Member States will, however, be permitted to allow operators to exchange CERs issued in respect of emission reductions made or planned before 2012 for allowances valid from 2013 onwards. It will also be possible to exchange unused Phase 2

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69 http://cdm.unfccc.int/about/index.html
70 United Nations Framework Convention on Climate Change
71 http://unfccc.int/kyoto_protocol/mechanisms/joint_implementation/items/1674.php
72 COM(2008)16, p.10
CERs for allowances from new projects (not already planned) begun from 2013 onwards in Least Developed Countries only.

156. Should an international agreement meeting the EU’s requirements be reached, EU ETS participants will be able to meet 50 per cent of the additional emissions reduction effort beyond the overall 20 per cent target with external credits.

157. The proposal also allows for so-called “domestic off-setting”. These are projects which mirror the concept of external credits, but are used within the home country to reduce emissions in sectors falling outside the scope of the ETS.

**BOX 11**

**Additionality**

CDM and JI projects must be “additional”. Formally, this means that a project is additional if greenhouse gas emissions are reduced below those that would have occurred in the absence of the registered project activity. Its precise interpretation is evolving and can include financial additionality, whereby a project should not be economically viable without the CDM or JI investment. In such cases, there is a double hurdle to clear: that the emissions reductions would not have been secured without the project, and that the project wouldn’t have happened without the investment. In theory, however, these conditions could have perverse effects by deterring countries that expect to receive such investment from introducing their own emission reduction measures or funding relevant projects of their own.

**The case for and against external credits**

158. A number of witnesses including the Aluminium Federation (AlFed), the British Cement Association (BCA), the British Lime Association (BLA), Euracoal and Lafarge Cement supported the use of external credits with no restrictions on the use of CDM-generated allowances. Those witnesses expressed the view that it was irrelevant where in the world emissions reductions were made as long as they were made at the point of lowest cost (AlFed Memorandum, para.9; BCA Memorandum, para. 15.2; BLA Memorandum, p.119; Euracoal Memorandum, p.162; Q 156).

159. DEFRA took the view that through external credits, the EU ETS had thus far played a major role in supporting developing countries’ efforts to address their greenhouse gas emissions (Q 105). Responding to concerns that the projects in developing countries would be happening anyway, officials emphasised that there was no evidence to support those claims and that the issue was “whether we are doing it in the best and most economically efficient way possible rather than whether or not we should have it” (Q 176).

160. By contrast, the RSPB rejected the use of external credits unless the EU set a much higher overall emissions reduction target of around 40 per cent, in which case external credits at 5–10 per cent might be considered (Memorandum, para. 9.1). The Church of England adopted a similar approach, proposing

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73 There is a UN-established list of 50 Least Developed Countries: http://www.un.org/special-rep/ohrlls/ldc/list.htm

74 Article 43 of the 2001 Marrakesh Accords laying down the detailed rules on the implementation of the Kyoto Protocol.
that all of the EU’s emission reduction efforts should be undertaken within the EU’s borders and suggesting that instead, “the financial equivalent of an additional 15 per cent emissions reduction” should be invested in developing countries to assist them with their climate change adaptation and mitigation efforts (Memorandum, para. 29).

External credits in the draft Directive

161. Explaining the Commission’s position, Mr Meadows told us that the use of external credits needed to be restricted because, if there was no international agreement and emission reduction targets therefore remained relatively low, the use of more external credits would hamper efforts to reduce emissions in the EU and to reach the EU’s renewable energy targets (Q 383).

162. The International Chamber of Commerce UK (ICC UK) warned that the restrictions in the draft Directive would, if enacted, undermine the market in external credits, leading to a significant reduction in finance available for carbon projects in developing countries (Memorandum, para. 6). ICC UK therefore proposed that: the provisions of Article 11a(4) providing certainty on the permissibility of credits from projects in Least Developed Countries post-2012 be extended to all developing countries; and that a risk guarantee fund be established to compensate investors in projects for post-2012 emissions reductions in the case of failure of the international policy process (Memorandum, para. 7).

163. The CBI expressed similar concerns about the provisions in the draft Directive regulating access to external credits (Position Paper, p.8). A CBI representative argued that restrictions on access to credits post-2012 should be relaxed but admitted that the CBI had not yet been able to come up with a specific volume of credits that would be appropriate (Q 156). He acknowledged that the EU might obtain useful bargaining leverage in international negotiations by threatening to restrict access to CDM credits in the event of no agreement at Copenhagen, but warned against intransigence on this point if no deal were to be reached.

164. Ecosecurities’ Head of European Regulatory Affairs, Miles Austin, pointed out that even in the event that an international agreement were to be reached, the proposals would only allow access to 72 million tonnes of CERs per year, as compared to 270 million tonnes during Phase 2 (Q 301). In relation to CDM projects, Mr Austin added that “it is very difficult to invest [in the market currently] because there is no clear signal as to what type of project to invest in”. Indeed, he suggested, “there is no clear signal that there will be a market as such” (Q 307). Similarly, the European Federation of Energy Traders (EFET) feared a “scaling back of new investment into low carbon technology in developing countries” (Memorandum, p.164).

165. Ms Anger (4cmr) pointed out that the Commission’s proposal to allow “banking” of unused Phase 2 external credits for use during Phase 3 would be unfair to new entrants, including the aviation sector, which would come into the ETS at the very end of Phase 2 in 2012 (Q 271). Coralie Laurencin of Climate Change Capital and International Carbon Investors and Services, Mr Austin (Ecosecurities) and Mr Sam Fankhauser (IDEACarbon), on the other hand, all welcomed the proposal that unused external credits could be carried over from Phase 2 to Phase 3, which they anticipated would allow pricing to be smoother and less volatile because participants could choose to
use their credits at the most appropriate time depending on market conditions (Q 314).

**Monitoring, Reporting and Verification of external credits**

166. According to the Environment Agency, Monitoring, Reporting and Verification (MRV) standards for CDM and JI projects must be as good as those in the EU ETS (Memorandum, para. 3.7.2). WWF proposed that only external credits from CDM projects which met the Gold Standard\(^75\) accreditation or equivalent quality should be allowed to enter ETS from 2013 (Memorandum, para. 9).

167. New Zealand officials noted that there was some scepticism in New Zealand about the integrity of CDM credits. New Zealand was accepting them, “but we do think it [the CDM] needs improving and we are putting in quite a lot of work in that area” (Q 355). The CBI argued that concerns about quality control of external credits should be addressed at the UN level if the aim was to build a global carbon market (Q 159).

168. As regards the current system of monitoring the CDM, Ecosecurities explained that the Executive Board of the CDM was largely composed of negotiators who undertook scrutiny of nearly every project. In each case, this required analysis of a 150–200 page project design document. As the Executive Board met only six times a year for three or four days, “there is currently a huge backlog of projects” (Q 313)\(^76\).

**Domestic off-setting**

169. The Centre for European Policy Studies (CEPS) explained that there were two arguments in favour of domestic off-set projects. First, they “unquestionably” extended the price signal and thereby initiated a “market search” for abatement opportunities. Second, they arguably reduced the overall cost of reducing carbon emissions because they allowed otherwise unidentified low-cost abatement options to be considered. CEPS took the view, however, that this second argument was questionable because it meant that low-cost abatement options were removed from the menu of possible ways of meeting the emission reduction obligations in the non-ETS sectors, thus increasing the cost of cutting emissions outside the ETS (Memorandum, p.137).

170. DEFRA suggested that the provision should be viewed mainly as an enabling clause (Q 194). Forestry was one sector where domestic off-setting might be considered, drawing on France’s experience (Q 195). This was a view shared by Mr Fankhauser of IDEACarbon (Q 316).

171. WWF and the RSPB rejected the idea of domestic off-setting. The RSPB expressed the view that the EU should not “invent its own credits on an ad hoc basis when there is a globally agreed system of crediting” (Memorandum, para. 5.1.). WWF explained that “the emphasis must be placed on reducing

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\(^75\) The “Gold Standard” Foundation offers a Quality label to CDM/JI and voluntary offset projects. Renewable energy and energy efficiency projects with sustainable development benefits are eligible. The Gold Standard is endorsed by over 49 non-governmental organisations worldwide. WWF was one of its founding members. Source: [http://www.cdmgoldstandard.org/](http://www.cdmgoldstandard.org/)

\(^76\) [http://cdm.unfccc.int/Projects/index.html](http://cdm.unfccc.int/Projects/index.html) As of 6 November 2008, there were 108 requests for registration of CDM project activities, many of which might be reviewed by the Executive Board.
emissions from the ETS sectors rather than expanding their access to cheap emission credits from other sectors” (Memorandum, para.5). Dr Barker warned that domestic off-setting “is a really bad idea” that would weaken the overall cap (QQ 274–5).

172. The British Cement Association (BCA) suggested that the provision might be strengthened so that the Commission could issue allowances in respect of projects involving companies and Member States that reduced GHG emissions outside the Community scheme (Memorandum, para. 12.2). The British Lime Association (BLA) was equally supportive of the principle on the basis that “emissions reductions should be made at the point of lowest cost” (Memorandum, p.118).

Conclusions and Recommendations

173. **External credits can play an important role in reducing global emissions cost-effectively as long as they do not crowd out developing countries’ own efforts to cut emissions.**

174. Nonetheless, the EU cannot hope to set an example in the international arena without undertaking substantial emissions reductions within its own borders. It also cannot hope to secure a competitive advantage in low-carbon technologies if external credits are too freely available, as this will stifle domestic innovation and investment.

175. **On balance, we consider it appropriate as a negotiating tactic to restrict the level of external credits in Phase 3 to those available and unused under Phase 2 of the EU ETS, as proposed by the European Commission, until such time as an ambitious global climate change agreement has been concluded.** This will be one of the few bargaining chips available to the EU in international negotiations: **we urge the European Commission and the Member States to use it to press for an ambitious global emissions reduction target at Copenhagen in December 2009.**

176. In order to provide the carbon market with as much certainty as possible, it is imperative that a decision on the future level of credits is taken at the earliest opportunity in the event of an international agreement.

177. **The use of external credits must be properly audited, but this process should not lead to the development of standards separate to those stipulated by the Kyoto Protocol if the aim is to promote a liquid, truly global market.** EU Member States might instead press for a review of the role of the CDM Executive Board by the Secretariat of the UNFCCC in order to assess whether it is functioning effectively.

178. **We are sceptical about the benefits that domestic off-setting might offer,** on the basis that tapping cheap abatement opportunities in non-ETS sectors could push up the cost of meeting emissions reduction targets in those sectors.
CHAPTER 8: LINKAGES WITH OTHER SCHEMES

The issue

179. The ability to link different emissions trading schemes around the world could provide a platform for international cooperation on climate change, and prompt the development of a global carbon market. In this chapter, we consider whether such links would be feasible, and under what conditions they should take place.

Content of the proposal

180. The proposal includes a provision stipulating that agreements may be concluded to provide for the mutual recognition of allowances between the EU ETS and mandatory greenhouse gas emissions trading systems with absolute emissions caps established in any other country or region in the world. Arrangements may be made for administrative and technical cooperation in relation to such allowances.

181. In this context, it is worth noting that a number of national and regional representatives from around the world, including the European Commission, established the International Carbon Action Partnership (ICAP)\(^\text{77}\) in 2007. The role of the ICAP is to share experiences of emissions trading schemes, thereby contributing to the establishment of a well-functioning global cap and trade carbon market.

Witnesses’ Views

182. A number of our witnesses, including the British Cement Association (BCA), RSPB, the Aluminium Federation (AlFed) and 4cmr welcomed the potential to link with schemes similar to the ETS (BCA Memorandum, para. 15.5; RSPB Memorandum, para. 10.1; AlFed Memorandum, para.10 and 4cmr Memorandum, para.10). The Centre for European Policy Studies (CEPS) reminded us that the Stern Review stressed the importance of building a global carbon market as a cost-effective way of achieving climate change objectives. According to CEPS, “the most likely and possibly fastest way to develop a global carbon market is through linking of national and regional schemes”, such as those being developed in Australia, New Zealand, the USA and Japan (Memorandum, p.139). One fundamental reason to link schemes was put to us starkly by Jerzy Buzek MEP, who noted that the EU was responsible for only 14 per cent of CO\(_2\) emissions. A 20 reduction in EU emissions would, therefore, reduce global emissions by only three per cent (Q 405).

183. DEFRA warned, however, that some of the detail of the ETS, such as the small emitter threshold, may “make it harder to link with other schemes” (Q 113). Nevertheless, the UK Government took the view “that most of these things are negotiable and they can be changed to have sufficient flexibility.” Indeed, “as long as we are based on the same basic principles of environmental integrity and a tonne of CO\(_2\) is a tonne of CO\(_2\) come what may, then most schemes should be able to link” (Q 114). Officials emphasised that there was substantial dialogue between the EU, the US and

\(^{77}\) http://www.icapcarbonaction.com/
Australia and that those two countries are “very much following our philosophy and way of doing it” (Q 174). They explained that it was not possible to work out the technicalities of linkages until the details of other schemes were clearer but the new Directive provided a legal framework to make such links (Q 174).

184. According to Mr Fankhauser of IDEA Carbon, the most significant barrier to linkage was the expected price differential between schemes. This was driven by the differing levels of ambition underlying the various emissions trading schemes and, in some instances, the application of a price ceiling when allowance prices hit a particular level. Mr Fankhauser warned that such mechanisms would not be compatible with the EU scheme, while noting that price differentials could be tackled if the political will were there (QQ 317–8). The European Commission confirmed that price caps would not be compatible with the EU scheme but was confident that this was well understood externally (Q 385).

185. As far as linkage between the New Zealand scheme and the EU ETS was concerned, New Zealand officials highlighted the different underlying philosophies behind the two schemes that would act as a barrier to linkage at this stage. The EU’s scheme was more focused on reducing domestic emissions, while the New Zealand system sought to ensure that New Zealand met its international obligations at least cost. This made New Zealand more open to offsetting emission reductions in other countries against obligations in New Zealand. One reason for this approach, officials explained, was that few of New Zealand’s competitors (in the Southern Hemisphere) face a carbon price, a competitive constraint that is particularly acute in the agriculture sector (Q 356). In the EU, by contrast, “the vast majority of trading is within European boundaries and that is where the fundamentally different philosophies emerge from in our view” (Q 356).

186. The European Commission took the view that when linking with other schemes, it would be important to take a common approach to external credits as, “if one of you has taken a decision not to accept a certain type of credit, then you cannot link with somebody who allows that type of credit without tacitly allowing it to affect your systems” (Q 385). A Commission representative acknowledged that the Commission had held discussions with New Zealand in light of New Zealand’s “very, very open approach to credits” (Q 384). New Zealand officials recognised that the types of credits accepted in each scheme would need to be “standardised or very near standardised for full linking to occur” (Q 353).

187. The International Chambers of Commerce (ICC) UK suggested that the EU should adopt formal criteria for assessing the potential to link with other schemes, along the lines of the criteria mentioned by the Commission78 in its impact assessment (Memorandum, para. 13). These included among others: the type of system; the stringency of the cap; the units to be used; the standard of the allowances registry; the sources covered; the emissions covered; compliance and enforcement; and project credit provision. Both the Environment Agency (EA) and the New Zealand government considered that linkages would require a common approach to monitoring, reporting and verification (EA Memorandum, para. 3.8.1 and Q 356).

78 SEC(2007)52, p.132
188. The International Chamber of Commerce (ICC) UK cited the recent launch of the International Carbon Action Partnership (ICAP) as a welcome development which underlined the growing interest of other countries and regions in linking up with the EU ETS, and which might represent one possible forum to develop dialogue on harmonising the design of emission trading schemes globally (Memorandum, paras. 11 and 15). DEFRA also took the view that the ICAP had been effective, particularly by helping the US tap into the experience of other countries (Q 175). New Zealand officials explained that the ICAP initiative had been helpful in allowing New Zealand to maintain close contact with other countries and regions that were developing emissions trading schemes (Q 354), allowing them to share expertise and practical experience (Q 363). They suggested that, in future, the ICAP could “play a very important role in promoting common understanding around important issues in the linking of emissions trading schemes”.

Conclusions and Recommendations

189. It is critical that the EU ETS should be able to link with similar schemes around the world. Emissions trading will become increasingly effective as it becomes more widespread. Conversely, the EU ETS will be less effective, both in economic and environmental terms, while it remains an isolated regional initiative.

190. The evidence presented to us suggests that linkages will only be possible between emissions trading schemes that share similar levels of ambition with respect to environmental objectives, quality-control of credits, verification and enforcement mechanisms. We note than on current projections, the third phase of the EU ETS is likely to deliver a substantially higher carbon price than the emissions trading schemes being developed in other parts of the world. This carbon price differential would in turn present a serious obstacle to establishing links between the EU ETS and other emissions trading schemes. We therefore anticipate that, due above all to the potential price differential, the EU may in future face stark trade-offs between compromising the environmental integrity of its scheme and extending its reach. It is not clear in advance which of these two approaches will deliver more emissions reductions overall, but this consideration should in our view drive EU policy on linkage.

191. In view of the significant remaining barriers to linkage between schemes, we wish to highlight the role that the International Carbon Action Partnership could play in facilitating international dialogue on these issues. We urge the European Commission and the Member States to take a leading role in promoting such dialogue.
CHAPTER 9: LOOKING AHEAD

192. The EU Emissions Trading System has become the cornerstone of UK and EU climate change policy, although its record—in delivering emissions reductions cheaply and efficiently—is as yet unproven. It is a daring, but warranted, strategy in view of the grave threat posed by global warming. By placing a cap on greenhouse gas emissions in participating sectors, and promoting the uptake of emission reduction opportunities where they are cheapest, the ETS could make a major contribution to delivering the cuts in greenhouse gas emissions that the European Union has pledged to make. The EU ETS may also be viewed as a building block in the development of a global network of emissions trading schemes, which could facilitate international collective action on climate change.

193. Vigilance is nevertheless required if the scheme is to live up to its promise. We have highlighted the audit and compliance regime as meritng particularly close attention, and consider that the scheme’s success in delivering emissions reductions must also be monitored. We have warned that on present projections—particularly of the price that different schemes would put on carbon—links between the EU ETS and other nascent emissions trading schemes would be far from straightforward.

194. Emission reduction measures in those sectors of the economy that remain excluded from the scope of the ETS must proceed at an equivalent pace, and receive no less attention from policy-makers, as those sectors account for around half of the EU’s greenhouse gas emissions. They should be accompanied by economy-wide measures to remove barriers to energy efficiency, and policies to support innovation and the deployment of low-carbon technologies.

195. We are conscious that the present financial crisis, and the prospect of a global recession, may increase some Member States’ reluctance to impose additional costs on industry through the proposed revisions to the ETS. Balanced against this, however, is the prospect that, as output falls, so should emissions, thereby easing compliance costs.

196. It has been argued that precisely because emissions may stabilise or fall in the short term, the most ambitious changes to the ETS should be postponed until industry is in a better position to absorb the costs they might entail.

197. EU Member States should resist this argument. Revisions to the ETS would only take effect in 2013, by which time an economic recovery is expected to be underway. In the interim, adoption of the proposed changes to the European Union’s Emissions Trading System would put in place a stable regulatory environment, and send out the necessary long-term signals, ensuring that when private sector investment recovers, it is channelled into the right areas.

198. As the Stern Review pointed out, the investment that takes place in the next 10 to 20 years will have a profound effect on the earth’s climate in the second half of this century and in the next. While the stakes are undoubtedly high, the EU cannot afford to falter.
CHAPTER 10: SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Chapter 2: The overall target, the EU-wide cap and the international context

199. Like all of our witnesses, we welcome the application of an EU-wide cap supported by a clear trajectory for emissions reductions over time, as it should deliver a level playing field and provide industry with the certainty that has been lacking in the EU Emissions Trading System thus far.

200. We agree with the UK Government that the proposed change from a 20 per cent emissions reduction target to a 30 per cent target by 2020, conditional on reaching an international agreement, is desirable. A unilateral 20 per cent target would be less helpful in achieving the desired global reductions than a 30 per cent target alongside an international agreement. A 20 per cent target would also fall below the 25–40 per cent target range recommended by IPCC scientific advice. However, we believe that the change should be conditional on a credible and robust international agreement so as to ensure that EU businesses are not placed at a competitive disadvantage in world markets.

201. As agreed by the European Council in March 2007, an international agreement should include a commitment by developed countries to mandatory reductions of greenhouse gas emissions in the order of 30 per cent by 2020 and a commitment by economically more advanced developing countries to an adequate contribution according to their responsibilities and respective capabilities. We urge the Commission and the Member States to adhere to these minimum conditions.

202. Some advanced developing countries’ argument that developed countries ought to take “historical responsibility” for the cumulative impact of their historical emissions is compelling, but we consider that the threat posed by climate change—not least to the very countries taking that position—is sufficiently grave that advanced developing countries must commit to binding emissions reductions. Persuading these countries to take on such commitments will be particularly difficult and, as a *quid pro quo*, we accept the UK Government’s contention that increased financial flows to developing countries, through external credits and direct assistance for adaptation to climate change, will be an essential bargaining tool in the negotiations.

203. We believe that a final decision on the emissions reduction target for 2020 should be reached as early as possible following the conclusion of negotiations on an international agreement, in order to provide the certainty that would enable industry to make the appropriate investment. We see no compelling reason for the decision to be adopted through the co-decision procedure as this would prolong the period of uncertainty, and risk reopening negotiations on the climate change package as a whole, which will already have been agreed by the European Parliament and Council through the co-decision procedure. It is crucial, however, that the details of the agreement are scrutinised by the Member States and the European Parliament as provided by the Treaty.
204. If the EU’s Emissions Trading System is to achieve its fundamental objective of delivering greenhouse gas emissions reductions as cost-effectively as possible, it must eventually include as many sectors as possible. However, sectors should only be included if their emissions can be reliably monitored and verified. In view of the quality of data and methodology currently available, we support the proposed scope of the ETS from 2013, but recommend that this aspect of the Directive be kept under regular review.

205. We note that the inclusion of agriculture and forestry sectors in the ETS may pose particular practical difficulties due to monitoring and verification problems and the large number of small enterprises involved. We nonetheless consider that these sectors have a major role to play in reducing greenhouse gas emissions, and urge both the Commission and the UK Government to accelerate work on assessing how these sectors can contribute most cost-effectively to a reduction in greenhouse gas emissions, drawing lessons from the experience of other countries.

206. Swift action must also be taken to tackle emissions from shipping. If a sectoral agreement cannot be reached through the International Maritime Organisation in the near future, we believe that the sector’s inclusion in the ETS should be given serious consideration, and should be delayed no further than 2013 for the largest emitters in the sector.

207. The development of a reliable and commercially viable method of decarbonising coal is urgently necessary, as coal is likely to remain a significant—and growing—source of energy. We therefore wish to see significant investment in carbon capture and storage, to establish whether this technology could meet that need. We support the provision in the draft Directive stipulating that operators need not surrender allowances for emissions that have been captured and stored, as it should help to stimulate such investment.

208. We accept that the de minimis emissions threshold proposed in the draft Directive may be too low, and that a large number of small emitters accounting for a relatively small proportion of overall emissions could be removed from the scope of the ETS in the interests of better regulation. We would therefore support a raising of the de minimis threshold as proposed by a number of our witnesses.

209. We note, however, that unintended consequences may flow from a de minimis threshold, such as incentives to build smaller, possibly less efficient installations, and recommend that such effects be monitored closely and preempted where possible. In this respect, we welcome the Government’s assurance that small installations in the UK that are excluded from the scope of the ETS will instead be covered by the Climate Change Agreement scheme or by the Carbon Reduction Commitment.

210. We note that the UK Government is making some efforts outside of the ETS to tackle climate change but would urge the Government to intensify its pursuit of cost-effective emissions reduction measures across the economy, particularly in sectors remaining outside the ETS such as agriculture, forestry and road transport. Emissions reductions in other parts of the economy are no less important than those within the sectors and installations covered by the ETS.
Chapter 4: Allocation and auctioning

211. We support in principle the 100 per cent auctioning of allowances from 2013 in all sectors other than those deemed subject to carbon leakage. Free allocation of allowances can lead to windfall profits and should for that reason be avoided wherever possible.

212. We acknowledge, however, the concerns of those Member States whose energy mix is fossil fuel-intensive and who therefore fear that the Commission’s proposal may have a disproportionate impact upon them. We believe that time-limited derogations from the principle of 100 per cent auctioning in the power sector from 2013 could be granted to Member States with particularly fossil fuel-intensive energy sectors, on the condition that the transition period is used to develop and trial carbon capture and storage technology. Derogations should be phased out by 2020 at the latest, by which time full auctioning should be in place for the power sectors of all Member States.

213. Should the Commission’s proposal for a gradual transition towards 100 per cent auctioning over the period 2013–20 for all but the power sector be adopted, we consider that a harmonised level of auctioning should be set across the EU, with no flexibility for Member States to either raise or lower the level set. This is crucial in order to prevent distortions of competition across the European Union. In any transition towards 100 per cent auctioning, free allocation should be based on sector-specific EU-wide benchmarking that rewards the use of Best Available Technology and stimulates further innovation.

214. With regard to how auctioning revenues are spent, we agree with the UK Government that it would be inappropriate for this to be prescribed at the EU level as it breaches the principle of subsidiarity. Without such earmarking, we do not see any remaining justification for the redistributive element of the Commission’s proposal, under which a proportion of the rights to auction allowances would be redistributed towards Member States with low income per capita or particularly high compliance costs.

215. We are conscious, however, that the redistributive element of the Commission’s proposal commands wide support among Member States. If this aspect of the proposal were to be accepted, and if any derogations from the principle of 100 per cent auctioning in the power sector were to be permitted, the levels of redistribution of auction rights among Member States should be re-considered. If the levels are not re-considered, the EU risks compensating the same Member States twice over for the compliance costs they face.

216. It is our firm view that Member States should invest considerable funds in climate change-related measures—including R&D and demonstration projects, as well as adaptation measures—and in measures to help ease the social problems that may arise as a result of the ETS, such as increases in electricity prices. In our view, this will be essential to secure the credibility of the scheme, by signalling that governments are willing to foot part of the bill that they are imposing on the private sector.

217. It is critical, however, that the measures into which such funds are invested should not cancel out the carbon price signal altogether by compensating industry and consumers fully for price increases arising from the ETS, as this would undermine the scheme’s raison d’être. Investment should instead focus
on providing viable, low-carbon alternatives and promoting the necessary transition.

218. The balance of evidence presented to us suggests that the proposed level of the New Entrant Reserve is too high, which would have the effect of creating a large reserve of allowances whose deployment is unpredictable. We accept our witnesses’ contention that the New Entrant Reserve is too large, but would support the redeployment of unallocated allowances from the Reserve towards large-scale carbon capture and storage demonstration projects free of charge, as proposed by the European Parliament’s Environment Committee. A provision along these lines would stimulate the development of this important technology without undermining the overall cap on allowances.

Chapter 5: Carbon leakage

219. While the ETS remains a regional scheme, we believe that some sectors of industry may be at risk of carbon leakage. The evidence we received suggests that vulnerable firms are concentrated in a handful of sectors, and in some cases, sub-sectors, such as clinker and primary aluminium. We consider that it would be appropriate to award special treatment to the industries or sub-sectors at risk in the third phase of the ETS until an international agreement or a global sectoral agreement putting these industries on an even footing with their non-EU competitors can be reached.

220. Identification of the sectors or sub-sectors at risk should be evidence-based. We support the Commission’s proposed criteria for arriving at these judgments, but emphasise that the analysis should distinguish between potential competitiveness lost as a direct result of the ETS and other influences on competitiveness (e.g. regulatory standards more generally) that arise from trading in a global context. The extent to which cost savings are possible through energy efficiency measures should also be considered.

221. In order to create a predictable policy environment, decisions on the sectors or sub-sectors at risk ought to be taken as soon as possible. We therefore believe that the decision-making process should be speeded up. Sectors potentially at risk of carbon leakage should be identified by 2009 so as to minimise uncertainty for all other sectors within the scope of the ETS. Decisions on the treatment to be afforded to sectors at risk of carbon leakage should be taken in 2010 after the December 2009 UN Climate Change Conference in Copenhagen, when the full extent of that risk (or lack of it) will become clear.

222. Free allocation of emissions allowances should in our view be the preferred policy response to the threat of carbon leakage, but international sectoral agreements on emission reductions in particular sectors must be the eventual aim as there is a risk that free allocation could, in the long term, become a protectionist measure. Border adjustment measures should be avoided, due to their potential to breach WTO rules.

Chapter 6: Compliance and enforcement

223. The practical application and enforcement of the ETS is critical to its success. It is clear to us that, without effective enforcement, the integrity of the scheme would be severely prejudiced. We therefore welcome the European Commission’s proposal that monitoring, reporting and verification rules should be harmonised across the European Union with the aim of
guaranteeing a level playing field. The Commission has been vigilant in monitoring Member States’ compliance with climate change legislation thus far and we urge it to continue to pursue this approach in future, taking all necessary action against Member States that are not fulfilling their responsibilities. We are not persuaded by the argument that the performance of national regulators will be kept in check by competitors in different Member States informing on each other.

224. We note with serious concern that the enforcement mechanisms of the Kyoto Protocol have been shown to be weak and consider that these deficiencies must be addressed in any successor agreement if international efforts to address climate change are to produce the desired result. The Commission and Member States must therefore place high priority on this issue during negotiations on a new international climate change agreement.

Chapter 7: External and domestic credits

225. External credits can play an important role in reducing global emissions cost-effectively as long as they do not crowd out developing countries’ own efforts to cut emissions.

226. Nonetheless, the EU cannot hope to set an example in the international arena without undertaking substantial emissions reductions within its own borders. It also cannot hope to secure a competitive advantage in low-carbon technologies if external credits are too freely available, as this will stifle domestic innovation and investment.

227. On balance, we consider it appropriate as a negotiating tactic to restrict the level of external credits in Phase 3 to those available and unused under Phase 2 of the ETS, as proposed by the European Commission, until such time as an ambitious global climate change agreement has been concluded. This will be one of the few bargaining chips available to the EU in international negotiations: we urge the European Commission and the Member States to use it to press for an ambitious global emissions reduction target at Copenhagen in December 2009.

228. In order to provide the carbon market with as much certainty as possible, it is imperative that a decision on the future level of credits is taken at the earliest opportunity in the event of an international agreement.

229. The use of external credits must be properly audited, but this process should not lead to the development of standards separate to those stipulated by the Kyoto Protocol if the aim is to promote a liquid, truly global market. EU Member States might instead press for a review of the role of the CDM Executive Board by the Secretariat of the UNFCCC in order to assess whether it is functioning effectively.

230. We are sceptical about the benefits that domestic off-setting might offer, on the basis that tapping cheap abatement opportunities in non-ETS sectors could push up the cost of meeting emissions reduction targets in those sectors.

Chapter 8: Linkages with other schemes

231. It is critical that the EU ETS should be able to link with similar schemes around the world. Emissions trading will become increasingly effective as it becomes more widespread. Conversely, the EU ETS will be less effective,
both in economic and environmental terms, while it remains an isolated regional initiative.

232. The evidence presented to us suggests that linkages will only be possible between emissions trading schemes that share similar levels of ambition with respect to environmental objectives, quality-control of credits, verification and enforcement mechanisms. We note than on current projections, the third phase of the EU ETS is likely to deliver a substantially higher carbon price than the emissions trading schemes being developed in other parts of the world. This carbon price differential would in turn present a serious obstacle to establishing links between the EU ETS and other emissions trading schemes. We therefore anticipate that, due above all to the potential price differential, the EU may in future face stark trade-offs between compromising the environmental integrity of its scheme and extending its reach. It is not clear in advance which of these two approaches will deliver more emissions reductions overall, but this consideration should in our view drive EU policy on linkage.

233. In view of the significant remaining barriers to linkage between schemes, we wish to highlight the role that the International Carbon Action Partnership could play in facilitating international dialogue on these issues. We urge the European Commission and the Member States to take a leading role in promoting such dialogue.

Chapter 9: Looking ahead

234. The EU Emissions Trading System has become the cornerstone of UK and EU climate change policy, although its record—in delivering emissions reductions cheaply and efficiently—is as yet unproven. It is a daring, but warranted, strategy in view of the grave threat posed by global warming. By placing a cap on greenhouse gas emissions in participating sectors, and promoting the uptake of emission reduction opportunities where they are cheapest, the ETS could make a major contribution to delivering the cuts in greenhouse gas emissions that the European Union has pledged to make. The EU ETS may also be viewed as a building block in the development of a global network of emissions trading schemes, which could facilitate international collective action on climate change.

235. Vigilance is nevertheless required if the scheme is to live up to its promise. We have highlighted the audit and compliance regime as meriting particularly close attention, and consider that the scheme’s success in delivering emissions reductions must also be monitored. We have warned that on present projections—particularly of the price that different schemes would put on carbon—links between the EU ETS and other nascent emissions trading schemes would be far from straightforward.

236. Emission reduction measures in those sectors of the economy that remain excluded from the scope of the ETS must proceed at an equivalent pace, and receive no less attention from policy-makers, as those sectors account for around half of the EU’s greenhouse gas emissions. They should be accompanied by economy-wide measures to remove barriers to energy efficiency, and policies to support innovation and the deployment of low-carbon technologies.

237. We are conscious that the present financial crisis, and the prospect of a global recession, may increase some Member States’ reluctance to impose
additional costs on industry through the proposed revisions to the ETS. Balanced against this, however, is the prospect that as output falls, so should emissions, thereby easing compliance costs.

238. It has been argued that precisely because emissions may stabilise or fall in the short term, the most ambitious changes to the ETS should be postponed until industry is in a better position to absorb the costs they might entail.

239. EU Member States should resist this argument. Revisions to the ETS would only take effect in 2013, by which time an economic recovery is expected to be underway. In the interim, adoption of the proposed changes to the European Union’s Emissions Trading System would put in place a stable regulatory environment, and send out the necessary long-term signals, ensuring that when private sector investment recovers, it is channelled into the right areas.

240. As the Stern Review pointed out, the investment that takes place in the next 10 to 20 years will have a profound effect on the earth’s climate in the second half of this century and in the next. While the stakes are undoubtedly high, the EU cannot afford to falter.
APPENDIX 1: SUB-COMMITTEE D (ENVIRONMENT AND AGRICULTURE)

The members of the Sub-Committee that conducted this inquiry were:–

Earl of Arran
Lord Brooke of Alverthorpe
Viscount Brookeborough
Lord Cameron of Dillington
Earl of Dundee
Baroness Jones of Whitchurch
Lord Palmer
Lord Plumb
Lord Sewel (Chairman)
Baroness Sharp of Guildford
Viscount Ullswater
Lord Wallace of Tankerness

Declarations of Interest Relevant to this Inquiry

Lord Cameron of Dillington
Farmer and Landowner in Somerset
Shareholder and Director of an internet travel company
Trustee of Lawes Agricultural Trust managing assets at Rothamsted Agricultural Research
Director of the Royal Bath and West Agricultural Society

Lord Palmer
Farmer
Vice Chairman of the All-Party Renewable Transport Fuels Group
President of the Renewable Energy Association’s Transport Division

A full list of Members’ interests can be found in the Register of Lords Interests:
http://www.publications.parliament.uk/pa/ld/ldreg.htm
APPENDIX 2: LIST OF WITNESSES

The following witnesses gave evidence. Those marked * gave oral evidence.

- Aluminium Federation Ltd
- Mr. Miles Austin, Head of European Regulatory Affairs, Ecossecurities
- Dr. Terry Barker, Director, and Ms. Annela Anger, PhD Student, Cambridge Centre for Climate Change Mitigation Research
- Confederation of British Industry
- Department for Business, Enterprise and Regulatory Reform
- British Cement Association
- British Lime Association
- Brunner Mond
- Business Europe
- Centre for European Policy Studies
- Centrica plc
- Church of England Archbishops’ Council
- Clientearth
- Confederation of UK Coal Producers
- Department for Environment, Food and Rural Affairs
- Environment Agency
- Environmental Industries Commission
- Euracoal
- European Commission
- European Federation of Energy Traders
- Mr. Sam Fankhauser, Research Fellow, LSE and Adviser, IDEACarbon
- Greenpeace UK
- High Commission of India
- International Chamber of Commerce UK
- Lafarge Cement UK
- Ms. Coralie Laurencin, Climate Change Capital and INCIS (International Carbon Investors and Services)
- New Zealand Government
- Polish Government
- Royal Society for the Protection of Birds
- Scottish Executive
- Spanish Government
- Mr. Phil Woolas MP, Minister for the Environment
- WWF–UK World Wide Fund for Nature
APPENDIX 3: CALL FOR EVIDENCE

Introduction

The House of Lords European Union Committee will be conducting a short inquiry, through its Environment and Agriculture Sub-Committee (Sub-Committee D), into the European Commission’s proposal (published on January 23) for revisions to the EU’s Emissions Trading System (ETS).

The Committee is seeking evidence from stakeholders and other interested parties, on the basis of which it will formulate conclusions and recommendations designed to inform the House of Lords and assist the UK Government and the EU institutions in finalising the relevant legislation.

Closer examination of the draft Directive amending the EU ETS will to some extent touch upon other elements of the package of climate change and energy measures published by the European Commission on January 23, including the draft Decision on Greenhouse Gas Emissions (which affects sectors not included in the ETS); the draft Directive on Carbon Capture and Storage (which includes provisions on liabilities under the ETS); and the draft Directive on the promotion of energy from renewable sources (which is the subject of a separate inquiry by the House of Lords’ EU Sub-Committee B).

The issues

Against this background, the Committee hereby invites you to submit written evidence to its Inquiry. The Committee would find it helpful if, in addition to any general issues you may wish to raise, you would focus on a number of specific issues, listed below. It is recognised that those submitting evidence will not necessarily have an interest in all the questions and may therefore wish to be selective. Views are sought on the following:

Level of Emissions Reductions

The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached.

Scope and Operation

The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture.

The practical application and enforceability of the scheme.

The key strengths and weaknesses of the proposal. You may wish to consider in particular:

the extent to which the scheme as currently designed will encourage technological innovation;

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80 According to the UN Framework Convention on Climate Change, the six land-use categories for the purposes of LULUCF are: forest land; cropland; grassland; wetlands; settlements; and other land. http://unfccc.int/methods_and_science/lulucf/items/1084.php
whether it will result in the appropriate price signal being sent; whether it will be efficient and/or equitable.

The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions.

**Allocation and Auctioning**

Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be.

Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge, and for how long.

Whether the redistributive element of the Commission’s proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate.

**The international dimension**

The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM).

The likely feasibility of creating links between the ETS and other similar schemes around the world.
APPENDIX 4: RECENT REPORTS

Recent Reports from the Select Committee

Session 2007–08
Priorities of the European Union: evidence from the Minister for Europe and the Ambassador of Slovenia (11th Report, Session 2007–08, HL Paper 73)

Recent Reports prepared by Sub-Committee D (Environment and Agriculture)

Session 2007–2008

Session 2006–2007
Minutes of Evidence

TAKEN BEFORE THE SELECT COMMITTEE ON THE EUROPEAN UNION
(SUB-COMMITTEE D)

WEDNESDAY 25 JUNE 2008

Present Ullswater, V (Chairman)
Arran, E
Brooke of Alverthorpe, L
Brookeborough, V
Cameron of Dillington, L
Dundee, E
Palmer, L
Plumb, L

Examined of Witness

Witness: Dr Douglas Parr, Chief Scientific Adviser and Acting Policy Director, Greenpeace UK, examined.

Q1 Chairman: Dr Parr, you are very welcome. Thank you very much indeed for coming to give evidence. We are starting an inquiry on the Emissions Trading Scheme. You are our first witness and we look forward to hearing what you have to say about it. This is a formal evidence session. As you can see, a note of what is said is being recorded and you will be given a transcript of what has occurred this morning for you to look at and, if there are any corrections that you wish to make, please, do so and return it. In a few minutes when the transmitter is switched on, this will also be broadcast just to let you know that this is perhaps reaching a wider audience than the Committee. Would you like to make an opening statement or would you like to go straight into the formal questions?

Dr Parr: One matter that I should say is that although the tone of what I say here may sound quite critical of the Emissions Trading Scheme, I do not want anybody to be under any illusion that we think that the Emission Trading Scheme is a bad idea. It is an important contribution to the policy framework for delivering emissions reductions. We are supportive of emissions trading; we think it is a good idea but we think that the Emission Trading Scheme is a bad idea. It is an underestimated piece of information that we now have is that we have verified emissions from all the point sources which helps enormously in working out what should happen in the second and third phases and of course we are on to the second phase. So, there have been some institutional gains, there have been some experience gains and the stage is set for it to start delivering in a serious way but that has not actually happened as yet. I think that the jury is still out on whether it is going to deliver and we hope that it does. In terms of its strengths and weaknesses, I have mentioned some of the strengths and the weakness is not so much in the Emissions Trading Scheme as the way that in particular the UK Government tend to treat it as a policy answer to all the conundrums that driving towards a low carbon society actually throws up. It is not, in our view, a way of tackling decisions about infrastructure that have a very long-term framework like a lot of the energy and transport systems does. The prices of the Emissions Trading Scheme are currently too low and they are certainly too uncertain going into the future to really drive those changes in a way that we would like. The issue for us is that, as the Stern Review identified, there is a danger before a carbon trading system is fully global and fully functioning that you get locked in to high carbon infrastructure and the immediate challenge for us in the UK is the coal-fired power stations and expansion of aviation. The Emissions Trading Scheme does not seem to us to be anywhere close to incentivising changes of that kind of order of saying whether we want a third runway or not and whether we want to have coal-fired power stations or...
The revision of the EU’s emission trading system: evidence

Dr Douglas Parr

25 June 2008

not because the institutional certainty is not there and the long-term price is not there and that requires other measures. That means that the Emissions Trading Scheme is good and it can help, but it is not the answer to everything and I think that the way it is treated as if it somehow is the answer to everything is part of the problem.

Q3 Lord Plumb: You said that there are experience gains.
Dr Parr: Yes.

Q4 Lord Plumb: What experience gains are there? This is a new world, is it not?
Dr Parr: Yes.

Q5 Lord Plumb: Therefore, one is bound to learn by changes, but are these scientific changes or technical changes?
Dr Parr: I think that they are partly attitudinal changes, so that companies are now looking at their emissions credits and thinking ah, here is something where we do not just have to comply but we can trade.

Q6 Lord Plumb: In other words, they are taking it seriously.
Dr Parr: Yes, they are taking it seriously but it is more than that, it is about a shift in the way that ... For example, I was told by one of the major utilities that they used to deal with the Emissions Trading Scheme with a compliance officer; it used to be thought of as compliance: you had to have enough permits in order to emit this amount of carbon, but they are shifting towards thinking about it as trading opportunity. In other words, instead of just getting enough permits, they think, right, how can we deal with that? How can we best optimise, obviously, our profits and how can we best optimise our position in the market? That delivers liquidity and also I think it delivers the potential for innovation. So, there has been a shift in the way that companies have been thinking about it and obviously market trading institutions have developed and so on, then that has the potential for delivering more and more significant carbon cuts through the Emissions Trading Scheme. However, it has not delivered them yet but that is the kind of experience and changes and changes in thinking that will be helpful in the long term.

Q7 Chairman: So, that is a positive attitude for change.
Dr Parr: Yes, I think that is positive.

Q8 Lord Brooke of Alverthorpe: Coming back to the scheme itself rather than other policies which you believe the Government should be pursuing, can you endeavour to identify in a little more detail the weaknesses you see in it.
Dr Parr: Yes, certainly. We think that a major weakness is that we need to have auctioning and maximum possible auctioning right across the board. That is probably the biggest and most important thing because that is a potential source of revenue which could be used to offset other taxes and it could be used to generate revenue for other low carbon investments or flanking measures. Secondly, I think that one of the weaknesses so far which is being addressed is that we need to have cross-Europe caps instead of national allocation plans. We think that the cross-Europe cap should be set on the basis of what is needed by the science and not by the kind of haggling that we have had so far. Some of these are being addressed but perhaps not as thoroughly as they should be.

Q9 Earl of Arran: Is the call by CAN for a 30 per cent reduction in levels by 2020 compared to 1990 realistic or pie in the sky?
Dr Parr: I think it is realistic and necessary and, subject to an international agreement, it is what we have already said we are going to be committed to anyway.

Q10 Earl of Arran: You have put a lot of caveats so far as to whether it is possible or not.
Dr Parr: Part of the changes to which I was referring earlier about the shift in thinking means that there will be more potential unlocked in innovation than we have thus far seen. I think that some of the other measures which are driving renewables in the market as part of the EU climate and energy package will deliver significant reductions including from within the emissions trading sector. It is challenging for the UK and it is challenging for other countries as well but I think that they should be deliverable. I think that it is realistic. I think we will have to see where the emissions reductions can be gained but I do not have any doubt that firstly that is what is necessary and secondly that innovation will be unlocked by long-term certainty and an increased price, which is what I hope we will be able to see from phase three.

Q11 Earl of Arran: Necessity is very different to reality, is it not? What I am really asking is, do you think that it is achievable?
Dr Parr: As Winston Churchill once said, “You can’t always just do your best, you have to do what is necessary” and, in the circumstances when the EU is trying to lead the world, which effectively it is doing at the moment in the international negotiations, then they also have to lead by example and it is no good telling China, India and Brazil not to do this and that if we do not do some pretty impressive delivery at home.
Q12 Chairman: Are you concerned about substitution rather than innovation, perhaps moving from coal to gas, perhaps importing cement—I do not know what it is—in order to reduce our emissions?

Dr Parr: I think that that comes back to the importance of long-term pricing. This is a politically created market; the politics have to be secure and the commitment from all the institutions involved has to be rock solid because, if you look at the marginal abatement curves and where it is cheapest to do reductions, there is no question that some of the substitution, gas for coal, come in at the low end. We have some efficiency and then you have fuel switching, so substitution like you say. If there is long-term certainty that there will be a strong price signal, then there is the possibility for innovation over the longer term with investment decisions that have a return of longer than two or three years. If we get to five to seven years, that is better and, if we get to ten to 12 years, that is much, much better. The Emissions Trading Scheme is only going to be as good as the confidence that people have that the price is going to remain high and that it is not going to be diluted when there might be some political issues with somebody-or-other who finds that the price is starting to hurt. If there is not that certainty, then actually there is a serious danger that the Emissions Trading Scheme will not deliver.

Q13 Earl of Dundee: What do you think about the setting of a cap at the community rather than at Member State level?

Dr Parr: We would be supportive of that because it can then be clear what the overall allocation within the EU is rather than the Commission trying to set an overall cap by individual bilateral negotiations with individual countries. I think that it brings a level of clarity to the ambition within the Emissions Trading Scheme.

Q14 Earl of Dundee: Do you think that they have pitched it about right with the cap that they propose?

Dr Parr: We believe that the cap should be set at 30 per cent emissions reductions from the beginning rather than saying that it is contingent on international negotiations. The reasons for that I covered to some extent earlier in terms of international leadership and in terms of what is necessary from a climate point of view and because actually at the moment there is uncertainty about the future of the Emissions Trading Scheme because it all turns on what happens in Copenhagen in 18 months’ time. Already, the way in which minds are turning towards the challenges that will be posed for this long-term infrastructure can be confused by that.

Q15 Earl of Dundee: But you would like 30 per cent?

Dr Parr: Yes.

Q16 Earl of Dundee: They are not suggesting 30 per cent at the moment and if what they suggest were to be implemented, do you still think that it would work or will it not work?

Dr Parr: It should work within its own terms and potentially will deliver a 20 per cent cut, but we would prefer that they reversed it and said, “We will go for a 30 per cent cut and maybe we won’t do that if the international negotiations do not deliver”. I was talking to Commissioner Dimas about ten days ago and I raised with him that we are at the point of developing the framework and potentially starting to allocate for the phase three over the next couple of years and there will be considerable difficulty associated with one set of negotiations to come to one set of conclusions if then suddenly, at the end of 2009, it is a case of, “We have to change everything; we have to make a 30 per cent cut”. Actually, it would be much easier to aim for a 30 per cent cut and then rein back. We do not believe that there should be a rein back but we accept that that is the next stage in terms of the firmness of the Emissions Trading Scheme. Does that answer your question?

Earl of Dundee: It does, thank you.

Q17 Viscount Brookeborough: Before we move on to the question of external dimension, on this memorandum, is this the total representation of the organisations you represent or are there others?

Dr Parr: I am here representing Greenpeace but we are part of CAN Europe.

Q18 Viscount Brookeborough: What is CAN? Do they have a big office block with lots of scientists?

Dr Parr: No.

Q19 Viscount Brookeborough: Or are they merely a forum that meets once a year with the heads of Greenpeace and other people?

Dr Parr: I forget how many staff CAN Europe have; it is not very many, perhaps two or three. A lot of the work has to be carried out by the member organisations but they provide a secretariat and a function that can bring those organisations together under an umbrella when there are important issues like the Emissions Trading Scheme where it is helpful to have a common position and there is quite a lot of aligned thinking. So, rather than each individual organisation putting their own thing out, it makes a lot more sense to say, “All the groups concerned with this think pretty much this”.

Q20 Viscount Brookeborough: So, is this evidence here agreed evidence that was sent out to all of them before it came to us?
Q21 Lord Plumb: How long has that been in operation? Was it something that started when we first began to talk about trading emissions?
Dr Parr: I think that CAN Europe has been in existence in some form for at least 20 years. It has been there a long time.

Q22 Viscount Brookeborough: You call it “CAN Europe”, is there a CAN anything else?
Dr Parr: There used to be a CAN UK but that kind of folded because most of the functions were being carried out by other organisations like Green Alliance or increasingly now Stop Climate Chaos and so on, so it kind of ceased to have a clear and good rationale.

Q23 Lord Plumb: Is it made up of scientists generally?
Dr Parr: I think that the scientists and technical people within the organisations would contribute heavily to the policy papers, yes.

Q24 Viscount Brookeborough: On the question of external dimension, the CAN Europe paper expresses serious concern over the level of use that can be made of external credits in order to offset domestic EU emissions, although it also emphasises that the EU must support developing countries in addressing their greenhouse gas emissions. What should, in your view, be the external dimension of the ETS and perhaps you would also like to comment on the third paragraph of your evidence where you refer to loopholes and so on.
Dr Parr: Let me begin by saying what I think the external dimension should be. We certainly think that there does need to be an external dimension. We would say that the relationship between the EU and developing countries should start with strong domestic reductions but that there needs to be a transfer of money and potentially expertise to help developing countries deliver emissions reductions as well. We see part of that finance or even a significant amount depending on how it works coming from the revenues from the Emissions Trading Scheme. I think that there would be a three-tier approach. One would be direct funding by the EU or even the Member States on a bilateral basis of projects, policies and programmes. The second could be through a multilateral fund which at the moment does not really exist, again for policies, programmes and projects. The third would be through the existing CDM credits. Our worries about having lots of CDM credits flowing into the Emissions Trading Scheme is that firstly it removes the incentive for domestic reductions and domestic reductions within the EU are critical in terms of changing the infrastructure that we have towards being a low carbon society. Otherwise, if we keep pulling credits, there is a fairness issue about effectively taking credit for emissions reductions going on elsewhere and taking up all the low-cost emissions reductions which the developing countries will ultimately have to do. It is not that we are against that but we should not be taking credit for it and saying that we are producing these large reductions which are actually being produced elsewhere.

Q25 Viscount Brookeborough: Would it not be an opinion that, if we are exporting technology and giving these returns in reductions, it is actually much more easier to control than money being put into developing countries because there are too many stories and there is a lot of history of money in developing countries simply not achieving anything and at least if we are actually doing something in those countries by developing the business, we can bring credits back and we know what has happened? You seem to be rather more for sending money.
Dr Parr: The CDM has controls on it; there is not en masse transfer of money to other countries in order to let them spend it how they will. I am not advocating mass transfer of money without checks and controls.

Q26 Viscount Brookeborough: Yes but it is quite difficult.
Dr Parr: I agree that it is quite difficult and it actually becomes even more difficult when we come to deforestation which is another part of the Bali programme and another part of where we think some of the money should go. The entire international climate talks are based on, if you like, a political settlement about development in exchange for carbon cuts and I think that, as part of that political settlement, it would be in the end counterproductive to say, “We are going to decide how these carbon cuts happen in your country”. I think that there has to be some respect for the developing countries in how they go about delivering those cuts even if those projects and programmes are scrutinised for what they actually deliver.

Q27 Viscount Brookeborough: What are the loopholes to which you refer?
Dr Parr: Could you point that out to me, please?

Q28 Viscount Brookeborough: It is in paragraph 3 of your evidence where you say, “On top of the unambitious and inconsistent reduction targets, these proposals offer Member States and EU ETS installations the opportunity to off-set their emissions by using large quantities of external...
Dr Parr: Which section is this?

Q29 Lord Cameron of Dillington: The key question probably is, what is the difference between the existing CDM and your gold standard CDM?

Dr Parr: Some of the key differences are about the kinds of project that are allowed. Under a gold standard type framework or similar, the focus is on energy efficiency renewable energy type projects because we believe that those are the kind of projects that will be delivering changes to the energy system and therefore driving long-term change. I am afraid that I am not familiar with the detailed criteria of gold standard but my understanding is that the levels of verification are rather higher than CDM and I think that there are more provisions for evaluation of feedback.

Q30 Lord Cameron of Dillington: May we have a note of that in order that we can understand that?

Dr Parr: Yes. Could you direct me to where …

Lord Brooke of Alverthorpe: It is on page 3 of your evidence.

Chairman: It is paragraph 3 on page 1.

Lord Brooke of Alverthorpe: And then overleaf as well.

Dr Parr: So, it is that one. I will sort out an elaboration on that.

Q31 Viscount Brookeborough: It is the fourth bullet point on key NGOs.

Dr Parr: I am sorry, I am looking at a different paper.

Q32 Lord Cameron of Dillington: Over the page, you refer to your CDM gold standard.

Dr Parr: So, it is that one. I will sort out an elaboration on that.

Chairman: That would be very helpful.

Q33 Lord Cameron of Dillington: May I deal with another escape route, as it were, for domestic reductions which is carbon leakage and whether you consider this to be a real threat and how we might tackle it.

Dr Parr: Is it a real threat? I think that there is the potential for carbon leakage. Yes, I would agree. Is it as big as it is made out? We suspect not because at the moment there are several industries—and I refer to the experience of my Brussels colleagues here rather than myself—saying that there is a danger that we will simply offshore and go somewhere else. When asked where the evidence for this is, they say, “It’s all confidential. We can’t possibly tell you”. There is a history of industry, particularly large industry, making claims about new taxes, new regulations and how damaging that is going to be when the actuality is not anything like as serious. My own experience back in the early 1990s was on ozone depleting chemicals and Dupont were saying, “We are practically going to go bankrupt if you implement these Montreal protocol controls”. By the late 1990s, a review of the impact of those controls evidenced that they appeared to suffer no cost and no job losses across the chemicals industry. I think that one has to take these claims, particularly when they are not being backed up with evidence, with a certain pinch of salt.

Q34 Lord Brooke of Alverthorpe: So, you do not accept the claims that air flights which previously came out of Heathrow have now gone to Charles de Gaulle and to Holland?

Dr Parr: That is possible. As I say, I would not reject it.

Q35 Lord Brooke of Alverthorpe: If you check, there are some very substantial facts that, unless we get an international agreement on these issues, you do have leakage.

Dr Parr: Aviation is a case in point but it depends on whether people want to come to London or not. If they want to come to London, they cannot go to Charles de Gaulle. I accept that transfer passengers is another issue.

Q36 Lord Brooke of Alverthorpe: This is people travelling to other parts of the world rather than coming to London.

Dr Parr: I think conceptually, just like the carbon leakage point, I can accept that there is a point. I have to say that anybody not using Heathrow is most unlikely to be doing so because the Emissions Trading Scheme or any threat of that, it is rather to do with the competence of operation.

Q37 Lord Brooke of Alverthorpe: There are a whole variety of reasons but we still come back to the fundamentals that carbon emission shifts, it is not stopped and these things do happen.

Dr Parr: As I say, I do not dispute that theoretically it can happen.

Q38 Lord Brooke of Alverthorpe: No, in practice it happens.

Dr Parr: What I would say is that it is confounded by a whole range of other factors about markets, supplies, where you want to deliver, where the supply chains are etcetera, etcetera, and whether the Emissions Trading Scheme is at a price that is within the range that people are actually thinking about.

Q39 Lord Brooke of Alverthorpe: Basically, you are saying on this question that it does not happen.
Dr Parr: No.

Q40 Lord Brooke of Alverthorpe: It is a fabrication.
Dr Parr: No, I am not saying that it does not happen. As I think I said, I would accept that, yes, it potentially could happen, but I think that one should be really sceptical about claims that it is going to happen to a huge degree and I think that one should definitely be very sceptical should there be a proper agreement in Copenhagen in 2009 because then, if there was a shift in manufacturing industry, they would be taking a punt that, within a few years, there are not going to be some kind of emissions reductions happening globally and whether there are short term benefits to moving.

Q41 Lord Cameron of Dillington: Your statement seems to be slightly undermined by the fact that there is a controversy starting to exist in the EU about determining the criteria for sectors that might be susceptible to carbon leakage and that we should be treated differently, ie getting more free allocations to prevent the transfer of economic productive businesses.
Dr Parr: Yes.

Q42 Lord Cameron of Dillington: My question is, what criteria should apply and if, as you say, it is all a bit of a storm in a teacup, why are people marshalling their forces for this little debate?
Dr Parr: It is about money really, is it not? I think that experience shows that, in the power sector, free allocation of permits led to considerable windfall profits because the emissions were given out for nothing and, as an economist friend of mine said, “If you acquire a house, it does not matter whether you bought it or whether you got it free from your dead uncle, you are still going to charge the market rate for it” and that is what power companies did. If an industrial sector can get free allocation of permits when they can use those free permits as something they can effectively charge for, then that is windfall profits. As I have been I hope clear, I do not dispute that carbon leakage can happen. I think that what the Commission needs to do is to properly scrutinise the claims that the absence of free allocation will lead to carbon leakage.

Q43 Lord Cameron of Dillington: So, you would not like to comment on the criteria which basically is saying which industries might be considered liable to carbon leakage.
Dr Parr: At this point, I could not comment on the criteria. I could ask my Brussels colleagues to provide comment if that would be helpful.

Q44 Lord Cameron of Dillington: That would be helpful. May I bring us back to more internal matters and discuss the scope of the ETS. Do you want to comment on the scope? There are certain sectors which are to remain outside, such as Forestry and agriculture. You might also like to comment on the de minimis cut off because it is out only the larger industries or outputters, if that is an English word, of carbon dioxide that are being included and also comment on whether, in your opinion, the cut off is right.
Dr Parr: Let me run over some of these points. We are opposed to the idea of forestry and agriculture being included in the Emissions Trading Scheme. I think that that potentially undermines it because the sources and sinks in those areas are much more difficult to quantify than monitoring and verifying at the point sources. There are quite high uncertainties associated with some of those emissions. If we want to maintain the integrity of the Emissions Trading Scheme which we do, then we think it is important that it is kept to those where the error bounds on the actual emissions is pretty small and is relatively easy to verify. So, we do not believe that land use change is an appropriate field and sector for the Emissions Trading Scheme. We would accept aviation into the ETS with caveats. We are a little disappointed to see that the Commission is suggesting that there should not be the multiplier associated with aviation emissions so that it is only covering the carbon dioxide emissions and not the full greenhouse gas impact. However, if it is going in, it should go in fairly quickly and we think that it should make its own contribution; all the other industries are going to have to cut their emissions quite sizeably compared to 1990 emissions. It would appear that in comparison the aviation industry certainly will not. However, yes, if it is going in, let us get it in and let us do it. In terms of shipping, we can see that there would be merits in including shipping but, rather like aviation, harking back to my opening comments, we do not want to see inclusion in the Emissions Trading Scheme as a reason for not pursuing other measures because, in terms of containment of emissions from both shipping and aviation in fact, there should be other measures to bring down those emissions including taxation—and I know that that is very difficult in the case of aviation—and standards and so on which would help rather than hoping that emissions trading is going to deal with it. So, shipping, yes, providing that monitoring and verification can be conducted appropriately and I think our view at the moment is that it probably can but that that needs to be properly bottomed out. In terms of other areas, I think that we would support the inclusion of the fluoro carbons in the ETS and industrial emissions of nitrous oxide. We are fine with that. In terms of the threshold for inclusion, I do not
think that we have a definitive view either way on that. I think the important thing is that the integrity of the scheme is maintained much as I would say about the potential inclusion of aviation and shipping in that, is the inclusion of more point sources actually going to help or hinder the Emissions Trading Scheme in delivering its outcomes? Yes, you could expand it to include more but, at the same time, with the sort of changes in thinking that we want the Emissions Trading Scheme to drive, you can at least make an argument that, if you get down to quite small companies, then it is just going to be a matter of compliance rather than actually trying to drive change. So, I think that there are arguments both ways but I do not think we have a strong view that it should be lower.

Q45 Chairman: Are you suggesting that forestry, agriculture and road transport are too difficult to put into the ETS? Should there be some other way of looking at their carbon emissions? You have said that the integrity of the ETS is an important one and I understand why you are saying that, but I would have thought that your organisation particularly would have some view as to not just allowing forestry, agriculture and road transport to sit outside it without any—

Dr Parr: Absolutely not. There is of course another directive going through at the moment, the Cars and CO2 Directive, and we have been very active in pushing for improvement in proposed standards for emissions associated with vehicles from that. It seems to us that that is just a more appropriate way in which to deal with it. How would you actually include all these individual drivers in the scheme because that does not seem to make an awful lot of sense? Would you do it by actually addressing the fuel suppliers? The whole point of their business is to supply fuels, so what is their abatement option? It would basically just be a variable tax. If you want to tax fuel, then tax fuel. Do not try and do something terribly complicated with the Emissions Trading Scheme. It seems to us that whilst transport absolutely needs to be tackled as part of the package, the Emissions Trading Scheme does not offer particularly good options for doing that and that the best opportunities lie elsewhere.

Chairman: I think that you have made your case pretty clear.

Q46 Lord Plumb: You said earlier that you would wish for maximum auctioning.

Dr Parr: Yes.

Q47 Lord Plumb: And that is of course based on the allocation, so you were presumably agreeing with the Commission since they have proposed that it will be 100 per cent and as from I think 2013 reducing it to 80 per cent and to zero in 2020. What about the differentiation here? How do you consider the differentiation between the power sector and others to be justified? The second part to that question deals with the free allowances and how they are allocated and I would like your views on that. If a system of benchmarks is used, how should they be determined?

Dr Parr: Our belief is that we should move to auctioning as soon as possible and 100 per cent auctioning as soon as possible. That deals with the two issues I have already mentioned, one about windfall profits and the other about revenues. We see the revenue stream as a potentially very valuable stream both for domestic EU reductions and playing its part in the external context. So, there is a high level of revenues available. Notwithstanding earlier remarks about the potential for carbon leakage, I think that the free allocation of permits will still be seen as a potential for windfall profits in other sectors. So, we do not see the particularly strong argument for not going to much higher levels of auctioning much earlier as close to 100 per cent from the beginning.

Q48 Lord Plumb: I have read the comments made by other organisations that have submitted their views. For example, the cement organisation illustrates the point you are making where it says, “If the cement industry were subject to auctioning, a substantial burden of additional costs would be imposed and the domestic construction market is facing difficult times”. How do you equate that therefore to the point you have already made?

Dr Parr: I guess that that is partly the point about carbon leakage and would actually these companies end up substituting for those which are not part of the EU. I think that the Commission will have to take a look at the cement industry because it has a prima facie case. At another level, cement is a high CO2 emitter and, if it is not bearing the full cost of its environmental impact, then that needs to be factored into the price which is to some extent the rationale behind the Emissions Trading Scheme and, if that leads to substitution away from cement, then, from a climate perspective, that is the Emissions Trading Scheme doing its job and substituting lower carbon material’s functions and so on for cement. It seems to me that again, notwithstanding the carbon leakage point, there is a case to be made that they should still be subject to full auction.

Q49 Lord Plumb: Is not the land a high CO2 emitter?

Dr Parr: The land is a CO2 emitter or it is a greenhouse gas emitter, but the levels of emission are subject to high levels of uncertainty.

Q50 Lord Plumb: Does ploughing the land create a greater amount of emission than just the land itself?
Dr Parr: Ploughing does, yes. I am struggling to see where this one is going!

Q51 Lord Plumb: It is not going anywhere, I am just asking you the question because one is told that ploughing the land means the release of CO\textsubscript{2} to a much greater extent than people believed earlier. That was said to me by a scientist in the middle of our international competition on ploughing and I happen to be President! I merely ask the question of you as you are an expert in this field to see whether you agree with what was being said.
Dr Parr: Yes, I would agree.

Q52 Lord Plumb: Should we stop ploughing is my question?
Dr Parr: It is a bit of a joke but actually there is a very serious point underneath it which is that—

Q53 Lord Plumb: It is a serious point.
Dr Parr: Agriculture is quite a significant contributor to climate change emissions.

Q54 Lord Plumb: You asked where this question was going and where it was going is that you said that agriculture should be excluded.
Dr Parr: Yes.

Q55 Lord Plumb: Agriculture is a big subject.
Dr Parr: It is, agree, but there are uncertainties associated with it and it depends where you put the functions that agriculture performs in your hierarchy of social needs. I think that food production is quite high up. If you need to engage in agricultural practices in order to provide food for the population, then I would accept that that is kind of necessary really. It might not be perfect in terms of climate change emissions but, boy, we have to do it, so there we go. I think that what is missing in the whole piece at the moment is a good and effective connection between agricultural practice and greenhouse gas impact and then a further step which goes beyond research which is to say, how do we incentivise the right sort of practices? We are a long way from that at the moment.

Q56 Viscount Brookeborough: From time to time you have come back to free rather than auctioning.
Dr Parr: Yes.

Q57 Viscount Brookeborough: And you immediately come into windfall profits and if windfall profits are necessarily a very bad thing. If they actually contribute to reductions in the long term of greenhouse gas, we have to pay for it and windfall profits may be one of the ways. I just perceive that you are against windfall profits.

Dr Parr: We are not going to avoid profit because, let us face it, the renewables industry is going to have to make a lot of profit before it makes anything work. My contention is that, if there is a revenue stream from emissions trading permit auctioning which can be used for helping to deliver a low carbon society both here and elsewhere, then that is a better use than having a company make profits from it. That is the problem I have with it. Companies make profits and that is what they are in the business to do, but this is a profit that arises effectively from public policy when public policy could be changed in such a way that it delivers a revenue stream that can deliver other positive outcomes.

Q58 Viscount Brookeborough: If you think about control of other industries, that has happened with many of them. Milk quotas were given to farmers and they then became valuable. Quotas of fish were given to fishermen and they then became valuable. I am not sure that there is a very easy way round it in that, if you wish to introduce some form of control, you then tell all the businesses that they have been producing for ages but that they have to pay to produce more. You have to have a standard somewhere and a base and I am not sure that, if you give it free initially to set it up and maybe auction from now, that is necessarily of such value.

Dr Parr: We are looking back into the past and we can perfectly understand why it happened like that but I think that, with the experience we have now gained, we can tune it to get better outcomes for the taxpayer and better outcomes for our objectives.

Chairman: Perhaps we can move on to what you would like to see happen with the revenue streams.

Q59 Lord Palmer: The Commission’s proposal includes a provision that 20 per cent of auctioning revenues should be targeted at various climate change measures. In an ideal world, how do you think revenues from the auctioning of allowances should be used and, as a matter of interest, very roughly, what would 20 per cent be in monetary terms?

Dr Parr: I am afraid that I do not know off the top of my head. The figure of 50 billion for the total auctioning revenues comes to mind.

Lord Palmer: Fifty billion?

Q60 Chairman: Is that EU-wide?

Dr Parr: That would be EU-wide yes.

Q61 Lord Palmer: So, Viscount Brookeborough’s point of view about milk quotas and potato quotas etcetera is quite a serious thing.

Dr Parr: Yes. To be honest, I would have to check that number.
Lord Brooke of Alverthorpe: It is probably not far off.

Dr Parr: Twenty per cent is 10 billion euros, if that figure is right. It is quite a sizeable amount of money. To come back to what we think should be done with it, our view is that, of the auctioning revenues, 50 per cent should be used within the EU and 50 per cent should be used for assisting developing countries with the transition around climate change of which about half of that should be towards adaptation because developing countries are to some extent already experiencing climate change impacts, but obviously also some of it should be used for mitigation and to contribute to reducing deforestation degradation and the emissions that come from that. So, 50 per cent domesticaly, 50 per cent for developing countries and within that there is adaptation, mitigation and the deforestation strand. Within the domestic sphere, those revenues could be used for a variety of measures and no doubt governments will decide how they want to do it but our view is that there should be some measure of hypothecation and that it should contribute to R&D support measures for particularly renewables and other measures that can help with energy efficiency and changes in the energy system.

Lord Palmer: If you could let us know that figure, that would be helpful.

Dr Parr: Yes, that is fine.

Chairman: Do you feel that the result will be that hypothecation will be agreed to?

Dr Parr: Sadly, that does not look very promising at the moment because I do not think that any of the Member States are particularly fond of a significant level of hypothecation, certainly nothing like the level that we would like to see, and I think it is more likely that the Member States will see it disappear into their treasury pots and will be used to decrease taxation elsewhere, which of course is not necessarily a bad thing but I think that in this case we should see these revenues being dedicated to the purposes for which they were raised, which is changing our energy system.

Chairman: Do you believe that the ETS is slightly awkwardly balanced within the European Union between those which are highly-developed countries and those which are lesser developed because it imposes a bigger strain on those that are less developed in coming up to the same standard as the other countries?

Dr Parr: That is a good question. I think on the question of emissions revenues, the major politics has been about States which feel that their power system will be penalised heavily. On the specific point of hypothecation, I am not sure how the Member States break down in terms of their attitudes towards it. I would have to check with my Brussels colleagues on that.

Lord Cameron of Dillington: Did your organisations ever calculate the cost to the industry of, for instance, your proposal that there should be a 30 per cent reduction rather than a 20 per cent reduction or do you just look at it purely from the greenhouse gas effect and what we are trying to achieve vis-à-vis climate change? I am just wondering whether you balance your approach to sustainability with the economic leg really.

Dr Parr: I am not aware that we have done a cost study on that. It is possible that there are figures kicking around and I am just not familiar with them. I think our point of view is that we need to speak for the climate at this point and if we do not, then nobody else will.

Viscount Brookeborough: Regardless of the cost to business and the community?

Dr Parr: I think that calculating costs a long way out like that particularly when part of the point of the scheme is to unlock knowledge that is contained within industry—

Viscount Brookeborough: It is not necessarily financial cost, it is social cost and it is poverty.

Dr Parr: I think that we are mindful of the social cost because it is easier to identify. I think that one can make general points about how one can manage that and also about the costs of not doing so. If we are going to provide a leadership role across the world, we would expect to become leaders in the technologies that are going to help the change across the globe and that in turn means improvements in industrial competitiveness, jobs and so on. There will be positive economic aspects to this as well as potential costs and I think that it is possible to identify those as well by looking at, say, what has gone on with Germany and their renewables industry where I think they now have about 250,000 jobs in their renewables industry and we have 20,000. Yes, sure, there has been a cost to their proposals within their renewable energy framework and it comes out at I think around 2 euros 50 per month per household. Equally, there are now 250,000 people who have jobs who perhaps otherwise would not have. There are clearly benefits to going down a road which is fully committed to low carbon technologies and we would expect that to be the case across the EU.

Lord Brooke of Alverthorpe: I would like to go back to the issue of allowances. Do you oppose in principle to any free allowances or do you see that there may be a case …? I can see solutions to the
problem that arose with free allowances not least that, if you get windfall profits, you can have windfall taxes as well, so there are often other solutions to it and you have said that, if you have a problem, there is not necessarily just one solution. Under the scheme, we do have some free allowances and they are going to run through until 2020. How do you think that free allowances should be allocated?

Dr Parr: I think that there are free allowances which should be tied to the proper scrutiny of questions around carbon leakage as we discussed earlier because there is an in-principle point about that which we would accept, but I think we would see them as being at a pretty low level depending on the outcomes of that detailed scrutiny of the argument.

Q70 Lord Brooke of Alverthorpe: We could also use the system of benchmarks.

Dr Parr: Yes.

Q71 Chairman: Do you think we could?

Dr Parr: Our preference would be for auctioning.

Q72 Lord Brooke of Alverthorpe: That is where we may get to but we are trying to find a way on the route and to try and have a look at the new system and make sure that it works better. Picking up on the enforcement point now, effectively there has not been a requirement to practise much enforcement during the initial phase whilst it has been established, but it will clearly become increasingly important to ensure that we do have effective and successful enforcements. Do you think that the proposals which are presently being laid are going to be fully effective or do you think that there are other changes that could be made to make for even more enforcement?

Dr Parr: We would have two propositions at this point and I would like to say at the outset that we are certainly not experts at this. Two propositions would be that we believe that there should be on-site visits for verification that the described practices are actually being performed and the general principle of on-site visits of verification is that they can be at very short notice or even unannounced. The second would be that there should be an independent country reviewer expert appointed within each country to look at the verification and emissions data across the piece. So, there are a couple of mechanisms that I think would help on verification enforcement, but I would be the first to say that this is not in the field of our expertise.

Q73 Lord Brooke of Alverthorpe: It is an important area.

Dr Parr: It is absolutely an important area, yes.

Q74 Lord Brooke of Alverthorpe: Do you see any role for the Commission itself to be involved with verification in the centre rather than it being done on a State-by-State basis?

Dr Parr: It would be nice but I think that there would have to be a lot more relevant Commission staff. I am aware that delays within the Commission for various policy propositions actually come about because of shortage of people in the Commission to actually do the job. That is not an overwhelming hurdle but I think that there would have to be a considerable building of institutional capacity there before they were in a position to do that and my understanding of it again is that for a lot of the expertise on verification, you would have to sit quite close to where the emissions were going on rather than being centrally managed. I think that setting frameworks and standards and making sure that those frameworks are being adhered to by the relevant national authorities seems to be about the right place to be.

Q75 Lord Brooke of Alverthorpe: We have of course had problems with enforcement in the whole range of areas of different policies which emanate from Brussels and I just wondered if you had any ideas on perhaps a novel approach which may be controversial to individual Nation States but could in fact ensure that there was some standard and uniform compliance.

Dr Parr: Do you have something in mind?

Q76 Chairman: There is obviously a structure of compliance with IPC at the moment.

Dr Parr: Yes.

Q77 Chairman: Some of the large combustible plants are controlled by a directive, so we have a form of that. Do you feel that is sufficient or that building on that is sufficient or are carbon dioxide emissions a totally different area of science which needs different enforcement measures?

Dr Parr: Yes, potentially. I would like to chat to the Environment Agency before I make any further statements on that. I am sorry, I just have not thought about that.

Q78 Chairman: There are no further questions from us. Dr Parr, thank you very much indeed for this morning’s evidence that you have given us. You have been able to answer most of our questions extremely well, so thank you very much indeed. As I said, a
transcript will be produced and you will have a chance to look at it and, in the meantime, may I thank you very much indeed for your appearance here this morning.

*Dr Parr:* It has been a pleasure.
Present Brooke of Alverthorpe, L Brookeborough, V Cameron of Dillington, L Palmer, L Plumb, L
Sewel, L (Chairman) Sharp of Guildford, B Ullswater, V Wallace of Tankerness, L

Examination of Witnesses
Witnesses: Mr Niall Mackenzie, Deputy Director Climate and Energy, Europe, Mr David Capper, Head, Future of the EU Emissions Trading System, Defra, and Mr Martin Bond, Head of ETS Team, BERR, examined.

Q79 Chairman: My apologies for keeping you waiting; the last item, which is finishing up our Report on the Common Fisheries Policy took a little bit longer than we had anticipated, but thank you very much for coming along and finding the time to help us with our short inquiry into the EU’s Emission Trading Scheme. I have a nasty suspicion that a short inquiry may resurrect itself into something like a longer or gigantic inquiry in the autumn! Formalities first; it is a formal evidence taking session so there will be a transcript. You will obviously get an opportunity to have a look at it and make any corrections that you think necessary. Also, we are being webcast so there is a possibility that there is a cast of thousands out there listening to our every word! So would you like to say anything to kick off or do you want to go straight into Q and A?
Mr Mackenzie: It is probably helpful if I explain who we are. I am Niall Mackenzie; I am Deputy Director for Europe in Defra’s National Climate Change and Energy Programme. On my right is David Capper who heads the EU Emissions Trading System Review project in my team; and on my left is Martin Bond who heads the Emissions Trading Scheme Unit in BERR, and we are very joined up across the departments, almost seamlessly!

Q80 Chairman: That will be the first time ever!
Mr Mackenzie: On this issue; so now you can test it!

Q81 Chairman: Can we have a look at where we are and where the revision of the ETS is and the negotiations at the Council and the Parliament, and they are underway now. Could you give us an indication of what progress has been made, what issues have been resolved, what remains outstanding and where the position of Her Majesty’s Government is on the outstanding issues; and where do you see the time table going at the moment?
Mr Mackenzie: Naturally we have a formal public consultation going on at the moment on the Emissions Trading System and its changes, so the government has not adopted any final positions on anything to do with the Emissions Trading Scheme because of that; and realistically we do not anticipate difficult negotiations, let me say, until September time—that is when it will start working. So in actual fact how the negotiations have been going so far is in the Council working groups officials have been effectively walking through the texts; Member States have been asking lots of questions of the Commission as to what exactly does it mean. One or two Member States have been putting down particular positions or concerns and the UK has been playing its part in that. So, for example, there are some areas that have been indicated in the consultation paper where we are fairly clear what we think is the right position; so, for example, the idea of a single EU-wide cap, we think that is a good idea and so we have said that in the working group, whilst stressing obviously that all of this is subject to consultation and indeed the parliamentary scrutiny process. There are other areas in the consultation exercise where we are genuinely asking questions in terms of we have not reached even an initial thought, so we are welcoming views from industry, environmental NGOs, the public, Parliament and others. An example of that might be rates of auctioning for different sectors, different industrial sectors, what would be the right approach; is the Commission’s proposal a sensible place to start? In terms of the overall timescale the Council of Ministers made clear earlier this year that we want a first reading deal between the Council and the Parliament by December, if at all possible; and by the latest March/April next year. Obviously the European Parliament rises next year and particularly true of the Emissions Trading System proposal is that if we did not get agreement to that by April next year the scheme would not be clear for industry to base their investments on until late 2010 and 2011, which for a new arrangement starting in 2013 is quite late. So this particular investment priority is in terms of getting the decisions agreed across Europe this year, but also the aspiration to get the whole package, the Renewables Directive, the Effort Sharing decision and the Carbon Capture and Storage Directive all agreed in that similar timescale.

WEDNESDAY 2 JULY 2008
Q82 Chairman: Are you at the stage even now to identify what you think will be the contentious issues come September?

Mr Mackenzie: It is hard to say, and indeed a lot will depend from the UK perspective where we end up on our policy. If we agree with the Commission and lots of others do not then that might be less contentious than if we disagree with the Commission and lots of other Member States. Because the French Presidency are committed to trying to get this first reading deal with the European Parliament there will be parallel negotiations almost in Council and with Parliament, so the views of MEPs will be quite important; and they are just beginning to produce their initial reports on the Emissions Trading Scheme. So we will have to watch what they create as contentious issues as well. So I think it is a bit hard at this stage. The obvious areas from the media coverage and the feedback we get from industry in particular are things like allocation methodology, the balance between free allowances and auctioning; the risk of carbon leakage, on which you may have more questions, and the idea that carbon pricing in Europe might force industry to relocate outside Europe to avoid the carbon price. I think one of the main things we are very keen to push—although there seems to be quite a lot of support in Europe—is better regulation principles. The scheme at the moment covers quite a range of installations and it is quite a heavy regulatory burden being in the Emissions Trading Scheme, and so we want to try and take out the smaller installations, provided that they are caught by some domestic arrangements. We are confident in the UK that they would be caught by the carbon reduction commitment and other measures in the UK, and we would look to other European countries having similar domestic measures, and that is currently in the Commission proposals. So that seems a very sensible de-regulatory approach.

Q83 Chairman: We will be asking about carbon leakage later but carbon leakage is a function of increased costs. Has any work been done on the cost impact of the scheme? The extent to which European industry would be competitively disadvantaged by adopting this sort of approach?

Mr Mackenzie: Yes, there are two levels to this really. In the partial impact assessment that we published alongside our consultation paper we have set out the costs to the UK economy of the change from the current Emissions Trading System to what is proposed over a range of scenarios, ie the Commission proposal preferred outcome, and that sets out clearly the extra costs to the UK. In terms of industry-wide across Europe, the UK commissioned last year a range of studies. Together with BERR we commissioned Oxford Economics, which did some work which fed into the Energy White Paper. We also commissioned Climate Strategies to look at this issue and those reports have been published and we have asked industry for their views on them. These tend to suggest that the risk of leakage and moving overseas does exist but probably only for a limited number of sectors. I think the clear message that comes through from the analyses that have been done by those experts on our behalf, and internally within the departments, is that this is very complex and there are lots of issues about data quality and how you define an industry. For example, in the early stages of the Climate Strategies’ work they started looking at the construction industry; it was then broken down into cement and lime, which have different characteristics and a different extent of risk. Therefore, the UK position, as we have outlined in the consultation paper, is we think that we should have a thorough evidence-based approach to it, addressing this issue across Europe and we should not rush to pick which sectors are at risk of leakage; we should build on the analyses that the UK has done and replicate that around Europe and agree the criteria as part of the political negotiations this year against which sectors would be judged, whether they are at risk of leakage or not, then ministers take the decision next year, the middle of next year, June 2009, as to which sectors are at risk of leakage, and then the following year decide what the measures are to protect those sectors after a deal has or has not been done in Copenhagen at the end of 2009. So certainly from officials’ perspective and the analysis and the conversation we have had with academics this is a very complex area and it is better to get it right rather than to rush to a wrong conclusion.

Chairman: Lord Palmer wants to ask a question on the auctioning business, so if we take it out of order at this stage.

Q84 Lord Palmer: Yes, I apologise; and I also apologise for having to leave the moment you have answered this question, but I have the widow of a colleague coming to see me. Some of us last week were absolutely amazed to discover the actual value of auctioning revenues, and many of those who submitted evidence to us considered that a certain proportion of auctioning revenues should be reserved for various climate change measures. But we understand that this suggestion has not been met with your approval or indeed that of the Council. Perhaps you can kindly explain the idea of this debate in Council and outline how you would propose to use the revenues in the absence of hypothecation?

Mr Mackenzie: Certainly. From the UK perspective, as I am sure you are aware, it is a longstanding principle of successive governments, and certainly this government, that we do not use hypothecation. The principal argument obviously for that is that it should be more efficient for the government as a
whole to make the decisions on priorities for spending, and if you hypothecate revenues then you limit the efficiency of the decisions of the government as a whole. That is effectively why the UK is opposed to it and indeed why quite a number of Member States have made that clear in their positions at Council. It is not an issue about environmental good or bad, or the environment being a good or bad issue to spend money on; it is purely a public expenditure issue that it is much more sensible to make the decisions by each Member State at the national level as to what they want to spend their public revenues on.

Q85 Lord Cameron of Dillington: Landfill tax is an exception, is it?
Mr Mackenzie: As with all long-standing government positions there are always exceptions! And that is the debate obviously that will take place in the coming months, to get the right sort of balance between what issues merit hypothecation and what do not.

Q86 Viscount Ullswater: I suppose, as a supplementary to that, you would not be in favour of sharing some of the revenues gained by auctioning with other countries within the EU?
Mr Mackenzie: No, we have made it quite clear in our consultation paper that we think this idea of the ten per cent redistribution of auctioning allowances to other Member States is not the right mechanism; that the Emissions Trading System should be about creating the commercial incentives to reduce emissions, not as a means of transferring wealth around Europe. Obviously the Commission and a number of Member States have taken a different view.

Q87 Chairman: Do you think that the government will be under pressure in negotiations to give some indication that a share of the revenues would be used for environmental benefits?
Mr Mackenzie: I am sure the government will be under pressure, but whether the government reacts to it obviously is something you will probably have to ask the ministers. It is a very lively debate; we have received a number of representations already as part of the consultation from the UK industry who thinks that there should be hypothecation, and there are a number of European trade associations and other Member States who think that hypothecation or earmarking is the way forward. But there will be a wide range of issues on the whole package, not just on the Emissions Trading System, where we will come under pressure, and that will be down to the skill of the negotiators and ministers in the final negotiations to get the best deal for the environment and the UK.

Q88 Baroness Sharp of Guildford: If we go back to the general principles of the ETS. The revised ETS is one pillar in the EU’s climate change and energy strategy. One of the witnesses we have heard suggested that perhaps the UK was putting too much emphasis on the ETS alone to promote the transition to a low-carbon economy. Could you tell us what are the other pillars in the government’s strategy for achieving its emission reduction targets? And what would you identify as the remaining market barriers to the long term infrastructure investments that may be required across the economy, and what flanking measures might be needed to remove them?
Mr Mackenzie: Certainly. Ministers have made clear repeatedly that the Emissions Trading System is a principal means of incentivising the transition to a low-carbon economy, but it is only one mechanism, and the extent to which it is above all others I think is always open to debate, and we like a mixed economy. As an example I would cite the fact that the government is introducing the Carbon Reduction Commitment. The Emissions Trading System puts a price on carbon on the electricity that is generated—or the generation of electricity—but then the Carbon Reduction Commitment, which will start in 2010 will add a further incentive to businesses to use that energy efficiently. So you could say that carbon is being priced twice, but that is because it is to encourage people to use their energy efficiently. There is a range of other measures already in existence; obviously the Climate Change Bill, which you will have debated already in this House and is currently in the other place, sets a framework for further measures in addition to Emissions Trading and other measures. We have the Climate Change Levy and Climate Change Agreements, which have been very successful in incentivising industry to reduce emissions. There is the Renewables Obligation and zero carbon homes in terms of building regulations, again encouraging private individuals to have more energy efficient homes. The Carbon Trust and Energy Saving Trust give advice to business and customers. So there is a whole range of mechanisms that are used, and indeed we keep these under review. The Energy White Paper last year set out our current range of policies and measures; but depending where debates on the Climate Change Bill go and the EU negotiations, obviously further measures may be required to move us more quickly to lower carbon levels. But these are the kinds of issues ministers continually consider and indeed will be very happy to debate with you.

Q89 Viscount Ullswater: Perhaps we could turn to the level of the agreement, the 20 per cent and the 30 per cent. It was put to us by a previous witness that taking the decision to work for the 30 per cent reductions now, which I know is dependent on
seeking international agreement, would offer business more of the certainty that it requires to make long term investments. What is your view on that? Mr Mackenzie: I understand the concern that industry has fully and we are very engaged, both officials and ministers, in discussions with industry. It is what kind of certainty; industry always wants certainty, we all do, and they are very good at managing risk and managing uncertainty. The government’s job is obviously to minimise the scope for uncertainty. The package, as it is currently framed, the proposals from the Commission give certainty on the 20 per cent and provides a mechanism whereby we move up to 30 per cent on the conclusion of an international deal. The uncertainty is the international deal, not the proposal. Indeed, the UK is very supportive of this trigger mechanism in the proposals whereby once an international deal is ratified we automatically move up to the 30 per cent and do not seek to renegotiate it amongst 27 Member States, because that would increase the uncertainty even further for industry, and it is principally because of that concern that we have that we favour the stepping up. If we started on the 30 per cent now we could either take a unilateral decision to say that the UK will do 30 per cent or Europe will do 30 per cent, come what may, which would give the industry the certainty that they want, but that is going beyond what ministers collectively around Europe have agreed should be the unilateral starting point of Europe, which is 20 per cent. And you then get into the tactics of how you play Europe’s position versus the world in negotiations, which is not my area of expertise, but it would obviously be clear that if we started saying that we are going to do 30 per cent come what may then our interlocutors in the global negotiations would ask for a higher figure. So if the Committee or indeed industry have ideas on how to give greater certainty we are very open to receiving them, but we think that the Commission’s proposal as it stands is the best mechanism that we can see for committing unilaterally to 20 per cent, providing no room for re-jigging things once an international deal is done. Whatever the deal ratified is, Europe then steps up to the higher level and industry is certain that there is not another year of negotiation within Europe to decide what the UK does versus Germany, and that gives the certainty industry needs.

Chairman: Can we move on to scope and Lord Cameron.

Q90 Lord Cameron of Dillington: You say that you wish to ensure that there are opportunities for expanding into new sectors and they are all considered. It would be interesting to know what particular sectors you are referring to. We have considered the possibility of including possibly agriculture and road transport—and forestry is a particularly important one because forestry probably worldwide is the biggest emitter of greenhouse gases, albeit deforestation—and whether you have considered these? Mr Mackenzie: We have and we continue to consider these things and how wide the scope should be, and I think the key issue I would like to make you aware of is the extent to which much can be widened how quickly. The ultimate aim is to have a global carbon market with as many sectors as can be included as possible because that then makes sure that the emissions reductions are done at the least cost in the most economically efficient manner. But there is an issue about the impact on the current scheme. It is very focused on heavy industry at the moment, therefore the Commission’s proposals to include N2O emissions from adipic acid and nitric acid production and CO2 emissions from petrochemicals are all very similar to what is in the current scheme, so they are an incremental approach. When you get to other areas such as surface transport, agriculture and forestry there are different problems and issues to be considered. The Commission at this stage have said for all those sectors that they do not think the time is right now and further analysis is needed. The UK Government as a whole has done quite a bit of analysis on these sectors already and we are doing more. At this stage it is unclear the extent to which we would have concrete enough proposals to share with the Commission and the rest of Europe to feed into these negotiations.

Q91 Lord Cameron of Dillington: Is the de minimis threshold set at the right level at the moment, in your view? Mr Mackenzie: Again we are consulting on that. The Commission had proposed 10,000 kilotons. I think our consultation paper suggested that 25,000 might be a better number.

Q92 Lord Cameron of Dillington: Because you have raised it.

Mr Mackenzie: To a slightly higher level, yes. But, again, just again from consultation and discussion with industry we know that there are some sectors where this drives a line through the sector; so half the sector would be in and half out, and what are the competitiveness impacts for that? Are they relatively small or would you be creating a perverse incentive to encourage industry and installations to be a certain size just to get around the regulations. So there are lots of issues we have to look at to make sure where the balance and the advantage lies. I say that there are two separate issues: that de minimis is about better regulation and the correct level of burden for an EU regulation, but a widening scope is about creating incentives to other sectors. The Department for Transport spent quite a bit of time last year looking
at surface transport. There are details on their website of the analysis done so far on that, and we can send the Committee details, if that would be helpful1

Again, the Commission is not yet comfortable with how that would be integrated into the system. I do not think we are yet as a government collectively agreed as to whether that is the best incentive for road transport. Similarly, on agriculture and forestry Defra obviously has done quite a lot of work on agriculture and we are continuing to do more work about incentivising emissions reductions and whether a market-based mechanism is the right way to do it. Again, we have a problem with agriculture obviously if you have lots of small farms—25,000 tonnes or 10,000 tonnes a year of CO2 emissions, there are not many farms at that level. But there may be other ways of doing it. New Zealand obviously is looking at a different approach; they are looking at agriculture. So we are looking at this and doing a further analysis.

Q93 Lord Cameron of Dillington: Where does Carbon Capture and Storage fit into the whole ETC programme?

Mr Mackenzie: The principal issue with Carbon Capture Storage is that under the current directive if you buried or sequestered the CO2 under the current regime you would still be required to surrender the CO2 allowances. So the essential thing in the review of the Emissions Trading System is to make sure that if you bury it and sequester it you do not then have to surrender the allowances, and that then provides a good commercial incentive to enable people to make money by burying the carbon—they can do commercial arrangements with those who are producing the CO2 to either take their allowances or some other consideration. There is obviously separately the whole issue about incentivising CCS demonstration projects, but that is a separate issue as opposed to the pure Emissions Trading System, which is just making sure that the trading system does not penalise Carbon Capture and Storage.

Q94 Lord Cameron of Dillington: Do you have support for that view, for the Carbon Capture and Storage being of benefit?

Mr Mackenzie: Yes. I do not think there is anyone in Europe is opposed to the core provision that if you bury the CO2 you do not have to surrender the allowances. Evidently it is a sensible way to do it.

Q95 Viscount Brookeborough: Is it that the integrity of the scheme is very important and therefore by widening the scope to areas which is difficult to monitor or difficult to verify because there are not at the moment any measurements taking place—and I include transport and things like that, which might go across EU Members boundaries—that that might dilute the integrity of the scheme?

Mr Mackenzie: That is one concern and it is a real concern. But most of these integrity issues can be address through time, so if you think forestry is a good example of that, although there are real concerns about the temporary nature of forests that if you chop down trees then you have to have a system for making sure that you accurately and robustly record the amount of CO2 sequestered in sinks. But it probably is all doable in time and that is what we are looking at and we are spending quite a bit of time looking at the way to do that. If you include a big sector like forestry or transport it will have an impact on the price of allowances in the Emissions Trading System, so you have to be clear that the way in which you frame a new sector coming in is done to minimise the price impact. We would not want a sudden price drop because of expanding to a new sector because industry will have made their investments on certain assumptions. And that is the beauty of the Commission proposal, that it is giving certainty to investors by setting a long term signal as to where the carbon price is going, by gradually reducing the cap. If you bring in a sector which effectively weakens the cap unknowingly then that will destroy the signals you are giving industry. So it is how you manage that.

Q96 Viscount Brookeborough: To get back to auctioning, the Commission proposes that there should be 100 per cent auctioning allowances in the power sector from 2013 onwards, and levels of free allocation in other sectors reducing from 80 per cent in 2013 to zero in 2020. In your EM you note that you support greater use of auctioning generally, but would need to assess the Commission’s proposals for specific sectors. What has been the outcome of those assessments and how should free allowances come into operation?

Mr Mackenzie: The Chancellor obviously announced in the last budget that the UK was in favour of a 100 per cent auctioning for the electricity sector and electricity generation sector. Other than that we have not finished our assessments.

Q97 Viscount Brookeborough: And this is 100 per cent in the future, 100 per cent auctioning after free allocations are given should a sector come into it?

Mr Mackenzie: How it would work under the Commission proposal—and David will correct me if I get this wrong because emissions trading is not the most simple to explain, and I hope I am being clear—the Commission proposal decides what are the levels of options in the three categories. There is auctioning for the power sector. Other industry and those sectors requiring protection because of carbon leakage might
have different arrangements. The electricity sector's allowances will be based on the number of allowances that they would get as their share of the overall emissions, and that would then be auctioned. Have I summarised that correctly?

Mr Capper: Yes, essentially they will get no free allocation, is the way that it is described in the draft directive. So if you are an electricity generator as defined by the directive you will just receive no free allocation, which often we describe as 100 per cent auctioning, which amounts to the same thing—it is just a different way of saying the same thing.

Viscount Brookeborough: So in the future if new businesses or new industries come into it they would not get a free allocation.

Mr Mackenzie: For the power sector, yes.

Viscount Brookeborough: Sorry, from beyond the power sector.

Mr Mackenzie: For other sectors it is not yet decided. The Commission proposal is ramping down from 80 per cent. The UK has not yet formed a view on this; it is part of the issues we are considering. It seems a reasonable starting point for the debate, which seems to be our view, because the reason for free allocation is because people have sunk assets. People have made investments without a carbon price and if you then charge them for carbon immediately and you set up the scheme in 2005 and there is a risk of stranded assets. The extent to which that argument then continues by the time you get to 2013 right down to 2020 when the scheme has been running for such a period is then debatable. But these are the kinds of discussions we are having within government and with industry and seeking people's views as to what the right reasons for setting the levels of auctioning should be. The longer you have free allocation you are at the mercy of bureaucrats such as me operating a system which may make wrong judgments about what the right level of allocation for industry is. If everyone has to buy allowances they will only buy the allowances they need. The issue then is the pace at which industry takes on these costs and whether it is too fast, and that is the judgment on which we will advise ministers and ministers will have to take a decision.

Mr Capper: Were you also asking about new entrants; was that part of your question? You were asking what happens if there is a new installation?

Viscount Brookeborough: Yes.

Mr Capper: In addition to what Niall said, the way that new entrants after 2013 or after 2012 will be treated is that the European Commission has proposed that there will be a pot of five per cent of the total number of allowances, which will be reserved for new entrants—so these are new installations. So, for example, in a particular sector like, say, cement, if there is a new installation after 2012 then, assuming that the cement sector as a whole is still receiving free allowances in phase 3 after 2012, the new installation in that sector will receive free allowances under the same rules that existing installations receive free allowances. So there should not be any distortion between those existing installations and new installations.

Q101 Viscount Brookeborough: Thank you. And you believe that Member States should not be constrained by fixed levels of auctioning and would a minimum level of auctioning be acceptable to you all?

Mr Mackenzie: Yes, we think there should be a harmonised minimum level, so if the European agreement was to have 80 per cent for sector X, 80 per cent of auctioning that individual Member States in pursuit of their own environmental ambitions or indeed the market conditions in different countries you could have a higher figure. You cannot allow a complete free for all because then there is an issue of subsidy to some sectors and some countries. So you have to have a harmonised minimum but if one Member State wants to effectively increase the costs for its sectors then ministers in that country should be allowed to do that.

Q102 Viscount Brookeborough: We would often hear that the United Kingdom is very good at gold plating; is this an option that you really want to leave open, that we can go further than anybody else to lead?

Mr Mackenzie: One person's gold plating is another's leading environmental ambition from the front. So I think we would see that as increasing environmental ambition and not one to effectively subsidise some sectors. We would take the view that some industries in the UK may not have the same competitive pressures that others do and reserve the right to be able to increase their rate of auctioning.

Q103 Viscount Brookeborough: What about redistributing auctioning allowances away from the UK?

Mr Mackenzie: Again we are opposed to that because we do not think that the Emissions Trading System should be the mean for distributing money around the EU—there are structural funds and other measures for doing that. It has to be said that this will be a challenging part of the negotiations, given that it would appear that the Commission have created a qualified majority who benefit financially from this proposal, so seeking to change that in negotiations will be tough, but we are committed to doing that and we have the support from quite a number of Member States.
Q104 Viscount Brookeborough: I am not suggesting that businesses would necessarily be for it, but to a previous question you said that the funds received from auctioning would not necessarily be committed to other environmental projects. You seem to be rather ignoring the PR side of this of the environmentalists who would like, probably, to see the funds being reallocated not only to poor areas in the EU but also elsewhere.
Mr Mackenzie: I think the issue is do you announce upfront that you are going to spend the money on the environment or do you have a series of programmes and measures decided at national level for which you then use the money. We have not done the sums but certainly the amount of auctioning we have in phase 2 of the Emissions Trading Scheme between 2008 and 2012 the proceeds from that are not as much as we spend on the environment already in the UK. So there is an issue going forward at what point will auction receipts exceed what we already spend on environmental measures, given that they cover a whole range of energy efficiency technological innovation and so on. But obviously this is a decision for ministers.

Q105 Lord Brooke of Alverthorpe: What role, if any, does the ETS have in supporting developing countries to address their greenhouse gas emissions?
Mr Mackenzie: A major role. In fact one of the main successes of the Emissions Trading System is that the demand for market mechanism projects created under Kyoto comes almost totally from the EU ETS because under Kyoto individual countries can buy these allowances, these credits to meet their own targets, but in Europe we have created a private sector demand for these because they can surrender these allowances to meet the regulatory requirements of the Emissions Trading System, and because of that it has been a main driver in creating the market. That then creates revenue streams in the developing countries to help them invest and install low carbon technology.

Q106 Lord Cameron of Dillington: Hypothecation in other words!
Mr Mackenzie: Market mechanism is better!

Q107 Lord Brooke of Alverthorpe: You did cover carbon leakage to some extent earlier on. Could you just run through the areas in which you think there may be problems?
Mr Mackenzie: We are very clear at this stage that we cannot name sectors at this stage because we have not finished the analysis in the UK as to which sectors are at risk of leakage. We think in terms of the negotiations of the package as well we have a very limited time frame and if we try to inject decisions on individual sectors into that political negotiation process it would risk derailing the process, and it is important that we across Europe have a shared understanding of which sectors really are at risk, based on the analysis of the data. The Commission has started a data collection exercise but it has to be said that the work which we commissioned, which I referred to earlier, by Climate Strategies, Oxford Economics and others shows that this is very complex and it is important to get it right. We think that the Commission time table and their proposal is too long because industry would not know until 2011 under their timescale. We think it can be brought forward a whole year so that every industry would know where they stood and what measures were in place to protect them if they were at risk of leakage by the middle of 2010.

Q108 Lord Brooke of Alverthorpe: We had Greenpeace here last week in front of us and they were somewhat more sceptical about the extent to which there is carbon leakage.
Mr Mackenzie: There is a risk. I think they are right to be sceptical; every industry I have been speaking to in the UK, apart from one, which I will not name because it would not be fair, have said that they are at risk of leakage. And so they should; they need to protect their industries’ interests. I think that all that we are saying and advising ministers is let us look at the data and make sure that we have a solid basis to make the decision rather than just trying to make an assumption based, possibly, on lobbying power and possibly on other factors as to which sectors are at risk; let us make sure it is based on the evidence, and ministers do this in a transparent process across the board of the EU.

Lord Brooke of Alverthorpe: As you pinched one of my questions virtually, my Lord Chairman, maybe I can pinch one of yours! I go back to an earlier issue and back to agriculture and to New Zealand as well. You did mention that in New Zealand agriculture is a very substantial part of their economy, yet they are intending to go ahead and cover it by carbon trading in the whole system. You said it is different there; could you say a little bit more about how different it is and whether in fact there is any possibility of using the model that they have developed there to transpose it across here? Could you also say whether you are working in collaboration with the New Zealand in a sense you seeing them as a test bed?

Q109 Chairman: Before you answer that I will come in as well! Within the UK agriculture in Scotland constitutes a much greater percentage of carbon than the UK generally. Are you taking account of differences with the devolved administrations from sector to sector?
Mr Mackenzie: Yes, is the answer. The issue with agriculture, I hope I was not suggesting that we are different from New Zealand in agriculture—it is the same basic problem. I think the proportion of their emissions that come from agriculture is significantly different and that is why they are looking at it perhaps sooner than we have. I think the issues are still the same. It is the balance between the burden of regulation and the incentives that you are trying to create on farmers. The department commissioned work by NERA last year, which looked at this issue, and concluded that the Emissions Trading System was probably too burdensome for the vast number of small farms to be practicable, and that project-based mechanisms might be more appropriate. Since that work has been done we have learnt more details about what New Zealand is doing and we are planning to do some further analysis and review whether a lighter touch and a different way of doing emissions trading might work because New Zealanders obviously think it can. So we are going to look very seriously at what they are doing. But picking the right mechanism is the crucial thing, and again just as there are issues of carbon leakage for industry there is exponentially more for agriculture because you have to avoid creating an incentive whereby you reduce the number of cows and sheep in our fields but we import more meat and lamb. There is a whole range of issues to be looked at and that is how we build mechanisms requires careful consideration. We are looking at it and we continue to look at it and obviously we can keep you informed as to our progress. I do not think any of that will be in the timescale that we are looking at these negotiations because the level of complexity is so great. But one of the features that we are looking at in the Commission proposal is the ability for individual countries to opt in other sectors subject to criteria. I am not sure whether it is currently big enough or flexible enough to opt in such a large sector as agriculture. I referred earlier to the concerns about destabilising the Emissions Trading System by bringing in too big a sector too quickly under the wrong mechanism. So we have to decide what the right mechanism for agriculture is, then if there is a market-based mechanism is the Emissions Trading System the correct approach. I have to say that we are undertaking further consultancy work and internal review within the department.

Q110 Chairman: When you were talking about leakage you quite rightly referred to the need to look at the data and give advice based on the evidence. At some stage a judgment has to be reached and what are the criteria, what sort of data is it that you will use to make that judgment?

Mr Mackenzie: That is one of the key issues we have asked industry in our consultation paper; we have laid out the criteria, which I will get David to summarise in a minute, and asked is this the right criteria? There is a big debate we are starting with industry about whether impact on profits is a good measure, given that profits vary year on year. So we are very keen to have the debate and the Committee’s thoughts on the criteria we have suggested and whether they are the right ones would be very valuable, because if we can get faith in the system that we have picked the right criteria, the process for judging industry against those criteria is transparent and open and industry can see where they are heading, they can make investment decisions fairly confident that they will come through this process and things will be much clearer. Perhaps I can ask David to explain where we are on the criteria.

Mr Capper: What has happened with the criteria is that the European Commission has proposed some high level criteria on the face of the directive. The key test that they put down is the ability of sectors or sub-sectors to pass on the cost of the allowances without a significant loss of market share. Under that they have four sub-criteria which allow them to make an assessment on that headline measure. This obviously helps industry to some extent in that they have some sense of how the Commission will be undertaking this assessment. What we have done in terms of our consultation document and our impact assessment is to attempt to flesh out these criteria in more detail. This is primarily to give industry more certainty about how the assessment might be done and therefore to inform the UK’s negotiating position on exactly what these criteria should be as we sign up, hopefully, to the deal in December.

Q111 Chairman: Anything more specific?

Mr Mackenzie: We can send you the criteria I have drawn to your attention, and the impact assessment, if that would be helpful, which sets out what we are currently thinking and what we actually ask industry.²

Q112 Chairman: Are you getting a feeling that other Member States are thinking in the same terms when it comes to criteria, or are people jumping up with all different sorts of criteria.

Mr Mackenzie: Very much a consensus and I have to pay tribute to the work that David has done in terms of negotiating with other Member States. We have a common position with four or five other key Member States where we are getting quite a lot of consensus and there is a lot of support amongst officials around Europe that this is a good way to deal with it; growing support amongst politicians who see that having a

² http://www.defra.gov.uk/corporate/consult.euets-amendments/partial-ia.pdf Section 4.2.3
clear and open process for doing it. It is in everyone’s interests in terms of being transparent and fair. Obviously the devil is in the detail but we want to try and make sure—and that is one of the main things we certainly want out of our consultations—that the UK industry understands what the criteria are and feed back to us their concerns with it or how it can be improved. We are not saying that we know everything, and we are very keen to get the feedback from industry, particularly given the analysis that we commissioned earlier last year, which showed the relationship with quality of data, and if you are going to make judgments you want to make sure that the data is fair and accurate and not open to abuse to get someone to get the right answer for that industry or for that environmental outcome. We want this to be a genuinely open and transparent process.

Q113 Lord Wallace of Tankerness: My Lord Chairman, I preface my question by saying I register an interest in relation to renewable energy, but maybe not directly to linkage but I put that on the record. You have referred to, in reply to Lord Brooke, about the importance of ETS and supporting developing countries and you have also touched on New Zealand. Clearly there are other parts of the world which are developing similar systems and it was one of the issues in the current US Presidential campaign as well. In terms of devising this particular scheme what steps are taken to try and facilitate linkages between the different schemes that either are already there or may emerge?

Mr Mackenzie: The basic first step in the Commission’s proposal is to actually amend the directive to allow it to allow a new mechanism to link and to give a process which is very welcome, and we have pushed the Commission hard on before they published the proposal and we are glad to see it is in there. Then there is a lively debate to be had through the whole of this review of the Emissions Trading System. If we take certain decisions either on carbon linkage or anything there is a risk that we make it harder to link with other schemes, and things like a small emitter threshold. If we decide a smaller emitter threshold at one level if we linked to another scheme would it have to have the same level or a different one? We think that most of these things are negotiable and they can be changed to have sufficient flexibility. We have again of course in our consultation and indeed in the impact assessment, criteria for linking that should inform the decision whether we link with an American or Australian scheme, and things like environmental integrity impact on the allowance price; and just how robust their monitoring and reporting is. So I think we want to try and agree—I do not want this to sound like officials always resort to criteria—that having a criteria and evidence base on which the political decision to link can be made is a sensible way forward. So we are confident that we will have the ability to link.

Q114 Lord Wallace of Tankerness: Is there an actual experience of that or do you have particular schemes in mind?

Mr Mackenzie: At the moment we are effectively the only scheme, national scheme—or international scheme. There is the CDM, obviously, which is project based in the developing world. There are individual states in America setting up schemes but not a federal system. The Australians hope to introduce one this year; and we have already referred to New Zealand. Those are the ones that are in existence, or who are about to come into existence. They hope to learn from the mistakes we made—phase I was very much learning by doing—and we hope to learn from some of the mistakes they make in further improving the Emissions Trading Scheme. As long as we are based on the same basic principles of environmental integrity and a tonne of CO₂ is a tonne of CO₂ come what may, then most schemes should be able to link. The technical difficulty will be the detail of linking, but I think we have to see other schemes up and running before we can make the decision to link, because just as we are wary about expanding the Emissions Trading System to new sectors in the European economy linking it to another economy has the same risks, so we have to understand the risks. We may take the decision that it is worth impact X on the European markets to get the deal, we may not; but, again, that is what ministers would have to decide, as to widening the market. It is very hard at this stage to judge what the correct judgment would be because we will be linking with something that does not yet exist.

Q115 Lord Wallace of Tankerness: That follows to another question you answered when you pointed out the different proportion of agriculture in Scotland to the rest of the UK. Climate change, as I understand it, is actually a devolved issue because it is not expressly reserved, but there are many aspects of climate change that clearly are reserved matters. What is your relationship, dialogue with the devolved administrations to the extent that it is relevant for the position of the UK in negotiations?

Mr Mackenzie: Apologies, I should not have just said “yes” to the Chairman’s question. We are in very frequent contact with all the devolved administrations because although environment is obviously devolved EU negotiations are not. The beauty of the Emissions Trading System is that there are economies of scale, so we want to make sure that we have reflected the needs of the whole of or the relevance of the UK economy, so we are in very frequent contact with them. None of the negotiating
positions that we are discussing within government go anywhere until the devolved administrations have had a chance to discuss them. Ministers meet periodically as well to discuss this and other issues, but I think it is fair to say, certainly at working level, if not weekly contact then almost weekly contact, particularly with my colleagues in Scotland who obviously have a larger number of installations in the Emissions Trading System than Wales and Northern Ireland. But we are in very close contact and we draw on their knowledge and understanding of the sectors and their economy.

Q116 Chairman: Could I ask the ultimate sceptical question, which is something along the lines of why a global Emissions Trading System makes considerable sense the effect of regional schemes result in carbon leakage on the one hand or they result in your own producers being landed with additional costs which make them internationally less competitive.

Mr Mackenzie: I do not think that is the case. The analysis we have done on phase 1 of the Emissions Trading System, learning by doing, there was very much towards the end the price of the allowances reduced to virtually nothing because of the over supply in the market. Despite that there is clear evidence that the people were pricing carbon into their investment decisions. There has been some analysis by academics suggesting that before the price fell there was evidence of people focusing more on energy efficiency. One of the industry consultancies—Point Carbon—did a survey last year which said that something like 65 per cent of Emissions Trading Scheme participants had secured some abatement because they were aware that this was now costing them. If just having a price affects people’s behaviour and makes people in industry actually count their emissions, which they did not do before, again that is the same answer to those who say rising fuel prices mean we do not need a carbon price as well. But, yes, you do because that only takes you so far. The issue then about leakage is that leakage does affect some sectors but only a few sectors. There are then two issues with that: an international global deal is the best solution to leakage because then all industry is caught by the same carbon price or a similar carbon price; but if in the absence of a global scheme you have regional schemes you can trade mechanisms to protect the few sectors that are likely to be at risk, probably by means of extra free allocation of allowances rather than building a wall around Europe to protect your industry, which does not sit well with World Trade Organisation systems. But it is doable and again I think that the UK view is very much that this is all a time limited problem; that we will reach the global agreement at some point; and the issue is how long is the gap in which these sectors are at real risk of leakage?

Q117 Lord Cameron of Dillington: Could you explain how you arrived at the figure of £6.49 billion being the benefit to the UK of your proposals over the current Commission’s proposals?

Mr Mackenzie: It is based on two things. To start with, this is a partial impact assessment on which we are effectively asking people’s opinion, so we are not saying that is the price; and, as you know, there are a range of scenarios in the partial impact assessment. Our figures are based on internal modelling jointly done between Defra and BERR, which contain a range of assumptions. I am not an economist but economists tell me that all modelling has assumptions which are challengeable; they could be right, they could be wrong. So that figure is our best estimate with the current information that we have. We gain some confidence in that figure in that the efforts of our modelling is very similar to the work that the Commission has done. They have, I think, used three different models and have come up with broadly similar figures. So we think they are in the right region of analysis. The other point I should make, obviously, is that these figures are contrasting the proposals before us now, which we are considering, to change the system with the old directive. They are not against not having a scheme, these are the cost benefits of moving from the current directive to the new one.

Q118 Lord Cameron of Dillington: You have not really answered my question, you have just given me a lot of caveats.

Mr Mackenzie: In terms of how it is broken down and different costs and so on?

Q119 Lord Cameron of Dillington: Yes. Could you give me the main headline figures?

Mr Mackenzie: The headline figure in terms of cost—and these figures are all net present value—£0.94 billion is the total cost to the UK, which we estimate, which is the cost of industry, installing and buying the technology to reduce emissions, or buying the allowances. We cannot split between the two because different industries and different companies may—

Q120 Lord Cameron of Dillington: Is there a main industry involved?

Mr Mackenzie: No, that is the assumption across. We have a range of projections and analyses for different industries, which say technology X costs Y and would be expected to deliver over this period. And these assumptions are the best that we can do on this fairly rigorous commissioning of consultants and others to give us industry data. We do not see the industry data in full because obviously there are
commercial sensitivities. But we have a fairly robust analysis to get to these costs and if it helps the Committee I can send you a more detailed note as to how we get to these costs.

Q121 Lord Cameron of Dillington: It might be useful. Is the energy industry particularly susceptible?
Mr Mackenzie: Yes, obviously fuel switching is seen as a big area for reducing emissions; moving from oil or coal to gas is a cheap form of abatement. Whether industry fix that will be up to industry and, to a degree, that is the beauty of the Emissions Trading System. We want to give them the incentive and if they want to stick with whatever and have to buy additional allowances that is legitimate because those allowances will finance someone else’s abatement in Europe, and because there is a strict cap you are guaranteed a reduction somewhere in Europe, and the economics will find the abatement at the cheapest cost rather than us trying to pick winners.

Q122 Lord Cameron of Dillington: It would be helpful if you could send us the detailed breakdown, thank you.
Mr Mackenzie: Yes.

Q123 Chairman: Are “net benefit” the right words?
Mr Mackenzie: I am sorry, I have only covered costs. The benefits are broken down into three areas: the benefits of CO₂ reduced in terms of meeting our greenhouse gas targets and Kyoto commitments; the benefits to air quality in terms of reduced nitrous oxide, particulates and so on, which have benefits for human health as well; and there are also benefits in terms of—

Q124 Chairman: You are putting a money figure on increased life expectancy, the same as you do with particulates.
Mr Mackenzie: Yes.

Q125 Viscount Ullswater: This is over the whole eight-year period, is it, the 6.49?

Q126 Lord Brooke of Alverthorpe: That brings us to enforcement. No real requirement under phase 1 to worry too much about enforcement but looking forward to the new scheme it may become more of a factor and I am wondering how enforceable you do believe the new scheme will be?
Mr Mackenzie: The scheme is enforceable and I would say that phase 1 was a real success. The Environment Agency handed down multi-million pound fines to companies that did not comply in the first year, and we had 100 per cent compliance the following year. So that tends to suggest that is quite enforceable. I think some of the difficulties of enforcement in the first phase stem from a vast number of small companies involved and that is partly a de-regulation issue, that having the right message for small emitters will make life easier. Having a harmonised system throughout Europe will be easier to enforce because it will be easier for companies to tell on their competitors because everyone will be operating by the same rules and that will help transparency of the process, whereas for phase 1 and to a less extent phase 2 there is a slight risk of different regulators across Europe having a slightly different approach. Again, the Environment Agency is one of the leading regulators in building up contacts across Europe and discussing implementation issues to make sure that the enforcement is done consistently. I think the phase 1 fines and the fact that we got such good compliance in the UK shows that it is enforceable and we would expect continuing levels of high enforcement.

Q127 Lord Brooke of Alverthorpe: I think we would probably share the view that it will occur to the extent to which in fact it is practised elsewhere in other parts of Europe, but are you confident that we are going to be able to ensure that there is a level playing field?
Mr Mackenzie: I am confident because, again, a harmonised system is easier to see and there will be plenty of people out there watching very closely every Member State. I have already referred to CDM and there are various other industries and analysts who look at this. The whole faith of the system in the market is based on the enforcement integrity. You have only to see the Press criticisms from time to time of CDM. If someone is not enforcing this it will be discovered quite quickly.

Q128 Chairman: It is going to be better than the enforcement in the Common Fisheries Policy!
Mr Mackenzie: It is outside my area!

Lord Brooke of Alverthorpe: And several other industries as well!

Q129 Chairman: We have been talking quite rightly about the ETS but we are going to have an economy where there is going to be an ETS sector and non-ETS sector. There is the danger that the ETS guys are going to say, “You have taken a big stick to us but you are letting these others off scot free.” What are you doing about the non-ETS sector?
Mr Mackenzie: Firstly, as I said, this is a package so it has been negotiated as a package, which is very important, and so there are issues about if you were to take a sector—and we were talking about agriculture earlier—and take it out of one and put it in the other then you will have to make changes to both as it goes forward. The Commission’s proposal is based on 21 per cent reduction from 2005 levels in...
the traded sector and ten per cent in the non-traded sector. That has been determined by the Commission’s modelling on the basis of what is the most economic efficient split between what you can abate in each sector, and our analysis suggests that the Commission have got it right and we are content with the way they have split it. So as of now the effort required of traded and non-traded we think is fair and is right. Obviously we have one mechanism for the whole of the traded sector and there will have to be a range of measures for the non-traded sector, some of which we are already looking at and have been discussed in the context of the Climate Change Bill; others which we may well have to bring forward as further proposals as we go forward. I think it is an issue that we will have to keep under review in terms of the split between traded and non-traded, but from the period from now to 2020 the framework that we have seems to be a good one.

Chairman: Thank you very much indeed for the clearness of your evidence and the help you have been to us.
Witnesses: Mr Murray Birt, Senior Policy Adviser—Energy, and Mr Matthew Farrow, Head of Environment—Confederation of British Industry; and Mr Dwight Demorais, Special Adviser, Lafarge Cement UK, examined.

Q130 Chairman: Good morning and thank you very much for coming on this beautiful summer day! I am sure that you would prefer to be inside rather than out! May I explain a couple of matters formally. This is a formal evidence taking session, so a transcript will be made. That will be circulated to you as soon as it is available, so you can have a look through it and see if there are any errors and slips that have come in and correct it. It is also being webcast, so there is a slight possibility that somewhere in the ether somebody may be listening. As I always say, we have never ever had any evidence that that is the case.

I do apologise for keeping you waiting; we had a few matters to tidy up before we reached this session. Again, thank you very, very much for coming. Would you like to begin firstly by introducing yourselves and then, if you would like to make a general comment, we can get on to questions and answers.

Mr Farrow: I am Matthew Farrow; I am Head of Environment and Energy at the CBI, so emissions trading falls within my area of responsibilities. I will make a statement in a moment and let my colleagues introduce themselves first of all.

Mr Birt: My name is Murray Birt; I am Senior Policy Adviser for Energy at the CBI.

Mr Demorais: I am Dwight Demorais; I am Public Policy Adviser to Lafarge Cement UK and also the British Cement Association.

Mr Farrow: I will keep this short as I am conscious that your lordships will want to get into the detailed questions. The starting point is to say that the CAP clearly sees climate change as a huge threat to the economy and to UK society. For a good time now we have supported strongly binding national targets and we are very clear that business needs to play its role in meeting those targets. Last year we produced a report of our Climate Change Taskforce which set out a detailed set of proposals showing how we felt that the UK could get back on track to meet its long-term 2050 target and in that report, as in our previous statements on climate change, we made very clear that we felt that emissions trading should be one of the core policy tools, if you like, to generate a carbon price for the economy and to encourage least cost abatement options at the same time while being able to set an absolute cap on emissions which is particularly important. We are very clear that EU ETS has a major role to play and we are also clear that it needs to be improved from the learning phase, Phase 1, and indeed from Phase 2 of current phase. We feel that the Commission’s proposals are broadly on the right lines but, in our policy paper which I think you will have seen, we have set out our own thoughts on how those proposals could be improved and we are very happy to discuss any of those aspects.

Q131 Chairman: May I begin by raising the point of certainty because what comes through very strongly, not just from you but from a number of other witnesses, is the need to have certainty and, once there is certainty, people can start planning, they can start committing their investment levels and they know where they are. Firstly, do you think that the Directive as it currently is gives us an adequate degree of certainty? Secondly and I suppose to tease you a little, you actually say that the movement from 20 per cent to 30 per cent ought to be dependent upon, and, as soon as you use words like “dependent upon”, you are introducing an element of uncertainty.

Mr Farrow: A great question! What I will do is give the general CBI perspective on this and then Dwight might want to say a little about, from an individual company perspective, how important certainty is. Business certainly does want more certainty. We accept that you never get absolute certainty in life or in business, but I think that the Directive does go a good way towards providing a certainly much improved level of certainty, so having a longer phase up to 2020, making very clear what the cap will be, and setting out a projection for the cap after 2020 gives business some indication of the longer term proposals for the Commission. We feel that it is certainly a big step forward. On your point about whether we are trying to have it both ways in a sense by the point about the move from 20 to 30 per cent, what we are trying to do with that proposal is introduce some certainty around business concerns such as suppose an international agreement is done in Copenhagen next year but actually it turns out to be a fairly loose and weak agreement but the political
enthusiasm means that the politicians say, “It’s the best deal we have, it’s the best we can do and it should be ratified straightaway”, the risk is that business is then exposed to a sudden uprating of the targets and a sharp tightening of the ETS cap against the background of an agreement which actually may not achieve very much internationally. We certainly hope that there will be a sound, strong agreement in Copenhagen but we felt that it was important to debate the question of supposing that the agreement is actually quite a weak one and we felt that it was important to guard against the risk that that instantly leads to the uprating of the targets. That is why we raised the question of, would it not make sense to have quite rigorous scrutiny of what comes back from Copenhagen and possibly a co-decision procedure in order that we can all be assured that, if we are going to go up to a 30 per cent target, we have the right international background. You are quite right to say that that is going to extend the timescale and introduces some uncertainty of process, but we felt it important to try and give business some certainty that they would not just be left exposed with a weak agreement and suddenly rushing more sharply uprated targets. Dwight, I do not know if you want to say something from a company perspective about certainty.

Mr Demorais: Certainly in terms of business investment cycles and how we plan our investment, as a company, Lafarge were taken somewhat by surprise at some of the vagueness of the proposal and, as a result of that, our Chairman and Chief Executive announced publicly that the company would suspend one billion euros of investment into Western Europe until we had greater certainty on which sectors are likely to be designated as subject to carbon leakage. In the UK, that affects us very starkly because we are currently planning the building of a brand new state of the art cement works in Kent that has a budget of about £200 million. That investment unfortunately is on hold right now and our company is saying, “We are quite used to managing business risk but this is a political risk too far; we simply do not know whether, if we spend £200 million in the UK or £1 billion in Western Europe, we are suddenly going to be subject to imports from non-carbon constrained countries because the Commission have not told us”. From a business certainty point of view, there is no question but that it is affecting our investment decisions. Picking up on what Matthew said, the move from 20 to 30 per cent is clearly also an issue of planning for us. If we have a broad agreement in 2009 out of Copenhagen, that will be great but how do we transpose that into hard targets and certainty? If, say, we do not get to that point until 2017–18, does that mean that we move from a projected target of 20 per cent to 30 per cent which we are going to have to achieve in two or possibly three years? We are simply not clear exactly what we are aiming at here.

Q132 Chairman: What would you need to know to unlock the hold on your £200 million investment? Mr Demorais: What we need to know is whether cement is likely to be designated as a sector subject to carbon leakage because, if we can see that there may be equalisation in the system in place that allows us to compete on a level playing field with non-carbon constrained countries, that would help us to make that decision. At the moment, we do not know whether we are or we are not. The Commission have suggested that maybe cement is not an energy-intensive industry subject to carbon leakage and we would argue very strongly against that.

Chairman: That nicely prepares the way for the next series of question from the Earl of Arran, which is simply tell us what you know about carbon leakage.

Q133 Earl of Arran: It is a massive and I have found very complicated subject. Taking some points from your positioning paper, I really have three questions. Firstly, are you able to elaborate on the set of criteria that you propose should be used to determine susceptibility to carbon leakage? Secondly, in your opinion, how likely is it that the Commission will be able to produce their recommendations in time to agree them as part of the Directive? Thirdly, would you explain how your preferred policy for dealing with the risk of carbon leakage, that of free allocation to vulnerable sectors, should be applied.

Mr Farrow: Perhaps I could begin and again my colleagues might want to add some detail. We feel that the key criteria is whether a company within emissions trading which is bearing a carbon cost can pass that cost through to their customers without losing market share internationally and/or undermining their ability to attract investment if they are an international company. We feel that the sort of criteria which are going to be needed to assess that are going to be factors such as, what is the cost of carbon at various possible levels under the system, what does that represent in terms of a proportion of a company’s profit margins, what is value added and what is the trade exposure of the company? Is the company trading pretty much within a European market where all companies would face the same cost of carbon or is it trading very significantly in an international market? Is that market price sensitive? Those are the sort of criteria which we think are significant. The Draft Directive, from memory, hints at similar sort of set of criteria but does not go into a lot of detail. Defra in their consultation spell out more closely a set of criteria which actually I think are fairly close to the ones we pick up in the brief and we are certainly very clear in our mind that this needs to
be as far as possible an evidence-based discussion. Many sectors will feel, rightly I think, that they are potentially vulnerable and a decision has to be made under the scheme so that it will give certainty to companies like Lafarge and we think that it needs to be an evidence-based process as far as possible. Can it be done within the Directive in that timescale? I think that will be tight and I guess that it is difficult to be certain. The Commission are pushing back quite strongly and saying, “This is terribly complicated. We are putting resource into it”. I think that the question in my mind is whether they are putting sufficient resource into analysing the issues. This is a subject which has been debated certainly in the UK for some time. Companies, consultants and the Government have produced various analyses. It may be difficult to get it into the Directive itself but we certainly feel that the Commission’s proposed timescale which is not to identify the sectors until, I think, June 2010 and not to decide on the measures they might use to protect the vulnerable sectors into another year after that, does seem far too leisurely, if you like, and creates just the uncertainty about which my colleague was talking. I do not know if Dwight wants to add anything.

Mr Demorais: I think that pretty much covers it. It is a fact that we have been preparing data and a number of sectors have been preparing data for submission into the Commission and they have a huge amount of data. What we are not clear about is why it has taken the Commission so long to actually come to the indications. We do not even necessarily at this moment need firm decisions. I think that we need to be given an idea of who is likely to fit this category of carbon leakage. We simply do not know that. It is a real threat. Just looking at import figures into the EU27 since 1999, in 1999 from non-Annex 1 countries, imports were approximately three million tonnes. In 2007 it was over 15 million tonnes. That, we believe, will be significantly increased if there is no equalisation scheme for those sectors that are actually designated as subject to carbon leakage. We see anecdotal similarities of issues happening in the Philippines, for instance. They put a special tax of $10 on a tonne of cement and imports there went from zero to 40 per cent virtually overnight. So, we do have illustrations of that which is why it is so important to get an early indication of which sectors are subject to carbon leakage.

Q134 Chairman: Can you give us a bit of guidance using the criteria—and you say that there is not a great deal of difference between you and Defra—as to what sort of proportion of UK industry would fall into the carbon leakage sector? Have you any idea? Clearly, everybody is trying to get in there, are they not?

Mr Farrow: I am sure that many people will have a case to make. Defra have not publicly said what proportion they would expect to be covered by the at risk category. If you look at research, they commissioned a report, the Climate Strategies Report, which indicates that two or three sectors appear to be disproportionately at risk of which cement is one, lime is another and iron and steel is a third, and those sectors do stand out. I do not have the figures in front of me, although we can send them to you, but I think those sectors are a fairly small proportion of UK economy as a whole. Of UK manufacturing, again they are of a minority but not all manufacturing is within the ETS of course. I am afraid that I do not have a figure—I do not know if Dwight can help—for what those sort of sectors amount to in terms of ETS emissions. Our feeling is that while it seems clear from the evidence that some sectors are in a very stark position, the Climate Strategies Report is a consultant’s report based on modelling and analysis. I think it is quite right that other sectors perhaps feel that the way in which the modelling was carried out does not reflect the particular feature of their industry or feel perhaps that the data used was out of date and that more recent data gives a different picture. I think it is important that those sectors should have a chance to make their case to the Commission and then we would hope that the Commission would make an objective judgment based on all the evidence that they have. Certainly some sectors do appear to be in a particularly stark position.

Mr Demorais: I would like to add one point to that and that is as to the nature of the data collection. At the moment, it is all pretty historic. It is looking at what has happened in the markets in terms of imports in different sectors. I think that we would be foolish not to take a forward look and actually model what might happen in the market at different carbon costs. We can see what has been happening historically but we need to model what is likely to be, how the markets will behave and therefore how we will really assess carbon leakage in the future markets. That has not been asked for by the Commission and that troubles us.

Q135 Lord Cameron of Dillington: As we move towards 2020 where you get fully auctionable allowances which you seem to more or less support, what do you expect to happen between 2013 and 2020 that is going to overcome the problem of carbon leakage? How is that going to change?

Mr Farrow: The concern is that it may not and the Commission proposal is that the power sector can cope with auctioning from 2013 and we broadly accept that. The Commission then argue that two further categories of company, those which are at risk of carbon leakage and those which are not at
significant risk of carbon leakage, and the ones which they deem are not at significant risk they feel should have a transition towards full auctioning over that timescale and we think that that is acceptable because, if they are not at risk of carbon leakage, they need time to adjust, clearly, before they bear a full carbon price, but that should be the aim. The Commission then argue that the third category of sectors that are at risk of carbon leakage should receive possibly free allocation or possibly broader adjustments—and we can debate those two options perhaps in a moment—over that time period if there is no international agreement in place. The Commission’s hope is that international agreement will solve carbon leakage problems. As I say, we think that that is clearly the ideal and is something we should all work towards but, if that does not happen, we feel that free allocation against a good technology benchmark would be required for the at risk sectors up to 2020 and quite possibly beyond.

Mr Demorais: When we talk about free allocation, it is not 100 per cent free allocation. What we have accepted is that, from 2013, we will have a reduced cap which would reduce by 21 per cent. So, when we talk about the 100 per cent, it is not really 100 per cent, it is more like 80 per cent.

Mr Birt: There is another subsequent issue in terms of electricity consumption. Some sectors such as aluminium or chloralkali, some of the chemicals industries, use a lot of electricity and, because the electricity sector is having full auctioning, the current price will be in place in electricity. So, that needs to be taken into account when sectors are being judged at risk of carbon leakage as well.

Q136 Chairman: Otherwise, the whole of the aluminium industry comes out of Iceland.

Mr Birt: Yes.

Q137 Lord Brooke of Alverthorpe: Which sectors are in this stark position that you describe, Mr Farrow?

Mr Farrow: We have not given an absolute view ourselves because we feel that it should be an evidence-based discussion. We do not have all the evidence as an organisation. If you look at the Climate Strategies Report which Defra commissioned and to which they always point as one of the best pieces of evidence around at the moment, I think that suggests that cement certainly, iron, steel, lime I believe and potentially parts of the chemical sector, appear to be sectors, on the evidence of that report put together, for whom the carbon cost is a pretty big proportion of their gross value added, the denominator they used, and also sectors that trade internationally on a price-sensitive basis. As I say, it does appear from the evidence that those sectors are particularly exposed. We feel other sectors which may be more marginal according to that report should have the opportunity to come forward if they feel that they have a strong evidence-based case to say, “Actually, we feel that we are at risk as well”. I think it is important that sectors have an opportunity. We recognise that not all sectors will be equally at risk and that a decision has to be made.

Mr Demorais: In fact, in terms of the cement industry being recognised, certainly reports like the Climate Strategies Reports, did say that, but the European Commission take the view that actually cement is quite expensive to ship around the world and therefore we are probably not subject to carbon leakage because of being too expensive to bring it. That is not the case. It is on-land transport that is the costly part. You can move it probably economically within a 200 kilometre radius of its import point and, if you draw circles around the UK import terminals, that covers the whole of the UK. It is actually very cheap to put it on a barge and ship it around the world.

Q138 Chairman: There is something going on my brain that I cannot get around. Clearly, the definition of carbon leakage is that you cannot pass on without you losing market share, but that is not a stable situation. That depends upon market conditions in the market at any particular time.

Mr Demorais: Absolutely.

Q139 Chairman: It is a dynamic, it is not a given. That makes things extremely complicated.

Mr Farrow: I think that is partly why the Commission are saying that it is going to take them quite a long time to work it out. The point worth making is that, as an organisation, we do accept that it is difficult, that a decision has to be made and that it is impossible to provide absolute guarantees to companies within the scheme that they can be protected, if you like, against all risks of carbon leakage. Against that, we accept as an organisation that, given the threat of climate change, we do need an Emissions Trading Scheme with an absolute cap if we are actually going to be serious about meeting new targets and tackling the issue and therefore there is a trade-off to be made and we feel that our proposals around how you can guard against carbon leakage give us a good chance of providing an acceptable adequate level of protection for sectors most at risk, but I think that business collectively is swallowing hard and recognising that there are no absolute guarantees but it still feels that we have to progress with ETS as being the best tool that we have to try and drive a cost-effective Commission’s programme.

Q140 Chairman: I am a little surprised that we have not heard an avalanche of representations that go something like, “Trading conditions are difficult; life is difficult; it’s tough out there; yeah, we can’t put our
hand up and say that we are subject to carbon leakage but this just adds another marginal cost which makes life more and more difficult and inevitably we become that little bit more uncompetitive internationally” because ETS is by definition a regional scheme.

**Mr Farrow:** We may well find and I am sure that we are finding that sectors in that position are making a case to the Commission and, as I say, if they have a strong case, they will be heard. I think that business perceptions may vary across different European countries where the tone of the climate change debate tends to be a little different. To be fair to our members, they are recognising that climate change is a genuine threat and, if we are going to tackle it, we are going to have to have schemes like emissions trading and it is absolutely right that we, as the CBI, a representative lobby, ensure that the scheme works effectively and offer as much protection as the scheme can deliver to sectors that are at real risk. British business is recognising that carbon pricing is on the way and there are sectors that will not find it easy but, over a transition period, will need to invest and structure their operations over the next decade or so to take account of that. We do see an important distinction between sectors such as cement where we think that will just crucify those sectors for no environmental benefit and other sectors who need a transition such as—and this is something which we may come on to—the system of international credits which again at the margin can alleviate a bit of the pressure, but nonetheless over time are going to face a carbon price. It is a difficult judgment for us as an organisation to make but that is what we have made of it.

**Q141 Baroness Sharp of Guildford:** I have three questions on the auctioning issue. The first one is, what position do you take on the Commission’s proposals in particular that all sectors should be subject to the 100 per cent auctioning except for those subject to major carbon leakage? Do you support the Government’s view that a minimum level of auctioning should be set leaving Member States to decide whether to auction a higher or a lower proportion of the remainder? Lastly, in relation to the revenues raised by auctioning, you advocate in your paper that at least some of that revenue should be used to support climate and renewable energy actions but argue that this should be left to each Member State, but to what extent are you confident that Member States will use those funds for that particular purpose if it is not stipulated by legislation?

**Mr Farrow:** With regard to the proposals for auctioning, I would not say that we are desperately enthusiastic about such a big shift to auctioning but we do recognise that, for the power sector, it is appropriate and I think that, if you had the power sector representatives here today, they would give you a similar view. For sectors which are not at risk of carbon leakage, the Commission proposes a transition over the whole of Phase 3 towards full auctioning and, while it is a difficult judgment to make and will not be easy for every firm in that situation, we do recognise that it is probably the right thing to do. For sectors at risk of carbon leakage, we feel, as we have discussed, that allocation based on benchmark is necessary. In terms of your second question, I think that the Defra or UK Government positions are for Member States to have some flexibility but only upwards. I think that their preference might be for a minimum. We do not support that. We are nervous that the Government’s understandable enthusiasm to be a climate leader, which in broad terms we accept and support, might, on some of these marginal issues, as you were saying, Lord Chairman, lead them to take some risks, shall we say, with certain sectors where they convince themselves that those sectors can bear more auction than elsewhere in the EU. We would prefer the Commission approach which is to have a harmonised level of auctioning which cannot be deviated from. In terms of the revenues, we do not feel that it should be a European decision. Are we confident that other Member States would spend the money in our view appropriately? No, we are not, but we feel that that is a decision for them fundamentally. Obviously, our interest is in the UK and UK business and, as an organisation, we are nervous about tax harmonisation at a European level and we feel that allowing the EU to stipulate, “You must spend this proportion of money on these particular things” is perhaps a slippery slope towards more tax harmonisation. We are saying that it should be a Member State choice; the Commission might advise and recommend but it should be a Member State choice. However, within the UK context, we feel that given the sums of money that will accrue to the Treasury through auctioning and given that this money is coming from business and consumers in order to pay a carbon price and given the challenges that as a country we face in terms of R&D in energy technology and adaptation and so forth, it is right that the Government earmark a certain proportion of that revenue for spending in those areas and in fact we have written, along with WWF, the environmental NGO, to the Prime Minister to make that case. I do not know if my colleagues want to add any thoughts on that.

**Mr Demorais:** Simply to say that as a company we would certainly agree and as a trade association we would certainly agree with what Matthew has said about applying the auction revenues to R&D. Certainly in the cement sector, we have commissioned a report, which we are expecting to be published very soon, by the International Energy...
Authority on carbon capture and storage within the cement industry. A lot of work has been done in the power industry on this. As members may know, the cement sector has very concentrated levels of CO₂ in our stack gases which have the potential to be captured and stored but the scale for us is way away from where the power industry is. The whole of the UK cement industry produces about as much CO₂ as a single two gigawatt power station. So, when we are talking about scale, it is entirely different. We believe that that is a way to go. Sixty per cent of our emissions as an industry are from the actual limestone process, only 40 per cent is our fuels. There is nothing we can do about 60 per cent. If you are going to make cement, you have to heat the limestone up to get the chemical change and that drives off the CO₂. We believe that that is a way forward for us but it is a technology that is out of our reach at the moment but, if we had the option to recycle auction revenues back into R&D in these sorts of areas, we would strongly support that.

Q142 Baroness Sharp of Guildford: What chance do you think there is of the Treasury accepting this philosophy?
Mr Farrow: Being honest, for the Treasury, very little chance. The Treasury, as we all know, has a long-held view although it is worth perhaps mentioning that, under another trading scheme, a domestic only UK trading scheme for carbon reduction commitment which is aimed at the commercial and public sectors, which is a fully-auctioned scheme, the Treasury did accept for that scheme that the money should be recycled directly to participants. We feel that a precedent has been set but the Treasury tell us that they do not feel that that was a precedent. Being honest about it, we feel that it needs to be a political decision at the highest levels. Our argument is that politicians tell us and we in business agree that climate change is an unprecedented threat and requires an unprecedented change to the economy in society and therefore, given that these very significant revenues will be accruing to the Treasury that they would not otherwise have had without business being willing to accept some auctioning, it seems an obvious opportunity. I think that some politicians are open to the idea but the Treasury has always had a view which I suspect we have all come across.

Q143 Baroness Sharp of Guildford: I note that what you are actually calling for in your recommendation is that a significant proportion of the auction revenue be devoted to low carbon technologies and adaptations. What would you define as a significant proportion?
Mr Farrow: Probably whatever the Treasury is willing to part with!

Mr Birt: It is worth remembering that the Stern Report says that the two fundamental pillars of addressing climate change are putting a price on carbon which is what the emissions trading does and then increasing the level of spending on public research and development and demonstration of new technologies and those are two equal pillars. So, even if the hypothecation argument is not accepted directly, the need to increase the UK and Europe’s spending on public R&D which is then matched by private spending on R&D and demonstrating technologies is clear. So, I think that the Treasury and the Government should be weighing those possibilities quite strongly in terms of increasing the revenue going towards those ends.

Mr Farrow: Just to add to that, the UK tends to perform quite poorly in terms of league tables of publicly funded energy R&D. I think that we spend about a third of the EU average as a proportion of GDP, so we do feel that this is an area of weakness in the UK which is going to come back to haunt us as we try and face up to the challenges of renewables and energy security and climate change.

Q144 Baroness Sharp of Guildford: Except for the pharmaceutical and aerospace sectors.
Mr Farrow: Indeed.

Q145 Lord Brooke of Alverthorpe: Following up on that, do you see alleviating fuel poverty which is a consequence that may come of course with increased costs on fuel prices, as part of the hypothecation?
Mr Farrow: We have made a case for that and we would recognise that a case could be made. We feel that the fuel poverty question, which is obviously becoming a significant issue as oil prices increase, is really a social policy question for the Government as opposed to an energy policy one. To be honest, if the Government said or if a future Government said that they would use a proportion of the revenues to support the R&D that Dwight was talking about, a portion for adaptation, a portion for fuel poverty, we would accept that as perhaps a reasonable package, but it is not an argument that we have made ourselves directly.

Q146 Chairman: Is there a danger that, if the Government do not get it right in terms of what to do with the revenues, there is a significant inflationary effect possible here?
Mr Farrow: Could you enlarge on that.
Chairman: You are putting costs up, are you not? The Government are getting the revenue—
Lord Cameron of Dillington: You are going to charge more for electricity.

Q147 Chairman: At the very least, there is a danger of adding to a wage price final.
Mr Farrow: Yes and the oil price issue generally of course is also adding to that. Yes, those risks are there. In a sense, if you put a price on carbon that gives businesses an incentive and consumers an incentive where they can to move away from carbon-intensive products and services, the incentive is there for business to innovate and find less carbon-intensive ways to produce the goods people want and for people to switch their purchasing power or their purchasing choices, but obviously where those products and services are essential, then you can get an inflationary pressure which is something that the Government are going to have to manage carefully. These are difficult choices.

Mr Birt: It is also worth thinking about the energy poverty issue. It is not one that we touch on a lot but it is almost the flip side of the carbon leakage issue in that increasing energy costs can impact consumers and it can also impact companies and there are varying impacts. They are almost two sides of the same coin. Maybe potentially that is useful in thinking about it.

Q148 Earl of Dundee: In terms of sectors and gases, you will note that the broader the scope of the Emissions Trading Scheme, the better. What makes you think however that the Commission’s current proposals necessarily advocate this at all?

Mr Farrow: The Commission propose to do things. They propose to include some additional sectors and gases and, in broad terms, we support the move to do that. There is a risk of some distortions at the margin and Dwight has an example that he might give in a moment to illustrate that. There is also I think a special case around aluminium which the Commission propose to include and the UK Government propose should be kept out given its particular vulnerability to carbon leakage issues. Alongside that, the Commission are, one could argue, going the other way in terms of taking the smallest emitters out of the scope of emissions trading, but we think that is the right thing to do because the transaction costs are quite significant for the smallest emitters. Some estimates put them around £300,000 a year per site and because of the way the distribution of emissions is skewed, it is possible to take out a large number of very small emitters without taking much emissions out of the scheme and we can talk about the numbers we have put forward around that. Dwight will want to give you an example of how expanding scope makes sensible in principle but one has to be careful at the margin about the distortion effects.

Mr Demorais: In the cement industry, we are trying to increase the amount of alternative fuels/waste fuels that we use in the process, so we are trying to get away from fossil fuels as much as we can and we are using a lot of society’s wastes, used tyres for instance and solvents, quite a lot of biomass, meat and bone meal, sewage, sludge pellets, plastics etc, and we are encouraged to do so. We are encouraged to try and recover energy from waste. The interesting issue there is that, in the EUETS, incineration and the gases from incineration and from landfill are not covered by EUETS. So, while we would get charged for emitting CO₂ but having captured the energy from it, the incinerators do not. So, there is a little quirk there.

Q149 Earl of Dundee: I have taken into account differences in special cases. Are you satisfied so far that the Commission have taken these on board and have adjusted within their proposals in order to achieve balance?

Mr Farrow: With aluminium, we think, along with the UK Government that it probably has not, that aluminium should not be included despite the Commission’s wishes. Apart from that, we broadly do think that they have covered the right sectors and gases. We also support the proposed inclusion of aviation which, as you may know, the UK Parliament is right now discussing and plans to bring in at the end of Phase 2. We think that the principle is right, the more sectors you have in, the lower the overall costs of the scheme. However, one has to be careful that you are at the margin and you are not causing distortions or you are not bringing in a large number of very small emitters who actually are probably better off being targeted by different policy measures.

Mr Birt: Even if aluminium is kept out of the scheme, they will still be impacted by electricity prices, so that is a fairly large concern for that sector.

Q150 Chairman: You mentioned transaction costs being excluded from the small emitters. Do you have evidence on transaction costs?

Mr Birt: The UK Emissions Trading Group of which we are a member are currently doing some research into this and they have done a sample from companies that are participating in the EUETS and looking at what their transaction costs are and having people and setting up systems to monitor their emissions and make plans for reducing their emissions. The Government have also estimated this but industry view is that the Government are likely to have underestimated the cost of complying with the ETS. That evidence is still being worked on but we would be happy to send it to you when it is available.

Chairman: We would be grateful.

Q151 Lord Cameron of Dillington: May I continue with the de minimis threshold question there. It would seem to me that you want the scheme to work effectively and therefore, to raise the de minimis threshold, which is what you are proposing, from
10,000 tonnes to 50,000 tonnes—the Government will go only go as far as 25,000 tonnes—you are making the scheme less effective. My second point is, would the small people therefore have a competitive advantage over the bigger people if they are not involved with the scheme and what is to stop the bigger people from splitting themselves up so that they fall below the minimum threshold particularly if it is as high as 50,000 tonnes?

Mr Farrow: To give some explanation of why we have gone for the higher threshold, I think that the numbers are quite striking because of the skewed distribution. At the moment, if you were to raise it to 50,000 tonnes, you could remove about 70 per cent of emitters from the scheme, but actually you would only be removing five per cent of emissions from the scheme. We think that does show that the scheme is better targeted at the big emitters who are more able to work within a quite sophisticated scheme. What is very important is that the small emitters excluded from the scheme do not get a sort of get out of jail free card, as it were, and in fact the Commission proposal makes it quite clear that they must be subject to comparable restraints. The Carbon Trust has undertaken some analysis on this—and their work tends to be pretty even handed—and their view is that, within the UK, being subject to the uplift of electricity prices which all firms will face anyway plus the payment of the climate change levy plus potentially being subject to climate change agreements or the carbon reduction commitment does mean that firms who are removed through having a higher threshold would in fact be faced with comparable carbon restraint measures but at a lower transaction cost. So, that should discourage larger firms from going through the complexity and difficulty of trying to break themselves up. Clearly, if that suddenly appeared to be happening, we would need to revisit this but although people argue about the precise threshold, it does seem to be broadly agreed across all the stakeholders that actually the smallest emitters are probably better being subject to different policy measures rather than the full complexity of ETS.

Mr Birt: It is also worth remembering that part of the emissions trading proposals from the EU is a cap for Member States on the non-traded sectors and as well the UK Climate Change Bill sets firm limits on the entire economy. So, there will be defining measures and the policy measures currently in place do create a carbon cost for those sectors if they are excluded from the ETS.

Q152 Chairman: Is that the way to tackle agriculture then?

Mr Farrow: To be honest, agriculture is not a sector at which we have closely looked. We do not feel it is appropriate for ETS though I would have thought that some of those measures would make more sense. I will be honest, it is not my area of expertise.

Q153 Lord Brooke of Alverthorpe: Perhaps I could continue with this as I was to come in with a question later on non-traded sectors and I think that it is probably appropriate that we pick it up now. How content or otherwise are you that the balance has been appropriately struck in terms of sharing the emissions reduction burden between the different sectors between the traded and the non-traded?

Mr Farrow: Our initial view when the appraisal came out was that it seemed to bear too heavily on the ETS sectors because they face a much sharper reduction than non-ETS sectors. Having said that, what we then did was go back to some work that we commissioned from McKinsey for our Climate Change Report which came out last year which looked at the marginal abatement cost curve for the UK and worked out where those cost-effective emissions cuts could come from and Murray did some rough analysis working out which of those emission cuts would be designated as ETS and non-ETS sectors and that did actually suggest that probably the Commission balance was broadly comparable to what we would expect from the UK and I think that what partly explains that is a measure like more energy efficient electrical appliances for households which one sees as a sort of nothing to do with ETS. It does not actually show up of course as a reduction in the ETS cap because the power companies have to supply less power. So, having initially been concerned about the balance, our analysis suggests that it may actually be broadly appropriate for the UK.

Q154 Lord Cameron of Dillington: May I ask a question about the new entrant reserve. You seem to indicate that five per cent is too much and also perhaps that the definition of a new entrant is not helpful enough, shall we say.

Mr Birt: On the definition, in Phase 2 which we are currently in there is a new entrant reserve and it is defined as including new facilities and new installations—they are opening up greenfield sites—but then also including expansion of new sites, putting in a new production line and a new kiln at an existing facility. That is already the definition currently used. The Phase 3 proposals were restricted to only new sites, so it really removes the opportunity for a company to, say, close down a facility and then move their production to another site and expand their production there as that might be more efficient. That is the definition issue. The UK Government on the size of the reserve have done some analysis; they have looked at it and said that they are also of the view that five per cent is too large and that actually 1.2 per cent is probably the size that would reflect the
needs better. We want to have a little bit of leeway just in case the economy is growing faster and in case the calculations are a little bit off, so we are suggesting a new entrant reserve size of two per cent.

Lord Brooke of Alverthorpe: I liked your briefing; I thought it was very good. One marginal complaint as someone who struggles increasingly to read small and smaller print—

Q155 Chairman: He did read it at half-past 11 last night and did not sleep as a result!

Mr Farrow: It might just send one to sleep!

Q156 Lord Brooke of Alverthorpe: I thought that it was very helpful, indeed. In particular, I read about the external damage which is what I would like to raise some questions on. You indicate your support for the use of external credits in Phase 3 but accept that their role should not be unlimited. It seems that you regard the limits proposed by the Commission as too restrictive. Could you explain where those limits should be placed and why.

Mr Farrow: We have not been able to come up with a precise figure but let me try and explain where our thinking sits and the band we think might be appropriate. There are two purposes to allowing external credits to be part of the scheme as we see it. One is to support the international carbon market which we think is important and the second is, at the margin, it may ease some of the competitiveness pressures if the carbon price is very high within ETS and CDM credits, for example, are trading at lower prices. The Commission has quite an ambitious tactic in the package aimed at the Copenhagen discussions where it says that if an international deal is done at Copenhagen, there should be a quite significant access given to international credits. If no deal is done or no acceptable deal is done, there should be very little access at all, and the thinking basically is to offer an inducement to developing countries by saying, “If you are willing to sign up to a decent deal at Copenhagen, we will unlock flows of credits and that will help your economy and so forth”. We accept that and it is quite an ambitious negotiating tactic, but I think that it is so important to try to get a good deal at Copenhagen; we accept that as a tactic as a part of the package. Where we disagree with the Commission is on the view that if no deal is able to be done, there should be almost no access at all to credits. We feel that, even if that were the case and the negotiation did not produce an acceptable deal, it would still surely be important in the years after 2009 when no doubt international politicians were trying to resurrect some sort of process to keep the international carbon markets going to some extent and equally I think the competitiveness concerns that we have talked about today are going to be as sharp as ever if not more sharp in the absence of an international deal … On that basis, we feel that surely there should be an option to use a proportion of international credits even if no deal is done. To get the differential right, we feel that if you are going to have a limit of, say, 50 per cent, which we think is about right, in reduction effort post deal, which is broadly in line with the Kyoto approach to the use of credits, then the volume of credits to be allowed without a deal has to be below that to offer an inducement, but rather than the Commission limit of a couple of per cent, I think Murray, we think that something around maybe 20/30/35 per cent would be broadly appropriate, but we have not been able to come up with the precise figure and we still doing some analysis on that and again it is a judgment.

Mr Demorais: I would like to add to that, if I may. As a company, Lafarge Cement is active and has been active in the international CDM field. We believe quite strongly that it is in every company’s best interests to do as much as they can wherever they are located at every installation. That is good business. We do also see the importance of developing technology in developing markets where, if we save a tonne of carbon in Malaysia, it is just as good as saving a tonne of carbon here. I had the privilege of being project manager for Lafarge on a CDM project in Malaysia which is now producing 60,000 tonnes a year savings. Another part of Lafarge in Morocco introduced wind turbines which are saving 30,000 tonnes a year. Yes, we need to do all we can in every installation we are in, but the opportunity to do work through the CDM benefits not only us but the host country as well.

Mr Birt: I would like to add to that. What the Commission have done in the absence of a deal is that they have slightly changed the rules retroactively. There are CDM limits allowed throughout Phase 2 but the proposals in the absence of a deal would extend that pool of credits over the entire Phase 3. So, they are taking the limit of Phase 2 which would be over five years and saying that it should now be spread over 12 years instead of over five years. So, it is significantly reducing the amount of credits that companies are able to use through both Phases 2 and 3 or it might end up that the limit has been totally used up in Phase 3, so that is a significant concern.

A lot of the carbon market is based in the UK and that is a real strength and is actually one of the bright spots in the economy currently and we want to maintain that going forward. So, it is important that some more access to CDM credits is allowed but we have not been able to pin down what that number should be.

Q157 Lord Brooke of Alverthorpe: How do you think the EU can best prepare for possible linkages between ETS and other regional emissions trading schemes around the world? We hear about the states
in America preparing themselves for it if they may go ahead. How do you think they can do preparatory work for linkages of that kind?

**Mr Farrow:** This is a complex area and again, to be honest, it is not a subject that we have done our own analysis on. I think that the principles are that it is absolutely right that the Commission should be looking to potential linkages as a way to develop or to move us towards a global carbon market which must be the long-term aim. I think that one has to be careful to make sure that you do not link two very different trading schemes, so if you have the ETS scheme in Europe which has an absolute cap for example and you link that with a scheme which had perhaps a low buy-out price or a carbon-intensity scheme, you could undermine the rigour of the European scheme and that must be guarded against.

Our feeling is that on the detailed mechanics of the scheme, so things like how the auctions will be run for example and the verification systems, it must make sense for the Commission to develop detail of the proposals, to look at what is going on in parts of the States, in Australia and in Canada where cap and trade schemes are being talked about and worked up to try to make sure that our system in detail is evolving in a way which would allow it in time to be linked as opposed to going down some different models, perhaps running the auctions or something, which then in three or four years’ time turn out to be incompatible. Those are our broad principles but, to be honest, we have not done some detailed work in this area.

**Q158 Lord Cameron of Dillington:** Are your fellow organisations in the States as signed up as you are to this whole agenda?

**Mr Farrow:** What is interesting is how far they have moved in recent years. Going back to, say, 2004, we were looking to do some joint work with them around emissions trading just as an issue which business throughout the world was having to think about and there was, to be honest, a reluctance to get involved for political reasons which I think we can all understand. That shifted very markedly and, in the last couple of years in particular, we have developed much stronger links on those issues and Richard Lambert has had meetings with his counterparts. Having said that, I think that while we are all encouraged that the debate in the US particularly led by business has become more akin to the debate here, I think we should recognise that it still lags behind where we are in the UK on some of these issues.

**Mr Birt:** I would like to mention that, as part of the follow-up to the CBI’s Climate Change Taskforce Report, we are engaging quite purposefully with our business counterparts all over the world and we will be developing views on what international agreement should look like and also trying to encourage other business federations to take a constructive view on climate change and trying to share experiences in how the CBI has come to take the views that it does on climate change and climate policy. For instance, the experience of how our taskforce was set up and operated and trying to share that experience across a number of business federations globally. So, that is part of our ongoing work.

**Q159 Baroness Sharp of Guildford:** Do you have concerns about the monitoring of CDMs?

**Mr Farrow:** Yes, we do. We recognise that there are some genuine questions being asked about the quality control of CDMs in the whole carbon offset market. I think that there is a risk of babies and bathwater here. What struck me working on this issue in recent years is that, if you go back perhaps a couple of years—and I am talking about the carbon offset market more wider than just a pure CDM market—many companies were looking to, as Dwight said, make reductions that they could in their own operations and then it was seen as a good thing to do to be buying offsets/remissions you could not easily have used in the short term. Then there was a sudden sort of press backlash with the NGOs and so on saying that all these credits are not worth the paper they were written on and all of a sudden companies are now very, very nervous about getting into those markets at all and I think that we need a middle course here. The carbon markets are important and, yes, there probably are some issues with some credits and they need to be addressed. In terms of the Commission package, what we are a little edgy about is that the Commission seem to feel that they are best placed within Europe to say, “Right, we are going to have our own quality standards and we will only allow into the EU scheme credits which meet the quality control of every Member State”. Our feeling is that this is about trying to build a global carbon market, so let us address quality control concerns at the root of the UNFCCC process and solve them there rather than Europe or individual Member States have their own quality control systems. We recognise that it is an issue and, as I say, there may be a baby and bathwater factor and we prefer it to be tackled at a UN level if possible.

**Mr Birt:** I would like to add that the schemes already prefer it to be tackled at a UN level if possible. There may be a baby and bathwater factor and we feel that they are best placed within Europe to say, “Right, we are going to have our own quality standards and we will only allow into the EU scheme credits which meet the quality control of every Member State”. Our feeling is that this is about trying to build a global carbon market, so let us address quality control concerns at the root of the UNFCCC process and solve them there rather than Europe or individual Member States have their own quality control systems. We recognise that it is an issue and, as I say, there may be a baby and bathwater factor and we prefer it to be tackled at a UN level if possible.

**Lord Brooke of Alverthorpe:** Just on a concluding note to a degree—
Chairman: As a number of members have now left, we have lost the percussion and the brass and we only have the violins left now!

Q160 Lord Brooke of Alverthorpe: You have really raised the issue within the traded scheme of agriculture and, if I recall correctly, you said that you have not done a great deal of work in that arena although it is a significant area. We have evidence that big progress is about to be made in New Zealand. I was wondering where you see the traded scheme going and I am now asking you to project possibly to Phase 4, or even possible changes still within Phase 3 where it could be extended. Would you care to speculate what might come under the spotlight, for example shipping?

Mr Farrow: I think that it is an important debate to have. We are in fact going to do a piece of work, which I am afraid will not be produced until next year as we are only just starting it, setting out exactly those issues. I think that aviation will and should come into the scheme. I think that shipping is a more complex challenge and there are a number of data problems with shipping in terms of monitoring emissions. With the UK figures, the emissions seem to go up and down very dramatically with shipping in ways that must reflect a statistical problem of natural trend issue and there are all sorts of, I guess, competitiveness-type issues about where ships fill up and the bunker fuel and so forth. I think that shipping should be looked at but whether it will be able to be brought I think is an open question. The Commission and the UK Government occasionally raise surface transport. Again, we have no objection to that being looked at but we find it hard to see how you would include surface transport in a scheme like ETS. We feel that probably there is not a lot further to go in bringing major new sectors into the scheme beyond aviation and our overall feeling is that ETS covers about half of emissions in the European economy and it is a scheme probably better set up for the big static emitters and I think that it has been a huge achievement to get ETS up and running to the level that it has been. It might be better for some of the other sectors to work on other policy measures and, in the UK, we are actually quite well advanced with the carbon reduction commitment and so forth. That would be my speculation.

Mr Birt: Potentially some further thoughts are more linkages between the carbon reduction commitment as that gets developed and evolved and its relationship with the emissions trading sector might be of interest. We have a project based system, the CDM market creates an incentive to create project based emission reductions. Outside of Europe, there is scope and it is hinted at within the Commission Draft Directive to allowing some sort of project based system within Europe to get credits from outside of the non-ETS sectors into issues of double counting and whether there is already a policy tool targeting that particular sector where that project may come from but that is another area. With regard to one of the previous questions on linkages between other schemes, that would be a key issue going forward in the years ahead. How do we build an even more global carbon market?

Q161 Chairman: One of the joys of this sort of Committee is that we cover such a vast area—agriculture, fisheries and the environment—and you can see if there are any crossovers and I was just thinking that one of the concerns, say, in fisheries is that people hold fish quota but do not have fishing boats and one of the concerns that there used to be in agriculture is that people have milk quota but do not have any cows. There must be the opportunity for people to hold credit but do not actually do any emitting. In other words, there is an opportunity for significant speculation in credits.

Mr Farrow: That is something which has concerned us because, as you say, in theory the potential must be there and particularly industrial members within ETS often say to me that they are concerned that cash-rich companies within the scheme, for example, or potentially I suppose outside, might look to do that. We have discussed it with Defra and they say that they are looking at it quite closely, but they think that the sheer scale of the carbon market in Phase 3 would make it very difficult for any one player to significantly influence the price in this and it is not obvious how it would work to their advantage. We will continue to say to the Commission and to the Member States as they develop plans for how the auctions are to be run and so on that they need to be absolutely assured that that does not happen. Any financial market has an element of that but, given the importance of this market to Europe as a whole and to business as a whole, we are alive to those concerns and are pressing them on.

Q162 Baroness Sharp of Guildford: Has a futures market developed in this?

Mr Birt: Yes and it is centred in London, so it is speculation and banks and other financial institutions.

Q163 Chairman: It is a good thing in other words!

Mr Farrow: Yes, for some of our members!

Chairman: You have been absolutely fantastic. It was very helpful, very clear and very enjoyable. Thank you very much, indeed.
THE REVISION OF THE EU’S EMISSION TRADING SYSTEM: EVIDENCE

WEDNESDAY 9 JULY 2008

Present  Brooke of Alverthorpe, L  Plumb, L  
Cameron of Dillington, L  Sewel, L (Chairman)

Examination of Witnesses

Witnesses:  Mr Phil Woolas, a Member of the House of Commons, Minister for the Environment, and Mr Niall Mackenzie, Deputy Director, Climate and Energy: Europe, examined.

Q164 Chairman:  This is a formal evidence-taking session, so there will be a transcript and you will get a copy, and you will be able to see whether there have been any errors, mistakes, slips, or, dare I say it, second-thoughts. Also, we are being webcast, so there is a slight possibility that somewhere someone may actually be listening to this! What would you like to do, Minister? Would you like to start off with an opening statement or go straight into Q and A?

Mr Woolas:  Can I just very briefly thank you for the invitation. It is a good opportunity for us to put our policies forward. Niall Mackenzie is the Head of the Climate Change and Environment, Europe, Division, and he gave evidence previously to you, and you will forgive me if I rely on his expertise to answer the difficult questions, I will try the easy ones! Just to say, of course, that the Emissions Trading Scheme within the wider United Kingdom climate change policy is of huge importance. I would say it is the keystone of our policy, because obviously as part of the United Nations process and we rely upon European Union solidarity (if I can use that word) to promote the cap-and-trade policy as opposed to the pledge and review policy. Therefore, for huge international reasons, in achieving a low carbon global economy, not just a low carbon UK economy, the ETS is the keystone, so getting it right is of huge importance. I have to say, Chairman, that that is disproportionate to the column inches it commands in the newspapers, for the reasons which I suppose are obvious. So it is extremely important. We welcome the Commission’s publication of the climate change and energy package of proposals on 23 January 2008 and, as you know, our policy is based on those building blocks. So it is just really to put on the record how important we see the operation of the Emissions Trading Scheme being.

Q165 Chairman:  Thank you very much. Can we have a look at this business of certainty, because a lot of the witnesses we have seen over the past couple of weeks or so have attached great importance to the scheme having a degree of certainty, mainly because obviously there is a requirement to put in significant levels of investment and they are not going to do that, or they would find it difficult to do that unless there is certainty as to the level they are being asked to reach. I suppose the difficulty is that the 20 per cent, 30 per cent, is dependent upon having an international agreement, which itself causes a degree of uncertainty. So there is a bit of tension there. Do you consider that the degree of certainty which emitters face at the moment is sufficient to enable them to get on with the job?

Mr Woolas:  I think in terms of certainty where we can provide certainty, and are keen to do so, is in timetables so that the markets know what periods we are talking about. The key one, of course, is the post-Kyoto period. We have argued very strenuously in international fora that the Copenhagen deadline of December 2009 is critically important to give time between hopefully, touch wood, that agreement, and the start of the post-Kyoto period 2013. The difficulty we have had is that most countries assume that that period is required for parliamentary or legislative ratification, and one typically looks at the Senate as being the biggest hurdle to jump given past experience. For us that is important, but what is equally important is giving businesses certainty. Then we come to the question you have asked, how can we possibly give certainty if we do not know there is going to be an agreement, if it is 20 per cent or if it is 30 per cent? We think the importance of putting our policies—and we support the European Union policy in this regard—into the framework of the Bali road map is the critical point, and in that sense we have got no choice in actual fact. So we can provide stability in the markets, knowing when decisions will be taken, but the big uncertainty, of course, is 20 per cent or 30 per cent.

Q166 Chairman:  The nice side of uncertainty is flexibility.

Mr Woolas:  Yes, it is.

Q167 Chairman:  I suppose the question there is, in the lead up to Copenhagen what degree of flexibility do you need in the ETS to give room to negotiate an international agreement?

Mr Woolas:  Most of all, we need to show that the ETS is working, and the strongest card we have in the discussions is that it is working from the point of view of it being a proven mechanism to reduce real levels of emissions within the European Union countries and also as a deliverer of a finance flow for countries outside, the developing countries obviously, as a real
finance to again show genuine emissions. The international debate is the mirror image of the debate here, where developing countries are keen on overseas funding, obviously, through the Clean Development Mechanism and potentially others, whereas the argument here from the NGOs tends to be, “Don’t salve your conscience by spending money overseas.” Well, I have never had an environment minister in the developing countries say to me, “Please, Phil, don’t spend any money here.” The opposite is the case. Can we show that it is working in those two criteria I have outlined? I would say that is the most important card in our negotiation package, which does not really answer your question but it puts it into context, I hope.

Q168 Chairman: One of the arguments which have been put to us is that really the EU will sign up to anything, with Copenhagen it desperately needs an international deal, and that when that comes back it will seem to be a deal which really unravels and is not as copper-bottomed as it should be, and our domestic emitters will be in the position where they are expected to go to 30 per cent but really the strength of that international deal is weakened.

Mr Woolas: That is one of the biggest questions facing us, especially in light of the reports from Japan. It is a good question. I can only give you my personal view. There is not an HMG line to take on this. We are living under, I fear, a false sense of security in the United Kingdom. The mainstream political parties support ambitious targets mid-term and long-term for global and domestic emissions reductions. The argument which is prevalent in the United States of America in the public debate is, “Why should we cut, if China isn’t?” That is a caricature, but that is basically what it boils down to. There is a substantial number of people, we know from our research and from common sense, in this country who share that view but that view is not given full expression because the three main political parties, and indeed the parties in Scotland, Wales and Northern Ireland, also share that ambition. If an agreement is reached which is perceived to be too harsh on the developed countries, although common, differentiated nevertheless, without commitments from the developing countries, it will be difficult, particularly in the potential economic circumstances which we may be in, to hold public opinion and business with us. That is what I worry about in the negotiations. I think we take it for granted too much that we can bring the public and businesses with us. We have to, therefore, be able to show by mid next year, more so than we are at the moment, that Lord Stern’s point (which says you can have economic growth and falling emissions) is proven, is the paradigm that business is in, that we see a UK competitive advantage for our industries as a result of that investment, that pathway forward, so that the argument we put which says having a low carbon pathway is not only the right environmental policy but is the right economic policy is proven to have weight. That, in my judgment, is the only way we will carry the momentum through, remembering that there will be an election in the offing, depending on the timing, in this country, when I am sure the newspapers will put things into very sharp focus indeed, as is their right and their want.

Q169 Lord Brooke of Alverthorpe: Good afternoon, Minister. Do you perceive similar problems in other European countries, that there may be a mismatch between what the political ambitions may be amongst the political classes and what is actually deliverable?

Mr Woolas: If I can speak very honestly and frankly to this Committee, of course conversations take place about climate change fatigue. There is that point. Again, of course, it matters what happens in the United States of America, and again I fear that there is a level of naivety in the public debate about the US. It is true that the two main presidential candidates have stated policies which are more akin to European Union policies, such as cap-and-trade policies, but the public debate forgets that the Congress and the Senate have got to ratify any agreement and it is not a given that they will do that. So I do think that unless we can show that we have decoupled, that the prosperity growth path is the low carbon growth path, I think the politics of it get very difficult indeed. So the answer is, yes.

Q170 Lord Brooke of Alverthorpe: If I may quickly follow up then, coming back to Lord Stern’s report and the importance of growth, what are the prospects for Copenhagen next year if in fact the current economic problems continue or even perhaps worsen so that we do not have growth?

Mr Woolas: Again, I said that the ETS was the keystone of our policy, and it is, but the end, as opposed to the means, is to show exactly that. We have had economic growth since 1997 of 27 per cent, I think, and emissions reductions on greenhouse gases of just under seven per cent. One of the reasons why the United Kingdom’s standing is high—without blowing my own trumpet, it is nothing to do with me, it is very high largely because of our scientific reputation and our diplomatic service—is because one of our strongest cards and the reason why we carry such respect is that we can show that we have decoupled those two growth paths. To be able to show that we can carry on doing that and that the ETS is a means to that end is critical. If we are not able to show that, then I fear that we will not get an agreement.
The revision of the EU’s emission trading system: Evidence

9 July 2008

Mr Phil Woolas and Mr Niall MacKenzie

Chairman: We have more on this from Lord Cameron.

Q171 Lord Cameron of Dillington: Minister, you mentioned that we are aspiring to a low carbon global economy and you also mentioned the fact that both presidential candidates seem to be heading towards some sort of USA equivalent scheme. How much work have either we or the European Commission done to ensure that our proposed third phase is going to be compatible with the US scheme so that it does work on a global basis? Do you know? Mr Woolas: I know that the answer to the question is, huge, and I know I have never been asked that question before in my twelve months as a minister.

Q172 Lord Cameron of Dillington: Perhaps Mr MacKenzie can have a go!

Mr Woolas: I think that is one of the most important questions facing us in the future of our global economy. The Foreign and Commonwealth Office, with whom we work, as I hope you know, very closely in this, have given significant priority to the whole area of climate change, the Bali road map (as it is called for shorthand). Within that, with our own experts in Defra and with others in the United Kingdom, and of course in the European Union, where the amount of shared expertise is growing, I would say that in my limited experience this is the area where European Union close cooperation works to greatest effect, particularly as we have Poland and Denmark in the presidency of the COP this year and next year. The use of that diplomatic effort and the expertise we have to help overseas countries develop carbon markets is based partly on the premise that for our scheme to be the most successful it needs interchangeable schemes overseas. The United States has been at the forefront of that, the individual states, which I know you have looked at, the Canadian provinces. We feel now that we have got a snowball going. The tipping point was the Australian election, but the Korean Government elected in December has started the research on a cap-and-trade carbon market. Our Embassy is advising them. Our own officials are involved. I think there are Royal visits planned. There is a huge UK effort. The Japanese, most pleasingly, have now set out looking at carbon cap-and-trade emissions trading policies, whereas that had not been their policy position. The New Zealanders were keen to promote it to other countries. The answer to your question is that that effort has to be such that there is interoperability and interchange between the carbon markets. We are trying to create a world currency and my own view is that if we are successful, touch wood, in ten years’ time that will be a genuine world currency based on the price of carbon with interoperability, which of course is why verification, monitoring and reporting at an internationally agreed standard as part of the UN agreement, with the City of London as a key provider of that service, is a tremendous opportunity for this country and I can report to you that we have good cross-party consensus in this country on that and that is very exciting.

Q173 Lord Cameron of Dillington: It is very good to hear that kind of philosophy. I do not know whether Mr MacKenzie would like to put a bit of flesh on that? Mr Woolas: Whether it is actually working or not is a fair question.

Q174 Lord Cameron of Dillington: What is actually happening in terms of setting criteria which are going to fit with other schemes? Mr MacKenzie: As the Minister has made clear, we have a lot of contact with the Americans, and indeed with other countries, and barely a week goes by when we do not have a delegation from Japan! Phase one of the Emissions Trading Scheme is very much learning by doing, so there is quite a powerful message to give to other countries about how we have done it, what mistakes we have made and what things we did quite well. Certainly, the evidence from both Australia and America in the schemes which are starting up there is that they are following very much our philosophy and way of doing it. For example, we had no option on allowances in phase 1. We were limited to a ten per cent option by the directive in phase 2 for 2008–12, whereas America, in its regional greenhouse gas initiative, has gone for very much higher levels of options from the start. I should know the figure, but I am afraid I cannot remember it. It might even be 100 per cent. It is quite a large number, so they have assumed that they are issues which they might even be 100 per cent. It is quite a large number, so they have assumed that they are issues which they can address. In terms of how to link with Europe, both we and the Commission are talking to the Americans and others, but until there is an American federal scheme and an Australian scheme in operation it is hard to work out the mechanics. So the changes to the directive which are being proposed actually provide a legal framework to make that linking and we are consulting in our consultation paper about criteria which we should make as part of a political judgment and technical judgment about whether we join. The Minister has already referred to them, things like proper monitoring, reporting and verification, but when we have a scheme to link with there will necessarily be technical issues which we will have to resolve, and it may well be an interim means, using something like CDM as the common currency which provides the oil throughout the globe. So if we allow Kyoto credits into the European scheme, the Americans allow it into their scheme, if the schemes are not identical to begin with that provides the oil between the two systems, which will give the market something to reduce costs, pending aligning the two
systems, because changes will probably be required on both, depending on where the Americans have got to. But until the Americans have decided what their system is, it is impossible to say with absolute certainty, “Oh, it is a matter of a few weeks to make the two systems link,” or it is six months or a year. But all the global schemes which are being talked about are based on some of the same principles, which makes it easier issuing allowances and surrendering allowances at the end of each reporting period. Obviously, it was the Americans who put the whole idea of carbon trading into Kyoto in the first place and they have got a lot of experience from trading sulphur and other gases. So the technicalities will be worked out in due course, but the framework is already in place, or will be in place when the directive is approved.

Q175 Lord Cameron of Dillington: Would you like to comment on the effectiveness of the International Carbon Action Partnership?  
Mr Mackenzie: It has just only started. It is effective. It is very good to have a forum where those who are interested in carbon trading can exchange experience and learn lessons. I think part of the enthusiasm for it is that it helps the American federal government realise just how much understanding and experience there is around the world, that you do not have to reinvent things from scratch, and there will be issues that we learn from the Americans as well. As I say, they are going for quite high levels of options in their original greenhouse gas initiative. That may have implications for how we run our options in phase three.

Q176 Lord Cameron of Dillington: Moving on, Minister, you were talking about CDMs being the other international aspect of this scheme. We have had some representation saying that the EU’s proposals on the use of CDMs are excessively restrictive. At the same time the whole of the CDM process has been pilloried a little bit in the press as being sending money into developing worlds, which probably they should be doing anyway, and would be doing anyway if it was not for the CDM process and it is not really achieving anything very much. I was just wondering where the UK stood in that range of views.

Mr Woolas: There is a lot of cynicism on this issue which I think is unfortunate. It is right to be robust, perhaps it is right to be sceptical, but it is probably the only show in town in terms of the scales of money which the developing world needs given that public sector money could never fund the issue. The second point, to answer the cynics although not the sceptics, is that it is early days. It is very early days. I remember studying the formation of the Stock Exchange and when we first formed it, it did not work. Now my colleagues in Defra and elsewhere are doing their best to make it work and we published a paper recently on improvements to the CDM, which we have circulated to other countries, which I think provides some very strong lessons forward. On the detail, Chairman, maybe Niall can add to that.

Mr Mackenzie: The only thing I would add, if it is helpful, is that people assert that it would not be happening, or it would be happening anyway but there is no real evidence, and particularly in some countries which have expressed themselves sceptical about climate change there is no reason on earth why they should install equipment to reduce emissions if there is no political pressure or public debate in that country saying they should do something about it. Whereas, if they are given a financial incentive then change happens and emissions are reduced. You would then have a debate as to whether it is value for money. That is a much better debate to be having, whether we are doing it in the best and most economically efficient way possible rather than whether or not we should have it. I think that is the main benefit of CDM, making things happen. There is always room for improvement and we are working on that through the UN process, but those who point out the faults take for granted now the behaviour change which CDM has driven.

Q177 Lord Cameron of Dillington: So you will be working within Europe to try to make them relax their approach to CDMs, will you?

Mr Mackenzie: As I think I may have said last week, we are genuinely open and consulting on this as part of the consultation exercise and the Emissions Trading Scheme is concerned. Some industry and some Member States are saying the limits in the Commission’s proposal are too tough, others are saying they are too lax, and indeed the MEP who is the rapporteur for greenhouse gas said that there should be no access to CDM in the non-traded sector, so that is very important and very tight. It is an issue we are looking at and we have yet to put consolidated advice to ministers yet.

Chairman: Thank you. Let us turn to the thorny question of carbon leakage.

Q178 Lord Brooke of Alverthorpe: Mr Woolas, one of the more politically sensitive issues surrounding the revised ATS is that of carbon leakage and the Commission has suggested that “border adjustment measures” (in short tariffs) on imports might be an alternative policy approach to that of awarding free allowances to the EU sectors identified as being at risk from carbon leakage. Could you give us your views, please, on this alternative policy approach? Does it appeal to HMG?
Mr Woolas: No. We think it is folly. The best way forward is to have a level playing field for competition, to identify where there are existing tariffs, directly or indirectly, on goods and services. The major economies meeting at Korea three weeks ago, which drafted the leader’s statement, was clear on that point. There was an argument about it, but it is the best way forward, we think. Again, there is a mirror image debate in the United States which sometimes comes from a different political persuasion. They are sometimes surprised that we are so strongly against tariffs. We are trying to make this market work. As you know, our experience is that tariffs are not likely to be the best way to achieve the emissions goals. The global climate agreement, of course, is necessary, in Copenhagen. We want to make sure that that includes the level playing field. As regards those who say we should put up tariffs as an incentive for others to support an ambitious target internationally, our view is that that is a miscalculation.

Q179 Lord Brooke of Alverthorpe: On the same subject, your officials indicated to us last week that the Government is still formulating its policy on the criteria which should be used to assess whether a sector is at risk from carbon leakage. What position will you be defending in the Council with respect to the criteria which is being proposed by the Commission, and can you give us an indication of the sectors which would be susceptible to carbon leakage according to the research you have commissioned? I would like to thank Mr Mackenzie for sending us some supplementary material along with the printed report last week.

Mr Woolas: I will do my best, but I will need help. It says here that we are seeking to refine the criteria! We have got a number of policy objectives. We have got UK plc, number one concern. How do we ensure that the regime achieves emissions reductions and gives UK plc a competitive advantage, where that is possible? If you look at our own emissions, of course steel is critical, but there are different methods of producing steel. That is not understood in the debates, so we are trying to bring some realism into that. There is the thorny question of aluminium, which is a policy developing as we speak, I think. Interestingly, in our own economy, food processing is a major emitter and of course the transferability, the potential for carbon leakage, is probably less in food processing. I have missed one out, have I not?

Q180 Lord Brooke of Alverthorpe: Cement?

Mr Woolas: Cement. Thank you very much.

Q181 Lord Brooke of Alverthorpe: We had the CBI here this morning.

Mr Woolas: I would say at a global level cement is probably where we stand the best chance of getting a good sectoral deal, if we can get the Chinese on board, simply because there are relatively few producers of cement around the world and most of them outside of China are members of the international trade body, so there is a family there that we can work on. Of course, I would never say there could not be carbon leakage of cement, but the threshold is higher. Just going back, I think aluminium presents a particularly difficult problem for us. The problem, as I understand it—and again I will have to ask Niall to help me—is that because you set the price of aluminium on the market rather than on the production margin, on the margin of sales, they not unreasonably say, “How on earth can we be expected to absorb those costs?” But then again the other argument is, if you can get a European agreement then you can protect yourself against carbon leakage internationally. I think that is where we are at, Chairman.

Q182 Chairman: Aluminium is basically solid electricity, is it not?

Mr Woolas: Yes.

Q183 Chairman: If it is not identified as an industry which is subject to carbon leakage, it will go to Iceland, you know, hydro-electricity. They will be the monopoly producers of aluminium.

Mr Woolas: That is a very strong argument. Where are we up to now?

Mr Mackenzie: I think that is quite right. Obviously, aluminium is a fairly light product in the scheme of things and a global price, and the main cost is labour cost and energy costs in each country which produces it. I think the key thing at the moment is that, first of all, we are consulting on the criteria which are used to define sectors and we want to avoid rushing to the wrong decision this year as part of the UK negotiations, but to set clear criteria which will enable governments to make the decisions. If we start naming one sector now, then another 50 come in and say, “Me, too,” and all our time, particularly all the Minister’s time would be spent seeing endless delegations from industry rather than building up the evidence on which to make the decision and the negotiations in Europe. It is a very important issue. The UK has already floated negotiations in Europe, accelerating the timetable laid out by the Commission. We have got quite widespread support for that faster timetable because we realise that industry needs certainty as soon as possible, and we are making very good progress. So I am as confident as I can be at this stage—we are still waiting for the end of our consultation period—that we will have a clearly agreed definition of criteria for deciding which sectors are subject to leakage criteria, which industry...
is confident are fair. The issue then is ensuring that a Commission-guided process early next year, the first half of next year, to get the data and the evidence is transparent and has the confidence of industry.

Q184 Chairman: When we mention steel, I take it the problem with steel is the nature of the international market on steel, that it is so competitive and energy is such a major factor that if you increase the European production costs of steel effectively it looses market share disproportionately?
Mr Woolas: Yes.

Q185 Lord Plumb: The next question is on the ambition of targets. I think this is very much linked to where we started and the Chairman's first question, but since then you have spoken of the cynicism about climate change and of the folly that follows in the minds of many people and the fatigue, perhaps, on all of these issues at the moment which are of concern. What are your ambitions on targets, nevertheless, because targets have already been set? What are your concerns? Evidence suggests prices of €50 per tonne of CO₂ are necessary to make CCS profitable and €100 per tonne are necessary to achieve the Kyoto target. There is a big difference. What are your views on this? It has been suggested that the 20–30 per cent emission reduction targets were insufficient to send that price signal to the market. So how do you respond to this, to start to think in terms of the possibility of meeting the targets?
Mr Woolas: The ministerial attitude amongst our team and our colleagues across government to that question is that we would be arrogant and foolish if we, as politicians, were to determine what that should be. We must take our advice based on science, we must use the committee on climate change at the UK level to give advice on the overall long-term targets, the carbon budgets and the medium term targets that follow from that, recognising two things: one, as I say, that they must be based on science, and two, that we must always remember why we have a target, which is (a) so that we can reach it, and (b) so that our emissions trading policies can work. In terms of the price of carbon, we are living through a time where €50 per tonne for CCS is the fashion. I could not honestly tell you, Chairman, whether it is the right price or the wrong price, I just would not know. Niall and the team have a much better feel for that. My attitude is to be cautious and take the advice. What we are committed to is the idea, to bring it down to the means as well as the end, of carbon capture and storage. The fact is that unless the world can get carbon capture and storage, particularly with coal-fired power stations, then we are not going to meet the target or come anywhere near meeting it. It is about half of the problem in the world. Our view is that we want the UK in particular and the European Union in general to be the crucible of the technology so that again we can get a competitive advantage. Again, we find the debate in public on this puerile. People say to me all of the time, “Don’t give it the go ahead unless it is carbon capture ready.” Well, I do not know what that means, other than having a field next to a power plant. It is not a demonstrated technology. The only way, I am advised by engineers, we will be able to demonstrate it is when we build it. So I believe we have to base our understanding of the policies on that point. In terms of where we go from here, I do not believe we should predicate our policy on developing carbon capture demonstration projects just on the carbon market. We have got to have plan B, and plan B means somebody has got to build it.

Q186 Lord Plumb: How do you think other countries would respond, in a similar way to your own feel on this? The whole problem, I suppose, is that we are stepping into the unknown. We have got no history to guide us as to where we are going. This is why I certainly would have many doubts about setting any sort of target in the circumstances we are in, having just come across London in a taxi, which took about an hour. You cannot ever tell what CO₂ is being thrown up from thousands of vehicles all jammed together in a small plot.
Mr Woolas: I think the debate needs to be more mature. This is again my personal view, that when people say we must not give the go ahead to coal-fired power stations unless they can have carbon captured by an arbitrary year of 2020, I believe that proposition is meaningless. I think it is like saying you should not perform cancer research unless you can cure cancer by the year 2020. Well, if we could say yes to that we would have already had the technology to cure it. I understand why it is said, but I think it is pure politics. It is not based on anything. The Government has to have a strategy for making it happen and I believe we have a strategy. Of course, there is a consultation which has been produced by the Business Enterprise & Regulatory Reform Department. It is outside of my portfolio. Then, of course, the question is, can the carbon market help it? Well, the roll out of it, yes. The UK is in a good position. There are two, I am told, carbon capture facilities in the world, one of which I think is BP in Algeria, or is it Shell? I think it is BP (and apologies to Shell if it is them) in Algeria. The other is a Norwegian example in the North Sea where the CO₂ is pushed back down into the geology as part of the extraction process for gas and oil. That is a long way away from the carbon capture of coal-fired power stations, but this is the technology which matters, alongside nuclear, in the world economy and I want us to be there. I believe if you are an environmentalist
you should be supporting clean coal-fired power stations because of the way in which the world energy markets currently are. Everybody has heard the figures for China.

Q187 Lord Plumb: In this Chamber in particular we have had Lord Ezra advocating this, the former Chairman of the Coal Board. He has been advocating this as long as I have been in the Lords, which is now 11 years. When do we get the first one in the UK, and where?

Mr Woolas: I cannot possibly say where, because –

Mr Mackenzie: There is a competition being run at the moment.

Mr Woolas: —I would probably be in prison if I answered you, and also I would be lying because I have not got a clue where it is going to be. The demonstration project at the European level, the technology, has been chosen.

Mr Mackenzie: Yes, and for the UK we have also got the competition which BERR are running. We are hopeful, or committed to having it operational by 2014 at the latest, but part of the debate about funding is how quickly you can get it up and running. As the Minister says, if you want to get something done quickly you are not necessarily going to get the carbon market to the price it might need to get it done quickly. So it will be a combination of carbon market and other sources of funding, as the heads of government made clear in their June Council conclusions, that the Commission and Europe are looking as a matter of priority as to the right kind of funding mechanism. As you will well understand, there is a lively debate within government as to what possible mechanisms those might be.

Lord Cameron of Dillington: There is almost a hint there about hypothecation!

Chairman: No, we do not want to get on to hypothecation!

Q188 Lord Cameron of Dillington: The Commission has proposed that 20 per cent of revenue from auctioning allowances should be earmarked for climate change and renewable energy actions, and I know the Government is sticky on hypothecation. The CBI were saying that this was a good idea and they were actually quoting this morning about the carbon reduction commitment scheme, which involves hypothecation, and I know the landfill tax, which I have something to do with, is totally hypothecated. I am just wondering whether we might be able to use some of the auctioning of the allowances for research, for instance, to make the carbon capture and storage an economic viability, and all sorts of other routes. My view is that the auctioning of allowances could be seen as being purely a tax, which might therefore bring the scheme into discredit if, for instance, decisions were taken on carbon leakage and other factors. People might become suspicious if this was merely enhancing the Government’s income and I think it would be beneficial if we could prove that actually this money is going to reduce carbon and greenhouse gases in some way or other. Discuss!

Mr Woolas: Shall I read it out, or shall Niall?

Q189 Lord Cameron of Dillington: It is very much a political thing.

Mr Woolas: We do not hypothecate revenues as a matter of principle. The UK is against the hypothecation of specific revenue streams for a particular purpose. It is an inefficient means of determining public expenditure priorities. We do, however, consider policies on their merits and will therefore consider the need to incentivise CCS alongside other valid policies. The serious answer to your very important question is that, as you know, most governments take these views, as you know better than I do, that you cannot do that because of the order in public finances. There is the other point, I think, that as this grows—and it will grow—the more it grows the proponents of hypothecation would have to, at some point, I think, break the link. I just throw that in as an observation. On the other side of the argument, clearly we believe it is in our interest to incentivise the CCS policy. The other point, of course, is that because we have placed this in the European Union context, hypothecation does breach the principle of subsidiarity, and I think that is a genuine problem. Those who would want to criticise us for reasons of selling newspapers would not know which way to attack us!

Q190 Lord Brooke of Alverthorpe: One of the issues which concerns me with the current position we are in is the growth of people in fuel poverty and I was wondering whether in fact we could not look to possibly hypothecate money being taken from auctioning to be used to ease the social burdens which the additional costs will come to bear with the carbon policy?

Mr Woolas: We held recently, you probably read, Chairman, the Fuel Poverty Summit (as the headline writers called it) which Ofgem hosted at Central Hall and that was one of the issues discussed there. We believe the social obligation which we placed in the carbon emissions reduction target, this prior obligation, is a substantial resource to help alleviate fuel poverty. We are in, as you know, the first year of three years of that scheme and therefore my attitude generally is that anything we need to do over and above that—and it is a substantial resource and there is, of course, a time lag on implementing energy efficiency measures, you cannot just turn on the tap that quickly—would therefore be in the next CSR period. However, of course, we are debating at the
moment what other measures we need to take, particularly in preparation for, God forbid, a harsh winter this winter with fuel prices being so high. We are advised by the Department of Health to look at in the region of 25,000 excess deaths if there is a bad winter. Of course, that is a subjective statement, obviously. The difficulty is, we do not know which 25,000. We have got the issue of fear of not being able to pay the bill, as well as the reality in some cases. We are partly, if I may say just for the record, a victim of our own policy in that the definition of “fuel poverty”, which is what public attention is around, is our own definition based on ten per cent of income. It interestingly does not include the winter fuel payment allowance as income. Do not ask me which of my predecessors agreed to that, but I guess it was to make it even more challenging. I am not trying to excuse the difficulty at all. It is a very important point.

The answer to your question is that we are discussing what measures we could take.

Q191 Lord Brooke of Alverthorpe: I think you might also be making a case now for hypothecating the £400 fuel allowance!
Mr Woolas: The Fuel Poverty Advisory Group, of course, do advocate that and they advocate better targeting of the winter fuel allowance, because of course there is no hypothecation whatsoever. One of my constituents told me that she spent the money in Spain, and it was very warm there!

Q192 Chairman: But it did not pay for the three months?
Mr Woolas: It did not pay for the whole bill, no, but she was very grateful!

Q193 Lord Brooke of Alverthorpe: Could we have a look at the allocation of the allowances again? I mentioned that we have seen the CBI this morning and taken evidence from them. They submitted a policy paper to us which refers to the Government’s suggestion that there be a two stage process to the allocation of free allowances. First, a sector-specific cap would be set based on the shares of the 2005–07 verified emissions and that cap would be then divided between installations according to benchmarks. Could you explain your policy is a bit more detail there, please?
Mr Woolas: I would have to ask Niall, Chairman, if I may.
Mr Mackenzie: This is a technical issue which we floated to industry, because looking at the Commission’s proposal how they see the allocation of allowances working is that there are three pots of allowances, or three categories—the electricity supply industry, who have no free allocation, a pot which is reserved for those subject to carbon leakage, who get extra free allowances, and a middle pot for the rest. The process then by which individual installations receive their allowances would probably be based on technological benchmarks, how much fuel you would use for your average cement works, let us say, which then you calculate CO₂ emissions from. We had a concern, on reading the Commission’s proposal, that there was a risk that different industries might suffer or be treated unfairly purely on the basis that one industry had a better benchmark or were better at calculating it and suggesting a benchmark, or agreeing a benchmark amongst themselves in Europe, so that for every tonne of fuel burnt cement got, let us say, one and a half allowances, whereas the aerospace sector got something less. So we have just floated the idea, is it better to have an absolute limit for each sector? So, say, the cement sector has a limit based on its 2005 historic emissions, for example, and then they divide that amongst themselves, and then aerospace, or steel, or whoever, has something based on their historic emissions as the starting place and then the negotiations or the benchmarking divides it up amongst themselves. There are pluses and minuses for both approaches and it is really just to flag the concern we had to industry: do you think the Commission’s proposals run the risk of being unfair for your sector? Obviously we will be interested to see what kind of response we get from industry. Part of the difficulty in all these issues, as I am sure you will appreciate, is that they are very technical, they are very difficult. We are trying to move this negotiation as quickly as possible and it may well be that even if we concluded and industry came back to us and said, “Yes, we would like sector caps,” we may not be able to get it in as part of the negotiations because it is such a change from what the Commission propose. But we are doing our best to try and understand, with industry, what is the best and fairest system for dividing up free allowances to those industries. Obviously, the simplest solution would be a 100 per cent option for everyone, because then you do not have to worry about how fair it is in giving out essentially money, but obviously you come back to leakage and the burden on industry. So it is essentially a question to industry, “Is what we have suggested a fairer approach?”

Q194 Lord Brooke of Alverthorpe: Now a question on domestic offsetting. The Commission’s proposal includes a new Article (24a) on domestic offsetting. What is your view on the deployment of such credits?
Mr Mackenzie: Again, traditionally the Government has taken the view that there is probably no merit in joint implementation in the UK because it is very difficult, given the wealth of Government policies on emissions reductions to find something that is truly additional in the UK. The proposed new Article, however, does leave open the possibility of Member
States doing that, or indeed one of the main benefits of this new Article we see is that if there are new types of credits created by the Copenhagen deal or subsequently, there is a mechanism for introducing them into the Emissions Trading Scheme and allowing industry to buy those new kinds of credits. They could be for a new sector. Just last week we had forestry and if a new mechanism or a new type of credit was created for a particular kind of forestry project, this might be the mechanism which allowed the EU to agree that that could be used as a compliance mechanism. So I think we see it mainly as an enabling clause rather than something we have specific proposals for to see how it could be used.

Q195 Lord Brooke of Alverthorpe: Have you picked up any ideas from elsewhere in Europe on an innovative use of this?

Mr MacKenzie: Certainly other Member States are looking at things, like the French are looking at forestry credits, kind of domestic offsets which we are talking to the French about to see if there is scope for the UK doing something on joint implementation. So this is one of the issues where we do keep it under quite close review. As I am sure the Minister can explain, we have consulted over the summer about the offsetting, voluntary offsets within the UK, and we need to join up all these different strands.

Mr Woolas: We spent two hours yesterday debating it in the standing committee, so that offset my offset!

Chairman: Let us look at the non-ETS sectors. Lord Plumb, as a farmer, is obviously keen that agriculture should make its full contribution!

Q196 Lord Plumb: I was going to start, Chairman, by suggesting—and I was going to ask your permission to raise this—that Greenpeace said that agriculture and transport should be excluded. I have never been very interested in what Greenpeace have said before, but I was particularly interested in that! I will not ask that, unless you would like to comment on it, which would be very interesting, of course. On your strategy for promoting reductions in those areas not covered by the scheme, is there any balance there? Is there any balance being struck or a sharing of the burden between the reductions across both sectors? If you have any evidence on that we would like to hear it.

Mr Woolas: If I could start, Chairman, with the overall framework, which of course is found in the Climate Change Bill. The idea of five year carbon budgets and the idea, as the Chancellor announced in the Commons, that next year’s financial budget will be parallel with a setting of a five year carbon budget, three periods hence, or 15 years on a rolling programme through to 2050, presumably, we obviously put huge store by that. I cannot answer your question with great certainty because we are dependent upon the advice of the independent committee under Lord Turner to set those carbon budgets and the commensurate mid-term targets for the emissions reductions they will be based on, and indeed comment on policies that we are currently carrying out and the obligation being put onto the Government. We, in the bill, asked for that advice before December 1st, which is the day before the Queen’s Speech and the new parliamentary session, in a beautiful bit of parliamentary symmetry, I thought, but got no credit for whatsoever! I just put it on the record. But seriously, the flow-out from that will be critical. The carbon reduction commitment, which has already been referred to, will affect the mid-energy users, and in terms of what will change the behaviour of public and private sector finance directors, I think the carbon reduction commitment will have a much bigger effect than anything else we have done. The ETS is intended to cover, of course, the bigger companies which have economies of scale and can plan strategies with that benefit. We are now talking about local council finance directors, supermarket directors, directors of finance of government departments. I think right across these sectors there will be behaviour change which comes as a result of the setting of carbon budgets. They are really the priorities, along with the domestic, home retrofitted energy efficient kit. Crudely put, our attitude is that the new homes and the new towns are pretty easy to regulate for. The big challenge is retrofitting existing homes. Those are really, if you like, Chairman, the pyramid of how we see things with the ETS, the carbon reduction commitment, retrofitting, and of course transport being alongside that. I am not sure where that leaves us on the other sectors. Niall, is there anything I should add to that?

Mr MacKenzie: No, I think you have covered it.

Mr Woolas: That is how we see it, right or wrong.

Q197 Chairman: Can I ask some slightly off-the-wall questions? First of all, you want the threshold of small emitters to be increased, do you not?

Mr Woolas: For the CRC?

Q198 Chairman: Yes.

Mr Woolas: My difficulty there is that I tend to look at it in terms of how much it costs.

Q199 Chairman: Yes, it is the transaction cost.

Mr Woolas: I get lots of advice on gigawatt hours and terawatts, and to be honest I have little understanding of what that means. I know what 240 volts is, but other than that I do not really know! So I tend to ask myself the question, how much does it cost? What is the electricity bill for these organisations? It comes it at about half a million pounds. That, of course, is half a million pounds on last summer’s prices, not half a million pounds now...
and therefore it is a moving feast. Then, of course, the costs, as you rightly say, of the operation of the scheme. We will roll out the information and awareness on the carbon reduction commitment in a significant way this autumn. We want to get it out there. We have got to talk to individual organisations. At the moment, we are in a vulnerable position because obviously the detail has not been worked out and people are now asking for details. So I tend to look at it in terms of the price.

**Q200 Chairman:** Let us assume for a moment that the response of a significant sector of industry is to basically not go down the technological change route but to go down the route of just buying credits. Is there any concern at all that that might just add to inflationary pressures, the wage-price spiral effect?  
Mr Woolas: Yes, there is. There is the consequential fear that if you are just offsetting you have to ensure that those mechanisms are robust. They have got to be tested to destruction, otherwise you are not even achieving your goal of reducing emissions, and the world will not forgive us if we make that mistake. So yes, there is a concern. There is a fundamental change in the way finance decisions are going to be made.  
The experience we have is quite strong that the corporate sector, we judge, is ahead of the game. They get it. They get the competitive advantage point. You only have to look at the take-up of green tariffs by business to see how they see the position helping them. We think that is sustainable, despite my pessimism about the potential political situation, crucially where there is competitive advantage in developing technologies. One cannot divorce this agenda from the water efficiency agenda. One of the biggest wastes of energy is heating hot water, both in the home and in industrial processes. What is called industrial symbiosis is of critical importance. I mentioned the food processing industry before. Water saving in food processing can have a huge beneficial impact on energy saving as well. So this is the path that we are laying out. Are there fears? Yes, there are significant fears, but are those fears greater than the fears of the status quo, in terms of economics not just in terms of the environment? No, they are not, because fuel prices are more inflationary, I would suggest, than the scenario I am painting. I guess that is politics, is it not?

**Q201 Lord Cameron of Dillington:** How do you think the EU is going to police all this? How are Member States going to police it? It is effectively done by Member States, but have you thought about it in this country?  
Mr Woolas: How we police the emissions measurement?

**Q202 Lord Cameron of Dillington:** Yes. The emissions and the scheme, to see that the claims being made by companies are verifiable?  
Mr Woolas: Well, we are creating an industry. We have some of it in place already. We have just made a change, have we not, in fact?  
Mr Mackenzie: We do not see a need for another European body. That is probably the last thing that is needed. What we have in the system already is that independent verifiers have to come and check the emissions. One of the confusions in the current scheme is that each Member State has got slightly different rules, so it is hard to see whether it is being applied equally. When we are all operating the same rules, I think we can rely to a significant extent on competitors telling tales on each other if they are not happy with the level of checking up by the national regulator in different countries. Then we have a very effective process for the Commission taking action, proceedings against countries which are not implementing it properly. There will always be slight variations, but as long as the key principle is that people surrender the right number of allowances at the right time or face a heavy fine (and the level of fines will go up in phase 2 and phase 3) we should be confident of good compliance. Everyone who is involved in policing the system knows that it only takes a few cases to devalue the whole system, and then the carbon price would collapse.

**Q203 Lord Cameron of Dillington:** So independent auditors paid for by the companies themselves?  
Mr Mackenzie: That is the kind of system we are doing, yes.

**Q204 Chairman:** That is the Member States’ responsibility, is it?  
Mr Mackenzie: Yes, although the change in the system which the Minister referred to is allowing mutual recognition. At the moment with some countries, Germany for example, you have to pass an exam in Germany. So there is an EU-wide accreditations organisation (the acronym of which escapes me) which accredits all kinds of standards, bodies, and the proposal is that they would oversee it.

**Q205 Chairman:** I must admit, I am not particularly worried about Germany. I get slightly more worried when we move to Bulgaria and Romania.  
Mr Mackenzie: I will not comment on the merits of other individual countries, other than to say that Bulgaria and Romania have only just joined the scheme. We have had two years’ experience ahead of them, so there will inevitably be a learning curve.  
Mr Woolas: Can I just add to that, Chairman, the other developing policy, of course, is in the carbon reduction commitment scheme, where emissions are
measured indirectly by energy use, and then of course you are into another situation.

Q206 Chairman: It is a wonderfully complex scheme, venture, is it not? It is a bold experiment, and I do not mean that in any depreciating sense at all. I think it is an enormous challenge, but the balance of the unintended consequences, perverse incentives—have you started to spot any of the dangers?

Mr Woolas: I can give a politician’s answer, Chairman, to that. We have got the experience, as Niall has said, of trading schemes based on sulphur dioxide in the United States. We have got the experience of Montreal, the ozone depletion, but I feel very much that the scale of this change in the way in which we run our economy is daunting. Ministers talk about the new industrial revolution, and I believe that is where we are at. I think we are in the foothills of it. I believe it is the best chance the developing world has of becoming more prosperous, because of the superstructure that is being put into place. It is easy to get into hyperbole about this, but I do believe that the public debate underestimates the scale of it, not overestimates it. So it is extraordinarily exciting and extraordinarily important, and the inquiry you are having into the workings of the ETS—if I am right and the ETS is the keystone of the policy—is of huge importance.

Q207 Chairman: It is fairly likely, is it not, that in setting something up like this a few fairly significant mistakes will be made initially? Is there the ability there to move in, rectify, change and learn from the basis of experience?

Mr Mackenzie: I would say yes, and we are doing that. It does sound a bit of a mantra now, learning by doing, but there was over-allocation and the Commission stepped in and sorted it in phase 2. Too much free allocation, increasing the rates of auctioning. High rates of auctioning are the solution to most things because it takes the bureaucrat out of the process. Those who need the allowances buy them and the market then provides. There are likely to be perverse incentives and we just have to keep an eye out for it. That is why it is extremely helpful to have consultations and inquiries such as this, because people coming and looking at things fresh will see things which have been missed. We talked last week about the threshold of small emitters. That is something we are particularly careful of, that when you draw a line and some people are inside the scheme and some are outside there is a real risk of a significant change of commercial behaviour to either get yourself in to get free allowances or to keep yourself out so that you do not have to buy allowances. That is one of the difficult issues and we are already talking at length to one sector which is concerned that whichever line we take would go through the middle of its industry and there would be competitive distortions within that industry. Obviously, with such a wide range of different industries involved in this we have to try and make sure that the framework is the best it can be.

Q208 Chairman: Finally, one of the delights of your Department and of this Committee is that there is such a wide range of things we look at, and we try and see whether there are crossovers, things we have not thought of. In fisheries there is the concern that people have fishing quotas but do not have fishing boats, and in agriculture people have milk quotas without necessarily having cows, so what about having credits without necessarily being emitters, in other words buying up and speculating?

Mr Mackenzie: People can buy and speculate, it is a commodity, but the beauty of the verification process we have in place, possibly learnt from the cases you referred to, is that someone goes and checks the installations there.

Mr Woolas: There will be a futures market.

Q209 Chairman: There already is in London, so it is a good thing.

Mr Woolas: Well, part of my policy is that it should be. It is going to happen and we are going to lubricate it. The voluntary scheme in Chicago is already a success. If and when they get a federal cap-and-trade scheme, it will be a huge success and the flows of money will be very significant. I think there are tremendous economic opportunities.

Chairman: I think that is it. Thank you very much indeed.
WEDNESDAY 8 OCTOBER 2008

Present

Arran, E of Brooke of Alverthorpe, L
Brookeborough, V
Cameron of Dillington, L
Jones of Whitchurch, B
Palmer, L

Plumb, L
Sewel, L (Chairman)
Sharp of Guildford, B
Ullswater, V
Wallace of Tankerness, L

Memorandum by the Cambridge Centre for Climate Change Mitigation Research

LEVEL OF EMISSIONSREDUCTIONS

1. The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached

The concept is a good one and supports the EU’s target of a 20% reduction in greenhouse gas emissions (GHG) below 1990 for 2020 for all sectors. The indication that the EU cap will continue to decrease by 1.74% per year after 2020 gives a clear signal to all trading sectors about the continuation of the EU ETS and increased predictability and transparency of the whole scheme.

However, there are three reasons why the level of reductions is too low. The first reason for the target to be more ambitious is that the scientific evidence presented in the IPCC’s Fourth Assessment report (IPCC AR4)1 shows that the level of ambition is insufficient to limit global temperature rises to 2°C above the preindustrial level, with more recent scientific research suggesting that even the limit of 2°C risks serious damages in the very long term.2 The second reason is that the electricity sector, which is the largest broad sector affected by the European emission trading scheme (ETS), has some of the lowest cost options for reducing emissions, since coal-fired plant can be replaced by gas-fired plant in many Member States. This suggests that the ETS should have a more stringent target than the rest of the economy. The third reason for more ambitious action is that as a member of the Annex 1 group of countries, that have taken on additional responsibilities for action under the Kyoto Protocol, the EU should be setting more ambitious targets compared to the global reductions required to limit temperature rise.

The target should be more like a reduction of 30% to 40% by GHG by 2020. Moreover additional GHG mitigation measures are needed for the non-ETS sectors, preferably at equal rates with those in the ETS (currently the proposal is only for a 10% reduction). Such additional measures may prove unnecessary if oil and gas prices remain above $105/bbl equivalent, but this is not guaranteed, and some form of “ratchet” on the EU’s additional energy taxes should be considered so that real carbon prices in the non-energy sectors do not fall substantially below $105/bbl in real terms by 2020.

The automatic change to a more stringent target if an international agreement is reached demonstrates the EU community’s good will to continue to be the world’s leading region in combating climate change and should be welcomed.

SCOPE AND OPERATION

2. The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture

EC has proposed to include CO2 emissions from aviation (likely to be included from 2012) petrochemicals, ammonia, aluminum production and N2O emissions from the production of nitric, adipic and glyoxylic acid production and perfluorocarbons emissions from the aluminum sector from 2013. All listed emissions can be measured and verified. Therefore these emissions can and should be included in the scheme to increase the efficiency of the EU ETS.

3 According to the UN Framework Convention on Climate Change, the six land-use categories for the purposes of LULUCF are: forest land; cropland; grassland; wetlands; settlements; and other land. http://unfccc.int/methods_and_science/lulucf/items/1084.php
The revision of the EU’s emission trading system: evidence

The Commission has decided to exclude LULUCF. Including LULUCF requires well-developed monitoring, reporting and verification measures that are currently not available. Moreover there are problems of additionality, so it seems wiser to keep LULUCF out of the ETS.

The EC has also decided to allow opt-outs for small entities if equivalent measures are in place. This is necessary to avoid high administrative costs (both for companies and the governments).

3. The practical application and enforceability of the scheme

Phases 1 and 2 have proved that the scheme is functional and can establish a carbon price. Monitoring, verification and compliance measures are in place, but more harmonised rules are needed to avoid distortions between Member States. If the proposal becomes law then member states do not have to submit National Allocation Plans. Despite the proposed more centralised and harmonised emissions trading scheme, the European Commission should continue working with Member-State governments to ensure that all relevant installations are covered and comply, and to avoid over/under allocations of allowances.

Penalties should be revisable and adjustable, not only to changes in inflation as is proposed currently, but also to the carbon price, especially if the carbon price exceeds the penalty (€100 per tonne of CO₂ in real terms).

4. The key strengths and weaknesses of the proposal

Key strengths:
- longer trading period eight years instead of five—increases predictability;
- diminishing cap—required to show climate leadership;
- high levels of auctioning—reduces possible windfall profits;
- harmonised allocation methodology—increases fairness; and
- increased intertemporal flexibility—installations can bank allowances and credits to the future.

Key weaknesses:
- not stringent enough cap to stabilise global warming at 2°C level, to provide a strong enough signal to encourage action by other countries, or in relation to action for non-ETS sectors;
- usage of domestic offsets—undermines transparency and responsibility for sectoral action;
- not clearly defined usage of auctioning revenues; and
- unclear access to credits from CDM mechanisms and JI credits from outside the scope of the EU ETS—increases uncertainty.

You may wish to consider in particular:
- the extent to which the scheme as currently designed will encourage technological innovation;
  The effect on induced technological change (ITC) would be enhanced by some of the auction revenues being used to set up an EU-wide Carbon Trust and/or some mechanism to provide low-cost loans for investment in low-GHG technologies and funding for deployment of these new technologies. The proposal foresees using 20% of auctioning revenues on adaptation and mitigation of climate change (including expenditures on R&D). How much of this member states will earmark for R&D is unclear and will be decided by Member States. In addition to this, the level of technological innovation is related to the level of carbon price (and fuel prices)—the higher the price level (spot prices and future prices) the more are companies interested in adopting new technologies and willing to invest into R&D
- whether it will result in the appropriate price signal being sent;
  The 20 to 30% target has not had the effect of increasing the carbon price in the ETS Phase 2 to the levels that the IPCC AR4 suggests that are necessary to achieve the 2°C target. This price depends on a tight cap, level of auctioning, usage of CDM/JI credits and intertemporal flexibility mechanisms (banking-borrowing). The ways in which auctioning will be undertaken by Member States also influence the carbon price. The price in the ETS market prevailing in early 2008 of €20 to 25 per tonne of CO₂ (tCO₂) is too low to have a substantial effect on emissions and reflects the low level of ambition of the 20% to 30% target. The IPCC AR4 suggest that prices above €50/tCO₂ are necessary to make carbon capture and storage profitable, and prices rising to around €100/tCO₂ by 2020 would be necessary to achieve the 2°C target. Such levels of prices can be easily achieved by a tighter cap, e.g the 30 to 40% suggested above, with a substantial proportion of the allowances being reserved for
management of the price, rather than being given away or auctioned. The Commission will adopt rules of auctioning by the end of 2010.

whether it will be efficient and/or equitable;

Including new industries and GHGs and harmonising the inclusion of combustion installations will broaden the scope of the scheme and will help to enhance its efficiency.

The proposed ETS is efficient in that it covers the EU-wide electricity system, although there are issues of competition in the marker, being investigated by the EU Commission. There are problems with rising electricity prices for low-expenditure households. Recycling of a certain proportion of auctioning revenues towards improving quality of housing or using revenues to lower income tax and/or increasing personal allowances would help.

5. The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions

These so-called domestic offsetting projects in the non-ETS sectors reduce the effectiveness of the weak targets even further and reduce the responsibility of non-ETS sectors for their emissions. However there are currently no institutions or rules in place to assure the quality of this kind of offset project. Establishing rules and institutions would have high administrative costs. For these reasons domestic offsetting should be avoided.

Allocation and Auctioning

6. Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be

In principle all permits should be auctioned and the decision should be taken at EU level, otherwise there could be a “race to the bottom” between Member States supporting their own companies. These issues with “state aid” were observed in phase I. A harmonised allocation methodology at the EU level will also help to avoid industry-wide distortions in the EU community. Full auctioning also provides a fairer treatment for new entrants. Decisions about allocation methods should be taken for longest possible period (ie 8-10 years) to assure a predictable investment environment for companies.

7. Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free-of-charge and for how long?

There will be free allocation (for sectors excluding electricity production) from 80% to 0% during phase 3. In addition to this, the proposal foresees up to 100% free allocation of allowances to the sectors identified as open to international competition. These sectors (likely to include cement, iron and steel) will be indentified by 2010. This decision has to be based on an in-depth economic and social analysis. However, for transparency these sectors should have to buy all allowances though auctioning rather than getting a proportion for free; but the revenues should be largely returned in the form of subsidies for re-structuring to low-GHG alternative products and processes. Avoiding free allocation will also help to avoid any possible windfall profits in these sectors. The amount of revenues returned to sensitive industries and the list of these industries should be revisable in every 3 years (as is proposed in the review).

8. Whether the redistributive element of the Commission’s proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate

Allocating more allowances to the poorer Member States inside the EU bubble does appear to be more equitable and it recognises the principle of common but differentiated responsibilities. However the proposal does not foresee revision for extra allocations listed in Annex IIa of the proposal. Supporting some of the old Member States (Greece, Italy, Sweden, Spain, Portugal, Malta) is questionable as these countries are not in transition to market economy and their emissions are not well below 1990 (as they are in new Member States).

9. **The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM)**

In phase 2 it is possible to use credits from CDM and Joint Implementation (JI) up to about 13.4% (ie about 1.4 billion credits) of allocated emissions. Yearly average allocated CO₂ emissions are 6.5% below 2005 verified emissions. Therefore if installations are using the full amount of allowed credits from CDM and JI mechanisms (outside the community) then yearly emissions will rise by about 7%. This contradicts the linking directive that stresses the usage of CDM/JI credits to be supplementary to domestic efforts in GHG reduction. Unused credits from phase 2 are transferable on to phase 3. There will be an automatic change to allow additional usage of credits by 50% of the additional reduction effort if an international agreement is reached. If there will be no international agreement, then the proposed scheme is unfair on new entrants (including the industries including aviation entering in the phase 3) which cannot transfer the credits from phase 2 to phase 3.

It would be better if it were clearly specified how many credits from flexible mechanisms Member States/ entities will be able to use in phase 3.

10. **The likely feasibility of creating links between the ETS and other similar schemes around the world**

From January 2008 three countries (Norway, Lichtenstein, Iceland) outside the EU but in the European Economic Area have been linked to the EU ETS. Linking other countries’ or areas’ emissions trading schemes in the EU ETS will widen the scope and increase the efficiency of the scheme. However to avoid any distortions between economic areas and inside industries these schemes should be based exactly on the same rules. The fairest GHG emissions trading scheme would be a harmonized global emissions trading covering all emitting sources in developed as well as in developing countries.

If it is possible to sell spare emissions between economic areas, then this may increase the incentive for each area to avoid stringent emissions cuts in the first place.

19 June 2008

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**Examination of Witnesses**

Witnesses: Dr Terry Barker, Director of the Cambridge Centre on Climate Change, and Ms Annela Anger, PhD student, examined.

**Q210 Chairman:** Hello, and welcome; thank you very much for agreeing to come and enlighten us as it is an area where we are in need of some enlightenment. I should first of all say this is a formal evidence session so there will be a transcript and you will get a copy of it to go through; if there have been any little slips, please correct them. We are also technically being broadcast, although as I say to everybody who comes here we do not have a great deal of evidence that anyone has ever listened to the broadcasts. As I say, I quite often say provocative things about them and if they had been listening they would have written in. I think the best way of proceeding is if you would like to make any opening remarks of a general nature, please do, that would be helpful to us, and then we can proceed with the questions and answers.

**Dr Barker:** Very good. If I may start, My Lord Chairman, my name is Terry Barker of course and I have many hats. I am founder of the Cambridge Trust for New Thinking in Economics, which was formed a few years ago, I am Chairman of Cambridge Econometrics, I have been a coordinating lead author on the IPCC book of the third assessment report and the fourth assessment report, working with governments at the highest level; for example, I was asked to provide the scientific review on costs and mitigation to the world community at some of these meetings and I was in charge of several of the paragraphs for some of the policy-makers, both for the third assessment report and the fourth assessment report. My main job is as Director of the Cambridge Centre on Climate Change Mitigation Research which I set up in 2004. Previously I worked in the University of Cambridge since 1965 and I joined a Cambridge project working with the Nobel Laureate, Professor Richard Stone. Therefore, I have got a very long form on this; particularly on emissions trading schemes; I have been working on emission trading schemes and publishing many papers on the European scheme since the DG Environment first thought of it. Indeed, the history goes back and you have to understand the scheme in terms of the carbon energy tax which was instituted by the European Commission or proposed by the European Commission in 1993/94 but was in fact defeated by lobby groups. One senior Commission official told me at the time that they had never
experienced such lobbying in their whole institutional life; so it was very serious lobbying—the sort of thing which is going on now with the emissions trading scheme rules up to 2012. The result of that was that the carbon energy tax was defeated by member governments basically and then the Commission thought of an alternative which allowed large quantities of money to go to industry, and we have seen the results of that.

Q211 **Chairman:** Indeed.
**Dr Barker:** May I introduce my colleague, Annela Anger. She is my PhD student and she specialises in the European emissions trading scheme, particularly with regard to aviation, but she is also working on international transport in general.

Q212 **Chairman:** Including shipping.
**Ms Anger:** Including shipping.

Q213 **Chairman:** That is interesting. I wonder if I could start the discussion and say, to have a successful emissions trading scheme what sort of circumstances and conditions have to be in place theoretically to make a scheme work?
**Dr Barker:** Basically a scheme would work best if all the parties—you call them stakeholders—were following ethical principles and wanting to do a good job, and of course I am contrasting that with the bankers. There needs to be that ethical behaviour underlying people’s behaviour and institutional behaviour, so if people want to do a good job the scheme is more likely to be successful than if they do not. You asked for basics so that is where I will start. Of course, those conditions do not prevail so we are in a situation where people are competing and not looking at the whole system outcomes of what they are doing. I am not sure that that is the answer that you were expecting or wanting.

Q214 **Chairman:** If you are dealing with individual states it is quite clear from just reading the newspapers that there is a lot of special pleading going on.
**Dr Barker:** Indeed.

Q215 **Chairman:** And if there is a lot of special pleading one would expect that when a scheme is finally in place there will be attempts to cheat.
**Dr Barker:** Indeed, this is a very, very major problem. It is called regulatory capture by economists and there is a lot of literature on it, and we are seeing governments essentially captured, for example, by Wall Street bankers so that what they do reflects the interests of a particular group—for example the bankers—rather than the taxpayers or the country as a whole or indeed the world economy. The same thing happens with the emissions trading scheme and that is why we are seeing all these lobbyists working very intensively in Brussels, and with the MEPs. I have had many contacts from MEPs saying they have never experienced such lobbying and that is because very large amounts of money are at stake. These are at stake partly because of the rules of the scheme allowing free allocation of a very valuable allowance—i.e. these emissions trading allowances—and of course the industries, some of which have been captured by their trade unions extraordinarily so you might find socialist groups in Parliament supporting industries—for example the steel industry or the cement industry—so that they would get large quantities of free emissions which would then support their profits. Presumably, the trade unions are hoping that they will follow the trickle-down theory in which the profits somehow trickle down to the poor; I am not sure they are right, but if they are very strong unions maybe they will be able to get some of this profit.

Q216 **Lord Brooke of Alverthorpe:** Do the unions not have an interest in jobs though?
**Dr Barker:** They have, but they have a very narrow interest in jobs: their jobs, their unions, not in jobs across the European Union. I am sorry to be so harsh but I fear that is the case.

Q217 **Chairman:** What are the big dangers so that if concessions are made in a number of areas then the whole thing is weakened?
**Dr Barker:** Each concession weakens it, and the interesting thing about these concessions is that they can easily be turned into a transparent concession rather than a hidden one, by turning the hidden subsidy, which is the free allowance, into an explicit subsidy, i.e. you charge them but then you give them the money back as a subsidy, and then it becomes very clear as to the scale of the money and whether it is going down or not. That is of course fiercely opposed because many of the stakeholders do not want that kind of transparency. I must say as an economist that transparency in information is very important for markets to work well and for people to know what is going on. The interest groups and the lobby groups etcetera seek to hide what is going on, and I am sorry to say—well, it is obvious and I am not sorry to say it, it is true.

Q218 **Viscount Brookeborough:** Are you really saying that the lobbying and the policy that is being fought over in Europe, in the Parliament, is not responsible government policy but is being led by trade unionists and individual interests?
**Dr Barker:** How would I know whether it is led or not, I am observing this as an outside observer.
**Q219 Viscount Brookeborough:** You did say that governments were not being responsible in their direction.

**Dr Barker:** I am not sure I was as broad as that. Each government is following its own ethical principles and its own responsibilities to its taxpayers and to running the system et cetera, so there are all sorts of things going on. The whole process is extremely complicated, partly because a lot of it is hidden, but without doing a great study you cannot say who is doing what and what is going on. You can just observe how the system works and what comes out of it, and I must say that a lot of the lobbying is not in the best interests of those doing the lobbying or those on whose behalf the lobbying is taking place.

**Q220 Chairman:** Is there not also a danger, because of the complexity of the emissions trading scheme, that lurking somewhere within it there are opportunities for perversities?

**Dr Barker:** Of course and then these are eagerly sought because these can often give rise to large profits. If I may, let me give you an example of the foolishness of some of this behaviour. We are now approaching a global depression on an unprecedented scale; this will almost certainly mean that the emissions will go down—the emissions that are covered by the trading scheme—and then in turn, because the targets are so weak, this 20%, 30% stuff, it is quite likely that the carbon price will go to nothing and there will not be any profits to distribute, so they will have been fighting over nothing. Another example is that one of the weakest aspects of the current Phase Two emissions trading scheme is the fact that there is very little flexibility, particularly in the proportion of the allowances which are auctioned. If there had just been one paragraph, perhaps even a sentence, even a word perhaps in the legislation that national governments could change this from 10% to 30%, it would not have been necessary for all of this stuff about extra profits tax on the electricity companies, the chancellor need have just said we will raise the amount of auctions from 10% to 30% or 50%, and then could have raised all the money and used it to decarbonise the UK housing stock. It is as bad as that, tiny little decisions on flexibility can have huge effects on welfare basically, national welfare.

**Chairman:** We need to press on. Lord Palmer on price signals.

**Q221 Lord Palmer:** You take the view that the proposed cap on emissions in the third phase of the ETS is not stringent enough, and that the carbon price—and we touched on this earlier—will therefore not be high enough to send the necessary price signal to private actors. Could you be kind and try to explain to us what the impact of an insufficiently high carbon price would be, for example on infrastructure, investment and technological innovation? We all know how volatile fuel prices are, particularly at the moment, and how would the level of fuel prices play into these decisions? In your view, what would be the appropriate range for the price of carbon, and would you regard price floors/ceilings as desirable or indeed necessary?

**Dr Barker:** That is a very complicated question and I would like to take it in parts if I may. If you could remind me of the different parts, let us start off with the 20%–30%. I have published many papers on why that target is too weak: it will not achieve the two degrees, I do not think it will even achieve the government’s targets for CO₂ reduction of 50%, I believe, below 1990 levels or 2000 levels by 2050. I do not think it is going to achieve the British Government’s targets. I do not think it is going to achieve the European Union’s ostensible target, this two degrees. There is lots of literature on this, it is not as if we have not had a fourth assessment report crawling over all this literature and coming up with a summary for policymakers which is quite clear about this. I have been going around the world giving presentations about this very issue, saying that to get to the two degree target we have to be much more stringent. I have now raised my level of what stringent should be from previously 30% to 40%, but with this ongoing recession and depression—very likely depression—it should be more like 40% and 50% by 2020. I can explain the reasons for that: because I think the UK economy, the European economy and the global economy would greatly benefit from such a target. It would be difficult to find where the losers are, though there will be some losers I expect. Basically, as a global macro-economist working for 10 years on this work, having a large scale model and a team of people behind me, that is the view I take.

**Q222 Lord Palmer:** Where are most of the losers? Which particular sector would you envisage them to come from or would it be across the board?

**Dr Barker:** No, not across the board. The losers are quite specifically concentrated in the coal industry, particularly the employment intensive coal industries in China and India. In this country and in Europe, if the subsidies which are at present used for the coal industry in Europe were just given to the miners whose jobs are being supported, they would become very rich and the coal industry would die, but I suspect the profits would not. Maybe there are losses of profits in the large coal owners; basically it is the coal industry. The losses are extremely specific so far as carbon trading and emissions trading are concerned, they are located in the carbon intensive industries and in the few energy intensive industries. If we are talking about unilateral action—which I
think you are talking about, but I could be wrong—there are some specific companies who are on the brink of going bankrupt who could be pushed over the edge because of the emissions trading scheme. But that would be the way the market works, these are relative prices that we are talking about and when relative prices shift markets should work. When companies are going bankrupt, like the banks, the markets work by letting them go bankrupt, and it is interference with the market to stop that happening. It slows the market processes and it is very, very serious at the moment, all the government interference with these markets, because banks ought to be going bankrupt but they are being stopped.

Q223 Lord Cameron of Dillington: Could I pick you up for a moment on what you have written here, and this is just an example. You say that the electricity sector has the lowest cost options for reducing emissions, since coal-fired plant can be replaced by gas-fired plant in many Member States. I find that quite a kind of simplistic statement. Correct me if I am wrong, but it is actually quite expensive to change from coal-fired—you have a whole infrastructure around it, you have to get planning permission and it would take years in this country at the moment, before the Planning Bill comes through it would take years and years to change. Okay, the construction of new power stations is going to boost the economy but it is going to be very expensive for the electricity generating sector, and I have a feeling that you are being slightly simplistic about the losers and the winners in this whole scenario.

Dr Barker: It differs according to the Member States and according to particular companies, and it is very complex, you are absolutely right. There are large amounts of money involved in investment but many of the coal-fired stations are reaching—have reached or have exceeded—their optimum life and they are being kept going because of perversities in the market or in the rules which allow things to happen that should not happen. There is, therefore, a lot of obsolete plant around which is being pushed beyond its life and is being kept going because the owners of the plant can make large amounts of money out of the emissions trading system.

Q224 Lord Cameron of Dillington: It is not only that, getting gas from Russia for instance, which is the only option available, is quite a difficult option to go for in terms of your nation’s power.

Dr Barker: The gas from Russia issue has been greatly hyped up by the nuclear lobby; I do not think that is an issue at all really. We are busy building large infrastructure projects to bring in liquefied natural gas, largely from the Middle East but it comes from many other parts of the world, and this is going to solve the gas problem as far as the UK is concerned.

Q225 Lord Cameron of Dillington: At great expense, yes.

Dr Barker: This is a market-led expense, there are no subsidies as far as I know going into building these liquefied natural gas depots so it is not a great expense to the taxpayer, that is what these companies do at great expense and what they ought to do, but I am not sure that I have answered your question.

Q226 Lord Cameron of Dillington: My point is that actually all those expenses will be passed on to the consumer eventually and to small businesses. I just think it is going to have a wider economic effect than you are purporting, it seems to me, to be making out.

Dr Barker: Yes, indeed, the increase in electricity prices brought about by the emissions trading is largely passed on to the consumer and some of it is more than passed on to the consumer the way the market operates, in that the companies make even more money, that is the case. I am still not quite sure that I have answered your question.

Q227 Lord Cameron of Dillington: My point is I think you are minimising the actual costs of the changes that are necessary. You are saying that a lot of people are making profits, but actually the downsides are very limited, I do not agree with you.

Dr Barker: There are benefits; let me list the benefits to offset the costs you are thinking about. The benefits are the development of alternative technologies. You mentioned gas and there are obviously good gas technologies to be developed. Those benefits then translate into export markets for European producers—I can give you examples of many export markets which have been developed from such benefits, in particular Danish wind power is exported all over the world and has been a great success for the Danish economy; the German economy has benefited from major developments of technology in Germany, in the kind of low carbon technologies which this country could have developed if it were not for the nuclear lobby and the coal lobby I suppose—and the gas lobby and the electricity lobby.

Q228 Chairman: That is fairly comprehensive.

Dr Barker: I have not finished answering Lord Palmer’s question; I started with the target.

Q229 Lord Palmer: If you could try to explain to us what the impact of an insufficiently high carbon price would be on infrastructure investment and technological innovation.
Dr Barker: It would be less. I do not know how linear or not the relationship is but the lower the carbon price the weaker the response in the economy. I would say that it is highly non-linear; if there is a zero price then it makes a huge difference if there is even a £3 per tonne CO₂ price, so there is a big non-linearity between zero and any price at all, it is just that if you have to pay for something you start thinking about it, but then when you go up and up and up and the price gets higher and higher and higher—it is very interesting this—this appears to impose a cost, but that is not the case and it is not the case because the cost is there and it is the kind of costs that Lord Cameron was talking about; they are the costs to particularly the electricity system. This a scheme which affects a very small part of the economy; electricity is about 4 per cent—this is off the top of my head but we can correct it—a very small part of the economy, and it is that part of the economy that faces the costs. We ought to look at exactly what these costs are—they are investment in renewables, they are investment in low carbon technologies of one sort or another. These are also benefits to other bits of the economy, the bits that are producing this equipment, that are developing export markets with this equipment and are employed to build this equipment and install it. Now we are getting a wider picture of the macro economy, but this picture can be widened even further when we are talking about the cost because the emissions trading scheme yields very large amounts of revenue potentially—if the allowances are auctioned—and those revenues can be used to benefit the economy. They can be used to accelerate this technological change and make Europe more technologically advanced and more leading the world. It has already taken the political lead and Germany already has a great advantage in terms of its technological lead—Germany is one of the greatest manufacturers of capital equipment in the world, and so is Switzerland for that matter, and so this will strengthen that lead. We are talking about globalisation and the fact that the specialisation in certain bits of Europe is strengthened by a high emission trading price. People think that a high emission price equals high costs: not so, a high emission price may—and our modelling suggests it strongly does if the policies are well-designed—yield great benefits and leadership for the world economy, especially at a time of a global depression when we desperately need more investment.

Lord Brooke of Alverthorpe: Are not the Germans burning an awful lot of coal and have hardly reduced it?

Dr Barker: I hesitate to say this but maybe the German government has been partly influenced by certain lobby groups, led by former Chancellor Kohl. How does this affect the length of the ongoing depression.

Lord Brooke of Alverthorpe: I thought you just said a minute ago that the carbon price was not reflected in the end price.

Dr Barker: Yes, because the target is too low. The overall targets should be much higher.

Lord Brooke of Alverthorpe: Could I just follow up the question on pricing. My Lord Chairman, on the depression that we face? Have you started doing modelling work?

Dr Barker: We have.

Lord Brooke of Alverthorpe: On the consequences, for example, of today’s statement and how it will work through.

Dr Barker: Not today’s statement. I have written a letter to the Financial Times; that is the extent of my modelling work?

Lord Brooke of Alverthorpe: I should not have said today’s statement but I mean the general change in the outlook and forecasts.

Dr Barker: We have some idea but not very much.

Lord Brooke of Alverthorpe: I am just wondering, My Lord Chairman, if we could perhaps follow up afterwards when maybe you have done some further work on this.

Dr Barker: Certainly, we are very happy to do that.

Lord Brooke of Alverthorpe: And what it will look like because it does have a major impact.

Dr Barker: But of course it is an ongoing situation and the government decisions that were taken yesterday affect the length of the ongoing depression.

Lord Palmer: Going back to my earlier question, what about the volatility of fossil fuels?

Dr Barker: That is a very interesting aspect to the question, I like that.
Q240 Lord Palmer: I am so glad.

Dr Barker: When we are talking about fuel prices it is very important to distinguish between the different fuels because they have different carbon contents. If we talk about fuel prices and say they go up, then it makes a huge difference whether they go up in relation to the carbon content of the fuels, in relation to the wholesale price of the fuels, in relation to the retail price of the fuels; these will all give different answers, that is the problem. Thinking about answering your question—because I actually thought about all these questions on the train—if the question had been phrased as oil or coal or oil and gas, in order of their carbon content, then it would have been much clearer because if the coal price goes up the system will shift towards using less coal, if the oil price goes up—and of course that has been the big headlines over the last few years—then there will be a shift to more coal because coal will be cheaper. The question therefore becomes extremely complicated. We have been struggling with our modelling and trying to look at the whole issue in terms of the uncertainty and the volatility of the prices rather than the conventional way which is to assume away this volatility and take averages and means. It becomes a little bit more complicated but one can understand quite what is going on. The basic issue with oil prices is that if oil prices go up, then this will encourage countries like China to use much more coal and indeed the UK to use much more coal because of the indirect relationships. Unless there is a strong emissions trading scheme in place, which will offset that tendency in the market—and that is the great value of an emissions trading scheme, it protects the carbon price in the face of such volatility and so does reach the targets for carbon reduction.

Q241 Chairman: There is an OECD study that basically comes to the conclusion that the only way in which energy needs up to 2050 are going to be met is by a rapid increase in coal. Does that chime with your thinking?

Dr Barker: That is under the assumption of no policy changes, no global scheme.

Q242 Chairman: Bringing in more and more coal.

Dr Barker: That is what the market will deliver, but of course we have to add on to that energy security because governments place energy security, as far as I can see, in advance of efficiency and other issues and questions. Energy security is very, very important to national governments, to make sure that the lights do not go out, and a lot of our policies are dictated by energy security considerations rather than economic considerations or indeed fairness considerations. I think there was another part to your question.

Q243 Lord Palmer: Yes, I am rather hogging the thing. In your view, what would be the appropriate range for the price of carbon, and would you regard price floors/ceilings as desirable or indeed necessary?

Dr Barker: Again, there is a lot of literature on this issue and I will make my answer very brief. Because I am coming from a position of looking to see what the carbon price should be to achieve the stated government targets, the two degree targets, I would think the range should be quite high, especially given the potential benefits from having a high carbon price. That is conditional, however, on what I would call well-designed policies, and policies may not be well-designed but may be designed for interest groups to capture the results and the profits, in which case you would have a not well-designed policy and the high carbon price would yield huge profits to particular segments of the community. The answer is therefore extremely complicated but if, in general, people were doing a good job and were following good business principles and good ethical principles, then I would expect that a carbon price in the range of €80 to €120 per tonne of CO₂ in year 2000 prices would do the job—not from the beginning and not globally, I am just talking about Europe. It is good that we have a low price at the moment, but the expectations in the market are that this price is not going to rise sufficiently, that is the problem. The price therefore is not going to be large enough even to support carbon capture and storage, according to the studies as to what this is going to be. Governments can give large amounts of money to carbon capture and storage, and indeed the MEPS have added some amendment to the European law to do so, but that will count for nothing unless the carbon price is high enough, simply because carbon capture and storage—it is quite obvious, it costs far more to take the carbon out of the coal, burning the coal, than to leave the coal in the ground and just burn it in the traditional ways. So you have to have a higher carbon price to justify carbon capture and storage.

Chairman: If we can come to auction revenues, Viscount Ulswater.

Q244 Viscount Ulswater: We have touched on this already but I would like to tease out a little bit more from you, Dr Barker, because you have talked about transparency and perhaps in order to increase or perhaps even achieve transparency in the ETS do you suggest that it is important to hypothecate the revenues from this scheme to provide low cost loans for investment in clean technologies, to improve the quality of housing which I think you mentioned, and are there any downsides to this sort of hypothecation? How likely is it that the Government will just want the revenues?
Dr Barker: Again, this is a complicated question and there are a lot of different aspects to it. If I could just answer the hypothecation part of it, because that is very important, treasuries are naturally very against hypothecation, they do need to raise revenues according to the economic principles appropriate to raising revenues and that is quite separate from the economic principles appropriate to spending the revenues. I am quite clear about that, it is an important rule and it is a rule that treasuries fight to maintain and I think they are very right to do so. When it comes to the emissions trading scheme we have to start from the position that this is not a tax, this is not legally a tax, it is not the same as a taxation, so we can always start seeing ways of moving away—and of course there are very important reasons why it is not a tax. I am now getting to another part of your question—can you remind me because I tend to lose track thinking of lots of different things. Was there another aspect of the question?

Q245 Viscount Ullswater: Really what you would see the revenues being spent on, whether it should be low cost loans to improve technology, for improving the housing stock, and are there any downsides on that sort of equation?

Dr Barker: Yes, there are downsides. First of all there is a transparency issue and the reason it is important and very valuable to auction all the revenues is that then becomes transparent, as to what the value of these permits is. Then they can be given back to the industry, not as free allowances which look as if it is not a lot of money but as actual money. That is important and that is essentially what I am suggesting should happen. Then we could see the money going to the electricity companies, for example, in Phase Two as however many billions it is that they are getting and then they can say how they have spent that money, if they have spent it on giving it to their shareholders or to the directors in bonuses or whether they have invested it in low carbon technologies or, worse, invested it in coal stations, which some of them are wanting to do and so worsening the problem. That is the issue of transparency, but then there was another aspect to your question which followed on from that which was the downside of allocating the revenues to low carbon technologies, processes and products. That is something which the Americans are very keen on and certainly Obama’s scheme has a lot of that. I am extremely supportive of that because the modelling suggests that this will be very beneficial because it will accelerate—we call it accelerated technological change as opposed to induced technological chance from the carbon price. It will accelerate technological change by supporting innovation and correcting a market failure in that the innovators cannot capture all the rents from their innovation because other innovators take it from them. So that particular subsidy is correcting a market failure; this is well-known in the literature, there is a lot of literature about this. This is standard stuff, I am not giving you anything unorthodox here.

Q246 Viscount Ullswater: Do you think this will happen or do you think the Government will pocket the revenue and let the industry find its own way through this?

Dr Barker: The legislation can require it to do so. It can be monitored and audited, I would not see that as a problem but you may be more expert than I am on that actually.

Chairman: We will have a look at the allocation methodology, Viscount Brookeborough, and then come back.

Q247 Viscount Brookeborough: This really continues on and goes into it in a bit more detail, perhaps. You argue that all emissions permits, including those for sectors deemed susceptible to carbon leakage, should be auctioned, and a minute ago you said they should be auctioned initially.

Dr Barker: Yes, entirely, for transparency and to get the market working.

Q248 Viscount Brookeborough: There would be no free distribution whatsoever.

Dr Barker: No.

Q249 Viscount Brookeborough: Let us say there was a new industry producing power or energy or whatever, it would have to factor into its economy the buying.

Dr Barker: Indeed, it would have to.

Q250 Viscount Brookeborough: Do you think the Government should hold the bank balance?

Dr Barker: There clearly needs to be a proper mechanism for distributing those revenues with which the Government has decided to support new industries and alternative ways of doing things. I do not think the Government is in a good position to do that, it is more the job of organisations like the Carbon Trust, working at a national level, who have got good knowledge of what the appropriate innovations in that particular economy involve. That is what the Carbon Trust does and I think it does a good job.

Q251 Viscount Brookeborough: Would any of this be traded internationally therefore or would this just be in national envelopes?

Dr Barker: The reason why I would argue that having national schemes is important, like the Carbon Trust—or in the United States even state schemes would be important—is because of information and
local knowledge and what is appropriate in the circumstances of the UK. The UK has got all these tidal streams, Austria does not, so the UK should be developing tidal power if that is economic, or certainly investigating it. For that reason they should be national and of course that also fits in with other national institutions, national laws and all the rest. I am therefore very much in favour of subsidiarity which is actually what this question is about.

Q252 Viscount Brookeborough: How significant is carbon leakage?

Dr Barker: Very, for certain industries. I mentioned before that a company could go bankrupt and therefore all the emissions could go to China or to Russia or something, so it is a very important issue for small sectors. It is not an important issue for the electricity sector, for example, because electricity is not traded, so we are talking about carbon leakage in the sense of trading and international competitiveness. It is very important, it has to be taken account of, industries are right to be worried about it, but it is also used rhetorically as is international competitiveness, by lobby groups basically, just arguing that they are going to go down the tubes, if I can use that expression, because they have to face a carbon price. My answer to that is let us be transparent, let us have full trading and then they have 100% subsidy, but that subsidy phases out and we can all see what they are going to do with that money and whether they need it, and whether indeed that is going to stop carbon leakage. The thing is that that carbon leakage may be due to other reasons; it may be due to the fact that energy prices are higher in Europe than they are in China or Russia and therefore the industry is on the point of going elsewhere irrespective of whether there is an emissions trading scheme or not, or labour costs.

Q253 Viscount Brookeborough: Can I just go back to one other thing you said earlier when you were talking about the different types of energy and gas? You seem to be absolutely happy with the security of gas supplies from the Far East and from Russia but recent events as far as Russia are concerned and as far as east of Eastern Europe are concerned surely show that these are not very secure necessarily.

Dr Barker: I must say that the last time I was speaking about it I was speaking from a UK perspective.

Q254 Viscount Brookeborough: You think our gas is totally secure.

Dr Barker: No, I do not, no, I do not. I think our gas supplies from abroad are secure in the sense that they are not dependent on one particular supplier, Russia; the amount of gas we get from Russia is very small and of course the security situation changes over the years as different supply routes open up. We are seeing large construction of liquid natural gas plant in Wales and in southern England and that will secure supplies, and I am sure the industry will develop further from there.

Q255 Lord Wallace of Tankerness: Dr Barker, you said that you take the threat of carbon leakage very seriously; how do you believe that the Commission’s proposals measure up in addressing that problem and are there specific proposals that could be recommended to tighten it, to address it better?

Dr Barker: I have not done enough work on the recent proposals to be able to give a proper answer on that. I have the impression that the Commission has devised rather neat schemes, but I may be wrong, that will in fact cope, but of course they could be subverted by the MEPs for all I know. This is a complex area because of the lobbying going on so I have not seen sufficient detail of the Commission’s proposals to be able to answer that.

Chairman: Let us go to access credits. Lady Sharp.

Q256 Baroness Sharp of Guildford: In the short paper you provided us you argued that the external credits through the clean development mechanism and the joint implementation mechanisms were being given too freely in Phase Two of the emissions trading system such that they can be used to avoid the domestic abatement measures.

Dr Barker: Yes.

Q257 Baroness Sharp of Guildford: Could you tell us a little bit more about that and the linkage between this and the certified emission reduction certificates that are part of the domestic scheme.

Dr Barker: To achieve the two degree target, the scientific evidence on the IPCC work suggests that the whole of the global economy has to be decarbonised, that all of us have to stop emitting CO2 via our use of carbon, our burning of carbon. That means that every country—China, India, Russia—if we are actually going to achieve that target must reduce its emissions to zero and then we must go beyond that to actually start pulling CO2 out of the atmosphere and burying it, or growing plants or allowing forests to grow naturally and not burning them down et cetera. Starting from that position you can see that the issue becomes, for an economist, how to achieve decarbonisation effectively, efficiently, equitably and flexibly, and it is a question of timing, who does what when. Then you would want to look to see, if you were taking the world economy and the system as a whole to try and answer that question, and say maybe it looks very likely that certain sectors like the car industry, because of other factors—the fact that the oil price has gone up so much and you cannot use coal to run cars—it might be good to
decarbonise the car industry first of all. This might be of really great benefit to the car industry, and so you say how quickly could that be done, it is an engineering problem. Of course, this is setting aside all these credits and all the rest, and I will answer the credit bits in a minute. It is a question of which sectors when, what economic benefits there are and what would decide benefits. If the car industry decarbonised its product so that cars are all electric then we can see many side benefits—our cities are much cleaner and less dirty, less noisy—of course we need to know about the noise so that we do not get run over, but that is the case, an electric car city would be more like Disneyland than like what we have got, which is a nightmare.

Q258 Chairman: I do not think that Disneyland is a great improvement on life.
Dr Barker: It is quiet, and clean, and good for the children. To return to the issue of the credits and how important they are, the credits are very important because that is really the only means by which in the present regime large amounts of money can go from the old emitters to the new emitters, from the UK to China or to Pakistan or whatever. That is because they are extremely important and I would support having quite large amounts of money transferred there, but then you would get large amounts of money if the price was right. It is the price being too low that is the problem.

Q259 Chairman: Can I just repeat what you said, and correct me if I am wrong: to reach the 2% target the whole of the global economy has to be decarbonised.
Dr Barker: Yes. That is clear, unambiguous, nobody quarrels with me in the IPCC; if Bob Watson came to give you evidence, he would confirm that; I give a presentation showing that to international conferences all over the world and nobody contradicts me, no one says you are wrong.

Q260 Baroness Sharp of Guildford: Can I take you back to the question which I posed to you which was the use of the CDM and the JI mechanisms. You implied in your paper that these were given too freely, that we were using them too freely at the moment.
Dr Barker: Yes.

Q261 Baroness Sharp of Guildford: This in a sense is a slightly different issue. We take on board the point that you have made that it is a global problem, but to some extent what you are implying is that we have really got to get our act together here in Europe.
Dr Barker: Yes.

Q262 Baroness Sharp of Guildford: And the danger of cheating by importing CDMs from the Third World is considerable.
Dr Barker: Yes. If we just take the question from the point of view of Europe and set aside the potential benefits of large amounts of money going to China et cetera, look at the scheme and give an answer as an economist, not a political answer, then I would want to look at the benefits of domestic action because that is what we are talking about. Is it domestic action or is it action in China? There are very large benefits of domestic action; I have mentioned some of them, in the literature it is called co-benefits of greenhouse gas mitigation, and that is the fact that air pollution is reduced and people’s health, animal health and plant health is improved because there is less dust, there is less low-level ozone et cetera et cetera. There is a lot of work on this that has been done and there is a lot of literature, so that is one important benefit of European action.

Q263 Baroness Sharp of Guildford: But you can argue that the benefits are greater in China than in Europe.
Dr Barker: They may be, but we are restricting ourselves to Europe in this respect so actually Europe brings that co-benefit which you would not get if it goes on in China. Of course, many more people might benefit in China but I am restricting myself to Europe at the moment. So there is that benefit, but the next one is that the higher the action at home the greater the revenues from the auctions and therefore the more potential there is to develop the European economy as a low carbon economy, as the exporter of many low carbon technologies and products to the rest of the world. That is a very good strategy, especially in times of global depression and recession. I could go on in that vein, there are many other benefits from domestic action which actually mean that people are seriously thinking about it. Of course, turning to the political benefits, they are from political leadership taking action.

Q264 Baroness Sharp of Guildford: We understand that. The verification of CDMs and so forth.
Dr Barker: That is a big problem, obviously, a huge problem; I am not sure we want to get on with that but it is a big problem.
Ms Anger: We need to have harmonised rules in the EU for verification and to rotate verifiers, because now every country can do what they like to do and they have different ways of doing things. In Germany verifiers are private persons; even someone like me or Terry can be a verifier but not a company; in some countries they are companies.
Q265 Chairman: Does the technology exist to really track down on the verification side—say a European Member State that may be arguing that it ought to have a more generous target than it is going to be landed with at the moment and the government of that Member State might be tempted to be a bit slack in policing what is going on; can they be caught?

Ms Anger: There is a problem with state aid. By using the new proposed way of dealing with emissions trading under Phase Three there will be harmonised allocation rules. So the Member States cannot support their own companies because the allocations will be done at the European Commission level. There is no way of helping your own companies any more as this was the case with Phase One. There is literature out there showing that.

Q266 Lord Cameron of Dillington: You can actually measure the amount of carbon dioxide being emitted, can you? I mean, if I am an auditor in these matters I can go along to a factory and say this is what you are emitting.

Ms Anger: No, you cannot really measure the actual tonnes of CO₂. It is down to calculating how much fuel you burn and then according to the carbon content of the fuel the CO₂ emissions calculated.

Q267 Chairman: If the government of Ruritania, which is a Member State of the European Union, thinks “My God, if we follow what the Commission says our industry is going to be absolutely decimated so we will carry on emitting at the level that we are emitting at the moment and just tell lies”; can we stop them? Is there a way of saying you are cheating?

Ms Anger: They cannot cheat any more because the European Commission will decide how many allowances will be given to Member States.

Chairman: The only thing the European Commission can do is to say “This is your target”. It has been known in other sorts of regimes and programmes of the EU for Member States not always to tell the truth.

Baroness Sharp of Guildford: You must realise we are the Committee that scrutinises what goes on in the agricultural area.

Lord Cameron of Dillington: And fisheries.

Lord Plumb: Black coal.

Q268 Lord Cameron of Dillington: If you cannot measure it, which is what you were saying earlier, how can you audit it? That is the problem, is it not?

Ms Anger: To verify it basically they look at the way the calculations are done.

Chairman: We will see the Commission about that one.

Q269 Lord Cameron of Dillington: Can I go on about the external credits? I was just wondering what your thoughts were about the Phase Three proposals to have very restricted external credits if there is no international agreement and to increase it by 50% if there is. Again, what do you think of the quantitative and qualitative restrictions being placed in this way?

Ms Anger: If there is no international agreement then basically the companies can bank only their credits to Phase Three.

Q270 Lord Cameron of Dillington: From Phase Two.

Ms Anger: From Phase Two, yes.

Q271 Lord Cameron of Dillington: That is unfair to new industries, is it not?

Ms Anger: It is unfair. I am working on aviation and it is unfair to the aviation sector as well because they will enter in the last year of Phase Two and they are not able to bank their credits for the future, or as much as the other industries will be able to do.

Q272 Lord Cameron of Dillington: Do you know the extent of the problem: how many past credits are there going to be, is it a huge amount?

Ms Anger: Again, it depends on the carbon price, and it depends on the state of the economy.

Q273 Lord Cameron of Dillington: So now may not be a problem.

Ms Anger: No.

Chairman: We can look at that again this afternoon.

Q274 Lord Cameron of Dillington: What about domestic offsetting in the non-ETS sectors, do you think this should be avoided and do you want to expand on that?

Dr Barker: That is a really bad idea and I think it is motivated by weakening the whole scheme. The problem with having extra and using it outside the main scheme is that it just weakens the scheme. I could explain it in a paper but I am afraid I have got a bit tired now after all this.

Q275 Lord Cameron of Dillington: If it is reducing the overall carbon emissions is there anything wrong with it?

Dr Barker: It weakens the scheme. It is because there is an overall cap on the whole lot and the cap is weakened by this extension. If the cap was not weakened then it would be different, but it is.

Q276 Lord Cameron of Dillington: It stops them addressing their own problems is what you are really saying.

Dr Barker: Yes.
Lord Wallace of Tankerness: Is that one of those issues about the scope of the scheme and the sectors covered by it and are there any obvious emissions that you think ought to be addressed as we move to Phase Three?

Dr Barker: That is in fact quite a difficult question because, as you will appreciate, the emissions trading scheme only covers around 50% of emissions so the other half is basically small-scale transportation and dwellings. What we want to do is decarbonise the economy and it is a question of which sectors go first and all this sort of stuff. It is clear that with the emissions trading scheme covering particularly electricity it is right that that should go first, but it now seems clear to me that transport systems should go pretty much there—perhaps it should go second. The reason for that is that the lifetime of cars and many vehicles is very short—not aeroplanes and trains but certainly cars—which means the whole stock can be turned around in ten or fifteen years. If they are on the point of shifting the stock already without a carbon price, which they are, then the carbon price which would come out of the emissions trading scheme for example, would do the job, and then the market itself would work in decarbonising the car stock. That is how I would address the question you are talking about. Looking at the question from the point of the home economy—there is the global economy but then coming down to the European or the UK economy—we need to see which are the most appropriate sectors and what should be the targets for those sectors rather than doing it from the point of view of the emissions trading scheme and not seeing what is outside the scheme and what would be more efficient to be done outside the scheme.

Lord Wallace of Tankerness: In your paper you also emphasise the importance of linking up with other non-EU schemes.

Dr Barker: Yes.

Lord Wallace of Tankerness: That could actually increase the efficiency overall of the scheme and our vision of a global scheme, but you also indicate for obvious reasons that if you are going to do that there has got to be quite a strong fit in terms of comparability. Given what you said at the outset of your evidence about the very high level you think we should be aiming for, do you anticipate that we would be able to get common ground on a wider basis if we went to some of the higher targets that you were referring to?

Dr Barker: Yes, I think so. We do regular projections to the year 2100, so we are looking at the long term development of such schemes and we would compare different emissions trading schemes with currency unions and how they long they take to develop, and of course we have seen globally currency unions develop dramatically over the last 100 years and—let me rephrase that and say over the last 50 years because I do not want to go back to the gold standard and all that stuff—I think we would see similar developments in joining the trading schemes together after the cost of hedging. If a scheme in the United States is, say, only $3 per tonne of CO₂ and the scheme in Europe is €13 per tonne of CO₂, there is obviously a disparity and something is going on. It may be much cheaper to reduce emissions in the United States or it may be they have got far weaker targets, we do not actually know without a study, but if there was some kind of coherence between them then there would be great benefit in reducing emissions in the United States first and then doing the ones in Europe second except for the air quality issues and various other issues to do with the advantages of European domestic action. In a way my answers to each of these questions come back to the same kind of point and same kind of world view.

Lord Wallace of Tankerness: What do you see as the advantages and disadvantages if we end up with several schemes operating in parallel rather than necessarily coming together? Do you think that would happen?

Dr Barker: Most of these schemes that we are talking about are pretty big. I should have thought there would be a common US scheme and I think the US schemes we have seen at present—the one on the East Coast and the one on the West Coast—are trial schemes in the way the UK had a trial scheme, and they will get rolled out to great benefit across the States. It is obvious it is a single market—it is more of a single market than a European one—and they will power ahead much faster, depending on who wins the election, but whoever wins will go into the emissions trading scheme and it will power ahead as a national scheme and very, very quickly be greater than the European scheme, but depending on the target, because Europe could advance its target and push ahead of the curve, especially with the global depression and develop its economy in a low carbon direction to great benefit.

Lord Brooke of Alverthorpe: In a sense you may have answered my question already by reference to what the MEPs are doing. You argue that penalties for non-compliance should be adjusted not only to changes in inflation, but also to the carbon price—notably if the carbon price turns out to exceed the penalty. Are you aware whether the provision has been amended in the way you suggest?

Dr Barker: No, it has not, so that is excellent, it is good news.
Q282 Lord Brooke of Alverthorpe: Could I just produce one out of the air on decarbonisation of the housing stock. Do you see that as a lower priority than—

Dr Barker: I see that as the very highest priority.

Q283 Lord Brooke of Alverthorpe: Than transport.

Dr Barker: I do not think it is a competition between the two because they are so different. There are synergies between them, there are very important synergies, but I see for the UK in particular that decarbonisation of the housing sector can be of extreme benefit to the national economy and to national welfare. I have been pushing for this in terms of trying to get the key organisations involved working together to produce basically a plan to decarbonise the UK housing sector as soon as possible, absolutely as soon as it can be done, and the reason for that is that the construction industry in the UK is in terrible straits, in disastrous straits, it is catastrophic for many construction companies and for employment in construction. We urgently need, throughout the country, massive development of existing homes to decarbonise them, using all the new techniques that have been developed, learning from Germany’s experience in improving the housing stock in East Germany, learning from the Norwegians with their problems of driving rain and what happens to housing stock if we are going to get worse storms than we have had. I am very much in favour of doing something about the housing stock.

Q284 Lord Brooke of Alverthorpe: Would the Government not argue that the deal it has done or is about to do with the energy companies in part is a step in that direction?

Dr Barker: I have to say that the energy companies have not been doing a good job with the scheme for insulating homes.

Q285 Lord Brooke of Alverthorpe: I am talking about the agreement that has been reached on the amount of money that will be available to electricity companies for insulating lofts and all the rest of it.

Dr Barker: Yes, that is what I am talking about. I have looked into that scheme and I was very disappointed at what had been done. Ofgem is in charge and Ofgem is supposed to be regulating the industry. I find it difficult to believe but when a home is insulated by British Gas for example under this scheme—so British Gas gets money to do it—what they actually do is a bean-counting exercise. They put insulation in the walls, they put insulation in the roof, they give you some light bulbs; they do this, that and the next thing and it is all neatly counted up—bean-counting. They do not measure to see whether it has been effective or not; they can do that easily, they can measure the gas input if it is British Gas and it is just gas and not electricity, or they can measure the electricity input and the gas input. They can see how much is used before and after, but they do not do it; they really do not do this, they do not put in the measurements. I had someone come to my house to do it and I know what they did, they just looked around tick, tick, tick, tick, tick, and then at the end of this process Ofgem receives a report from all the electricity companies and all the boxes are ticked, everyone is happy, all the money has been spent. Have we got improved housing stock? Maybe a bit if we are lucky, but if we are talking about decarbonising we have to be much better at it than that; you cannot just push insulation everywhere and hope that it will work.

Q286 Lord Brooke of Alverthorpe: Thank you.

Dr Barker: I am glad I have given the Committee some amusement.

Lord Cameron of Dillington: We admire your enthusiasm.

Q287 Earl of Arran: I am from Yorkshire. On the basis that you hope it will work, your answers have been so comprehensive that I think you have probably already covered the point about whether verification, monitoring and reporting of the scheme is to be successful. I suspect you have very grave doubts on this.

Dr Barker: Indeed, yes. We should be adopting a whole house attitude and every house is different; they are not the same, they are in different parts of the country, they face different climatic conditions, there are different people in them who do different things, different behaviours. That is how we should approach it, not just from the electricity companies or the gas companies, there are lots of others involved. The IPPR had this green streets initiative which seems to have been tremendously successful in energising local communities to do something about their housing stock, because it is not just a question of decarbonisation, it is a question of whether people are living in decent conditions, of whether the community is looking after its own.

Q288 Earl of Arran: Do you have any hope of the fulfilment of your vision?

Dr Barker: Yes.

Q289 Earl of Arran: You do.

Dr Barker: I do, yes, partly because of the terrible crisis we are in. I do not think people understand how deep it is.

Q290 Viscount Brookeborough: Is it not true that for even the future housing or the housing that we are putting up at the moment the building regulations and so on are simply not stringent enough and the
regulations that we are operating with now are similar to those that were operated by in particular Denmark, with a similar climate, 20 years ago?

Dr Barker: Yes.

Q291 Viscount Brookeborough: We simply have not gone anywhere, so we are creating a problem every day let alone curing anything.

Dr Barker: I call this regulatory capture. The construction industry has been lobbying—I have not done studies of it but I dare say if we studied those who have been responsible for the regulations, who has been sitting on which committee, what jobs they have, what bonuses they get, we might find that the regulations have been captured and that they are doing what the construction industry is wanting to do in a rather stupid, short-sighted, mean sort of way. What do we have at the end of the day? We have some of the smallest rooms in Europe—Barratt build houses with some of the smallest rooms in Europe; it is incredible. We are becoming like the Japanese, living in tiny rooms. Maybe everyone will like living in tiny rooms; I do not want to live in a tiny room in a Barratt house.

Q292 Chairman: I think that is it, but as one Yorkshireman to another, let us be direct then. It is a European emissions trading scheme, it is a regional scheme; that is an enormous weakness is it not?

Dr Barker: It is, but it is an example—and that is a positive advantage—to the rest of the world.

Q293 Chairman: Unilateral nuclear disarmament was going to be an example to the rest of the world.

Dr Barker: But it is an example which has brought great benefit to Europe. Certain European industries are much stronger than they would otherwise be, particularly in Denmark—I have mentioned Denmark, I have mentioned Germany and other aspects. The City of London has benefited from its expertise in trading carbon; you can now export that expertise to the rest of the world, to Wall Street for example.

Q294 Chairman: The other thing is what arguments can we advance to bring the BRIC countries into a more reasonable position because they are completely opposed to any form of control and yet that is where the emissions are increasing and will continue to increase.

Dr Barker: BRIC is Brazil, Russia, India and China: the first argument I would say is if you decarbonised your transport sector you might get rid of an awful lot of air pollution and you might save yourself an awful lot of money in terms of lost output and hospital admissions. Indeed, it is that argument that we are going to investigate in an academic study, bringing together air pollution and the decarbonising of Mexico because Mexico City has particular climatic conditions. I would say that was the first benefit; the second benefit I would say is your economy will advance technologically much faster if you move to a low carbon technology than if you stay with these old technologies—burning coal and gas. Basically, technology is a growing argument. Thirdly, I would say if you go the low carbon way you would get far more money from the high carbon Western economies, the old economies.

Q295 Chairman: I suppose the real challenge is that all those countries may turn round and say “Our overriding priority, our sole priority, is economic growth, alleviation of poverty and those objectives can only be met by increasing CO2 emissions.”

Dr Barker: In the present circumstances—this is a global depression that we are facing, not just in the United States and the UK, it will go throughout the world. It is a very big shock, in Russia for example, when the stock market collapses—which is more or less what is happening because many people lose huge amounts of money and the system really starts creaking—this will have its effect unless the policy reaction is better than it has been in creating huge losses of jobs. Therefore, any investment, even the Keynesian type investment of taking stones out of fields and building walls with them, is going to be beneficial because it is going to take up some of these resources which have been set free by the bankers’ follies over the last 20 years.

Q296 Viscount Ullswater: I am longing to ask one question: is nuclear old technology or new technology?

Dr Barker: It is both; we have mostly old technology but it would be nice to have the new technology and to lead in the new technology but the UK is far too small. China is much bigger and we should be buying our nuclear power stations from China if we were going to follow an economic route. I suspect we are not and we are rather going to buy them from France.

Q297 Viscount Ullswater: But you are not opposed to nuclear energy.

Dr Barker: Not at all, no.

Q298 Viscount Ullswater: It is in the mix.

Dr Barker: Yes. I am in favour of nuclear stations which are protected against attack and which have technologies which cannot be used easily by terrorists. There is obviously a very severe problem with proliferation and so I am very much in favour of hoping to prevent that but some countries are going gung-ho for nuclear and they are obviously going to develop a world technological lead in nuclear.
### THE REVISION OF THE EU’S EMISSION TRADING SYSTEM: EVIDENCE

8 October 2008  Dr Terry Barker and Ms Annela Anger

| Q299 Viscount Brookeborough: What about the future storage of the waste? | Dr Barker: That is an extremely serious problem. Chairman: The Finns have got that sorted. That is it; thank you very much indeed, that was a delightful session. |
WEDNESDAY 8 OCTOBER 2008

Present

Arran, E
Brooke of Alverthorpe, L
Brookeborough, V
Cameron of Dillington, L

Jones of Whitchurch, B
Sewel, L (Chairman)
Ulswater, V
Wallace of Tankerness, L

Examination of Witnesses

Witnesses: Mr MILES AUSTIN, Head of European Regulatory Affairs at Ecosecurities, Ms CORALIE LAURENCIN, Associate, Market Development, Climate Change Capital and INCIS (International Carbon Investors and Services), Mr NICK HASLAM, Research Analyst, IDEACarbon, and Mr SAM FANKHAUSER, Research Fellow, LSE, and Adviser, IDEACarbon, gave evidence.

Q300 Chairman: Thank you all very much for coming and talking with us and finding time to help us with what some of us still find an extremely complex area of study. Can I explain two things to you? One is that it is a formal evidence session. A transcript will be taken. You will receive a copy of the transcript to look through and correct any errors and slips that have arisen. Secondly, we are being broadcast. Would you like to open by making any general comments or would you prefer to go straight on to the question and answer session?

Mr Fankhauser: We can go straight on.

Q301 Chairman: On the trajectory of the carbon market, what has been happening? How has it changed over recent years in terms of volume? How many allowances and credits have been traded? How much are the values worth? In which direction are things going? How do you account for the trajectory and obviously what do you think the Commission’s proposals are going to do for the third phase of the ETS? How are they going to impact?

Mr Austin: I would like to have a crack at what the Commission’s proposals are going to do. The package as a whole, the whole climate and energy package, is quite a positive package. There are some very good features to it. The centralised allocation by the European Commission is a hugely positive move. The European Commission is a hugely positive move. Can I explain two things to you? One is that it is a formal evidence session. A transcript will be taken. You will receive a copy of the transcript to look through and correct any errors and slips that have arisen. Secondly, we are being broadcast. Would you like to open by making any general comments or would you prefer to go straight on to the question and answer session?

Mr Fankhauser: We can go straight on.

Mr Fankhauser: Maybe I can address the first half of your question on what are the dynamics of the market at the moment. In 2007, the common estimate that everybody used was that the carbon market was at a volume of about 64 billion US dollars. That is about double what it was in 2006 when it was just over 30 and in 2005 it was around 11 or so billion dollars. It is really growing very, very fast. I think the numbers for this year are somewhere in the hundred billion US dollar range. If you look at the composition of that market, about two thirds or so is trade in the EU ETS. About one fifth is CDM and then you have the various smaller markets like the voluntary market, like joint implementation and the regional Australian scheme and so on that make up the rest. The two big markets at this point in time are the EU ETS, which is about two thirds of what is going on and the CDM, which is about one fifth of what is going on. In addition to just those volume numbers, there have been some interesting structural developments in the market over the last year or two in the sense that we have seen a change in the firms that are in the market. We have seen a lot of market entry of the mainstream, financial institutions over the last 18 months, the investment banks, the hedge funds and so on. They have come in and they have started to compete with the niche carbon players that have dominated the area for a long time. The other thing we are seeing is that the support industries are coming in. It is not just people who produce carbon or do carbon projects; it is also the support industries like IDEACarbon, which is an advisory service. We start seeing a lot of exchanges coming into the space. Two years ago, about 80% of the action happened over the counter. Now we expect this year and next that 40% will actually happen in exchanges. The corollary of that is that we start seeing more complicated products, a lot of futures trading rather
than spot trading. We start seeing more derivative products. All those are signs that the market is no longer an immature market. It still is to some extent but we start seeing the maturity and we start seeing the market behaving like any other financial asset.

Q302 Chairman: How do you account for this development, this increase?
Mr Fankhauser: I think there are two aspects. One is that the volumes have reached critical mass. You could see that this was picking up for banks to have an interest in. Also, the upward trajectory was interesting. There are very few markets that double in size every year as the carbon market has done. The judgment was made that the carbon market was here to stay and so it was worth investing in it. I believe that is still the judgment, whatever happens in 2012 and beyond. The judgment is still there that there will be carbon markets. I think those institutions are in the market for good now.

Viscount Brookeborough: Ecosecurities is the leading company in the business of sourcing, developing and trading. How many other businesses are in that business and what proportion of the total do you take part in? How do you rate yourself among others who are there?

Q303 Chairman: “Very good” is the answer.
Mr Austin: If I did not have a colleague from Climate Change Capital sat next to me, I would say we were the largest, but we are definitely one of the largest in terms of project developers. Our core business is to develop projects in the developing world under the Clean Development Mechanism. We have something like 400 plus projects in development at the moment at various stages.

Q304 Viscount Brookeborough: What is the total size of the business—not necessarily of yours but of the total businesses like you involved in Europe?
Mr Austin: I do not know.
Mr Fankhauser: Ecosecurities is definitely one. There is a ranking of the size of the portfolio that people can look at in Reuters and on the internet. I think Ecosecurities is one of the top three in terms of the size of portfolios.

Q305 Viscount Brookeborough: And the other businesses that you are involved in?
Mr Fankhauser: IDEACarbon is different in the sense that it does not take risk or ownership over carbon assets. It is purely an advisory service.

Q306 Viscount Brookeborough: A consultancy?
Mr Fankhauser: Yes.

Q307 Viscount Brookeborough: What are the aspects of the draft Directive that your organisations and clients have been following most closely during the progress of negotiations in Brussels and what brings those points to interest?
Ms Laurencin: Like Ecosecurities, we have been very focused on the aspect of dealing with the CDM because that is where most of our business is located, in the origination and the selling of credits from these development projects in developing countries. We have been keen to understand how that market is going to evolve. What we do not know today is both in terms of volume that is allowed in and also the type of projects that will be allowed, the quality debate. It is interesting to see that the Commission and the vote yesterday in the Environmental Committee in Parliament have given us a lot of insight as to what that is going to be, but there are still a lot of questions pending, especially on the quality side, on the types of projects that we are going to be allowed to develop post-2012 and imported back into the EU. Hopefully, we are going to get clarity on that but it is going to take a couple of years until we know for certain how this market is going to evolve.
Mr Austin: Yes, that is true. That is one of the key effects of the current Bill. There is no certainty in the market currently. It is very difficult to invest because there is no clear signal as to what type of project to invest in. There is no clear signal that there will be a market as such. Even under the 30% pathway, the current proposals could be serviced by existing projects something like four or five fold. There is also a lack of certainty over when the switch to a 30% pathway from the 20% pathway would happen. The general intention is that it happens when a multilateral agreement is agreed but it is unclear if it is when it is signed, when it is ratified by Europe, when it comes into effect, all of which could be very different things. If you look at the progress of Kyoto, there are years between those events. That is the key, the uncertainty that this has created because it makes for a very difficult investment climate which is in the context of an already difficult investment climate.
Mr Fankhauser: It is worth emphasising two aspects. One is the volume of the demand that there will be in Europe, whether it is 1.4, 1.6 billion tons or any other number. The other is the quality restrictions on projects, what level of gold standard they would have to meet or any other restrictions in terms of the countries they can come from and so on. That creates a similar amount of uncertainty.

Q308 Chairman: Given the uncertainties you refer to, is it inevitable that there will be this uncertainty or could they be resolved?
The revision of the EU’s emission trading system: Evidence

8 October 2008

Mr Miles Austin, Ms Coralie Laurencin, Mr Nick Haslam and Mr Sam Fankhauser

Ms Laurencin: We deplore the uncertainty but we understand that it is part of the deal, because the EU is working out these provisions for ourselves, which are EU participants in an EU-wide market, but we understand that the EU’s other goal in providing and creating this market is to embark as many other countries as possible in the conclusion of a global, international agreement on reducing greenhouse gas emissions. The EU wants to be able to incentivise these countries to join as much as possible and at the same time it wants to provide continuity for the investors that we represent. Doing these two things can sometimes be a little contradictory. It has to balance out the sort of tension that there is between those two objectives, all the while knowing that the international process is going to give us clarity later than the discussions that we are having at EU level. There is a time sensitivity and a dual aspect of negotiations going on. That is part of the uncertainty and that is pretty much the state of the business that we are involved in now. We understand and recognise it. We deplore it but it is very difficult to see how that could be different.

Q309 Viscount Brookeborough: Are you really saying that the draft is not specific enough to indicate where the opportunities lie for people to take this forward and yet, if it was too specific, it would discourage too many other people from joining?

Mr Austin: The draft Directive has a qualitative limit. That is, post-2012, beyond CERs from least developed countries, any credits that would be accepted in all Member States would be admissible. The Commission has no idea what that actually means, I have asked them. That is something that could have been done with a certain amount of effort but was not. Whilst there is a certain amount of necessary uncertainty because there is an international negotiation process going on, not just in the EU but also within the context of the successor to Kyoto, there also is a certain amount of unnecessary uncertainty being introduced for businesses like ours but to provide emissions reductions on a wider scale.

Q310 Viscount Brookeborough: You can play within that system at the moment. Do you see that they are about to approve issues that you want resolved to take the thing forward?

Mr Austin: No.

Ms Laurencin: I think I agree. There are issues that are left unclear. The reason for that is that credit cannot be given until we see what our other international partners are going to be doing. That is part of the game. It is a difficulty that, as a business, we have to deal with but it is one that is justified by the higher ambition which is to provide a global framework which will not only create opportunities

Q311 Viscount Brookeborough: Could you just give us a very simple example of a client who finds it is secure in going forward and a business that is not able to go forward because it feels too insecure at the moment? Where is the demarcation?

Mr Austin: Currently, the key area of clarity of areas is that we know projects in least developed countries will probably be accepted. That would be an example of where there would be a degree of investment certainty. However, we do not know what the level of demand for those projects would be. In the absence of international agreement, there would be no new demand. There is a real unease about investing post-2012 at the moment. It is also unclear exactly what use installations would be able to make of CERs post-2012 as well. It is fairly clear within the draft Directive, but the Directive will change and that is part and parcel of the process. The whole thing is just creating uncertainty. For instance, under the amendments from the Environment Committee power generators from for instance Germany or Spain would not be purchasing any CERs post-2012 because it would be to their advantage to use up their full entitlement pre-2012. That said, I think it is fairly clear that there will be further changes when this reaches the Council of Ministers.

Mr Fankhauser: One area where we know that developers are holding back is forestry, an example where some players are keen to go but they are holding back. The firms suffering from the uncertainty most are the project developers and the intermediaries or the carbon funds like EcoSecurities. The compliance firms within the EUETS I do not think are all that much affected just yet. They are fairly busy trading European allowances and they are thinking about whether or not they want to import CDM but this has not really reached their desk. It is just the professional project developers that are suffering from the uncertainty at the moment.

Q312 Lord Cameron of Dillington: You have obviously made your position pretty clear about the uncertainty of the quantitative external emission credits. What about the concept that this will make the domestic market really focus on reducing emissions? In other words, there will be less leakage if people are restricted

Mr Fankhauser: The first principles then tell you that trading is probably not a bad thing in the sense that science tells us that the atmosphere does not care where the emissions come from. Economics tell us that trade usually enhances welfare so if you just stick to the first principle, as it were, carbon trading is probably a good thing. There are some practicalities
obviously where markets do not fully work, where you want to worry and for me there are two that I usually lump together under the label "leakage". One is the worry that whatever happens abroad, if you do a project, say, in China, it does not give you the 100% emission reductions that the same action would in Europe. That is a question of monitoring environmental integrity and perhaps even cautious accounting. That is something that the system can take care of. The second worry is one of lock-in, the idea that if we build a coal fired power station now with the assumption that we can offset those emissions through the CDM we will have those assets on the books for the next 40 years and we may not want them on the books for the next 40 years. But if we can make that reasoning and understand the long-term dangers of doing that, then people may not invest in coal-fired power stations. The question then becomes one of the credibility of the regulatory pressure on coal-fired power stations. Whatever the rules on the CDM, eventually Europe will have a carbon free power sector and those firms will have to comply with it. The lock-in is a real problem but it is also a problem that, if the regulators can anticipate it, the regulated firms can anticipate it as well. It is a matter of creating consistency.

**Mr Austin:** In terms of emissions reductions, the concept within the Kyoto Protocol is supplementarity where the use of international credits should be supplemental to domestic action, which is largely interpreted as being 50%. 50% of effort can be covered with international credits. That is simply not happening under phase three of the EUETS. It is a major move away from the previous commitment. There is the question of lock-in and I think it is quite important to bear in mind that the carbon market cannot achieve everything. It is a very, very useful tool but it is a tool that needs to be considered in the context of a suite of other tools such as supplementary technology funding for things like CCS to bring certain things online.

**Q313 Lord Cameron of Dillington:** The debate to some extent has been about qualitative restrictions. What about the quantitative restrictions? How do you audit them? Sam, you said the system can take care of that but we have grave doubts about whether the system can take care of that.

**Mr Fankhauser:** That was a little bit of a cavalier statement. It is a serious concern that the environmental integrity has to be ascertained. I have no doubt that there are quite a few projects in the portfolio of the good people to my right that are probably not additional but overall I think the system does deliver. There are two ways in which you can take all those worries into account. One is that you really monitor very carefully, you double the scrutiny and you are doubly careful. That is good but one eventually reaches a point where the transaction costs related to that become too high. Another way is to accept that on average in a portfolio a certain fraction is not properly additional. One could devise a system where that is just factored in. In terms of admin costs, that would be a lot easier. It would probably be expensive in the sense that even the good projects would lose a fraction of their carbon benefit. In that sense, the system can be designed to take care of it but it is inherently a complicated thing.

**Mr Austin:** In terms of the current system, there is a clear possibility for improvement with the current setup. The executive board of the Clean Development Mechanism is currently undertaking scrutiny of nearly every project that is submitted. Every project submits what is called a project design document which is a 150 to 200 page long technical and economic document that details every aspect of the project. The executive board is largely composed of negotiators. Some of them have technical skills; some of them have economic skills but not that many. This is a body that meets six times a year for three or four days and there is currently a huge backlog of projects as a result.

**Q314 Lord Cameron of Dillington:** What are your views on access to historic external emissions credits that have been carried over from phase two to phase three? A point which has been put to us which is quite valid is that any new industries will not have access to this—airlines and so on. Shipping may come into it.

**Ms Laurencin:** It is a fair point that any new industries will not have access to historic credits. One of the issues with a nascent market which is immature is that you still have significant policy risk and you still have a large number of players which are new to the market and which may not have a good vision of the fundamentals. Providing people with the ability to bank their credits into future periods allows them to have a longer term vision of the market, of the supply and demand fundamentals and hopefully we will not see the volatility that we saw in phase one, which is a very big hit from an investor's point of view.

**Mr Austin:** Also, if you disallowed banking on CERs, installations would simply use up their entire CER allowance in phase two and bank through EUAs instead, so you would still have the same effect coming through. I understand that Defra has a paper
at the moment that outlines a mechanism for solving this problem.

**Mr Fankhauser:** The fact that you can bank, that we have created a continuous trading space from now to 2020, is one of the really good design features. If you just think back to phase one where things did not work out as they should have, the price drop would have been a lot less if there had been some sort of link between phase one and phase two. For obvious pilot reasons, one did not have that but if one imagines a link between phase one and phase two one would not have seen the price drop that we have seen.

**Q315 Lord Cameron of Dillington:** You are all obviously very keen on opening up the market as much as possible. Do you have any views on the desirability of domestic offsetting?

**Mr Austin:** In terms of setting up a JI-like system within the UK?

**Q316 Lord Cameron of Dillington:** Yes.

**Mr Austin:** It is limited because of the EU ETS for one thing. Anything that would affect the EU ETS would be disallowed automatically so renewable energy projects would be disallowed. Anything along those lines would be disallowed. Forestry would be a key sector and in Germany I know a lot of VAM and coal mine methane projects are taking place under JI, so there is room in the UK for that to happen. I certainly think that, for sectors that are not covered by the CRC or the EU ETS, it would definitely be a way of beginning to engage them.

**Mr Fankhauser:** I have a slightly different opinion. In this country, most sectors in one form or another are subject to carbon type regulations say, through the CRC. The transport sector is subject to carbon regulations. The only one where it probably would work—I agree with you—is forestry and, more generally, maybe land use and land use change.

**Q317 Lord Wallace of Tankerness:** So far, these schemes we have had have tended to operate in isolation from each other. Obviously, there are some bridges but if we are looking to the future what do you regard as the main obstacles of linking the different regional or national schemes that might emerge?

**Mr Fankhauser:** The main one by far is the stringency of those different systems. If you look at the various proposals in the US, for example in Lieberman Warner, they are all designed as low price systems. They have safety valves in there if the price goes too high and things like that. The EU ETS in a sense is designed as a high price system. Nobody admits it but that is what people had in mind when the system was designed. If you have a top price, according to Lieberman Warner, it would have been about 20 euros. That is the maximum price the US system would have allowed. Obviously, that is not at all compatible with the European system where prices are expected to be in the thirties before long. There is also a question of quality control in terms of the offsets that are being let into the system. If the European system has quality levels as to what type of projects are being let in, it creates a back door if you link up with other systems that have lower standards. The lower standard projects go into that other system and that other system then exports its allowances into the EU. Those are the two main issues. The more important one is that high price and low price systems are hard to link. The second, a lesser issue, is that you might have quality differentials between the two different systems.

**Q318 Lord Wallace of Tankerness:** You said in answer to an earlier question that what we have seen in Europe is a pretty rapid maturing process. Do you think that is going to happen elsewhere and that some of these differentials—I can see the difficulty of linking these differentials—might diminish as the market in more recent schemes matures?

**Mr Fankhauser:** I think the quality differentials are very easily ironed out and there are efforts to do that. The price differentials are a matter of political will more than a matter of maturity of the system. It means that all the other systems have to have the same willingness to impose the same carbon costs on their economies.

**Mr Austin:** To give it some context, the Regional Greenhouse Gas Initiative in America is currently trading at about three dollars a tonne. It has a price valve at ten dollars a tonne and when it hits ten dollars a tonne it will allow in offsets from nearly everywhere, not just the CDM but other schemes as well. The Commission on the sidelines seems to be looking at a target price of about 40 euros a tonne to make CCS economical. I cannot see where the motivation for the Americans to link would be, when they are looking at a ceiling of $20 a tonne and Europe is aiming for a floor of 40 euros a tonne.

**Q319 Lord Wallace of Tankerness:** Do you think the structure of the draft Commission proposal allows these links to be facilitated? Does it leave the door open to be able to link up?

**Ms Laurencin:** It aims to definitely. In the proposals that were accepted yesterday in the Environmental Committee in Parliament, there is definitely a very specific text that says the imported credits post 2012 in the EU should be able to be accepted in other markets. There is a specific reference to the US scheme, so definitely the EU has this in mind and does want to move towards a situation where there is one carbon market with one carbon price. In the
short term, the question is how long is the short term. Is it ten years or is it more? The issues that you were just mentioning are difficult to overcome.  

Mr Austin: RGGI also managed to bring in an extra technical complication by using imperial tonnes rather than metric tons as well, RGGI being the trading scheme in North East America.

Q320 Chairman: If you do have this price difference, what are the implications in terms of location of industries?  

Mr Fankhauser: This is a very oft debated question. It has come up a lot in the context of the EU ETS. It has been fairly well studied. The most convincing study that I have seen is that the competitiveness issue can be quite narrowed down into a handful of industries: steel, aluminium, lime. It is concentrated into a small part of the economy. There are distributional issues, if you happen to be in the south of Wales, it is a big part of the economy. But from the UK or European point of view competitiveness is concentrated in very few industries for which one can probably find tailor made solutions that do not contradict the state aid rules one has.  

Mr Austin: It is part of the package that the Commission in 2010 will produce a list of sectors that are vulnerable to international competition and it will then issue free allocation of EUAs as is deemed appropriate. Also, in terms of industries that are adversely affected in domestic markets, a potential way of addressing that would be the French proposal for some kind of border adjustment mechanism. For instance, goods coming in from other parts of the world would have to pay some kind of levy, be that in credits, be that in hard cash, to compensate for the fact that they have not taken on similar commitments.

Chairman: It sounds a very French proposal.

Q321 Viscount Ullswater: You have identified some of the problems that are recognised and you mentioned some of the sectors which need to have this special treatment, but it creates a great deal of uncertainty at the moment because the solutions have not been identified. How does it affect your work with your clients, as to what you need to factor in possibly for the future and how to deal with that?  

Mr Austin: In terms of the uncertainty for sectors that will appear on the list or not, I think certain sectors are almost eschewing. The steel sector will almost definitely be there.

Q322 Viscount Ullswater: Cement?  

Mr Austin: Possibly. Possibly not. It depends. I have heard various different versions of how the cement market functions and what it has to compete with. There is an issue of leakage in southern Spain where cement can be shipped across the Mediterranean from Morocco. I have heard recently that there could potentially even be European-wide problems of leakage with cement shipments coming for instance from China. A way of addressing that would be potentially to push for some kind of global, sectoral deal that would cover those sectors. For instance, the whole of the cement industry would be covered by a sectoral deal.

Q323 Viscount Ullswater: I think we were given an indication this morning by Dr Barker that one way of treating it would be to sell credits to every industry but, for those that were subject to leakage, you would give them the money back. Have you heard that proposition made?  

Mr Austin: That is something that to some extent Defra has undertaken with phase two. If you look at the historical emissions, the steel industry in the UK is over-allocated. They have been given more credits than they will probably need. To some extent, not only will that not cost them anything but they have sufficient credits to either allow for some expansion in production or to sell to cover the administration costs of being part of the EUETS.  

Ms Laurencin: And the increased electricity cost. They get the double hit. They pay electricity costs and they have been imposed into the EUETS. That was the reasoning up until now but phase three will definitely mark a change from that situation.  

Mr Austin: There is an issue for industries that are not covered by the EUETS but are affected like for instance the aluminium sector, which currently is not covered but uses huge amounts of electricity. There might be some argument for some other kind of mechanism to compensate for that.  

Mr Fankhauser: Generically, I only see three ways in which one can deal with the leakage problem. One is the border tax adjustment that we talked about. The second is the global, sectoral agreements that are being discussed, for example for steel. The third is giving allowances away for free. Giving allowances away for free seems to be the one that has the fewest obstacles attached to it, so that is probably what is going to happen. As an economist, I have some misgivings about that. What giving allowances away for free does is it increases profitability. It does not increase competitiveness because at the margin we still face the cost of carbon. It is just that you have been given something for free to compensate for that. If my stepson sells something on Ebay, a piece of equipment, whether he bought it for himself or it was bought by his mother, the decision whether to sell or not does not depend on it. It has to do with whether he still needs the piece, whether there is something else in the market that he needs, whether he can get a good price for it. How you get your allowances does
not define how you behave at the margin when you make your location and production decisions.

**Q324 Lord Brooke of Alverthorpe:** You are not enthused by subsidies?

*Mr Fankhauser:* It is a subsidy. I can see why it is being done because it is easy to do and not everybody behaves in the hard nosed way that I have just described. There are some complications in it.

**Lord Wallace of Tankerness:** One of the arguments for the subsidy was its transparency. You could see there was a sum of money and you could see what was done with it.

**Q325 Lord Cameron of Dillington:** The companies themselves might look at that money and say, “This is for greenhouse gas savings” as it were. That is slightly different to, “We get a lot of free allowances so we do not have to do anything.”

*Mr Austin:* If you do something, you can sell those allowances and not have to use them for your compliance obligation. There is a counter to that. To address subsidies slightly, again I do not think they are an unreasonable tool in a suite of tools, given certain contexts. To look at the German tariff, the renewable energy which was in effect a subsidy for renewable energy, it has made Germany the world leader in wind. If you look at the European context, we should be the world leader in wind because we have a far larger resource than Germany does.

**Q326 Lord Brooke of Alverthorpe:** They do not have the planning problems that we have. The World Bank has pointed out that some of the cheapest mitigation opportunities are in some of the sectors that we talked about before, such as building, forestry and agriculture but these have been barely taken up so far. Could you endeavour to give us an explanation as to why you think these opportunities have not been tapped into and indicate whether you expect this to change in the future? What is the kind of timescale?

*Mr Fankhauser:* Forestry is a special case because there are Kyoto related rules on forestry that have restricted what is possible and what is not. Deforestation was not possible and afforestation was. Forestry has its own special accounting issues which have to do with leakage, with permanence, additionality and those sorts of things. It is the eternal question as to whether there is such a thing as negative cost opportunities in building. Every cost curve that has ever been drawn has had that negative part to it. The question is why has that negative part not been taken up. The answer is that there are some hidden costs, some difficulties that make the thing more expensive than it appears from a pure engineering point of view. You also have information issues; you have asymmetric information issues; you have rigidities in the system. That makes it difficult to realise some of those opportunities. When it comes to buildings—dare I say it?—the easiest way is probably just to regulate these opportunities away rather than trying to have it done through the market.

*Ms Laurencin:* I would completely agree because on top of the hurdles that you were mentioning there is the fact that, as an individual, if you want to invest in your home, it might almost be more attractive to buy a new couch or create a new kitchen rather than insulate your walls, even if by insulating your walls you would get your money back over a certain period of time. Because of the energy savings that you will get from that investment, you will derive the benefit but unless you regulate these types of investments it is very difficult to see how it would work. I think regulation should be matched by financial incentive to help people deal with the up front costs which are required in this type of investment. It is difficult to see how it would happen otherwise.

*Mr Austin:* It is a question of up front costs versus ongoing costs. To insulate your house you would have to come up with a large sum of money in one hit, whereas if you do not insulate your house then your energy bills will be higher by an amount. You would not know what that amount is until you put in the installation.

**Q327 Chairman:** What would you do about agriculture?

*Ms Laurencin:* Agriculture is a very difficult topic.

**Q328 Chairman:** It contributes a significant proportion.

*Mr Fankhauser:* It does contribute a huge amount. A practical issue that we found when we looked at emissions in the UK is that the uncertainty of monitoring is much greater in the non-CO₂, non-industrial sectors. That makes it more difficult to structure it as a CDM project, going back to all those worries about environmental integrity. It is far more difficult to ascertain in those sectors just because it is more difficult to measure. I do not think that is the reason why these things have not been taken up. It probably has more to do with the small scale nature of many of these things, agriculture being a very difficult sector for foreign investors to enter and make sense of.

*Mr Austin:* Another reason for the low uptake in agriculture besides the slightly convoluted CDM rules around it is that forestry credits are not admissible under the EU ETS, which is the largest market, providing annual demand.

**Q329 Lord Brooke of Alverthorpe:** You do not see any movement in these areas?
Mr Austin: There is a big discussion going on under the Lieberman Warner Bill on the latest amendment that was proposed which allowed tropical deforestation credits.

Q330 Lord Brooke of Alverthorpe: On agriculture, we are taking evidence from the New Zealand government tomorrow on their programme. More generally, could you outline for us which countries and sectors have been the dominant sources of project credits so far and which countries and sectors you expect to break into the market in the future?

Mr Austin: You mentioned New Zealand and the inclusion of agricultural land in New Zealand was controversial because the rules devalued or increased the value of certain types of land, so some land holders suddenly found themselves with a considerably reduced value assets.

Viscount Ulswater: We will ask them about that tomorrow.

Q331 Lord Wallace of Tankerness: How did that happen?

Mr Austin: There is a compliance obligation that is placed upon the land. My understanding is that a certain number of credits are given out once to cover the compliance obligation. The compliance obligation is then tied to the land so if you sell it on the new owner also has the compliance obligation as well. Certain types of land were quite severely affected. The Maoris were particularly unhappy as they seemed to own a fair sized tranche of this particular kind of land. I do not know the full details but I do know that there was a devaluation of certain types of land.

Q332 Lord Brooke of Alverthorpe: Which have been the dominant projects?

Mr Fankhauser: In terms of countries, the dominant two are China and India. China tends to have bigger projects than India. Whether one looks at it in terms of volume or in terms of number of projects therefore makes a slight difference but China and India between them have about half of the number of projects. Why is that so? The projects probably go where the emission reduction opportunities are. If one looks at how much carbon is being emitted in CDM eligible sectors in those countries, the picture evens out because there is a lot of carbon is emitted in China and India. They do have a slightly bigger market share which probably has to do with first mover advantage, putting good institutions in place and making it easier for investors to do CDM business in those countries. In terms of the sectors, the earlier projects were in the industrial gases, in HFC 23, N20. If we look at the registered projects, which are the early ones in the pipeline, I think a third at least is from those sectors. In the second generation of projects, these sectors have lost a lot of their significance. What can be done there has been done. The more recent pipeline has about one third of renewable projects in it.

Q333 Lord Brooke of Alverthorpe: Looking at the consequences and effects of the economic downturn that we may be facing, have you been doing any work on what the likely consequences of that might be on the price of carbon and, in turn, what will be the knock-on effects from that on the system that has been devised for 2012?

Mr Fankhauser: We did crunch some numbers on that. We have a market that goes all the way out to 2020 and, because we have the flexibility between years, the market can optimise over those 12 years. If we have two years of recession now, over a 12 year horizon it does not change all that much in the average GDP growth over those 12 years, hopefully. Once we know that, we have an elasticity which says a 10% reduction in GDP growth from 2% to 1.8% would reduce the carbon price by between 4% and 4.5%. If you use that elasticity and assume that the recession is not much more than two years, I think we should probably lose about a euro or so in the carbon price. That is just the sheer short and medium-term mechanics. The more complicated story is probably what is happening in the psychology of the people who are active in the market. Is it more difficult to have access to credit to finance those projects? Our indications are that one can still get money for these things at the moment but that could affect the market more than the fact that GDP is down and therefore emissions and prices are down.

Ms Laurencin: I would definitely agree. There is an impact on reduction of GDP which will impact the net demand in the EU system. That will have an impact on EUA prices and therefore supposedly CER prices. It is also important to mention that we anticipate that there will be a fourth phase in ETS post 2020 so it is not just a 10 year horizon. It could be more and that is very important in the face of wider economic events. At the same time, this could put pressure on different participants, especially EU participants, which will have a wider level of compliance to provide from their own portfolio of activities. It is very important that they do so to meet their targets but, as the rapporteur said yesterday from the Environmental Committee in Parliament, this issue is much more important in the longer scheme of things and so it must be dealt with.

Mr Austin: There will be a downward adjustment in the price of carbon if output falls so to some extent it is self-correcting. In terms of finance available for projects, I was at the Environmental Industries Commission’s carbon trading working group this
morning and this very topic was being discussed. The general feeling was that the availability of credit was to some extent still there. It had become more risk averse and also the due diligence process was taking longer so there is a definite slowing down being experienced at the moment in terms of investment in projects as a result of the current economic circumstances.

Q334 Lord Brooke of Alverthorpe: My final point is on the ethics. We have a new market developing at a very fast pace indeed. In the light of recent experience and questions being raised about markets and ethics, do you feel that the regulatory regime is appropriate or do you see areas in which the regulatory regime could be strengthened?

Mr Fankhauser: Something we said long before the current crisis was that the CDM market in particular is focusing on environmental regulation and environmental integrity. What is lacking is the financial regulation. The FSA does not care all that much about the carbon market just yet. That is my understanding. Maybe there was no need until now. But the gap is not necessarily in environmental regulation. It is there and you could make that more efficient, more predictable and more streamlined in the way that Miles has been talking about. The bigger gap is financial regulation. If we want carbon to be an asset class in the same way as other commodities are assets, then before long we have to get serious about the financial regulation of that asset class. So far, that has been more implicit than explicit and probably more so than ever it is something that needs to be addressed.

Q335 Chairman: We can have faith that the FSA will be on the ball, can we not? I want to go back to environmental regulation. I think what it amounts to is policing. Some EU Member States argue very hard that their targets are too demanding and ought to be relaxed. What is to prevent that Member State from cheating and just letting its industries, its plants, carry on emitting at a level that is incompatible with the EU centrally allocated target? Does the technology exist to pick up what a particular factory is emitting?

Mr Austin: All of the emissions reports that installations submit are independently verified. If there was an entire state wide conspiracy involving the whole of industry and all of the verifiers, it would be possible to do that.

Q336 Chairman: Who are the verifiers?

Mr Austin: In Germany, for instance, the verifiers are TÜV Sud and TÜV North who also verify CDM projects so they are fairly experienced in measuring and verifying emissions or emissions reductions.

Q337 Lord Cameron of Dillington: Are these government organisations?

Mr Austin: No, they are private organisations. Under the CDM, they had to be accredited, there is a formal accreditation process. Under the EU ETS they are state accredited.

Q338 Chairman: Poland, Bulgaria and Romania?

Mr Austin: There are suggestions that in phase three monitoring and reporting verification standards should be standardised across the EU and I do not think that is an unreasonable suggestion.

Q339 Chairman: Until then there is a possibility?

Mr Austin: It would have to be a huge conspiracy to be effective.

Q340 Lord Brooke of Alverthorpe: It is not beyond the bounds of possibility?

Mr Austin: Not 100%.

Q341 Chairman: If you look at where carbon emission is going to increase exponentially over the next 20 or 30 years, it is the BRIC countries. They are also amongst some of the greatest beneficiaries of a reduction in carbon emissions as states; yet they are states which set themselves fairly strongly against being involved in any such arrangements. How would you encourage them? Is there any way of encouraging them to bring them on board?

Mr Austin: Certainly. In China, I cannot remember the name of the official or what his role was but he was somehow involved in the Kyoto negotiations. If you look at the per capita emissions of the United States, you are looking at about 20 tonnes per person per year. The EU average is about 11. In China, it is something like 4.8 and in India it is round about 1.9. The Chinese official made a statement to the effect of, "Bring down your per capita emissions too close to our level and then we will talk." I do not think that is an unreasonable approach. If we start to approach Chinese emission levels, I think we would certainly have the right to discuss China taking on targets. Until that point I do not see any legitimacy in asking them to take on targets.

Q342 Lord Cameron of Dillington: China’s total emissions have now gone over the United States’ total emissions.

Mr Austin: Simply because it is a large country. It would be like treating Europe as a block.

Ms Laurencin: The EU is sensitive to this issue and in the proposal that has been amended by the committee yesterday from the Commission’s text, there is language saying, "We will allow imports from countries which are participating in an international climate change agreement.” There is that form of
encouragement in saying, "We are happy to provide for technology transfer and funds to provide emission reductions in the countries that themselves take on a more dynamic role towards an international agreement on climate change."

Mr Fankhauser: I am not an expert in this area but what I hear is that the developing countries are interested in three things. One is technology; the second is finance and the third is adaptation or recognition that certainly China and India are extremely vulnerable. The Russians have not figured out whether they are vulnerable or not but certainly in China and India there is the recognition that they are vulnerable, so it is in their own self-interest to address the problem. On top of that, there is finance and technology.

Chairman: Thank you very much indeed. It has been very helpful.
THURSDAY 9 OCTOBER 2008

Present

Arran, E  
Cameron of Dillington, L  
Dundee, E  
Palmer, L  
Plumb, L  
Sharp of Guildford, B  
Ullswater, V  
Wallace of Tankerness, L

Summary

1. New Zealand has an interest in the EU ETS because New Zealand currently has draft legislation for a domestic emissions trading scheme, the Climate Change (Emissions Trading and Renewable Energy Preference) Bill, before Parliament.

2. The EU ETS is the world’s largest existing mandatory cap-and-trade scheme. As such, the EU ETS can be regarded as the cornerstone of the international carbon market at present. Proposed changes to the EU ETS have direct relevance to the international market, and by extension to the New Zealand Emissions Trading Scheme (NZ ETS).

3. New Zealand has views on a number of the issues outlined in the House of Lords’s Call for Evidence as follows:

   (i) Both internationally and in our domestic ETS legislation, New Zealand advocates the use of emissions trading with as broad coverage of sectors and gases as is practically possible. The proposed NZ ETS includes all major greenhouse gas sectors and gases including agriculture and forestry. New Zealand would support the EU ETS looking to broader coverage of sectors in phase 3 than is currently proposed. New Zealand looks forward to continuing to exchange information with the UK Government on this matter.

   (ii) New Zealand encourages the EU ETS to continue to be outward looking and encourages liberal use of the Kyoto Protocol’s flexible mechanisms, in order to support the international carbon market and the uptake of least cost abatement options.

   (iii) Linking the EU ETS and NZ ETS is an option New Zealand would like to further explore with the UK Government.

Background

4. The European Commission’s proposals for phase 3 of the EU ETS are of considerable interest to New Zealand due to the fact that the EU ETS is the world’s largest mandatory greenhouse gas trading scheme and in effect is the cornerstone of the international carbon market at present. Decisions made in relation to the EU ETS for phase 3, and in particular decisions as to the type and quantity of international credits that are permitted into the EU ETS for compliance purpose will have a strong bearing on the structure of the international carbon market.

5. New Zealand is interested in future developments within the EU ETS because the New Zealand Government currently has draft legislation for a domestic emissions trading scheme, the Climate Change (Emissions Trading and Renewable Energy Preference) Bill, before Parliament. It is expected that the Bill will pass into legislation later this year. The NZ ETS is fundamentally designed to be consistent with the rules established by the Kyoto Protocol and the draft legislation allows use of the Kyoto Protocol’s flexible mechanisms. As the EU ETS is currently the major source of demand for CERs and in effect drives the price levels of these units, decisions made pertaining to the design of the EU ETS would directly influence participants in the proposed NZ ETS.

6. The proposed NZ ETS is a relatively small market. Therefore, in order to ensure liquidity and alignment of domestic prices with international prices, it is important that the NZ ETS is linked to larger markets. In New Zealand’s view, the Kyoto mechanisms (international trade in Assigned Amount Units (AAUs), the Clean Development Mechanism (CDM) and Joint Implementation (JI)) provide the best and most readily available means to link to a wider market. Consequently, New Zealand has designed a scheme that fits within
the architecture of the Kyoto Protocol. It permits sales and purchases between the New Zealand market and the international market with as few restrictions as possible. This is also necessary to ensure that compliance costs are kept to a minimum.

7. New Zealand is advocating in the UN climate negotiations for improvements in the fungibility and transparency of the market for Kyoto units. However, while there are potentially changes to international rules that could improve the functioning of the market, the reality is that decisions taken by countries in implementing their domestic and regional trading schemes also have a major influence on the functioning of the international market.

8. As more domestic/regional trading schemes begin to emerge, bilateral or multi-party linking arrangements will play an important role in expanding coverage and improving the overall efficiency of emissions trading schemes. The NZ ETS has been designed to keep linking options open. In the face of uncertainty as to the nature of an international climate agreement post-2012, the importance of bilateral linking arrangements may grow in importance.

9. Box 1 outlines some of the major design features of the NZ ETS and key differences with the EU ETS.

<table>
<thead>
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<th>Box 1</th>
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<tbody>
<tr>
<td><strong>MAJOR DESIGN FEATURES OF THE NZ ETS AND KEY DIFFERENCES WITH THE EU ETS</strong></td>
</tr>
<tr>
<td>The NZ ETS will be introduced across the economy through a staged process that will allow gradual adjustment such that, by 2013, all major sectors of the New Zealand economy will be exposed at the margin to the international price of carbon.</td>
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<td>The proposed implementation pathway is:</td>
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<tr>
<td>— 1 January 2008: forestry;</td>
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<td>— 1 January 2010: stationary energy;</td>
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<td>— 1 January 2010: industrial process emissions;</td>
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<td>— 1 January 2011: liquid fossil fuels (mainly transport); and</td>
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<td>— 1 January 2013: agriculture, waste and synthetic gases.</td>
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<tr>
<td>The liquid fossil fuels sector will also have voluntary reporting from 1 January 2009 and mandatory reporting from 1 January 2010. Voluntary reporting will also be enabled for agriculture, waste and synthetic gases from 1 January 2011 and mandatory reporting will be required for those sectors from 1 January 2012.</td>
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<tr>
<td>Free allocations will be given to industries that are likely to face higher costs in respect of their emission than competing firms that do not face comparable emissions obligations and to participants from the agricultural sector over a transition period, and will be phased out by 2030. Free allocation will also be given to owners of pre-1990 forests who are affected by deforestation requirements under the NZ ETS.</td>
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<tr>
<td>The New Zealand Unit (NZU) will be the primary domestic unit of trade. For the first commitment period, NZUs will be fully comparable to and backed by Kyoto units.</td>
</tr>
<tr>
<td>The NZ ETS will allow both sale and purchase from international trading markets. This is essential for a small market like New Zealand, since it will aid liquidity in the market and act as a safety valve on price.</td>
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<tr>
<td>The NZ ETS differs in a number of key respects from the EU ETS. Most notably, the NZ ETS places only limited restrictions on the type and quantity of international units that can be used for compliance purposes and the NZ ETS will include all major greenhouse gases and sectors by 2013.</td>
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New Zealand’s views are discussed below according to the specific issues outlined in the House of Lord’s Call for Evidence.

**LEVEL OF EMISSIONS REDUCTIONS**

10. New Zealand supports effective global action on climate change. This will require emission reduction efforts by the world’s major developed and developing country emitters. New Zealand is actively engaged in the UN climate change negotiations under the Framework Convention on Climate Change and its Kyoto Protocol.
11. Within the Kyoto Protocol negotiations, New Zealand has said that an appropriate aggregate range of emissions reductions for Annex I Parties is 25 to 40% below 1990 levels by 2020 (this corresponds to the lowest greenhouse gas stabilisation band currently assessed by the Intergovernmental Panel on Climate Change), but to be meaningful this needs to be in the context of a global agreement involving at least all of the major emitting economies.

12. It is expected that there will again be a spread of emission reduction commitments for individual countries. In setting further commitments for individual countries, it will be important to know first what rules will apply, to take into account national circumstances, and to consider comparability of effort between countries (this is recognised in the Bali Action Plan).

SCOPE AND OPERATION

13. New Zealand strongly advocates incorporating all greenhouse gases covered by the Kyoto Protocol: this enhances global efforts to reduce greenhouse gas emissions. This is reflected in the design of the NZ ETS. Reasons for the “all sectors all gases” approach reflected in the NZ ETS are two fold:

(i) The first being an argument of economic efficiency: the broader the coverage of an ETS the greater the potential for least cost abatement opportunities to be utilised; and

(ii) There are strong inter-sectoral equity arguments for bringing as many sectors as possible within an ETS.

14. We would therefore support the eventual inclusion of as many gases and sectors as is practically possible within the EU ETS. While there are different methodological and administrative issues associated with including agriculture and forestry sectors, we are confident that the NZ ETS provides a good example as to how these sectors can be included within an ETS, while ensuring high levels of environmental integrity. New Zealand has shared its experience with the UK Government on a number of occasions and looks forward to continuing this exchange of information.

15. Arguments against the inclusion of certain sectors and gases often refer to the “appropriateness” of some sectors for inclusion in a trading mechanism. These arguments often refer to levels of uncertainty with the monitoring and verification of emissions (or removals) and whether or not there are emissions abatement opportunities within those sectors. Certainly for any sector or gas to be included, there has to be a relatively high degree of confidence that emissions and removals can be estimated and reported accurately (at least at an aggregate level). New Zealand is undertaking extensive and ongoing work in this area.

16. We note that under the Commission’s current proposal, the Land Use, Land Use Change and Forestry (LULUCF) sectors still remain excluded from the EU ETS. However, to respond to climate change, the world needs to make full use of available mitigation potential. As noted by the IPCC, forestry offers significant mitigation potential and, in New Zealand’s opinion, can be included in emissions trading schemes whilst maintaining environmental integrity.

17. The concerns raised by the Commission regarding permanence and leakage risks, additional monitoring requirements, and a concern that the simplicity, transparency and predictability of the EU ETS would be considerably reduced due to an uncertain and potentially large supply of units entering the market from the LULUCF sector, can be overcome. The experience and insights garnered during the development of the NZ ETS provides important lessons in doing this.

18. We also note the Commission’s proposal to exclude road transport and shipping from the EU ETS in phase 3. In New Zealand’s view, these sectors can readily be brought into an ETS using an upstream point of obligation. Ultimately the choice of whether or not to exclude transport fuels depends on what other policy, including taxes, may be in place in different jurisdictions and how effective they are. We are unable to comment on this particular issue.

ALLOCATION AND AUCTIONING

19. New Zealand notes the difficulty of designing allocation plans to address issues of international competitiveness and compensation for stranded assets, while ensuring price signals are fully devolved to those responsible for emissions over time. The approach taken in the NZ ETS is to give no free allocation to sectors that are able to pass on the costs. For these reasons, under the proposed NZ ETS legislation, no free allocation of units is given to electricity generators or to the transport fuels sectors. The Commission’s current proposals on allocation appear to be aligned with the allocation design elements of the NZ ETS therefore New Zealand is generally supportive of the proposals as they stand.
INTERNATIONAL DIMENSION

20. The European Commission’s proposals for phase 3 of the EU ETS are of considerable interest to New Zealand due to the fact that the EU ETS is the world’s largest mandatory greenhouse gas trading scheme and in effect is the cornerstone of the international carbon market at present. Decisions made in relation to the EU ETS for phase 3 and in particular, decisions as to the type and quantity of international credits that are permitted into the EU ETS for compliance purpose will have a strong bearing on the structure of the international carbon market.

21. New Zealand welcomes the proposal to continue to allow CDM credits to be used in phase 3 of the EU ETS for compliance purposes. However New Zealand is concerned that the proposal to limit the volume of these credits in phase 3 to phase 2 levels has created some uncertainty in the international carbon market as a result. While all countries need to make decisions as to the relative balance between domestic emission reduction efforts and units purchased from the international market, the EU ETS, as the major source of demand for CDM credits, has a significant impact on future investment decisions in such projects in developing countries. A more liberal approach to the use of international credits within the EU ETS would continue to support the international carbon market and the transfer of technology to developing countries.

22. New Zealand welcomes the proposal to enable linking with other emissions trading schemes. New Zealand notes in this context that the Kyoto Protocol already provides Parties with a mechanism for linking, that is, trade in AAUs and project-based mechanisms (CDM and JI). Bilateral linking arrangements between countries (ie mutual recognition of allowances) are a further means to expand the scope and efficiency of domestic/regional trading schemes.

23. Linking to the EU ETS is an option that New Zealand may wish to consider in future years. The NZ ETS differs in a number of key respects from the EU ETS. Most notably, the proposed NZ ETS applies only limited restrictions on the type and quantity of international units that can be used for compliance purposes. The proposed NZ ETS will also include all major greenhouse gases and sectors in the economy by 2013, including transport fuels, forestry and agriculture (see Box 1). Such design differences should not necessarily preclude linking opportunities, the key requirement generally being comparable levels of ambition in respective schemes. New Zealand officials have met with representatives of the European Commission and EU member states (including the UK) on a number of occasions to discuss prospects for bilateral linking arrangements between the NZ ETS and the EU ETS and wish to continue this dialogue in the future.

26 June 2008

Examination of Witnesses

Witnesses: Mr David Brash, General Manager, Emissions Trading Group, Ministry for the Environment, Mr John Scott, Senior Analyst, The Treasury, Mr Stuart Dymond, Senior Policy Officer (Climate Change), Environment Division, Ministry of Foreign Affairs and Trade; and Ms Louise Gault, Policy Officer (UK, Ireland and Italy), Europe Division, Ministry of Foreign Affairs and Trade, New Zealand, examined. (Evidence given via video link)

Q343 Chairman: Hello. Can I just take a minute to explain? We are towards the end of our inquiry into the EU’s Emissions Trading Scheme. We are particularly interested in the work you have been doing in New Zealand and we are very grateful for the fact that you have found time so late in the evening to enlighten us. Because of the lateness of the evening we will try and keep it short. We have a shorthand writer here taking a note and, of course, because it is a formal evidence session you will receive a transcript of the proceedings so you can go through it and make any corrections of errors that have taken place, but for the shorthand writer’s benefit could you introduce yourselves please?

Ms Gault: My name is Louisa Gault. I am the UK Desk Officer with the Ministry of Foreign Affairs and Trade.

Mr Brash: I am Dave Brash. I lead the Emissions Trading Group that has been designing the Emissions Trading Scheme in New Zealand.

Mr Scott: My name is John Scott. I work with the Treasury here in New Zealand and I have been heavily involved in a lot of the policy issues around emissions trading.

Mr Dymond: Good evening. I am Stuart Dymond. I am with the Ministry of Foreign Affairs and Trade as part of the climate change team that works in the international negotiations.

Q344 Chairman: Thank you very much indeed. How we normally handle these sessions is that we have an opportunity for those giving evidence to make any general statements at the beginning and then go on to a period of question and answer. Do you want to make any initial statement? Would that be helpful?

Mr Brash: Yes, I will make an initial statement. It will be short. I just want to make a few introductory remarks. You have got our submission and I am very keen to get on to the opportunity to have the dialogue...
part of it, but it is an opportunity for us to update you on the events that have happened in New Zealand since we made the submission. Of particular import is that our emissions trading legislation is now fully through its passage in our Parliament and is now law. While there were changes in the design relatively late in the legislative process—you will be aware that we have a mixed member proportional government system and there were a number of changes made at the last minute—the fundamentals remain intact. In particular it is “all sectors all gases” and internationally linked. It is an absolute as opposed to an intensity-based scheme and it seeks to replicate the settings that are in the Kyoto Protocol in our domestic policy. Our underpinning philosophy is to seek to work within the international frameworks and to enhance these frameworks. We are seeking to minimise the costs of meeting our climate change objectives wherever possible. By minimising these costs we believe we give ourselves the best chance of achieving our environmental goals. These principles apply to both domestic and international levels. There is one more generic point I would like to make prior to briefly summarising our submission. That is that the circumstances of different countries differ for a whole range of perfectly valid reasons, and as such the responses of those different countries which have the challenge of reducing emissions should not be expected to be exactly the same. Our domestic response is quite appropriately tailored to the New Zealand situation, including our unique emissions profile, and we can go into that later, but in particular agriculture and forestry are unique. In some areas of climate change in emissions trading policy we may lead; in many others we draw on others such as yourselves in the UK and in the EU. We are confident our initiatives are appropriate to our given circumstances. The key points from our submission are that both internationally and in our domestic ETS legislation New Zealand advocates the use of emissions trading with as broad a coverage of sectors and gases as is practically possible; secondly, New Zealand encourages the EU ETS to continue to be outward-looking and encourages the liberal use of the Kyoto Protocol flexibility mechanisms in order to support the international carbon market in the uptake of the least cost abatement options. Finally, looking to the EU ETS, we are interested in linking two schemes together. This is an option New Zealand would very much like to further explore with the UK Government. We are very happy to take further questions.

Q345 Chairman: Thank you very much indeed. That is a very helpful initial statement. What is particularly interesting to us about your approach is the comprehensive nature of your coverage, covering agriculture, forestry, shipping and road transport, because the clear weight of evidence that we have had from European and particularly UK witnesses and our own Government is that there is a hesitancy to go into some of those areas, particularly agriculture and forestry, on the basis that these are areas that are not ripe yet for inclusion in any emissions trading scheme. I think partly because of the difficulty of verification and monitoring. Have those issues come up in New Zealand and what have been the critical arguments that have convinced you of the practicality of going particularly into those four areas, and do you see the possible extension of your scheme into the EU to cover those areas of activity?

Mr Brash: I will get John to answer that question, but you are right: those issues that you have put on the table are right at the centre of the debate here as well, but I will ask John to respond to that.

Mr Scott: They are pertinent questions and, as Dave mentioned, they are certainly issues that we have discussed at length here. Just to draw out what Dave said in the initial comments, our underpinning philosophy is to reflect in the domestic policy settings what the Kyoto Protocol sends us and we consider that to be an economic signal on the country. The reality is that, as both forestry and agriculture are included in the Kyoto Protocol, for us to exclude those sectors would mean that we are excluding just about half of our greenhouse gases in the case of agriculture and just about 20% in the case of forestry, possibly more, depending on how you measure it. Forestry has a post-1989 and a pre-1990 element to it, and if you were to take out those two from our ETS you would be looking at perhaps 70% of our emissions not being in there. When you think about that you say, “Okay, why do we have an ETS?” and you start questioning the way you are going, so the choice that we had when we were designing our domestic policy response was to say, “How do we best manage the Kyoto liability and its successors in terms of the framework?” We could have put in regulatory controls to try and reduce greenhouse gases or we could have put in a price-based mechanism. We chose the latter because we thought that, albeit there are some quite difficult measurement issues, we are still better to use a price-based mechanism because they are so powerful and they are so effective and so efficient as opposed to regulatory measures. It is not that we argue that you can measure these things perfectly—you cannot, but you can measure them, in our view, to a good enough extent so that it is better than the next best policy option. I will talk if you wish on what we are doing in terms of forestry and agriculture, which are perhaps two of the hardest areas. In terms of forestry, there are the two angles of forestry. There is post-1989, which is the growth on land that was not in forest on 1 January 1990, and I will point out that our land use is quite dynamic. A hundred and fifty years ago
perhaps just about all of New Zealand was in forest. Now a relatively small but still significant proportion is in forestry, and that proportion changes with a whole range of things, particularly economic circumstance. What we are primarily measuring is the volume of land that is in forest and new forest, the trees that are on there, the species, and the age of that forest. We have pretty good measures for what the growth rates are in different regions of the country for different species of trees, so ultimately what we need to measure is the land area that is in that type of forest. For pre-1990, again, we are measuring changes in area fundamentally, as we know a reasonable amount about the carbon stock in different types of forest. Our approach is slightly conservative, so we are trying not to expose the Government, the Crown, to particular fiscal risks. My colleagues have reminded me that I am talking about plantation forestry here, which is major, but there is also quite a large area of New Zealand in native bush. From the forestry side it is really the change in land area plus also relatively average growth rates that you have to measure, and that is giving a pretty powerful economic signal and is certainly driving behaviour now. In terms of agriculture, we are working through the issues, it is fair to say. We have not finalised our design fully and agriculture is not coming into our scheme until 2013. The most likely area where we will start is to have the obligation at processor level, largely if not entirely, and what that means is a dairy processor, perhaps a meat works, something like that, and, while we cannot perfectly give an economic signal, we believe we can give a good enough economic signal so that you are measuring at least a decent part of what is driving your emissions. That is where we think we are likely to go. In terms of your final question: are there some lessons to be learned from what we are doing for the UK or for Europe, I am sure there are and we would be very happy to share them.

Q346 Chairman: Could I just clarify one thing? When you are talking about agriculture, what is your average farm size?
Mr Scott: It varies. For a dairy farm, where a lot of our emissions come from, it is probably something similar to 100 hectares. Do you use hectares or acres?

Q347 Chairman: We do not mind.
Mr Scott: It is 250-300 acres perhaps for a dairy farm. For a sheep farm it is certainly over 1,000 acres—1,000, 2,000, 3,000 acres. There is a reasonably small number of very extensive sheep farms that might be 100,000 acres-plus, but probably the bulk of them are 2,000-3,000 perhaps. On the dairy farms, we already have a computer programme for just about every dairy farm in the country, which is a nutrient budgeting computer programme and that produces a lot of information that you would want at a farm level about greenhouse gas output, so we have quite sophisticated systems at a dairy farming level. At the sheep and beef level there are less sophisticated systems for understanding what is going on there.

Q348 Lord Cameron of Dillington: I have two questions, one on forestry and one on agriculture. On forestry, if you fell your woodland and replant it, is that a carbon emission because presumably you are still absorbing the carbon in the new trees? The second question on agriculture is, do you have a de minimis? If a farm is only ten acres, which is the average size farm in quite a lot of European countries, for instance, are they included in the scheme? Where do the smaller farms stand?
Mr Scott: We will take your second one first if that is all right. We are not sure yet, to be honest, in that if you ended up with a farm-level point of obligation, ie, each individual farmer has to determine their carbon output and account for it, you almost certainly would have a de minimis. I do not know what the size would be but you would need to have one so that you were not picking up someone with one cow or one sheep out the back. In terms of forestry, there are different rules that the Kyoto Protocol sets up. For the pre-1990 forests if you fell the timber and then replant there is no cost to the country, so we replicate that in our domestic policy systems. For the post-1989, if you fell and replant you must pay for some loss of carbon under the Kyoto rules when you fell the trees and then you count the carbon again or you are eligible for credits when they regrow, so again we replicate those in our domestic policy systems.
Mr Brash: Can I just add to that in terms of agriculture, and this is repeating something John said earlier but I just wanted to emphasise it? Agriculture does not come in until 2013. We have a lot of work to do to work out the detail of how that is going to work in terms of monitoring and how the system will work, so, even where the point of obligation is going to be, whether it is at the farm level or the processor level, from an administrative point of view, if it is at the processor level we are talking about how many companies in New Zealand?
Mr Scott: Just over 100.
Mr Brash: We are talking about just over 100 companies. If we are talking about at a farm level we are talking about 30,000, and so we have a major issue to work through there—compliance costs versus whether you put the incentive at the farm level.

Q349 Lord Plumb: You spoke when answering the Chairman’s question on the size of farm but you did not really say anything about the size of unit. With the size of your dairy herds, some of them are 3,000, there must be an emission of a lot of gas from some of those herds. Are you considering the possibility of
a limit there, and to what extent are you discussing all these matters with my good friends in Federated Farmers?

Mr Scott: We are not considering a regulatory limit on farm size, if that is what you mean by the question, in that we would prefer to use the economic instrument of the ETS—along with other economic drivers—to make the decisions about how big farms should be. We certainly are discussing the issue with your good friends (and ours) at Federated Farmers. There is some quite active engagement going on at a working level and I am personally involved in that and there are pretty good working relationships.

Q350 Lord Cameron of Dillington: You seem to have a very liberal approach to external credits and I was just wondering if you could give us an indication of the types of restrictions that you have done away with that the EU ETS still retains.

Mr Scott: We do not, for a start, have any quantitative restrictions. The EU has a limit, I understand, on how many units from outside of the EU can be used in terms of their compliance. The most important one that we have removed is that quantitative restriction. On the types of unit, while we have some controls saying there are certain types of unit that are not permitted to be used for compliance purposes, there are far fewer than in the EU, so we have a slightly broader number of CERs that are allowed in and we are also allowing in some but not all AAUs. That is the brief description.

Q351 Lord Cameron of Dillington: There is an accusation here that your industries will focus on getting the credits from abroad and you will have very little effect on your home-grown industry, maybe even very little effect in the world, because quite a lot of these external credits, eg, Russia, post-Kyoto are free allowances and have very little meaning. How are you auditing what you are trading in your external credits?

Mr Scott: I will say a couple of things. First, our ETS absolutely will have an effect domestically. Our estimate is that it will reduce our Kyoto deficit by slightly less than half through domestic action, so that is putting the price of carbon down there. In terms of the AAU, that has been a topic that has been discussed at length in New Zealand. The minister made an announcement today that we would be allowing in for compliance purposes greened AAUs in terms of those eastern European ones, but not those that have not gone through an appropriately greening process. Part of the discussion around an AAU is the very point you are raising, its environmental integrity. We have conceptualised an AAU as a right to emit, so even though it has gone into the Kyoto system, and some people are not terribly comfortable with the way it has gone into the Kyoto system, it is in that Kyoto bubble, and, assuming that the Kyoto Protocol stays in its present form and continues beyond 2012 or a variant that is close thereto, you can be sure that that AAU will actually be used somewhere for an emission. Someone will use it somewhere, so we would argue that an AAU has environmental integrity in there. It is a bit like a sunk cost for an economist. Once it is in the system it is there, so we would argue that using an AAU has environmental integrity and that is why we have ended up where we are.

Q352 Lord Cameron of Dillington: You seem to be arguing that kick-starting the international market is perhaps more important than the integrity of it. In other words, you want to bring a liberal approach to international credits really just to get the international market going and flourishing, and we are more enthusiastic about concentrating on the integrity of it. I was just wondering whether you wanted to comment on that line of argument.

Mr Scott: Getting the international trading going is important; there is no doubt about that, but we also think the integrity of that market is critical and we have a formalised objective for our ETS which talks about meeting our international obligations at least cost, and that was the point made by Dave in the introductory remarks, but it also has a very explicit statement about environmental integrity, and we do consider, and it has been debated at some length in New Zealand, that the use of AAUs has a lot of environmental integrity in that those AAUs will be used if you believe in the Kyoto Protocol, and they are in the system. It is an emission that will occur at some point. In many ways an AAU has more environmental integrity than some of the CER credits. We also think the CDM is a very valuable tool and, do not get me wrong, we are accepting many CER types of credit, but an AAU is in the system and someone will use it, so if we do not use it someone else will; it is going to happen.

Q353 Baroness Sharp of Guildford: Can you tell us what sorts of features you have built into the New Zealand system to facilitate linkage with other emissions trading systems, and in particular what features will you be looking for in other regimes in identifying whether there is potential for linkage?

Mr Brash: In developing the infrastructure for our Emissions Trading Scheme it has been all-important to ensure that it is suitable for future linking. We have put a lot of emphasis on trying to look at flexibility going forward. The generic features such as not having a price cap, having a price at the margin created through the ETS and building appropriate compliance regimes, are all-important to ensuring that the New Zealand Emissions
Trading Scheme is able to link effectively with other schemes in the future. We can link via the Kyoto mechanisms, and John has talked about the different types of unit that we are going to provide for, but we are also able, through the regulation framework provided in the legislation, to specifically provide for direct bilateral linking with other schemes, so to accept other units. The key issues are the types of unit used in respect of schemes and the rules for import and export of units from and to the respective schemes. We very much believe they need to be standardised or very near standardised for full linking to occur. Having said that, there is a range of different types of linking that could occur, as I have mentioned, from the Kyoto type of linking through to different types at a bilateral level. One specific provision, the provision that stops first commitment period AAUs, that is up to 2012, from being used for compliance purposes post-CP1 will assist with ensuring that our ETS is suitable for linking to other schemes post CP1 should these circumstances arise. That is, if certain AAUs are not acceptable post-2012, then effectively we have isolated those in our Emissions Trading Scheme. The other features that are maybe less important but are also nice to align are the monitoring and verification and reporting approaches. Both of these can affect competitiveness, but if substantially different, could also affect opportunities to link; I think it is a matter of degree.

Q354 Baroness Sharp of Guildford: I wonder whether you could give us some examples of how far, in terms of these bilateral linkages, you see those working in preference to the multilateral schemes, how they link into the multilateral schemes and so forth.

Mr Brash: Our first best preference is for multilateral; there is no doubt about that. That is what we are promoting internationally and that is what we would like to see. Having said that, we are obviously working very closely with our Australian cousins in terms of the design of their scheme, but both Australia and New Zealand, at least to date, are of the view that we need to get our own schemes up and running that suit our own domestic circumstances, which I must say are quite different trans-Tasman, but with a long-term view, ie, 2012 or beyond, linking from that point on if there is not a multilateral arrangement that comes into force at that point. There have also been some very preliminary informal discussions with the EU and Brussels around what may be the barriers to or opportunities for linking as well, and of course there are other schemes, like the US scheme, which are some distance away but we keep close contact with other countries as well, particularly through the ICAP initiative.

Q355 Baroness Sharp of Guildford: There is quite a lot of scepticism here in the UK about the CDM mechanism. Is this also true in New Zealand? Do you see the CDMs and the JIs as playing a part in this?

Mr Scott: We are accepting units from both JI and CDM, but there is also a bit of scepticism here, to be honest, and that has also been a topic of some debate: should we include them or should we not? Our view is to include them but to work really hard to try and improve that mechanism, for example, it is important that they are brought on board in the right way in the climate change agreements. CDM is useful. It is not perfect, we make no bones about that, so we are accepting them but we do think it needs improving and we are putting in quite a lot of work into that area.

Q356 Earl of Dundee: Against linkage between the New Zealand Emissions Trading Scheme and that of the European Union, what do you consider to be the main obstacles just now?

Mr Brash: As I said before, we would welcome linking with the EU or other emissions trading schemes and we are very keen to explore those possibilities. Having said that, and we have touched on this already, between the EU and the New Zealand schemes you will see that there are some quite different philosophies coming through and there is a range of differences between the ETS’s that act as a barrier to linking at this stage in our view. In particular we are seeking to meet our international obligations for as little cost as possible, at least in the long term, whilst still maintaining environmental integrity. This theme runs through many of our actions on climate change and it is important that the world reduces risks associated with increasing global emissions, but the higher the cost of doing so the less likely, we believe, we are to achieve those environmental goals. The European scheme is more directly focused, and I think one of your Lordships spoke about this before, on domestic emissions within Europe. This difference in intent would make direct linking with the New Zealand scheme difficult in the medium term. There are other differences around, which again you have touched on, things like agriculture, which we think can be more easily overcome, but the difference in philosophies we believe is perhaps understandable. From a New Zealand perspective we will be reluctant to expose our industries to a higher price of carbon in a marketplace where few of our competitors face the price of carbon, particularly in this hemisphere. In the case of agriculture in particular we are competing against subsidised production systems. We are not part of any common market. Over 70% of our emissions are associated with products that are likely to face higher costs in respect of our
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competitiveness of particular types of industries
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answer is very clearly yes, that if the international
Mr Scott: I will answer the last part first, and the
market, and in that how do you make the
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treatment that you have already indicated you wish
some fairness in the marketplace; that is obvious.
understand that, and I think we all share a view that
to be as flexible as you possibly can, and I
quite clearly that you intend in your methodology
Lord Plumb: You have already indicated
Q357 Earl of Dundee: On these different
philosophies, in phase 3 how much prospect do you
hold out for coming together with the EU?
Mr Scott: At the moment, as we understand the
phase 3 proposals, the key difference that acts as a
barrier in the short run is the difference in the export
and import rules around units, and our
understanding of phase 3 proposals is that those
rules remain in place in Europe. You basically need
to get towards a standardised price; that is where it
takes you, and if we were to link with the European
scheme, given that our scheme is very small in
comparison, and presumably we would be asked to
take on the European rules for importing units,
what it would mean is that the price in the New
Zealand ETS would increase quite dramatically, the
cost on the New Zealand economy would increase
quite dramatically, and from our viewpoint it would
not add a great deal at all in terms of environmental
value. That is in a nutshell why we have designed
our scheme in the way we have and, as Dave
mentioned, for agriculture it is basically half of our
emissions. Not only are we the only country in the
world to place the price of carbon on agriculture;
we are also often competing with subsidised
produce. Yes, we are going to meet our Kyoto
obligations, absolutely, but we are going to be
reluctant to put a higher price of carbon into our
economy than we need to. That is in a sense the
philosophy that is sitting behind the design of our
trading scheme.

Q358 Lord Plumb: You have already indicated
quite clearly that you intend in your methodology
to be as flexible as you possibly can, and I
understand that, and I think we all share a view that
as far as competition is concerned there has to be
some fairness in the marketplace; that is obvious.
What sectors do you anticipate will qualify for the
treatment that you have already indicated you wish
to apply, that is, the distribution of free emission
permits to industries which are exposed to that
competition where there might be unfairness in the
market, and in that how do you make the
assessment and would this aspect of the ETS change
in the event of an international agreement?
Mr Scott: I will answer the last part first, and the
answer is very clearly yes, that if the international
agreement were to change so as to affect the relative
competitiveness of particular types of industries
then we would reflect that in our domestic policy
settings; there is no doubt about that. In terms of
which industries we are providing free allocation
for, in a general sense we are providing it for
agriculture for our trade exposed industry, and I will
talk a little bit about that, a limited amount for our
fishing industry for a 3 year period and also for our
pre-1990 forests where we are changing the
economics of changing land use. The last two are
far more of an equity-based argument; that is, a
stranded asset type argument. The first two,
industry and agriculture, are more in a trade
exposure or competitiveness-at-risk type argument.
In terms of agriculture, we will be looking to
provide free allocation to all sectors there. There
might be some de minimis applying but it will be
pretty much to all sectors. In terms of industry, we
have not made the decisions on exactly which
industries will be provided with free allocation, but
the criteria that we will be looking at are to ensure
that the industry is genuinely trade exposed and,
secondly, that the exposure to the carbon costs is
significant. It could be a measure of the ETS-related
costs relative to either their overall costs or their
profit or their revenue, or a measure like that. We
will (most likely) be using those as the two criteria
largely to determine which industries receive some
free allocation.

Q359 Lord Plumb: It seems a strange question for
me to ask, but what do you include in agriculture?
Are you talking about producer level as well as
slaughterhouse, et cetera, or are you talking of one
aspect of it?
Mr Scott: When I was mentioning agriculture, we
are talking about the producer level which is nitrous
oxide and methane. In terms of the slaughterhouses
and the dairy processing factories, they are
potentially going to be included in the industrial
side, and that would include some free allocation
that might cover, for instance, their exposure to the
electricity price and the use of gas. We are not giving
any free allocation to our electricity generators; we
consider that they will largely pass the price
through, and nothing to our transport fuel
operators, which I should have mentioned.

Q360 Lord Plumb: Is there any development on the
use of methane for heating in some of the rural
areas?
Mr Scott: Not terribly much. There is some capture
of methane and turning it into electricity. You never
know; within ETS the price of carbon might change
those economics sufficiently but at the moment there
is not a great deal of that. I should also mention—
one of my colleagues has just pointed it out—that
our free allocation under the legislation is due to be
phased out by 2030, so we have a phase-out line
where we have a flat amount of free allocation up
to 2018 and then a phase-out down to 2030, and if the legislation is not reviewed in that time, and there are some reviews built in, there will be zero free allocation by 2030.

Q361 Lord Palmer: Although you have touched several times on my question, could you try to explain why you intend to award free emission permits to the agricultural sector, and did I hear you say that the transition period would only last until 2013? Can you try to explain how in fact emissions permits will actually work?

Mr Scott: It is 2030 as opposed to 2013, just to clarify that particular point. The permits will be allocated, so basically the agricultural sector will face a difference between what it has been allocated in terms of free emission permits and the total emissions for that sector when they come into the ETS, and that might be roughly 15 to 20% of their overall emissions, that is the estimate, so the permits, when they are in play, will largely but not entirely shield the agricultural sector from that cost of carbon. The free allowance will assist in maintaining the sector’s profitability and it is designed to allow a transition to a lower carbon agricultural sector. As you can imagine, there is a very significant effort going on in terms of research and development to try and reduce methane and nitrous oxide outputs from our farms right now. Quite a long transition period is designed to allow that research to bear fruit, if it is going to bear fruit; we do not know yet but we are certainly hopeful, but the reason we are providing a reasonably generous level of free allocation is that it is a major export earner and it is genuinely trade exposed, so it is about that transition period. Given that we are exposing that part of our economy to the price of carbon, a relatively generous free allocation is almost certainly the right thing to do for a period.

Q362 Viscount Ullswater: In your submission you note that global agreement on emissions reductions can only be meaningful if it involves at least all of the major emitting economies. What do you currently regard as the prospects for bringing those major emitting economies on board, and I suppose I am talking about Russia, India and China, and are there any design features of the EU ETS and its establishment which could help to entice them to join up?

Mr Dymond: You will be familiar with the international negotiations as they are at the moment. We have a negotiating track underneath the Kyoto Protocol which is looking at further commitments for all developed country parties to that Protocol and we have another negotiating track underneath the UN Framework Convention on Climate Change and both of those tracks are working together towards Copenhagen next year. In response to the question, we already have some of the major emitting economies committed to action through the Kyoto Protocol and negotiations are under way on further commitments for the second commitment period. The Bali Action Plan, which is the Convention negotiating track, envisages comparable action by developed countries, which picks up developed countries that are within the Kyoto Protocol as well as the United States. It also has nationally appropriate mitigation action by developing countries, which includes the major developing country economies, so if you look across both of the negotiating tracks as we have them in the UN negotiations, we have the framework there to deliver action by the major emitting economies once we come to a conclusion around a comprehensive agreement. There are some key issues that we need to work on further in the negotiations before we can judge how effective an agreement might be and the kinds of issues which we will be looking at through those negotiations will be. For example, what our common shared vision for the future will be, including a long-term global emissions reduction goal, to guide the international community in its emission reduction efforts. What the commitments and actions by developed and developing countries will look like and how ambitious they will be. There is quite a lot of water to flow under the bridge in that part of the negotiations. There is a new concept around measurable, reportable and verifiable commitments and actions and how that will translate into practice. And also what technology and financing will be required and will be provided to support action in those countries that need support.

In essence, we have the building blocks there in the international negotiations and we have some way to go in those negotiations before we see how we can bring that together in a comprehensive agreement. In terms of your question about the EU ETS, with the shape of the UN negotiations and what will happen in the future “up in the air”, our comment would be that if the EU ETS can retain some flexibility in its design to reflect what agreement comes out of the UN process, that would be helpful. For example, there have been many proposals made, for example, that developing countries could contribution to emissions reductions through the carbon market via no-lose approaches. There are other options that have been put forward on the table as well. If proposals such as those were to find agreement in the UN negotiations it would be helpful if the EU ETS could find a way to accommodate those in the future.

Q363 Earl of Arran: As a member of the International Carbon Action Partnership, whose remit is to have sensible, meaningful conversations with other countries who have already established carbon markets or who wish to have them, how useful has this Partnership been so far and to what
extent do you think it can help in the future as regards moving towards a global carbon market?
Mr Brash: It is early days, is the first thing to say, with the Partnership. However, we are very supportive of it and we think it is a very valuable forum for engaging with other countries and regions that are developing emissions trading schemes. In particular, we see ICAP as a useful forum to share expertise and practical experience, and that is already happening. Going forward in the future, ICAP we think could play a very important role in promoting common understanding around important issues in the linking of emissions trading schemes, in reducing misunderstandings about carbon markets and in trying to develop a common language so that we can share experiences in things like we have talked about today in terms of New Zealand around, say, forestry, and with other countries around some of the industrial stuff. This could both reduce impediments to the growth of the global carbon market and facilitate a more efficient market which, as you have heard, is very important to New Zealand. In addition to access to ICAP via observer status in the Partnership, it may promote a wider interest in the use of market mechanisms by countries that are considering introducing schemes, and a number of countries have shown an interest recently in joining ICAP and we have supported that.

Q364 Earl of Arran: So it is a talking shop with some guts to it?
Mr Brash: We have found that so far but I think it could develop further in the directions that I have indicated.

Q365 Chairman: Before we sign off, is there anything that you think we ought to be aware of or that we have missed and that it would be helpful and useful for us to know?
Mr Scott: Not really. Can we just confer for a moment?

Q366 Chairman: Yes.
Mr Brash: We are very satisfied. Thank you for the opportunity.

Q367 Lord Cameron of Dillington: Can I ask one more question about your agriculture? We were hearing yesterday that your allocation of credits or allowances to land in units has caused a certain amount of friction between various different sectors of your agricultural community. (a) Is that correct, and (b) if it is correct, would you have done it differently if you were starting again?
Mr Scott: In truth we probably have not got to that point. I am not sure who was talking to you yesterday but the honest answer I would give to that is no, in that, while in the legislation we have set out an overall amount of allocation to provide to the agricultural sector, we have not by any means determined how we will distribute that allocation. One could imagine certainly that there will be some friction between different sectors but we are not at that point. I suppose, looking ahead, in three, four or five years’ time, once we are at that point and have distributed allowances, almost certainly we will learn from these things and I think the European experience is that the first time you set up an ETS these are complex instruments, you do not get it 100% right, and almost certainly we will make some errors across a range of areas. Having said this, we are confident we have got the major design principles right for a New Zealand situation and we have a very strong review mechanism built into our ETS for precisely the reasons that you are inferring.
Chairman: Finally, can I thank you very much for giving up your evening to talk to us. We have very good relations with your High Commission over here. In a number of our inquiries we have had very valuable evidence from New Zealand, particularly on our report on the reform of the EU wine regime. Again, thank you very much indeed.
Present: Arran, E of Brooke of Alverthorpe, L
Brookeborough, V
Cameron of Dillington, L
Dundee, E of
Jones of Whitchurch, B
Palmer, L
Plumb, L
Sharp of Guildford, B
Ullswater, V (Chairman)
Wallace of Tankerness, L

Examination of Witness

Witness: Mr Damien Meadows, Head of Unit C.2, “Market Based Instruments including Greenhouse Gas Emission Trading”, Directorate of Climate Change and Air, Directorate-General Environment, European Commission, examined.

Q368 Chairman: Good morning. I expect you are aware of what this committee is doing. We are looking into phase three, of the EU ETS. We are very grateful that you should come and give evidence because I know that the whole debate is beginning to gel, if I might use that expression, and we would like to ask you some questions, of which I think we have given you notice. I should indicate that this is a formal evidence-taking session. A note of it will be recorded and you will be offered the opportunity of looking at the draft and making any corrections, should there be any. I should also perhaps indicate that this is being webcast. Just to advise you, that that is what is happening. Good morning to you. I do not know whether you would like to make an opening statement to us on where you see the negotiations going, but otherwise we could certainly go straight into the formal question and answer session.

Mr Meadows: Thank you my Lord Chairman. I think, in terms of words of introduction, it would just be to highlight the centrality of the EU Emissions Trading System as Europe’s main instrument to tackle climate change. It covers almost half of the carbon dioxide emissions and, in terms of forming a global response, it is the most likely way that certainly the United States is going to be tackling climate change and, through a linked system of carbon markets, we have a prospect of limiting climate change to two degrees. It certainly is busy times at the moment. There was a European Parliament Lead Committee vote last week, the European Council is expected to be discussing the EU Emissions Trading System today and tomorrow and then we have the Environment Council meeting on Monday and Tuesday of next week, all with the expectation that this legislation should be agreed by December of this year under the French Presidency. I am working as the Deputy Head of Unit principally on the EU Emissions Trading System, but the effort-sharing decision, the remaining targets for Member States, is also something I am familiar with as well as the linkages with particularly the Carbon Capture and Storage Directive. So on any of these I would be very happy to answer questions.

Q369 Chairman: Before we go on to one or two of the details, could you inform us of the progress of the negotiations? Are there any particular sticking points which Member States are finding awkward to deal with and do you see that solutions are in prospect?

Mr Meadows: There are. To start, there seems to be agreement on the basic architecture that there should be a common cap across the EU, that there should be a year-on-year trend path that is predictable and stable, on wanting harmonisation, on actually deciding the rules for how auctioning takes place, on monitoring, on linking to other trading systems and also on criteria for assessing so-called carbon leakage. There is a lot of similarity between the Council position and the Parliament position. Coming to the differences, probably the biggest ones in the European Parliament are that they support the mandatory use of auction revenues to address climate change, in particular to address deforestation, and this is to be used in countries that ratify the post-Kyoto agreement, we expect, in Copenhagen. They are also, across the EU ETS and the effort-sharing decision, supporting only high quality CDM—i.e. Clean Development Mechanism—credits. They favour free allocation for industrial waste gases, for district heating and combined heat and power and there were some in the European Parliament, although this is a bone of contention—this was not an amendment adopted last week—who wanted 100% free allocation for all industries. So that is the central part of the European Parliament’s position which differs from Council, and the Council also has a range of internal issues they are still discussing. I think the biggest one is levels of free allocation. Levels of free allocation to industry is a particular concern of some Member States. Free allocation to the power sector is something which a smaller number of Member States want to continue, but a number of Member States, including the UK, want full auctioning from 2013. A third area is the aviation sector, which was decided to be included in emissions trading in July this year, and the European Parliament adopted amendments on the
level of auctioning for aviation, where I think there are differing views within Council. The levels and quality of the clean development mechanism, CDM credits, is the second area I would highlight. Financing for carbon capture and storage is an area where the European Parliament adopted an amendment, and there are very differing views within Council on how this should be done. The final two I would mention are the transition from a 20% reduction target without an international agreement to the 30% reduction target we know is necessary to stabilise climate change and how this should take place. The final issue in Council is the element of redistribution between Member States’ equity and solidarity. In a nutshell, those are the key areas which need to be resolved before December.

**Chairman:** It does not sound, then, as if it is quite set up. I will not ask you to answer that. Perhaps we could deal with some of those particular problems by way of questions. Particularly let us start with carbon leakage.

**Q370 Baroness Sharp of Guildford:** We have sight of the non-paper that the Commission issued for establishing which sectors of industry are susceptible to carbon leakage. Could you outline for us what you see as the main features of the methodology in that paper? We have heard that only specific sub-sectors of the industry are at risk. Would your methodology allow you to pinpoint these particular sub-sectors and by when do you anticipate that your analysis will be completed?

**Mr Meadows:** Thank you. We found this paper of the Commission’s services to be very useful in taking forward the debate. Because a number of Member States were saying that this is too vague, we want to know exactly now which industry will receive what level of free allocation. The Commission’s services paper builds on the Commission’s proposal in terms of elaborating how the criteria would be applied and which industries could receive what levels of free allocation, and the key point here really is the Commission wants this to be evidence-based. The Commission is not in favour of carbon leakage, and obviously the best way to avoid this is by having a good international agreement that other countries are contributing to reductions as well. If this is not the case, then the measure proposed by the Commission to take effect immediately is free allocation. The issue of border measures, which is not one I mentioned because there is not really an active discussion on this now, would only come later, but the free allocation would be the immediate response, and here, on the basis of data given by industry and using data from Eurostat, we have been looking at potential cost increases from the value of pollution rights and also the amount of trade there is in particular sectors to come up with a rough indication of whether, if other countries did not take more action, there would be potential for carbon leakage. The paper we have released covers the steel sector, the aluminium sector and cement and clinker. The work is proceeding quite fast now—it was begun in March this year—and we expect to have preliminary results by the end of this year with various other sectors and sub-sectors coming out in the coming weeks. Obviously an important part of deciding if there would be carbon leakage is what the Copenhagen Treaty would provide for. So the Commission’s view is only, in 2010, can we actually establish a list saying who gets 100%, who gets a lower percentage, but we have had two meetings with Member States and with industry stakeholders where this approach has been generally welcomed and we are working out how the criteria can be applied in practice. This is important, because the list is quite long, and then you find you have not got data for all of these elements, and so on.

**Q371 Baroness Sharp of Guildford:** Looking at the non-paper, I take it that where the degree of risk of carbon leakage is high there is much greater sympathy for some kind of measure which might help the industry and where it is relatively low it would not. I note that we have had evidence from the cement industry that cement is not really regarded in this paper as having a very high risk of carbon leakage, which I think they would dispute, and also from the minutes that we have also seen of the meeting that was held on 26 September with some of the stakeholders, but while you have got some agreement with the methodology, actually the conclusions may well be disputed at the end of the day?

**Mr Meadows:** Yes. The clinker element of cement production we would consider to be trade exposed, justifying that, but I am sure, whatever the outcome it will be contested by some, we think that primary aluminium is a sector that if other countries do not do more would be at risk of carbon leakage but secondary aluminium, recycling aluminium, would, in our view, not be. In fact the EU Emissions Trading System gives a big incentive to recycle because it is more energy efficient than primary production, but with Member States and with stakeholders the discussion will continue for quite some time.

**Baroness Sharp of Guildford:** I can see that. Thank you very much.

**Q372 Lord Plumb:** Obviously no-one wants to see leakage. Nevertheless, we understand there are three options that have been already addressed, or are being addressed, on the risk of leakage: the border levies, free allowances and global sector agreements. Those are three totally different solutions. If the border levies are more likely, and one understands that free allowances are used to mitigate the risk of...
leakage, would that treatment be discontinued after a while or phased out automatically in the event that an international agreement replacing the Kyoto Protocol is reached?

Mr Meadows: A good question. In terms of the measures possible, as I said, the key one is free allocation—that is what is proposed as the main instrument. Decisions on the level of free allocation to industry, that is determined to be exposed, is intended only to happen after the Copenhagen Agreement would have been reached in December 2009, so in that sense it would not need to be discontinued because it would not be given in the first place. The same with border levies. Although US drafts of cap and trade legislation tend to include so-called border levies, the inclusion of importers, this is not something that we consider useful to have in legislation at this stage. We have seen the reaction of developing countries when this is even leaked as a draft, and it is not helpful in reaching the right international agreement. So that idea would only be considered after December 2009, and I think only in case there was not an international agreement. In terms of sectoral agreements, this is something which, if developed, can be looked at very seriously, but it does seem that everyone has a different idea of what a sectoral agreement would be.

The Commission has set out conditions in its proposal in Article 10(b) saying that these must be contributing significant levels of emission reductions and they must be binding, enforceable and subject to proper monitoring. We have not seen sectoral agreements that would meet those criteria yet but, again, it is one potential way forward which could also be part of the Copenhagen Agreement. These are probably coming up in terms of decision-making after the Copenhagen Agreement. There is a provision in the Directive, Article 10(a), which foresees that if the international agreement were delayed, then, obviously, any free allocation would be reconsidered after the agreement has been reached so as to not over allocate.

Chairman: Perhaps we could move on to the use of the auction revenues.

Q374 Lord Palmer: I have got two questions. If I may, I will take them separately. We have been advised that for the sake of transparency all industries, including those deemed vulnerable to carbon leakage, should be made to pay for their allowances at auction. A proportion of the revenues from auctioning could then be returned to vulnerable sectors, in the form of subsidies, to fund the transition to low-carbon products and processes. What do you see as the practical and political impediments to this idea?

Mr Meadows: In political terms, it would be difficult to arrive at 100% auctioning immediately across the board from 2013. Many Member States are very insistent on free allocation, particularly in terms of stranded costs, in terms of plants having set up before emissions trading was something in place. The idea of a transitional phase out. The Commission has proposed a phase out across the board by 2020 if there is no higher free allocation because of carbon leakage. This is something which has been supported by a number of Member States but not all. Some Member States want no more than 20% auctioning in any sector outside of power.

Q375 Lord Palmer: How are they split? About 50:50?

Mr Meadows: Apart from one or two influential Member States, generally the transition to full auctioning by 2020 seems to be supported, but in terms of full auctioning, even in the power sector in 2013, I would say the majority support full auctioning in 2013 but around eight, nine or ten Member States want to phase in, even for the power sector, and the power sector is seen as the clearest example where the opportunity costs of allowances are passed through to consumers. In the steel sector, in the aluminium sector, and in others, industry is saying this is not possible. That is why, in terms of transparency, I hope we can get to the same result with an evidence-based approach where we really look at where free allocation is justified, because costs cannot be passed through to consumers because of competition outside the EU. The free allocation is similar in many ways to directly giving money. If the Commission’s proposal is harmonised, this falls outside of the state aid rules. State aid applies to discretionary actions by Member States so it is an easier model to work with than applying the state aid rules to the direct recycling of revenues to industry. In saying that, the issue also comes up of indirect emissions of the costs industry faces from the purchase of electricity, and here the
European Parliament voted that auction revenues should be usable for indirect emissions, and some Member States are also supporting that in Council.

Q376 Lord Cameron of Dillington: The idea that you either give free allowances or you charge for allowances and pay them back, was an idea that was put to us last week or the week before, saying that this would be much more transparent because it would make people hone in on the costs of their carbon emissions. You have answered the question really, but I was just wondering whether, as an idea, it is something that has got any sort of go in Europe at all. Have you heard about it before?

Mr Meadows: When we developed this proposal we looked through a whole range of ideas, but this is probably one in our impact assessment that we would have put aside quite early on, I think, on the grounds of political feasibility. The same result in practice should be reached if free allocation is given out on the basis of evidence. So that element, I think, can be seen as identical. The element that is different is that, even where an industry is seen as not being exposed to carbon leakage or where for aviation the Commission position is the same, there should be 80% free allocation in 2013, phasing down to 0% in 2020, and in terms of political acceptability that seems to have broader support than full auctioning to begin with.

Q377 Lord Palmer: Moving on, if auction revenues are not earmarked, how might state aid guidelines need to be adapted to allow funds to be channelled to industry to support mitigation and adaptation measures? Do you foresee any potential for such provisions to be abused?

Mr Meadows: There is the potential for misuse. This is where the Commission has produced another services paper, which I am not sure if the Committee has seen, but I can leave or have it sent, on the use of auction revenues to tackle climate change, because, in practice, over the last seven years the Commission has approved 98% of environmental state aid notifications that have been made to it. I do not have the figure to hand, but I think the amount of state aid properly granted in Sweden compared to other Member States is something like a factor of 10 times more; so there is the potential for Member States to use auction revenue or, indeed, any public revenue, in many, many ways to tackle climate change, for research and development, for carbon capture and storage. The newer Member States in particular expressed a need for more information on how they could do this, there was a willingness to reduce their emissions in this way, and many of their production facilities and power generation are much more carbon intensive. The willingness was there but they tended to see the Commission as a potential obstacle because of state aid examination. That state aid examination will not go away, but we are emphasising to Member States that we will work with them in terms of showing them the procedures to be followed.

Q378 Lord Wallace of Tankerness: What you have said is that it is welcome insofar as the Commission would be flexible about allowing state aid in these circumstances, but I think it all proceeds on the basis that it is a matter for the individual Member State to decide whether or not that is what they wish to do with the auction proceeds. Does the Commission have a view as to whether, if not all, at least a proportion of the auction proceeds should be hypothecated to adaptation measures, mitigation measures?

Mr Meadows: I was careful to say that the state aid paper talks about auction revenues or, indeed, any public revenues, because in state aid terms there is no difference between the two. The Commission is proposing that Member States should—and I emphasise that word “should”—use 20% of auction revenues to tackle climate change. In the aviation emissions trading law it was agreed that Member States should use all the revenues to tackle climate change, but because this applies to half the economy, the potential auction revenues are much bigger—in the realm of 30 to 50 billion euros per year—so the Commission’s proposal is that 20% should be used, and this recognises the UK’s concern that it is eventually a national decision. A number of Member States are very keen to basically have an indication that they should be using this revenue in that way and in particular the redistributive element of the package. It is said that all of that redistribution should be used to tackle climate change; so when there is the redistribution from the UK, Germany and France that redistribution is actually used to solve the climate change problem. The Parliament has adopted mandatory wording, wording on a fund, an international fund. This wording is not agreed with Council and I see it as being one of the major issues in the coming weeks.

Q379 Lord Wallace of Tankerness: Can I clarify, and I do not want this to be nit-picking, but you used the word “should” and have emphasised the word “should” on number of occasions. Is that the status of a strong recommendation as opposed to a mandatory element?

Mr Meadows: It is not legally binding, the word “should”. We had many, many discussions with the UK on aviation before the word “should” was agreed. The Commission feels that this should be an acceptable outcome. On the other hand, in Council some Member States want to delete this provision altogether; others see it as important also vis-à-vis the rest of the world. We know there will be a need for financing to tackle climate change. I think the Eliash
Report yesterday also mentioned this, and this is one potential source.

Q380 Chairman: Has the redistributive element been agreed upon?
Mr Meadows: No—a one word answer. Some Member States wish to delete, some Member States wish to increase to 20%. The Industry Committee in the European Parliament voted for 20%, but the Lead Committee Environment left this unchanged, and I think it is primarily seen as an issue within Council for them to resolve.

Q381 Chairman: The position of the UK Government, I think, is that it would want to see the provision deleted.
Mr Meadows: Yes.

Q382 Chairman: Before we move on to something else, could I clear up one point following what Lord Cameron was saying. How does the scheme evaluate either the issue of free credits to perhaps electricity generation in Poland, which I think is mainly coal-based? Free allocation would not give them any incentive to clean up or to alter from coal perhaps to gas, or whatever it was, but if they had to buy those credits and then were given them back in order to improve their efficiency, is that an incentive rather than just allowing them to keep on generating in a polluting way?
Mr Meadows: There are various ideas being put forward by Poland, one of the countries supporting free allocation. In pure economic terms, whether there is a free allocation or whether there is auctioning, there would still be the incentive to make emission reductions. So the real question in economic terms is the question of whether the state has the revenues or whether the electricity companies have the revenues. This is something we have been emphasising in contacts with Poland. Because Poland has not had a liberalised electricity market like other Member States, the electricity prices have not, I think until the start of this year, given the price signal that there has been in another Member States. So, Poland will be seeing, I think, a 15 to 20% increase in power prices over the coming years related to the liberalisation of the market, related to the infrastructure investments needed. For these reasons, we are emphasising that Poland is better off with auctioning and the Government having the revenues. There have been proposals. If people have seen the European Council conclusions draft, I think it was circulating towards the end of last week, then the Presidency was talking about time-limited derogations and subject to conditions for investment in new facilities, so this is something which seems to be on the table now, but the majority of Member States and the Commission favour full auctioning from 2013 in the power sector.

Chairman: I think we are aware of those conclusions, but I do not think they have been circulated to the Committee.

Q383 Lord Cameron of Dillington: Access to credits. A thorny problem. There seem to be diverging views. One is that it undermines the whole system if you have lax availability of possibly unaudited CERs and ERUs, but there is the other view that this is a worldwide problem and we should have maximum flexibility in our world tradability. We heard the latter from the New Zealand Government, and others recently. But under your original proposals access to external credits would be severely restricted under phase three of the EU ETS unless a satisfactory international agreement was reached. I am wondering whether you can explain exactly what the Directive’s provisions are, as we have been told there are multiple interpretations of the relevant clauses.

Mr Meadows: Absolutely. In terms of rationale, the most important thing is to get the right international agreement, and this is why, after 2013, the Commission takes the view that the clean development mechanism, the CDM, or other mechanisms are a key incentive that Europe has to get other countries to sign up to the international agreement. If we continue to buy CDM credits from all countries, whether or not they agreed to do more, there would be a strong incentive for them not to do more because for the larger emitting countries the European Council is expecting them to move into more stringent measures taken nationally, and, of course, CDM is a no-lose solution for developing countries. So, we have said for the 50 or so least developed countries we think the clean development mechanism is the right solution until 2020, but for other countries we would want their contributions to be calibrated under the international agreement and, once that agreement is there, then a very considerable amount, 50% of the additional effort beyond 20%, can come into the EU system in terms of CDM credits. So, we are very open if there is an international agreement, but if there is not, then in fact we are still the first people in the world legislating to say that CDM has a future after 2013, even without an international agreement, but we do limit the quantity to the 1.4 billion tonnes which Member States have provided for in their second allocation plans. This is still a very large quantity. At 30 euros per tonne it would be around 40 billion euros of transfers to developing countries. So that is the key thing in the Commission’s position, the key rationale. In addition, if we do not have an international agreement and so we are only aiming for a 20% reduction, which we know is insufficient to tackle climate change, then allowing even more credits...
would mean there were less emission reductions in Europe, it would make our renewable targets more expensive, we would have more other air pollution in Europe and, therefore, it would make our other targets harder to reach. We know that to reach the two-degree target it is not enough just to have CDM, that there need to be substantial reductions in the developed countries; so we are much more generous than the 30% scenario. Moving on to the European Parliament, I would say the same view is taken in respect of the EU ETS and the effort-sharing decision, but an even more stringent approach. The European Parliament is saying that only countries that ratify the new agreement should be able to sell into the EU ETS after 2013, and they also take a very strong line on high quality CDM projects. At the moment we have a situation where any Member State can say no to any particular type of project. In fact, Denmark is doing this for large hydroelectric projects and the carbon market is becoming fragmented because they know that the credits cannot be sold in every Member State. It is commonly agreed that we want to harmonise this, but there is a discussion ongoing in Council whether we allow all types of credit that come out under the United Nations system or whether Europe should be able to focus on particular types of credit, and, for example—as has been done in the US House of Representatives Climate Bill, tabled I think on 7 October, where they say that HFC projects are not allowed—whether particular types of project should be able not to be covered. The European Parliament, in particular, has said that we should look at what other systems are doing when we decide what we allow, because we know the Americans are very sceptical of CDM, in our view too sceptical: because you need to involve developing countries, but if you want to link your trading systems together, then you really have to take a look at what other systems are doing or else de facto you would be accepting what they refuse to accept. I was interested to see a few days ago that the House of Representatives has taken up the same wording, basically, that the European Parliament have on looking at what other systems are doing when making decisions.

Q384 Lord Cameron of Dillington: I think that probably answers the question. I am interested in the idea that having the two options is a way of forcing people to the table, should we say, as much as actually making our system work in a fair and equitable way?

Mr Meadows: It is an important incentive. Another element of our proposal says that once the international agreement is agreed, then other types of credits can be allowed in. So, in effect, we lose nothing by taking a strong approach now, because after Copenhagen we can reconsider and allow in other types of credit. We have also had discussions with the New Zealanders because they are taking, in our view, a very, very open approach to credits.

Chairman: Before we go on to monitoring, the discussion has now been about CDMs, so perhaps we ought to go to linkage, because I think the two are very connected. Lord Brookeborough.

Q385 Viscount Brookeborough: You have already answered to a certain extent some of this, but there are obviously obstacles in the future with linking different systems, particularly less ambitious emission trading systems, notably due to the difference in the carbon prices and to a lesser extent, and you mentioned it, the quality control over emissions credits. Are there ways in which these difficulties might be overcome without putting the integrity of the EU ETS at risk, accepting at the moment there would be those who say that Europe is okay within Europe but it is leading the way, and where do you see compromises in the future in order to make the world system link together?

Mr Meadows: We are very positive in terms of expecting linkage between emissions trading systems. I think we see it as the main way forward to have a global carbon market. Here, of course, the United States is potentially the biggest player, because their emissions trading system may be three times the size of the European one. In terms of the elements needed to link with other systems, we are encouraged to see most countries tend to be thinking of mandatory systems capping absolute emissions. These are the most straightforward to link with, but you rightly highlight some of the key issues. In terms of the types of credit accepted, I think in terms of external credits this is an area where you basically need to take a common approach. In terms of internally what you do, whether you are New Zealand or whether you are the US or Europe looking at agriculture, for example, within Europe, I think you can have a high degree of confidence that countries internally will make sure that their systems are credible, but where credits are coming from outside, if one of you has taken a decision not to accept a certain type of credit, then you cannot link with somebody who allows that type of credit without tacitly allowing it to affect your system. So this is an area where, linking back to the CDM discussion, we are very conscious that the United States is highly unlikely to allow all types of CDM credit. We think, however, CDM is vital to engage developing countries. So I think a mechanism whereby we can make sure that the credits are of quality and a mechanism by which, when we link up with other systems, we can align this—I think that is, hopefully, quite straightforward because countries should generally be looking for high quality credits. Europe is much further advanced down this road. The US is planning an extremely broad approach, but coming to the other areas in terms of ambition in the
system, something that would cause a problem is having a price cap. This has been proposed, I think, by Senator Bingaman in the US, that if the price of carbon increased above ten dollars, then you would simply pay the Government, and obviously European companies would not be happy to pay the US Treasury ten dollars to get out of their obligations in Europe. Europe would have a temptation to set a price cap at nine dollars 99 and get the US money. Basically, linking would not be possible in that situation, but that is quite well understood in the US. We see a price cap being proposed in the Australian system for the first few years but they are not planning to have it long term, and the main US bills do not have price caps. In terms of the level of stringency, this is obviously a key issue, where I guess we want other systems to learn to walk before they have to run, because in Europe we know how much there needs to be done to tackle climate change right now. In US bills we see a comparable level of stringency in 2050—they are looking at an 80% reduction—but in terms of levels of ambition in the short term, then it is not clear that they are as ambitious, and I think this would be a real point for discussion between the EU and the US.

Q386 Viscount Brookeborough: When the New Zealanders were giving evidence the other day, and I was not here for that but I was reading, when talking about the costs of meeting their obligations, they said, that by minimising these costs they believe they give themselves the best chance of achieving their environmental goals. Do you believe that we in Europe are talking in the same terms or we are actually saying by increasing the costs we would achieve our goals? Are these opposite ends?

Mr Meadows: We are talking the same language, because emissions trading allows the lowest cost reductions, so therefore we can have more ambitious goals, but I think Europe is at the head of the pack in terms of the emissions reductions we are signing up to.

Q387 Viscount Brookeborough: You mentioned the other nations of the world that are already going down this route. What can you tell us about China and India and Asia?

Mr Meadows: In Asia, South Korea is looking very seriously at emissions trading systems. The international negotiations, I think, well, it is still an early stage compared to Copenhagen, so it continues to be difficult to get countries to accept that there are large differences between the Gulf states in levels of emissions and GDP and less developed countries, and in particular with China and India, there are sectors of the economy which are directly competing with EU sectors. On the other hand, there are sectors such as households where there is a move to motorised transportation instead of ox carts. I think this is a complex area which over time will become differentiated between, basically, households and transport and the industrial sectors. Europe is not expecting the same contributions from India and China by 2013, but I think as you look further forward we would be expecting the industrial sectors to make a stronger contribution; but it is the OECD countries that we see as the prime candidates for emissions trading from 2013.

Chairman: All of this will not work unless it is monitored.

Q388 Earl of Arran: On this particular subject on monitoring, reporting and verification, we understand that these would be provided for in the draft directive to be harmonised across Member States. Could you elaborate a little bit on this and explain why the Commission deems it necessary? Is it trust or lack of trust amongst other Member States?

Mr Meadows: I will call it credibility, and it is credibility both within the EU and to third countries. In the US the Environment Protection Agency does the monitoring for power plants, and actually the US would be quite reluctant to involve the private sector in this, although other systems such as the New England system are following the European approach of using private sector verifiers. But in our law Member States almost agreed on the language, or provisionally agreed on the language last week, saying we can only link to systems which have comparable monitoring stringency and credibility, and we see that in US legislation as well, that the monitoring would have to be credible. Here, although this is certainly an element of success of the trading system so far, we are conscious that Member States are taking, to a degree, different approaches on insulation boundaries, on the way transfers of CO2 for other purposes outside of a plant are covered. All of this is much more harmonised already than if we had 27 different trading systems in Europe, but we see that it can be done better, and in particular, for verification, the companies, the accountants carrying out verification can do so in one Member State without automatically being allowed to in other Member States, and for internal market reasons it is much better if verifiers can work across the EU. So it has probably been one of the least controversial areas, with the European Parliament and Council moving to have a harmonised system through regulations, and we will be working with stakeholders and Member States up until 2011 or so to get rules that apply in the same way right the way across Europe.

Q389 Earl of Arran: It is terribly important that the reporting and monitoring all stems from a level playing field, is it not?

Mr Meadows: Yes, and also in terms of costs for industry, where Member States take slightly different approaches, then the costs of verification, the costs of
monitoring differ and, obviously, this is something where there is no good reason for that to be the case.

Q390 Lord Brooke of Alverthorpe: As I understand it, you were saying that we are in a position where, broadly, we would be able to reach an understanding with the United States in these areas, that we have maybe different ways of application but the commonality is there which would be acceptable to both parties. Why is there, or appears to be, such a difficulty with CDMs, such a wide variety of views being held between two continents, and what can be done to overcome it?

Mr Meadows: For CDM monitoring.

Q391 Lord Brooke of Alverthorpe: Yes.

Mr Meadows: For CDM monitoring. We have seen the situation has improved. I think the Executive Board of the CDM has been getting better. I think the big differences between Member States and the European Parliament at the moment are that some Member States are saying that anything that comes through the United Nations system is de facto something we should accept.

Q392 Lord Brooke of Alverthorpe: Which the States do not? The Americans do not.

Mr Meadows: No, the Americans do not. The thing is, the CDM is only one of the mechanisms. There are things such as “joint implementation track one”, and this could effectively be an agreement between Russia and Ukraine to turn governmental assigned amount units straight into credits useable in the EU, basically unrelated to a project. So when you talk about UN safeguards, there are no UN safeguards for this type of joint implementation. In addition, because in our year-long stakeholder consultation most people agreed it was more important to link up carbon markets than to have the CDM, the CDM oils the wheels, but the long-term objective is linked systems, and here the Americans are in a unique situation.

Q393 Earl of Arran: Turning to enforcement, what enforcement mechanisms will be available after 2012 to ensure compliance with the provisions of the EU ETS and, secondly, how do you envisage that post-Kyoto international agreement could be effectively policed and are there any lessons to be drawn from the Kyoto Protocol?

Mr Meadows: Thank you. Firstly on this, I would differentiate between compliance with a company-based trading system such as the EU ETS and compliance with the Kyoto Protocol, because back in Marrakech in 2001 the EU was looking for a very strong compliance system. We got agreement in Marrakech but agreement without the very strong compliance system. That was in effect the last minute concession needed. In addition, internationally you can say that countries that do not meet to their Kyoto target will have a more stringent target in the next period, but they have not yet agreed to the next period. Canada, for example, has said that it will not necessarily comply with its Kyoto target this period, and so this enters into, I guess, a traditional area of international law where it is more difficult to enforce commitments than it is within domestic legal systems. For us compliance is vital in the EU Emissions Trading System, it must be cheaper to comply than not to comply or the EU Emissions Trading System will not work, and we have the 100 euro per tonne penalty applicable to ensure companies comply. So we would only link up with trading systems which have strong compliance measures, and the Kyototo Protocol is important as an umbrella for setting targets for states but it does not directly link with the company trading systems linking together. To highlight this, one thing I can announce, maybe you have heard already, but the EU Emissions Trading System will link up at 8.00 a.m. tomorrow morning with the United Nations International Transaction Log, so CDM credits will start flowing into the EU system from tomorrow. At the same time, we had a law which entered into force last Sunday on the registry system, and this provides that by 2012 the EU system will really be self-contained and we would be able to link to other systems either through the UN or directly to those systems. We are conscious that a US system is likely to be a credible system. We want the US to be part of the next international agreement, but if the US is not part of that agreement, then we want to be able to link, we want the possibility to consider linking with them anyway because the senate majority differs for ratifying a treaty to having a cap and trade system up and running and UN infrastructure would find it quite difficult to link to a non party. So our architecture is set up based on a company trading system which can be linked to any other company trading system, and that is where effective compliance would be foreseen.

Earl of Arran: Thank you very much. Thank you for your advanced notice as well.

Chairman: Perhaps we should go on to evaluating an international agreement. Earl of Dundee.

Q394 Earl of Dundee: We know that the European Union would commit to tighten its central emissions cap, in part, in the event that a satisfactory international agreement can be reached in the first place. What kind of criteria, therefore, would be used to determine whether the international agreement should trigger the tightening of the cap?

Mr Meadows: We are careful here to use exactly the terms of the European Council in terms of an agreement to a 30—I think it might be at least a 30% reduction of emissions by 2020 for developed countries, with appropriate commitments by major
developing countries, and some in the European Parliament and some in Council have tried to change these words but this tends to create a lot of debate to come back with exactly the same formulation from heads of state. So this is what the EU is looking for internationally: a Copenhagen agreement whereby the developed world commits to 30% reductions as a whole and the major developing countries commit to more than just CDM. The process for moving the EU trading system from 20 to 30% is specified to happen when the EU ratifies this agreement. This means that after everybody returns from Copenhagen the legislators would look at that agreement and only if it is good enough, only if the EU wants to ratify and commit itself to it, would we move to 30%. So, basically, leaves the appraisal to legislators in 2010 as to whether the agreement is good enough.

Q395 Earl of Dundee: Could there be perhaps sharper background clarification, from the legislators no doubt, on how this matter is progressed and judged upon: who will make decisions; roughly when—you say 2010, but there may be other dates—and what kind of process altogether?

Mr Meadows: The process proposed by the Commission, which we began to discuss quite a lot in Council, is for the switch to a 30% reduction to happen from the year after the community as a whole ratifies the Copenhagen agreement. So, the likelihood is that the United Kingdom, the other 26 Member States and the community as a whole will ratify the next agreement. That is what happened for Kyoto, and we discussed for some time whether it should be 27 plus one, whether it should be the community and every single Member State who ratified. I think after the Irish referendum, Member States came to see that it was probably best not to make the transition to 30% dependent upon every single Member State ratifying but when we commonly decide. Some Member States still want to say it should only happen when the Treaty enters into force. For example, with Russia, because of their delayed ratification, Kyoto entry into force was delayed. The Commission’s line here has been that there is no obligation on the EU to commit itself to the 30%, to ratify the Copenhagen agreement, before other countries. When the United States pulled out of Kyoto, we took a decision that we wanted to ratify anyway, but there is nothing preordained that says that the EU has to ratify before we see other countries ratifying. So, that is the key element of transition. At the same time, there is a debate now about how much of the elements should be revisited when we go to a 30% reduction. The European Parliament is very keen to keep this as narrow as possible, just talking about the actual extra effort, but some would like a much wider discussion.

Q396 Chairman: Would you explain how the decision will be taken by the community? Will it be taken by the Council? Will it be determined by co-decision? Is there an outline of that already?

Mr Meadows: The procedure would be by qualified majority, as it was for Kyoto in Council, and I think, under the Treaty of Nice, the European Parliament would be involved in something that is very close to co-decision. I am told there may be a small difference, but it would basically be a co-decision procedure so the European Parliament and Member States would be involved in moving to 30%.

Q397 Viscount Brookeborough: I think at the very beginning in your introduction you said words to the effect of “when we have reached 30%, then we will have stabilised global warming”. I thought that was a rather sweeping statement, and obviously we are talking about Europe at the moment. What happens when global warming does continue? There is quite a differing view on that, and I am not disputing the merits of carbon trading or reducing it, we all believe in it. Would you just set it out.

Mr Meadows: Europe by itself is something like 14% of global emissions and well beyond 30% reductions are needed, we are told, to stabilise at two degrees centigrade. The Bali Action Plan mentioned reductions, I think, of 25 to 40% by developed countries by 2020 as being necessary. These, of course, were entirely domestic reductions. So our 30% reduction proposed would have an extra 5% which could come in from clean development mechanism. I think scientifically, when I see recent reports from the Met Office and others in terms of what needs to be done, it is difficult to say we are doing too much to tackle climate change, but we are certainly doing as much or more than any other region of the world. The advantage of emissions trading is that it is a system that other countries can follow. It also involves developing countries in more ways than other climate measures do.

Q398 Lord Brooke of Alverthorpe: In the Directive’s Explanatory Memorandum you note that shipping and road transport might be included in the EU ETS at a later stage, but that there is little prospect of including agriculture or forestry for the time being. We have seen that the European Parliament has pressed for shipping to be included as soon as possible. I wonder if you could explain how you see the scope of the ETS expanding in the future and say something specifically about shipping and on what basis we can see the changes taking place?

Mr Meadows: Absolutely. I will start, if I may, by the overall targets of the EU, because it is said often in the legislation and also in our proposals that all sectors should be contributing to emissions reductions and to the 20% target. In the EU’s 20% target aviation
emissions are included, even though these emissions are not included in the Kyoto Protocol targets. We do not think they can be ignored. However, agriculture or forestry is not included in the 20% target because the international rules need improvement, and shipping is not yet included in the 20% target because the data is generally of very poor quality. Estimates range between 500 million tonnes and one billion tonnes a year over emissions. So we did not have good enough data to include this in the 20% reduction, but we take the view that in principle shipping should be contributing to the 20% and 30%. That is the core of the European Parliament’s position as well, that shipping should be contributing to the 20% and 30%—they voted the same way for forestry—and that then the legislators have a choice: either emissions trading covers shipping by a certain date or else the effort-sharing decision must cover shipping by a certain date, but you cannot just ignore shipping. Although I think the timelines are quite short that have been adopted by the European Parliament, the Sixth Environmental Action Plan of the EU said that the IMO (International Maritime Organisation) must agree measures by 2003 or the EU will take action. No such measures were agreed, and in London last week the IMO, I think, failed to make progress again on greenhouse gas measures. We are seeing a failure to move forward on shipping, and, of course, this places a disproportionate burden on other sectors and, in terms of carbon leakage, it does not make sense either because nobody is flying cement to Europe from China, and in terms of shipping, if there is no carbon price applied there, then it is not a sensible signal. So the Commission sees shipping as a promising candidate to include in emissions trading but we have not got a proposal on the table yet. It may come in 2010. The discussion up until December 2008 is whether, in principle, shipping is included in the targets or not.

Q399 Lord Brooke of Alverthorpe: Separately, going right back to the beginning when you listed the obstacles that still remain to be resolved before we get the Directive through in December 2008, which would you highlight as the most difficult one that will remain at the end of the list?

Mr Meadows: Coming back to the questions about full auctioning and recycling of revenues, I think the free allocation is possibly the most difficult discussion. Even on aviation and the level of auctioning this is a difficult discussion, whether free allocation should stay at 85% for free, whether it should diminish to 0% in 2020, as the European Parliament adopted, and the same in other sectors, determining whether steel, cement, others, would be eligible for free allocation or when those decisions will be taken. Council is tending to favour decisions being taken in 2009, but the Commission’s view is that 2010, after Copenhagen, is the best time because in 2009 we cannot really judge this without a Copenhagen agreement, so what help is it to produce a list which then has to be changed anyway? Some industries say it is some help anyway, but I think that would be one of the most difficult elements. Otherwise, I think the free allocation potentially in the power sector, the treatment of new Member States, the redistribution is part of the overall package. Although it is present in the emissions trading proposal, it is something to do with the overall balance and the fact that our new Member States have quite demanding targets, whereas their Kyoto targets were not so demanding. So there is this equity that has to be decided upon as well. I would personally see the emissions trading as not being the most difficult element of the package, because the European Parliament and the Council are relatively close together, apart from on issues such as the use of auction revenues, where a compromise has been found in the past, in July, between the institutions. On the effort-sharing decision, I think the European Parliament and the Council are further apart. I think agreement is still altogether possible, but there is a lot of dialogues, a lot of negotiations to take place.

Lord Brooke of Alverthorpe: Thank you very much.

Q400 Chairman: Before we finish, perhaps you could clear up one point. Has discussion about the reference year been finally disposed of?

Mr Meadows: There are two discussions here. One has been proposed by Hungary to have 1990 as the reference year. This is still raised in discussions, but I think, without any expectation, that the package as a whole will be based on 1990. There is no data for this. Certainly the redistribution of auction rights under the EU ETS is based on not having 1990 as a base year. If 1990 were the base year, then the Commission would not see a justification for redistributing some of the auction revenues. Some people have said you cannot have your cake and eat it, or, in French, you cannot have le beurre et l’argent du beurre—an expression I hear quite often. So I would foresee that the package continues to be based on 2005. There is then a more specific discussion about the redistribution element within the EU ETS, whether that is based on a one-year or a three-year period. For Finland, in particular, 2005 omissions were 24% below emissions in the following years; so for them this is probably their most important national issue. Here, it has been quite heart-warming to see that Member States tend to see that it is more representative to have a three-year period than a one-year period. The European Parliament voted for that as well, so it is more moving in that direction.

Chairman: Thank you very much.

Q401 Lord Plumb: Does Hungary give a reason for 1990?
Mr Meadows: The 1990, or, to be more exact, I think Hungary has a 1988 base year. Some of them have an average of earlier years. When base years were chosen for Kyoto, obviously countries chose the most favourable base years they could, and many of the new Member States have over achieved their Kyoto targets considerably. I think the greatest level is by something like 60%, and so these countries see that under the effort-sharing they are being allowed an increase but their GDP per capita, their emissions per capita, are often far lower than the Western European level. They want this to be recognised, and their Kyoto targets. It is a good argument, they feel. For us, this is much more relevant to a 30% scenario, because then obviously we have the international agreement. Without that, we do not see such a strong argument, but the equity for us is also taken into account in the redistribution in the EU ETS.

Q402 Chairman: Are there any more questions? Mr Meadows, it remains for me to thank you very much indeed for coming here today, for giving such a clear opinion of the progress of the negotiations, which I think we were all very interested to hear, and also your very comprehensive replies to our detailed questions on this amending directive. I have just one point. What are the next steps? Are you looking for a first reading deal?

Mr Meadows: Yes, a first reading deal in December 2008 is the scenario, which I would expect to be confirmed by heads of state in the European Council conclusions tomorrow. There have been some in the European Parliament following last week's vote who are putting this in question who would like to delay beyond the French Presidency, for which this type of package is a priority. I do not think that includes any UK MEPs of any persuasion whatsoever, but that is a potential threat to agreeing this, that somehow because of technical grounds, availability of interpreters or whatever the package could slip into the end of the legislature. Between now and December this year the European Parliament rapporteurs are committed to negotiating with the Council to solve the outstanding issues. There are around 50 outstanding issues, counting even the very small things, but all but about 15 of these, I think, can be solved pretty quickly. The ones we have talked about are the main ones. That should be confirmed between ambassadors and the European Parliament in early December of this year and then in the Poznan Climate Conference that would allow the EU to say that it has a legal system in place for 2020 and beyond.

Q403 Chairman: Would you like to make any concluding statement or shall we release you?

Mr Meadows: Just to thank you, my Lord Chairman, and the members of the Committee.

Chairman: Thank you very much for coming.
WEDNESDAY 22 OCTOBER 2008

Examination of Witnesses

Witnesses: PROFESSOR JERZY BUZEK, Member of the European Parliament and former Prime Minister of Poland, and PROFESSOR KRZYSZTOF ZMIJEWSKI, Adviser to Professor Bazek, Embassy of Poland, examined.

Q404 Chairman: First of all, welcome and thank you very much indeed for finding the time to come and help us with this inquiry. We have been doing this inquiry on the EU’s Emissions Trading Scheme for some months now, since before the summer and now into the autumn, and I suppose it is fair to say that the debate has been carrying on as we have been doing the study. Would you like to make any in statements or would you prefer to go straight on to the questions that we have for you?
Professor Buzek: Could I say a few words?

Q405 Chairman: Yes, please.
Professor Buzek: Thank you, first of all, my Lord Chairman, for having the possibility to explain the position of my country. I am also discussing the problem in the European Parliament, so I have a different point of view in my mind all the time, and I understand that it could be a different point of view in their EU 27. Let me also say that it is a special day for me. I have walked around Parliament quite a few times in my life but never been inside. It was really a great thought from my side to think I should improve things also in the future, and now I have the possibility to explain so important a thing, not only for one, two, three countries but for the whole European Union and for the world as a whole. If you are talking seriously about cutting CO$_2$ emissions, we think that it is necessary to do absolutely the same all over the world, because we cannot change the situation as the European Union only. We produce not more than 14% of CO$_2$ emissions, and if we change it, 20% diminished, it means a 3% change in the overall world admission. It means nothing from the point of view of the problems we are tackling now. To achieve international agreement is very important, so we need a good, profitable, efficient Emissions Trading Scheme, not dangerous for the economy, and giving 20% reduction 2020. In my country there will be the great discussion in two months, under the umbrella of the United Nations, as you know—the service convention COP 14, as it was in Bali 10 months ago, and in 14 months it will be in Copenhagen. The last moment for achieving agreement. This point is so important, not only for our countries. Perhaps I could say a few words about myself. I was graduating from the University of Technology in Upper Silesia and was working in the universities and also political sciences, and my political life and public life started together with Solidarity in 1980. I was organising it and being also a chairman of the first National Solidarity Congress. It has been the most important event in my life, I must tell you, and now I am a Member of the European Parliament on behalf of Poland. Thank you very much.

Q406 Chairman: Would you introduce your colleague, please?
Professor Buzek: With great pleasure. He is a professor of the University of Technology from Warsaw. He has been engaged in energy problems for many, many years. Perhaps you could say a few words about yourself, professor.

Professor Zmijewski: I have the chance to work for our Prime Minister as the President of Polish National Energy Conservation Agency. I used to be a deputy minister in the Ministry of Construction, responsible for energy efficiency policy in this sector—which is very important, not only in Poland but also in the whole of Europe, with 40% of energy consumption. Now I am an independent expert involved in energy policy, and especially in the EU ETS, trying to show how we can achieve the goals which were established one year ago. But this time, one year, is a year of great changes, because now we should adapt those goals which were discussed one year ago to the new situation in which we suffer a lack of trust, a lack of credit, and a lack of security. That is why the whole concept of the Polish Government says, “Let us try to achieve these goals with the lowest possible cost for the society.”

Q407 Chairman: Thank you very much. I will start the questions and then hand over to my colleagues. It comes across fairly clearly from what Polish
ministers have been saying that they have a concern that the social and economic impacts of the whole EU climate change package really have not received sufficient attention: the emphasis has been very much on the environmental case and insufficient attention to the social and economic impact. Could you give us a little bit more, explain the Polish Government’s concerns here, and particularly how those concerns relate to the Emissions Trading Scheme.

Professor Buzek: Thank you very much, my Lord Chairman, for this question. If I could divide from the very beginning the whole problem into two parts: one part is energy-sensitive, for the energy-intensive industry. We have such an industry in every one of the 27 Member States: cement industry, chemistry industry, steel industry. In every one country we can find almost the same influence from the point of view of ETS and probability of carbon leakages or some perturbation in the economy. We have it in every one country. On the opposite from the point of view the energy sector, there are big differences between Member States. It depends on the energy mix. For example, in Sweden less than 10% of electricity is produced from fossil fuels, but in some other countries more than 90% is produced from fossil fuels, especially in Poland. It is an enormous difference. For the electricity sector, it is quite a different problem from the point of view of the average interest in the European Union than it is for energy-intensive industry. If I could, my Lord Chairman, explain mainly the electricity sector, because from the point of view of the Polish problem or the Czech problem or the Rumanian problem or even the German problem, it is a much more interesting because it is a specific problem. It is the main reason we are suffering more because of ETS than such countries in which the energy mix is mainly for nuclear or for renewables and is not influencing so strongly the economy, householders, and so on and so on. In the case Poland, GDP could be diminished 0.6%, and we should also expect inflation, a rise of between 0.2% to 0.4%, and we can also say that costs of electricity in householders could be not 10%, like it is today, but 16%. It is a big difference. About 10% less in households will be for free spending, so for householders it could be a very big difference. It was counted by our ministers and was also shown in the European Commission. From this point of view, we can find big differences in the European Union.

Chairman: Thank you very much. Let us move on to energy prices themselves.

Q408 Viscount Ullswater: Perhaps I could you take you up a little bit more on what you have said. The indication we had from the papers put forward by the Polish Government was that electricity prices for consumers could double if power companies were obliged to bid for all their emissions permits at auction from 2013. I would be grateful if you could explain how you think that figure is reached, which contrasts very much with the Commission’s own estimation, which is only 15% because they are talking about the cost of coal being a much more important factor in the price of energy.

Professor Buzek: Thank you very much, my Lord Chairman. Let us take this figure as the average for the European Union—because the European Commission counted the electricity price for the European Union as a whole. For some countries, as I mentioned before, in which they must buy CO₂ emissions allowances only for 8%, 12%, 15% of electricity, the change of electricity price is very small. Mostly in the European Union we have such countries. In that, I mean that they have less than 30% of coal in the energy mix. Maybe it is also some portion of gas, but gas is emitting much less CO₂ in producing electricity than coal. So for countries which are having, like Poland, 94% of electricity produced from coal—only from coal: 94%—it means that this average, which was counted by the European Commission of 15%, or sometimes they are saying 20%, for us it means simply 90%. We have prepared some figures. We can leave that here for information. If anybody, my Lord Chairman, would be interested in it, we would like to leave it.

Q409 Chairman: Thank you very much.

Professor Buzek: It can be found on these figures very easily that, with such a big difference, having average in Europe means that we are not close to the average of all the countries. From this point of view, it is very easy to count it. If we take €39 as the cost of one tonne of CO₂ emissions in 2013 and multiply it by the emissions in Poland from coal power stations, this figure is very simple to achieve. Having average does not mean that it is connected with all the countries. It is the main reason I divided the problem at the very beginning on energy-intensive industries, because cement production or chemistry is almost the same in all our countries—one of us having cement, another one steel, another one chemistry—and I think the Commission is open on our presentation and figures. I was discussing with the main author of the Directive and he does not like to change the main issue from the ETS Directive now, but probably during trialogue there are some possibilities to change it slightly, because it is very, very difficult for some countries.

Professor Zmijewski: My Lord Chairman, may I add one sentence on the facts? The specific emission for Sweden—so how much they need to produce one megawatt hour of electricity—is 18 kilograms of CO₂. The same number for Poland says 950 kilogram of CO₂. Of course, we can calculate the European average, and the European average will be something like 400 kilograms—and, by the way, for the United Kingdom it is a little bit more. When we calculate the
average, we will obtain the average for the price which is set by the Commission—but, unfortunately, we have one leg in the cold water and one leg in the boiling water, and my country is in the boiling water! Thank you very much.

Q410 Lord Plumb: I was very interested in your very clear statement at the beginning saying that you had to compartmentalise your mind, thinking on the issues in Poland, thinking on the issues in Europe, and then recognising that this is a world problem. I admire you for saying that. I know exactly how you feel. I had 20 years of it in the European Parliament. It is not always easy to reconcile the interests of one's country with the wider, perhaps, interests of the world. All the time you are thinking of the people who are going to be affected; that is, the consumer: the woman in her home who is putting on the gas cooker, or the coal fire, or whatever it may mean in different parts of the world. Seeing that the total cost of this is only about 15% of the overall cost of energy, if that is correct, what is the impact of the ETS? Is the greater proportion coming from elsewhere instead, due to the factors that are there (the other methods of producing energy or the cost of energy) compared with the cost of the programme that is before us?

Professor Buzek: My Lord Chairman, if I properly understood the question, the question was about proportion between price rise because of ETS and other problems which could appear on the market. Let us say, first of all, that our energy market in the European Union is not enough open, especially in some countries, so it is very difficult to say about liberal markets. From this point of view, we cannot say, in such a country like Poland, that we have something else than monopolies. We do not have enough cross-border connections, and our producers, as a matter of fact, are monopolists. Maybe it is different in such a market like France or Germany or North Italy or some others—big markets—and it may be working well. From this point of view, of course, there could be some costs which are growing prices because of the activity of monopolists, but, as far as we know now, it is not a very big influence in our country, and we checked it. Another thing is about coal prices. We are also observing it, and we can check very easily how much the coal price is influencing the price of electricity. It is very easy to check it. But if we talk about electricity prices and a rise of electricity prices because of ETS, we can count it very easily as well. It depends on the cost of one tonne of CO$_2$ emissions. It was assumed by the European Commission that it would be €39. Now some agencies have prepared quite a different level of costs, let us say 60% or 70% to one tonne of CO$_2$. It means it will be a quite different influence on the electricity prices. In the case of such a proportion you have mentioned a few minutes ago, the real cost of electricity would be much, much higher than we expect now, so it is impossible that only 15% of electricity price rise is because the ETS. It is quite obvious, from many points of view if you want to see it, that the ETS influence in Poland would be a much, much higher influence than 15%, as I said during the answer on the first question you were giving me, my Lord Chairman. So I think it is quite obvious. Maybe, Professor Zmijewski, you would like to add something.

Professor Zmijewski: If the cost of CO$_2$ is kept at the level of €39, the necessary investment in the Polish sector to reduce emissions by 20% costs us something like €10 per megawatt hour, or a little bit less. The same for the higher possible rise of the fuel costs, because the next €10 could be only if the price of fuel will double—which is not very probable. But let us say what will happen if the price of coal would double: then, the rise of the cost of electricity will be something like €10. It is not very probable that that will happen, but still you have the comparison of €10 for investment and €10 for fuel and €39 for 1 tCO$_2$. In fact, my Lord Chairman, I should take a little bit less because we should reduce the specific emission, so it will not be €39 but it will result in €35. Definitely, therefore, it is not true that the rise caused by ETS is 15%. It is definitely much, much, much more. Two thirds of the rise is EU ETS, and that is a significant rise, unfortunately.

Q411 Lord Plumb: I am thinking long term. Will market liberalisation affect the production of coal? Do you see the production of coal continuing at the present level or will it be reduced?

Professor Buzek: That is a very important question in the long perspective. I think if we can develop new technologies for coal and, in the long perspective also, carbon capture and storage, which is a very promising technology but not checked yet in the big scale—in the small scale, in the Norwegian fjords, yes, fair enough, but not in the big scale—in these cases, coal could be a very, very important source of energy, especially for Europe, because we do not have gas and oil and we have coal—almost in every one European Union Member State, lignite or hard coal. From this point of view and a long perspective, we should think about coal as a serious energy source, together with nuclear and renewables, because we have them, the three of them, we do not have oil and gas. Our political independence means nuclear, coal and renewables, and the proportion and energy mix will be stated by every one country separately. I think coal could be so important. Also, I would like to add that the Chinese are opening, in these times, every week, quite a new coal power station. It means, from the point of view of global warming, to manage with coal maybe in our continent, in Europe, and to go with this technology of carbon capture and storage to
other countries. That is only the one really visible idea for the next 50 years—and I am not saying about five years or ten years but 50 years. Without carbon capture and storage we cannot manage in India, in Brazil, and China first of all. From this point of view, this question, my Lord Chairman, should be a very, very, very important question, and it is also connected with questions like switching from coal to gas. It is another question which is different but perhaps very, very close to the question which was put a few minutes ago.

Q412 Lord Palmer: Is all the coal that you burn home produced?
Professor Buzek: Yes, 100%. We are also selling some coal. It depends on the year and on the activity of our coal mining industry—10%/5%—and it was always the same a few years ago, 20 years ago and 30 years ago.
Professor Zmijewski: We are buying, also. It is ballast.
Professor Buzek: Yes, today it is ballast.

Q413 Viscount Brookeborough: What is the size of your coal industry, both in terms of GDP and in terms of employment within the country?
Professor Buzek: Employment I know precisely. It is 130,000 employees, so it is not very big now.

Q414 Chairman: Compared to the British industry it is.
Professor Buzek: From the point of view of production, about 100 million tonnes per year, 95 million-99 million tonnes per year. We had a big amount of lignite, first of all, and we did not use it until now at all, so we are waiting for the start, if it will be possible. For hard coal we also have a big amount—today, for 30 or 40 years at least, and if we start to explore quite new parts of our country, it could be even for 100 or 120 years. Underground gasification could bring it even for 300 years, because its deepness is about 1,200-1,500 metres below the level. Then, if we develop underground gasification, it would be for 300 years, because there is an enormous amount of coal on this level.

Q415 Viscount Brookeborough: You talk about lignite and hard coal separately. Is there a difference in emissions?
Professor Buzek: It is slightly worse with lignite than with hard coal. From the point of view of electricity costs, not taking care about the Emissions Trading System and CO2 emissions, the production of electricity from lignite is cheaper today. That is if we are not taking into account CO2 emissions costs; but together with CO2 emissions costs, it will be maybe the same or maybe lignite will be slightly more costly in the future. Today it is cheaper.
Vattenfall, RWE, and other companies. They are saying that opportunity costs were obvious, because we did have free allowances with which we could sell on the market. Without the possibility of selling, there would not be any opportunity costs and it would not be possible to add them to the electricity costs. On the other hand, not having a liberal market, an open market, we are not sure if, in a country like Poland, in 2013, when it will be necessary to buy all the allowances by the proposal of the European Commission today—because it is a proposal of the European Commission that 100% allowances must be bought on the open market—really windfall profits will go to our budget, or maybe new money, additional money, from customers’ pockets. Because windfall profits exist now, and it will be three or four years until 2013. In 2013 they will be real costs for energy companies—real costs. Because they are not real costs and they changed the prices; with real costs, they can change the prices again. If I am asking about that, they are not sure what will be the future. From this point of view, today’s proposal for full auctioning, buying 100% of allowances in 2013, should be very dangerous.

Q417 Viscount Ullswater: Are you suggesting, then, for the energy sector only, that you should have non tradable emissions certificates?
Professor Buzek: No. Of course not. Also, for energy-intensive industry. It is much easier for us to state it for energy-intensive industry, because everybody is fighting the European Union for that.
Professor Zmijewski: May I come in? It is a misunderstanding. We and the Polish government are not against tradable allowances. We only say that at the level which is defined—some kind of “best available technology”—the society should not be punished by paying CO2 allowances. Because if we can do it better, let us do that; but if we cannot do it better, why to pay for that? We should pay for everything else. For kind of wastement of the possibility, this should be paid, of course, and it should be tradable. It should be tradable. But another question is: For whom are allowances? We understand that allowances are for producers and generators, for the power sector and for the industries, but not during the auctions, not for every one. Because if we open this market for every one, we open the market for the great speculation. The offer is stiff; the offer is defined in a legal way. We know what will be the offer of allowances: it is already decided by the European Commission. Even if someone says, “I’m going to pay more,” the offer will not rise. The offer is stiff. There is a danger of buy-off from the speculation fund, so we say, “Okay, let us make it in such a way: If this is more or less defined by the technological possibility, this is for free. The rest should be bought during the auctions. After that, what you have you can trade, but at the same time you have an obligation to produce—because you are giving according to your production, not because of your existence.” My Lord Chairman, may I add one sentence? If we have such a situation where hospitals are given medicines for free, can we allow them to sell those medicines on the market? Definitely not. Definitely not. They are given something for free, it has value, but they should not sell it on the market, it is to heal the people. Allowances are to produce electricity and goods, not just for speculation.
Professor Buzek: There are many, many, many details of course, and I would not like to go into such detail. I am sorry, but could I only add that we are talking mainly about the electricity sector because it is the main problem. Of course, for the energy-intensive industry, the proposal of a benchmarking system is even easier to explain, but I am not saying about that.

Q418 Baroness Sharp of Guildford: To clarify in my own mind, you are proposing that you should set allocations by the standard of the most efficient power stations and that, therefore, you may well get a free allowance based on that basis, and the less efficient ones are going to have to pay extra because they are emitting more.
Professor Zmijewski: Exactly.

Q419 Baroness Sharp of Guildford: They are going to have to buy for that and this provides a very good incentive for them to improve their efficiency up to the basis of the most efficient.
Professor Zmijewski: Yes.
Professor Buzek: It is just a benchmarking system, yes.

Q420 Chairman: At any one time, if you have the most efficient technology and that is used as your criterion and then you have a cost that you have to pay if you are not applying the most efficient technology, where is the price incentive to improve the technology?
Professor Buzek: I can explain it in such a way: If you are producing electricity today and having efficiency of 35% in old power stations, old power plants, and today it is possible to produce electricity using coal with efficiency of 46% not 35%, so the difference between the emissions of CO2 is very big—two power stations producing the same amount of electricity, one with efficiency of 35% and another one with efficiency of 46%—the first one is producing 30% or 40% CO2 more than the second one, the more efficient one, and this difference it is necessary to buy on the market, but not everything. Because if we have the most efficient today—we can say that everybody would like to have the most efficient technology. And the technology which is less efficient we must improve, we must change the technology as quickly as possible to improve it and to have a better one, as
not to spend money on allowances. If we are talking about cost-free allowances in the system, which are awarded to the best technology, we can say, “You can sell cost-free allowances, but which ones?” Let us say that you improve your technology from 46% (the benchmark one year ago) to 50% during one year, so you “spare” another amount of CO₂ in comparison with the last benchmark, you can sell this small portion.

Q421 Chairman: I see.
Professor Buzek: So you can save additional money. We cannot sell any free allowances; except these allowances which we can save improving efficiency. This will be money in our pocket. For these producers who are having a very bad efficiency, a very low efficiency, it is a horrible situation, because they must pay for a lot of allowances, because they need to be on the level of the best. And the best? What do they want, the best? They want to sell allowances and to improve efficiency from 46% to 48% to 50% or even more, and then to sell on the market and to have money for new investment. So incentives are absolutely clear. Absolutely clear. It is not so much money in our budget, of course, but we do not like it very much. This is a different question, of course—because it is going to the national budget but we do not like it very much.
Professor Zmijewski: The benchmark is established ex ante and the allowances are given ex post. We know the benchmark from the real technology: “If you can improve, that is your money.” That is a big incentive for every one.

Q422 Chairman: I have got the model.
Professor Zmijewski: The level of emission is granted by the level of the supply from the European Commission, so the path to reach the goal is guaranteed 100%. There is no threat.

Q423 Baroness Sharp of Guildford: If I am right in understanding your model, the idea would be that between 2013 and 2020 you would gradually move towards auctioning.
Professor Zmijewski: Right.
Professor Buzek: Yes—well, if we could explain this very important question, my Lord Chairman. There is some problem with the period of 2013–2020. If you are going towards the benchmarking system, both in the energy-intensive industry and the electricity sector we can say it could be forever: because we have always incentives and it is working also in 2030 and in 2040. But talking about the problem very honestly, it was a proposal from the European Commission to have full auctioning, 100%, for the electricity sector from 2013. At the beginning, if we do not have the proposal of a benchmark, we wanted to have a phase-in to this system between 2013 and 2020. But it is not very good solution and much better is benchmarking. But if it would be necessary to buy everything on the market, it is better to go in this model step-by-step during eight years; let us say, 20% 30%, 40%, 50%, 60%, every year and more, and to get used to the new rules. It is only something like a preliminary proposal: phase in, instead of jumping into the water when we do not know if it is hot or cold, but better, much better, is a benchmarking system, of course.

Q424 Lord Wallace of Tankerness: When you talk about a benchmark, are you talking about a national benchmark or a European benchmark?
Professor Zmijewski: Fuel specific European benchmark.
Professor Buzek: Benchmark for fuel, and also for cement industry. We can explain. In the cement industry, we have now in Poland the best technologies all over the world, if you have comparison. Just in this industry: in others we are not so good, of course—in chemistry or something. So it should be for the whole of Europe. For Europe. Also, for coal and for lignite, a different benchmark. For gas, for oil, a different benchmark, because it is a different position. And European fuel specific, of course.

Q425 Lord Cameron of Dillington: Perhaps I could bring you back to the possible reality whereby you do not have any free allowances and in the energy sector they all have to be auctioned. The Commission has calculated that Poland will receive approximately £3 billion a year for the auctioning of its own emissions permits and a further £1 billion a year from the redistributive element through the rest of Europe. I am wondering if you have had any thoughts about how you might use that quite considerable amount of money. Would you use it to protect consumers who might be badly affected by higher energy prices or would you prioritise the encouragement of alternative energy production or even encouraging electricity savings in businesses or even in the homes?
Professor Buzek: Thank you very much for this question. Starting from the figures, of course it will be about £4 billion together in our budget from selling the allowances. But, as a matter of fact, our industry and the electricity sector in 2013 should buy more, and it will be bought in the European market, so, as a whole, our economy will lose something like £2 billion more or less. It is very easy to count it. We have, also, in our information sheets how we can calculate it very easily. Of course, in our budget will be £4 billion, but, together, our industry and the electricity sector will have to buy much more allowances.
Q426 Lord Cameron of Dillington: Why?

Professor Buzek: Talking about the figures, we can say that it will be 90% cent of emissions from 2005, and it means that we must strongly diminish emissions. If we take all the figures together, we must buy more than we will have in our budget. But still we can say that we have a lot of money in the budget and we can spend that. Mainly in Poland 80% of income to budget revenues—80%—will be from the electricity sector; the rest will be from the energy-intensive industry. What does that mean? We are giving something like tax for electricity, and electricity is used everywhere, so we have general taxes. Having more money in the budget—we have this money thanks to taxes—we do not like it very much, because it means that the competitiveness of our industry is declining, because it is a tax for everything, from offices to householders to industry, everywhere. If you want to go with revenues back to householders or to industry, as it was the question, it is very difficult to recognize where we should add money. We will have in our budget money from revenues later, because, first of all, the prices will be higher. So, first of all, we have no competitive economy, generally speaking, having high electricity prices—even 80%, 90% higher than it was without ETS system. Having such a situation is not very convenient for us to go back with revenues. Well, in Poland, we are against it. Our Minister of Finance was fighting against such a solution, probably because, 44 years out of the war, we have just experienced such a budget. Everything was artificial: taxes, payments, and it was redistribution from the central budget. It is something similar. We would like to have money in our budget and then to redistribute it. We prefer to have money in customers’ pockets—and even companies’ pockets, to force them to change technology on the level of companies. Of course, it is a problem of windfall profits. They are now. If we can diminish the windfall profits or check them in companies, it is much better not to have a flow of cash from customers to budget and from budget back to customers or industry, and it does not mean so much as losing the competitiveness of our economy, generally speaking. In the case of Poland, because electricity costs could grow by even 80% or 90%. It is a much different situation in France or Sweden, not having such a big change in electricity costs. There is also a problem of carbon leakage straight away from electricity, because in Ukraine or in the Kaliningrad regions they are preparing themselves for producing electricity from coal very cheaply, because they are not obliged to pay for CO₂ emissions they think, and to send it to Poland. It will be straight away the same in Slovakia and Romania. In our part of Europe, therefore, we could have also direct carbon leakage outside the EU, producing electricity from coal in the Kaliningrad region or Ukraine, and sending electricity to EU countries. From this point of view, 100% of auctioning is very dangerous. It is of course promoting new technologies—of course, we agree—but from the point of view of electricity costs, overall costs, competitiveness, it seems to be very, very dangerous—and not for every one economy on the same level, of course. In every one EU country there will be a different situation from this point of view. So it is the reason, as it was the question, that we are not very interested to have money in our budget. We prefer to have it in customers’ pockets and even in companies’ pockets to force them to change the situation in the electricity sector.

Q427 Lord Cameron of Dillington: If the permit price went up, that would presumably, in your argument, make things worse not better.

Professor Buzek: Yes.

Professor Zmijewski: Much worse. May I add figures? Our country’s income is €4 billion. The spending from the power sector is €5.2 for the year 2013 and the spending from the industry is €1.5 billion. Together, it is €6.7 billion. So we have €6.7 billion costs for the society and €4 billion income for the budget. It is not a good business for society. Maybe it is a good business for the budget, but society does not like it. Of course this money should be spent for energy efficiency and to help the vulnerable families, that is for sure. There is no doubt about it.

Professor Buzek: But it is not very easy to recognize where to send the money—as it was not during the communist economy. We remember it very well. It was very difficult to say where we should send money, and every year it was worse and worse.

Chairman: It reminds me of the Common Agricultural Policy, but never mind.

Q428 Baroness Sharp of Guildford: You need to have an incentive on the part of individuals and companies to move towards energy efficiency. Insofar as you are saying that the money is better in the pockets of the individuals—

Professor Zmijewski: Or companies.

Q429 Baroness Sharp of Guildford: —or companies, it is nevertheless important that the price signals are there.

Professor Zmijewski: My Lord Chairman, we only say to reduce the cost for the society, not to make them zero. We agree it must be a cost for the society—we need money for improvement—but let us make these reductions at the lowest possible cost for the society. Still the same reduction, 20% for the year 2020. We are not against this. It was not stated at the very beginning, but we should say it now.
**Professor Buzek:** I did state it at the beginning.

**Q430 Chairman:** Yes, very clearly.

**Professor Buzek:** I am sorry.

**Professor Zmijewski:** But because we would like to go with such a line as it was proposed by the European Commission, 20% reduction is a straight line from 2008 or 2009 to 2020, and we are going on this line. We are not changing the line at all, even one millimetre. It is one problem, saying it honestly, because it is a problem how to use all the revenues in our budget, our national budget all over the European Union, because we need support for third countries, and some part of the money is proposed to be used in third countries outside Europe, for mitigation and also adaptation. Of course, from this point of view, it will be less money for that, having such a proposal like a benchmarking system, because it will be not so much money in every one national budget. In the Polish budget it is not €4 billion, but maybe €1 billion or half a billion less from these differences which are buying on the market. So in this case, probably it is necessary to give third countries money from the general budget, as it was until now, because in the European Union we were paying money to third countries to improve economy, and also adaptation is very costly in some countries, Bangladesh and so on, and we were sending money in those countries from the overall European Union budget. We should continue the same in the next years, if we have a benchmarking system, having less money in national budgets. I think it is a much better system than taking money from national budgets.

**Chairman:** We still have quite a few topics to cover, so we need to try and speed up a little bit. Let us change the line of questioning quite significantly and deal with energy security.

**Q431 Lord Palmer:** I can completely and naturally understand why you are reluctant to switch away from coal fired power generation towards gas fired power generation, for the obvious reasons of energy security. How long do you envisage it will take before other technologies—and you did touch on carbon capture and storage earlier or, indeed, nuclear power—can be developed into viable alternatives and what policies are you hoping to put into place to speed up this process?

**Professor Buzek:** My Lord Chairman, it is a very short answer. If we work very hard and spend a lot of money, in 12 years, 2020, we can have 15% of renewables. And we want to do that. It is our EU task. It is different in every one EU country. In some countries it is 20%, in some countries it is 25% or 28%. In Poland, it is 15%, and we want to have it in 2020.

**Q432 Lord Palmer:** Would you get there by wind, particularly.

**Professor Buzek:** Yes, wind, biomass, and bio gas, nothing else—because we do not have any other possibilities.

**Q433 Viscount Ullswater:** You do not have hydro electricity?

**Professor Zmijewski:** Three megawatt an hour. That we can improve!

**Professor Buzek:** There is nothing. In comparison with Sweden or Norway, it is nothing—or Austria.

**Professor Zmijewski:** No alps!

**Professor Buzek:** So it is 15%, spending a lot of money, but we want to do that, as a matter of fact. Second, we can go ahead with nuclear. We are about a decision in this direction. Because of Chernobyl, we stopped it 20 years ago—because of Chernobyl, we must say, because it was 250 km from our border. It was not very far from our society. It was a very, very dangerous situation. We could have 15% of nuclear energy by about 2020, if we start immediately, not having any experience, and having two big reactors during 12–15 years. So that is 30% of electricity from nuclear and from renewables. The rest must be from fossil fuels. We do not have gas, we do not have oil. We must take them from abroad, and we have only one direction until now, from the East. We do not have any other ways, so it is very difficult for us to decide in this direction. We must keep close to coal. Carbon capture and storage we would like to start immediately. We are very interested to have two demonstrations, full scale industrial installations, about 400 megawatt every one, for full carbon capture and storage. Two of them are planned. We would like to finish it until 2015, and we expect until 2020 this technology will be ready, as it is said today, in zero emission fossil fuel power plant European Union technology platform, which is preparing the whole programme for the European Union. This demonstration plant will be with the great support of the European Union. There are also some British projects on the desk in the European Commission, two or three of them, and 12 will be supported very, very strongly. From this point of view, we can say that the timetable is quite visible: renewables and nuclear, the rest must be coal, and we would like to have carbon capture and storage as quickly as possible. I mean 2020, and to improve it and to—

**Professor Zmijewski:** By coal, it means high efficient coal.

**Professor Buzek:** Of course. Thank you very much. It means not 35% but maybe 46%. And in coal generation or polygeneration, producing not only heat and electricity but also chemicals, like gas for fertilisers, for example, we can achieve an efficiency about 60%—it is fantastic, really: 60%. Producing gas during coal gasification is another method. It is working in South Africa, for example, and it is working in some places in the United States. We are
going to change our power electricity sector in stronger changes.

Q434 Chairman: Obviously, if you diversify into gas at the moment, then you are becoming dependent on a rather large neighbour. Looking forward, are you beneficiaries of the development of pipeline from the Caspian through the South Caucasus?

Professor Buzek: It is another question that is very difficult. We know we have North Stream and the South Stream. They are two gas pipelines which are not going through Central Eastern countries. One of them is going through the Baltic Sea; another one is going by the Black Sea straight to Italy. From this point of view, it is not a good situation, because, during the last meeting in the European Parliament, representatives of the Russian energy sector presented the figures, and gas pipelines which are going now through Ukraine or through Belarus will be much less exploited in the future. About 50% less gas, or even more, through Ukraine and Belarus in the future, when North Stream and South Stream will be built. From this point of view, our security will diminish, and also, of course, in Ukraine and Belarus. It would be very important, from the point of view of EU countries, to have a common foreign and energy policies and to try to negotiate with our partners—and we need to have them, of course, in Northern Africa and so on—together, to try to substantiate optimisation of contracts, because now it is going in such a way that for Russians, or maybe also for North Africans, it is much easier than for us on this market and it is not a convenient situation for us.

Q435 Chairman: I can quite see that.

Professor Zmijewski: This is only one time, when I am not completely agreeing with my Prime Minister. Our obligation is to have 15% of renewables. Our calculation is in order to obtain 20% reduction of CO₂ and the result is that we will have to have 25% of renewables. It does not matter if you like it or not, it is the must. It is the must.

Professor Buzek: Okay. It could be. I am not against such a proposal. Being politicians, I must be very gentle.

Professor Zmijewski: That is why I liked to co-operate with my prime minister.

Q436 Viscount Brookeborough: Would you like to say something on your relationship with Russia. Have they become even less reliable over the last five years in your view, and can you see it changing in the future, because we are talking about world trade.

Professor Buzek: We are talking about the last 10 years, and we had just 10 years ago such a specific case. We learned that 11 Russian diplomats were not rather working for diplomacy and it was the official decision of the government just to send them over to Poland.

It was just such a decision about these diplomats: everything was on the table and everybody could see it. After that, we had two or three years very good relations, and now it is much worse. But I think it is not worse for Poland than between other countries of the EU. We are doing everything to improve the situation because we think relations with Russia are very important for both sides—also for Russia. It is our European interests to have a strong Russia, to have stabilisation of this country, but we are worried about democracy and we know very well it is far away from democracy. They understand the democratic rules in quite a different way, and we do not like it, because we like our way, not their way. It is one difference, very important, but we should do everything to improve situation. The key for that is Ukraine. I am very sorry it is going so badly in Ukraine today. If we could achieve democracy and free market economy in Ukraine, it would be fantastic—the best sign for Russians—because they could understand something which is coming from Ukraine much easier than it is coming from West Europe. It seems to me that Ukraine two or three years ago was much closer to democracy and free market than today. Something is wrong. I had a great privilege and honour having one million persons during the Orange Revolution in front of me and speaking to them, at the end of 2004, as the official representative of the European Parliament and also somebody from Poland who they could know very well. It was really a very great hope to prepare something like free market and democracy in Ukraine, and it would be influencing Russia much, much stronger than everything we are doing in Western Europe. It also should be our task to improve—if we can, of course—the situation in Ukraine and to influence it in this way, because we believe in our democracy, of course, sitting in the Houses of Parliament in Great Britain.

Q437 Chairman: We are not awfully keen on democracy in the House of Lords!

Professor Buzek: Okay. Well, not everything is visible for outside.

Q438 Viscount Brookeborough: You have talked about benchmarking and so on, but I know the Polish Government has argued that the Commission’s proposed year for measuring emissions reduction, 2005, would discriminate against countries whose emissions fell sharply after the fall of communism. Could you identify which
other Member States share this concern and explain what progress you have made in discussions on this issue of the base year?
Professor Buzek: It is Estonia, Latvia, Lithuania, Slovakia, Hungary, Romania, Bulgaria. I omitted a few countries, and I can tell you which ones very precisely: the Czech Republic, Slovenia, Malta and Cyprus. I omitted the rest of Central and Eastern Europe, and of course additionally Italy and Germany, as a matter of fact, they are supporting. Maybe not so strong as it was in the eight countries I mentioned before, but still they are thinking about changing opinion on it. They have not changed, yet, until now.

Q439 Viscount Brookeborough: Will it have an effect or will we continue with the base year as laid down?
Professor Buzek: I am sorry I did not understand.

Q440 Viscount Brookeborough: You have support from these countries.
Professor Buzek: Yes.

Q441 Viscount Brookeborough: But will that change what happens?
Professor Buzek: I hope so.

Q442 Viscount Brookeborough: You are optimistic.
Professor Buzek: It is very difficult to say. But it is not majority, of course; it is the minority of course.
Professor Zmijewski: The most important thing is that this small coalition does not fight against the goals. All of us, we accept the goals. The discussion is not to change 20% for 90% or anything like this. We only ask, “Let us optimise the cost of the process.” There are some official statements quite recently from the European Commission that the goal is to switch from coal to gas. We ask where it is.

Q443 Viscount Brookeborough: Would you like to see a European policy, a very, very strong policy with a compromise towards certain countries? You do not want to water down the objectives at all.
Professor Buzek: We could have a very strong policy. We should check each other, because it is very important in the future. We were also checking it in last year. We must also say that the ETS was introduced in 2004 but it was not working very well during the last four years and we are sure it will be working much better in the future. We want to have it working in the future, and the ETS diminishing CO₂ emissions.

Q444 Viscount Brookeborough: How efficient is the energy supply compared with Western Europe. How much can you improve quickly? A number of years ago we had figures in a different inquiry about Denmark, its GDP going up by 20% and yet its use of electricity had remained the same.
Professor Buzek: The question you ask was also connected with the question before: effectiveness and efficiency, end-use efficiency, are the most important things.
costs. They are quite different in Poland and in other countries with a different energy mix. From this point of view, our energy-intensive industry is very sensitive and they are observing electricity costs and saying, “Maybe we must leave Poland because it will not be possible to stand it.” Aluminium production or chemistry, for example, are saying it very, very simple. It is much easier than for cement, because cement is heavier to transport than aluminium or chemicals. It is very easy to leave our country. Also, for the steel industry, we have big factories which are owned by Mittal and he is saying almost officially, “I’m going back to Russia. I’m not having an interest to develop my factories and company in Europe, generally speaking.” It is a danger. If we were going to a benchmarking system it is quite different. In the energy-intensive industry, the benchmarking system is giving much more possibility to stay in Europe. Additionally, the benchmarking system in the electricity sector is giving much less indirect carbon leakages because of electricity prices for energy-intensive industries. From both points of view, it is much better to have a benchmarking system.

**Q448 Lord Wallace of Tankerness:** One of the features of the evidence that has come through to us is just how important the monitoring and reporting and enforcement would be. I wonder if you would say something about the experience with enforcing the existing Emissions Trading Scheme and how the Polish Government looks forward to monitoring and enforcement post 2013, particularly with regard to the possibilities of greater harmonisation of enforcement across Europe.

**Professor Buzek:** It was a really different system during the last decade, because we were very different on both sides—I mean old and new Member States—and influenced much later by the systems and the Emissions Trading System as well. From this point of view, harmonisation is very important, but we think that we can also harmonise it. We can also take into account the energy mix, which is very important not only for the new Member States, for Eastern and Central European countries, but also for some countries in, let us say, old Europe, like Italy or Greece or Germany. I was talking with ENDESA quite lately in Spain and they are also worrying about that—although maybe not be such a big extent. The most important issue from the point of view of harmonisation of the whole problem for the EU is taking into account energy mix in different EU countries, because from this point of view we differ very, very strongly. It is also of some interest, as a matter of fact, in Great Britain, when I am talking with colleagues in the European Parliament. For example, in the West Midlands they are saying quite generally that they are worried about electricity costs in the future and also about possible carbon leakage. It is not the same in North England or in Scotland. I feel that colleagues from North England or from Scotland are not worrying so much about that. But generally it is probably not as big a problem for Great Britain. It is a problem for Germany, much bigger than it is for Great Britain, maybe because the production of electricity from gas is very important. It is much cheaper. Today it is much cheaper; we do not know in the future, because gas prices could be very high in a few years.

**Q449 Lord Brooke of Alverthorpe:** Are there specific views you have on ensuring that a new scheme is properly enforced, and that there are no effective means of trying to get around it right across Europe?

**Professor Zmijewski:** Might I add something? We have a unique system in Poland which helps the housing sector to perform under the Emissions Trading Scheme. It is widely performed in the country and the drop of the heat consumption is significant. This experience can be used everywhere. It is not only for this heating system, it is for every one: state, communal, private, every one. Announcing it is the experience of the White Certificate. The Polish White Certificate system is in the pipeline at the moment and we used quite a lot of your experience to design this certificate. The question is: Why is this only in a few countries like the United Kingdom and Italy and Poland, and not in the 27 Member States? That is a very good system and very efficient. I can say this because I made all the calculations, so I know it is very good. Why not do that? It is good for the environment, it is good for the budget, it is good for society. The question is: For whom it is not good?—but that is perhaps not the subject for this hearing. Thank you, my Lords.

**Q450 Chairman:** I think that is a good point to stop. There are all sorts of issues we have touched on and explored and we could have gone on a lot longer. Thank you very much for helping with our inquiry.

**Professor Buzek:** Thank you very much for inviting us and giving us the possibility to explain some crucial questions from the point of view not only of Poland but also of the European questions and problems.

**Chairman:** It has helped enormously. It has been something very new for us.
Written Evidence

Memorandum by the Aluminium Federation Ltd

THE ISSUES

LEVEL OF EMISSIONS REDUCTIONS

1. The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached.

The concept of long-term targets is logical. However, the actual values must be based on affordable technology and the potential of given industries to make the necessary savings. All evidence and available data, including risk analyses and competitiveness effects, should be scrutinised by the Committee before Government agrees to arbitrary targets. Budgets and targets are aspirational tools which may need to be amended in the light of operating circumstances.

Reference should also be made to an equivalent contribution from the non-traded sector.

We do not believe the adjustment should be automatic. It should depend on the strength of the international agreement, which should as a minimum contain proposals for a global emissions trading scheme matching the scope of the EU scheme with a central cap set by an international body such as the United Nations.

An automatic adjustment could lead to EU business being disadvantaged on a global scale.

The Aluminium Industry recognises its obligations to protect the environment and minimise the effects of climate change. It supports the concept of trading as a means of achieving further reductions of greenhouse gas emissions. However, driven by the high proportion of energy cost to total cost of production, the Aluminium Industry has worked relentlessly on process improvement and energy conservation, with consequent reduction in greenhouse gas emissions. The industry is also highly effective in recycling waste aluminium materials. The scope for further reduction in greenhouse gas emissions is, therefore, very limited. The Government should take this into account when agreeing to burden sharing.

SCOPE AND OPERATION

2. The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture.

— With regard to the proposed inclusion of emissions of CO₂ and PFCs from primary aluminium production, CO₂ and PFC emissions are at BAT levels in EU Aluminium smelters as a result of the implementation of IPPC. We therefore consider there to be very little scope for further improvement and thus consider the environmental benefits from inclusion of this sector to be negligible.

In addition, several independent studies, including the Commission’s own impact assessment, confirmed that the competitiveness of the European aluminium industry would be at stake. Reduced production in Europe would be made up by imports from other regions of the world with different environmental standards and carbon constraints.

The EC proposes a broad definition of a Combustion Installation. This means that, if the thermal capacity of fossil fuel burning equipment on a site exceeds 20MW, the site would be included in the EU ETS. Recognising that this threshold could capture small emitters, the EC proposes a combined exclusion clause. Secondary aluminium companies above the exclusion limit would still be included in the ETS.

The UK Secondary Aluminium market is made up of Refiners who process mainly scrap aluminium and Remelters who recover excess material from post-consumer and customer processes.

Recycling operations should be exempted from the definition of combustion installation and secondary aluminium (recycling) should be removed from Annexe 1.
The Commission itself has identified the need for industry to become more resource efficient and increase the recycling of valuable raw materials. Already around 40% of aluminium used in Europe is recycled material. Recycling results in energy savings of up to 95% compared with the production of primary aluminium. This also means that up to 95% less carbon dioxide is emitted. Further, by investing in new technology, emissions are, in general, at Best Available Technology values.

Recycling should be encouraged rather than constrained. It makes no sense to include the aluminium recycling industry in the ETS as it consists of a large number of small plants counting for less than 0.01% of total EU emissions.

Scrap is a raw material of strategic importance. It is the only aluminium containing “raw material” which is generated in the EU. There should be a strong interest to keep this material in Europe and to support the recycling industry. Inclusion of secondary aluminium in the EU ETS would, at the very least, influence investment decisions concerning further capacity increases in the EU.

Inclusion of secondary aluminium in the EU ETS creates a market distortion between EU companies, and makes EU companies uncompetitive against Non-EU companies because it includes only the companies of a certain size, who tend to already be using best available technology (BAT) because they are already IPPC regulated, and who are market leaders in their field. As such it is penalising success. Inclusion of secondary aluminium in EU ETS would add cost and further weaken the competitiveness of EU secondary industry competing in global markets. Carbon leakage is a significant threat for both primary and secondary producers of aluminium, due to the global nature of the aluminium market. For example, the UK has four aluminium rolling-related plants, whereas there were six, just two years ago; and the biggest extrusion plant has recently closed. Carbon leakage is a one-off, one-way event. EU ETS only includes facilities of a certain size. If you force these facilities to close, they will remain closed forever and never return to the EU.

We do not consider that LULUCF is an appropriate sector for inclusion within the scheme as the costs of abatement in this sector are not comparable to that of an industrial installation.

3. The practical application and enforceability of the scheme.

No comments other than the scheme has had a high level of compliance to date.

4. The key strengths and weaknesses of the proposal. You may wish to consider in particular:

The scheme as designed is unlikely to encourage technical innovation in the aluminium sector. This is because the technology applied in aluminium smelting is already considered to be BAT, driven by the application of IPPC.

Because of this the aluminium sector is expected to be a net buyer of allowances. However we are unable to pass through the costs of this as aluminium is a globally traded commodity—its price is set on the London Metals Exchange. This means that any increase in costs due to purchase of carbon allowances represent a reduction in profitability.

As such consumers of aluminium will feel no price signal reflecting the carbon content of aluminium.

Drawing on experience gained from Phase I and Phase II, the EC believes that the overall functioning of the EU ETS can be improved. The review aims to strengthen the scheme in order that it meets strategic objectives to deliver cost effective emissions reductions without distorting the playing field for competition. The Aluminium Industry contends that the revision fails to meet these objectives, as non-EU based producers of aluminium will experience no carbon price.

— The extent to which the scheme as currently designed will encourage technological innovation.

UK aluminium smelter emissions are comparable with other international, pre-bake smelters and have minimal opportunity for further reduction, even if PFC’s are included. UK aluminium production will be at benchmark by 2012. Smelters are Part A processes covered by the IPPC Directive. The technology employed is BAT. Permits include emission limits, cross referenced to CCA’s and energy efficiency improvements.

The primary aluminium industry is extremely energy intensive as it uses on average 15 MWh/ tonne aluminium produced. Energy conservation has therefore been at the forefront of technological innovation for many years. Consequently, scope for further improvement is limited.

— Whether it will result in the appropriate price signal being sent.

— Whether it will be efficient and/or equitable.

The EU ETS distorts trade and increases the risk of carbon leakage. Carbon leakage is the same as increased dependency on imported materials. These imported materials will have to come from countries outside the EU.
5. The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions.

We support the inclusion of projects that could increase the supply of allowances to the EU ETS.

**Allocation and Auctioning**

6. Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be.

Decisions should be taken at EU level on a sectoral basis to avoid national bias causing competitive distortion. Industry needs clarity concerning which sectors and sub-sectors will be covered by this commitment and the possible measures taken at the earliest date possible in order to prepare the plants concerned for future operations or closure. The measures should take into account both the direct and indirect effect of CO\textsubscript{2} cost pass-through if the serious risk of carbon leakage is to be addressed. The carbon equalization system, (Recital 20), will not be suitable for the aluminium sector.

Any revisions of the measures proposed must take into account sectoral agreements.

7. Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge, and for how long.

Those sectors determined as being subject to carbon leakage\(^1\) should continue to be allocated to for free. The free allocation should cover both the direct (ie combustion and process related) emissions and be used to compensate for electricity price rises associated with emissions costs passed through the electricity generation supply chain.

The electricity used by primary aluminium smelters comes from several different sources with different CO\textsubscript{2} emissions. These are called the indirect emissions, which can be up to six times higher than the direct emissions from smelting. With the introduction of the Emission Trading Scheme, the power suppliers have incorporated and passed through the costs of indirect CO\textsubscript{2} emissions into their electricity prices.

For an energy intensive industry like aluminium, this means that the cost of producing a tonne of primary aluminium is increased by more than 20%. Since the price of aluminium is a global price, quoted in USD, and determined on the London Metal Exchange, the European producers have no possibility of passing on this extra cost to their customers. These effects need to be addressed if the aluminium industry is to avoid carbon leakage and continue with operations in Europe. A commitment to compensation for pass-through costs must be clearly expressed in the Directive.

Transitional free allocation to installations should be provided for through harmonised Community-wide rules, establishing sector benchmarks, in order to minimise distortions of competition within the Community. These rules should clearly set out the process of establishing the sector benchmarks. Further, the principles for setting benchmarks must be agreed with the sectors concerned and reflect the current emissions and technical options for emissions reduction within that sector. Within the primary aluminium sector benchmarks must be developed to reflect the different classes of smelters in operation, as a minimum to identify and benchmark the different types of grid connected and self-generating smelters.

The provision to avoid “distortion of markets for electricity and heat” should not prevent free allocation to existing CHP plants or self-supply of electricity. Self-supply by energy-intensive industries should be treated differently from utility generation because the competitive situation of its end-use is entirely different from a utility.

Free allocation should be maintained until an international sectoral agreement is implemented.

The best solution to carbon leakage is a comprehensive international climate agreement.

8. Whether the redistributive element of the Commission’s proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate.

No, auctioning rights should be determined by share of emissions on a predefined date. Revenues raised should be recycled to participants in the form of lower business taxes and/or funding for environmental improvements.

The revenues should not be used for removing inconsistencies in economic growth across member states—this is a role for general EU taxation and expenditure.

\(^1\) Carbon leakage occurs where manufacture of the product in question will move outside of the traded area and then be imported.
The revision of the EU’s emission trading system: evidence

The proposal to allocate more auctionable emissions permits to poorer Member States should be rejected. Any redistribution of wealth should be agreed as part of the European Social Policy and funded via the EU budget. Alternative schemes are open to malpractice.

The International Dimension

9. The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM).

Flexibility of compliance should be maximised for EU Operators which is why we suggest that no restrictions should be placed on the use of allowances generated by the CDM. The environmental benefit is the same regardless of where the emission reduction is made and maximum flexibility will result in emissions reductions at the lowest cost—the primary objective of market mechanisms such as emissions trading.

10. The likely feasibility of creating links between the ETS and other similar schemes around the world.

Linking the EU scheme with others is desirable for two reasons:

- It increases the amount of participants, thus the amount of emissions reduction opportunities also increases which will result in lower carbon prices.
- It can also serve to bring in competing industries lowering the risks of carbon leakage.

However links with other schemes should only be made where the same level of environmental integrity exists. We consider the European Commission’s suggestions to be appropriate criteria.

What is Needed

- Acknowledge CO₂ cost pass-through into electricity prices:
  - as an enduring consequence of the carbon constraint regardless of exact state of competition in the power markets or whether the permits are given freely or purchased.
- Adjust the post-2012 EU ETS scheme to ensure appropriate mitigating measures for CO₂ cost pass through into power prices:
  - for those energy intensive industries producing commodities that are subject to global competition;
  - such measures must be implemented on a EU wide basis to alleviate possible state aid concerns.
- Ensure international competitiveness of aluminium sector is preserved post 2012.
- The threshold for smaller installations should be raised to 50 Ktpa CO₂.
- Keep secondary aluminium industry out of the post-2012 EU ETS.
- Provide guidelines to Member States for adoption of short term remedies:
  - to insure survival of the affected sectors;
  - to apply until 2012;
  - bring forward decision dates to provide more certainty for investment; and
  - continue operation of CCA’s.

Conclusion

In summary, Aluminium is an exciting material of to-day and of the future. It is a truly sustainable material which is cost-effective, strong, lightweight, corrosion resistant, flexible in design and fully recyclable. The UK Aluminium Industry alone employs approximately 20,000 people and has an annual turnover of over £3 billion. Aluminium has many industrial uses from aircraft manufacture to beverage cans. It would be unforgivable to see this vital industry forced to relocate outside of the European Union.

The aluminium industry is already heavily regulated via the IPPC Directive, the Landfill Directive, the Water Framework Directive, the REACH Directive, etc. Also, for seven years the industry has participated in the Climate Change Agreements and achieved below-target reductions in greenhouse gas emissions.

We urge the Committee to challenge the EU ETS legislation and establish clear rules and consequences of participation. The aluminium industry supports measures to achieve cost-effective emissions reduction. However, as drafted, the revised Directive will damage the international competitiveness of the UK and European Aluminium Industry and result in carbon leakage to other parts of the World.

June 2008
Memorandum by the British Cement Association

THE UK CEMENT INDUSTRY

1. The British Cement Association represents the United Kingdom’s cement industry in its dealings with Her Majesty’s Government, the European Union and relevant organisations in the United Kingdom. The members of the BCA (Castle Cement, Lafarge Cement UK, CEMEX UK and Tarmac, Buxton Lime and Cement) are the major domestic manufacturers of Portland Cement and together produce over 90% of the cement sold in the UK. Additionally, BCA works with Quinn Cement on climate change issues in relation to its operations in Northern Ireland.

2. Cement and concrete are essential to economic and social development. A healthy domestic industry is integral to the UK’s competitiveness and the most sustainable way to supply the market. Current EU ETS proposals seriously threaten this.

3. Energy represents an increasing proportion of the variable costs of cement manufacture (35% to 40%) and it is therefore a primary concern of the industry to take all cost effective measures to improve energy efficiency and thereby reduce its emissions of carbon dioxide.

4. Through their parent companies, Lafarge Cement UK, Castle Cement, and CEMEX are committed to carbon reductions throughout the world as demonstrated by their commitment to the World Business Council for Sustainable Development Cement Sustainability Initiative, (WBCSD CSI). In addition, Tarmac Buxton Lime and Cement has undertaken to adopt the commitments within the WBCSD CSI.

5. Through early action and substantial expenditure on new plant, BCA’s member companies have reduced their direct² carbon dioxide emissions by nearly 28% between 1990 and 2007. In 2007 the annual CO₂ emissions were over 3.7 million tonnes lower than in 1990.

6. SPECIFIC INQUIRY QUESTIONS

7. LEVEL OF EMISSIONS REDUCTIONS

8. The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached.

8.1 Proposed level of emissions reduction: The cement industry agrees that the EU must make meaningful reductions in its greenhouse gas emissions during Phase III of the EU ETS and beyond. However, these reductions should take account of the action taken to date, and the potential for further reductions. The current proposal does neither.

8.2 Targets set for the traded sector are a 21% reduction on 2005 levels by 2020, and only 16% for the non-traded commercial and domestic sector. However, the traded sector has already made substantial reductions based on 1990 levels, whilst parts of the non-traded sector such as motor transport have actually increased in this period.

8.3 By 2007, the UK cement industry had reduced its emissions by nearly 28% through the installation of new plant and the closure of inefficient plant whilst supplying 90% of UK consumption from UK production. However, the potential for further reductions through conventional technology is limited.

8.4 BCA believes that there should be a better balance between the traded and non-traded sector ensuring that the non-traded sectors do more to tackle climate change. By redressing the balance a broader understanding and responsibility will be acknowledged by those areas of the economy that have to date, been required to contribute very little to climate change mitigation.

8.5 International Agreement: With regard to the triggering of a 30% reduction target, the Commission’s proposal is unclear in three aspects.

8.5.1 the meaning of the term “international agreement”;
8.5.2 the criteria for assessing when an international agreement has been reached; and
8.5.3 the point at which the target is increased from 20% to 30%.

8.6 There needs to be greater clarity on all of these issues. The “conclusion”³ of an international agreement by the European Community is likely to introduce distortive effects on product markets of EU manufacturers unless there is a clear timetable including the introduction of measures by all participants to the international

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² “Direct carbon dioxide emissions equate to emission from the cement kilns, and exclude (indirect) emissions associated with the generation and transmission of the electricity used in manufacture”.

³ Article 28 terminology.
agreement where the increased EU targets are linked to the delivery of milestones in other nations and the agreement covers a critical mass of Annex I activities.

8.7 If an agreement is reached during the Phase III period, the EU should consider whether this agreement is equivalent in respect of:

8.7.1 Overall absolute emissions reduction.
8.7.2 Effort sharing/Reduction commitment of the traded sector.
8.7.3 Equivalent cost for the traded sector ie equivalent carbon cost in both developed and developing nations.
8.7.4 Equivalence in the reduction trajectory for the traded sector.
8.7.5 A critical mass of production from the activities listed in Annex I of the current EU ETS directive.
8.7.6 The type of system to be implemented (absolute/relative targets).

8.8 BCA believes that provision should be made in the Directive for the reduction trajectory for the traded sector to be adjusted depending on the nature and rigor of any international agreement.

8.9 The point at which an international agreement is deemed to have been concluded has significant implications. If concluded (ratified/adopted/comes into force) in 2013 at the start of Phase III energy intensive industries will be required to reduce emissions even further.

8.10 However, if the agreement is adopted later in Phase III eg 2017, then energy intensive industries will be required to make step-change reductions which are unachievable. BCA does not believe that this gives industry sufficient time to adjust given the time lags that exist to build new facilities, gain planning permission and obtain environmental permits.

8.11 It takes around seven years to design, build and commission a cement plant that will have an operating life of over 35 years. Consequently, although the international agreement is supposed to level the “playing field” it could actually cause a short term shock in product markets which accelerates the importation of product therefore increasing the “carbon footprint” of the UK and resulting in an unintended consequence of the EU ETS. As such the Commission should amend their proposals to limit the additional reduction, and extend the timeframe by which the extra reduction should be made.

9. **Scope and Operation**

10. **The sectors and gases that the Commission proposes to include and exclude.** We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture.

10.1 Overall, the cement sector supports a trading scheme with the proposed broader range of industries contributing to the reduction of greenhouse gas emissions. The agricultural sector has a key role to play in relation to climate change. Firstly as a contributor of a significant quantity of GHG emissions and by the provision of bio-fuel as alternatives to fossil fuels currently ubiquitous in energy intensive industry. Any inclusion of the sector in EU ETS should consider the potential impact on the emerging biomass fuel market.

10.2 BCA is concerned that greenhouse gas emissions from incinerators and landfill gas continue to be excluded from the system. The cement industry plays a crucial role in the waste management of the UK by recovering annually over one million tonnes of waste material as fuel and raw materials. BCA’s view is that the exclusion of incinerator and landfill emissions will give an inequitable commercial advantage to these waste treatment routes, whilst missing an opportunity to increase waste recovery and consequently reduce further fossil fuel usage in cement manufacture.

11. **The practical application and enforceability of the scheme.**

11.1 The practicality of some aspects of the European Commission proposals does not bear close scrutiny. Current proposals do not allow for European “sector caps” to be derived from the EU central cap. It makes practical sense to have EU-wide sector caps that are distributed using EU wide sector benchmark methods using a top-down approach.

11.2 However, in order to ensure that the sector caps are set at the correct level a bottom up assessment should be done using the benchmark method. Sector caps will avoid the potential distortions that different sector allocation methodologies may deliver if competing products are provided with allowances from the same allowance pot but using a different method. Sector caps will also improve certainty for investment decision makers when deciding the desirability of investing in the EU cement industry.
11.3 The current definition of installations which qualify as new entrants inhibits the potential to consolidate production at the most efficient sites and places a barrier for companies to take advantage of upgrading existing installations. Often emission reductions are made by consolidating and improving the larger installations and closing smaller or older inefficient plants. This important issue needs to be addressed if the EU ETS is to encourage investment in existing industrial installations.

11.4 The key strengths and weaknesses of the proposal. You may wish to consider in particular:

11.5 The extent to which the scheme as currently designed will encourage technological innovation;

11.6 Although the proposed use of auctioning to distribute allowances may, at the macro level, align with economic theory, in practice it represents the least efficient method of encouraging technological innovation. Auctioning introduces a high cost penalty rather than acting as an innovation driver and it also removes funds from companies that could have been used for capital investment. Industries that are energy and capital intensive such as cement need resources to enable investment in new innovation and energy efficient processes.

11.7 In contrast, the use of benchmarks to distribute freely the sector cap can provide the differential between technologies whereby the least efficient receive less allowances and the most efficient technologies receive more allowances relative to their process requirements. The benchmark approach is more effective for delivering technological change in industries where the “benchmark” or technological standard can be transparent and thus set a level of aspiration. It also means that companies already employing the best available techniques do not incur unnecessary costs from auctioning.

11.8 Whether it will result in the appropriate price signal being sent.

11.8.1 The price signal will be set by the market price, which in turn is determined by scarcity of allowances within the market ie the level of ambition of the overall EU cap, which has been set. Energy is a key feature of all decision making in the cement industry as it represents 35—40% of variable costs. In addition to the increased cost of carbon dioxide, the cement industry will also be required to pay the costs of the carbon dioxide emitted by the power generators as well as the extant climate change levy and the additional cost that will be levied from the ambitious renewable targets.

11.9 Whether it will be efficient and/or equitable.

11.9.1 BCA believes that the current proposals are neither efficient nor equitable. The cement industry in the UK and the EU must have the opportunity to compete equally with suppliers in non-carbon constrained countries. It is essential that an equalisation scheme is in place before the industry is required to buy CO₂ allowances at auction.

11.9.2 Without equalisation, emissions will move off-shore taking domestic industry and jobs with them and allowing non-carbon constrained economies to exploit this competitive advantage. The import of cement or clinker, even from technologically equivalent plant, imposes an additional burden as a result of its transport.

11.9.3 Until a truly equitable global trading scheme is established, free allocation is the only practical solution to the leakage of production, carbon and jobs. Importantly, free allocation does not reduce the incentive to reduce emissions as it does not affect the price of CO₂ because the carbon price is predominantly determined by scarcity.

11.9.4 Within an overall EU cap, it is feasible for different sectors to follow different trajectory of CO₂ reductions, based on their investment cycle and abatement potential. Additionally, BCA would expect a review of the EU trajectory before the rate of reduction is decided for Phase IV of the EU ETS.

12. The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions.

12.1 BCA believes that emissions reductions should be made at the point of lowest cost. Consequently, the use of project credits, either within or outside of the Community should be unlimited, as this will help promote climate change mitigation and also allow those activities within the EU scheme that have long investment cycles time to adjust.

12.2 In this regard Article 24a might be strengthened by requiring the Commission to adopt implementing measures for issuing allowances in respect of projects, which may involve companies and Member States that reduce greenhouse gas emissions outside of the Community scheme. The cement industry could provide assistance with the use of waste-derived alternative fuels that when used in the cement industry prevent emissions being released outside the remit of the Community scheme in landfill and incineration activities.
13. **Allocation and Auctioning**

14. Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be.

14.1 BCA believes that there should be a maximum harmonised level of auctioning to ensure an equitable European market. UK industry is particularly under threat from imported product from non-carbon constrained economies due to the large number of ports, easy access by sea and proximity of major conurbations to maritime distribution centres. Although auctioning should not apply to the cement sector as a sector vulnerable to “leakage”.

14.2 The illustration in Annex I identifies the key cement import terminals. Consequently, key factors such as this should be taken into consideration in freely distributing the UK portion of the EU cap to strategic industries such as cement. If the cement industry were subject to auctioning, a substantial burden of additional costs would be imposed when the domestic construction market which is facing difficult times.

14.3 The level of auctioning should be based on the ability to pass through to customers the auction cost, and this level will be different for different sectors and in some circumstances for different Member States. As such, BCA believes that a sectoral level of auctioning should be set where the level takes into consideration *inter alia*:

- 14.3.1.1 ability to pass through auction cost;
- 14.3.1.2 vulnerability to imports; and
- 14.3.1.3 carbon dioxide emissions relative to product profitability.

14.4 Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge, and for how long.

14.5 If auctioning were applied to the cement industry at the 20% rate in 2013, increasing to 100% by 2020, the cost to the UK industry would be in the region of €1.9 billion over Phase III. To this cost would be added a further electricity cost of €0.5 billion, (based on the pass through of the carbon cost). See Annex II.

14.6 The UK cement industry has very limited capability to pass through these additional costs to customers and it is likely that the quantity of imported cement from non-EU countries would increase. The construction industry would quickly become dependent on externally sourced cement and security of supply would become an issue.

14.7 BCA believes that the UK cement sector is subject to “carbon leakage” and to prevent this it would be necessary to receive free allocations until sufficient market equalisation takes place, either by a robust future international agreement or by a border adjustment.

14.8 There is currently uncertainty on the detail of the “carbon equalisation scheme” proposed by the Commission and how it will apply to different sectors. This uncertainty is constraining investment decisions. One of the BCA member companies has placed on hold £1 billion (of which £200 million in the UK) of investment in the EU due to EU ETS uncertainty. Strategic businesses need to know as soon as possible that they are likely to be recognized as competitively vulnerable to imports so that investment can resume creating a healthy domestic cement industry.

14.9 In the interim, until an equalization scheme is developed, CO₂ allocation should be based on free allocation using performance based methods such as “benchmarking”. This is an important issue if encourage investment in existing industrial installations is to be encouraged and carbon leakage avoided.

14.10 BCA believes that the assessment (Article 10a[9]) on competitively impacted sectors should be made much sooner than the proposed date of June 2011. Once sufficiently robust criteria have been agreed, it should be possible to commence such an assessment.

14.11 Even if a consensus were to be achieved in at COP 15 in Copenhagen in December 2009, it could be well into Phase III before any real “equalisation” can be assessed in the trade of commodity products following implementation of the international agreement in signatory states. As such the carbon leakage assessment should begin in advance of COP 15. It is essential that the Commission consults with industrial experts during the “leakage assessment”.

14.12 Whether the redistributive element of the Commission’s proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate.

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14.13 The EU ETS is an environmentally-targeted instrument and it is therefore appropriate to use the revenue from auctioning emissions permits wholly (minus the scheme administrative costs) for the purpose of mitigation and adaptation to climate change within the European Union. As such all of the Member State auction revenue should be used entirely by that Member State for the purpose of tackling climate change.

15. The International Dimension

15.1 The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM).

15.2 As noted above in section 12.1, BCA believes that emission reductions should be made at the point of lowest cost. The use of project credits, either within or outside of the Community should be unlimited as this will help promote climate change mitigation and also allow those activities within the EU scheme that have long investment cycles time to adjust.

15.3 The likely feasibility of creating links between the ETS and other similar schemes around the world.

15.4 BCA is not in a position to give an informed assessment of the likely feasibility of creating such links, but notes that until the EU system is linked to equivalent scheme of major global emitters: USA, China, India and Brazil the effectiveness of trading for the reduction of emissions will be severely restricted.

15.5 BCA believes that links with other regional or national scheme require the demonstration of “equivalence”. The Commission proposals do not go far enough since they do not include conditions for testing equivalence of the future international agreement.

15.6 A more rigorous test for equivalence might be based on:
   15.6.1 Overall absolute emissions reduction;
   15.6.2 Type of system (absolute cap and trade not relative efficiency);
   15.6.3 Scope: direct emissions rather than indirect;
   15.6.4 Effort sharing/Reduction commitment of the traded sector;
   15.6.5 Equivalent cost for the traded sector ie equivalent carbon price;
   15.6.6 Equivalence in the reduction trajectory for the traded sector;
   15.6.7 Equivalent monitoring, reporting and verification (units, carbon factors etc);
   15.6.8 Enforcement and penalties;
   15.6.9 Functionality concerning banking, borrowing and treatment of new entrants.

12 June 2008
Annex I

Cement Import Terminals:

UK Non manufacturers control 12 out of 22 terminals

200km from import facilities covers practically all of the UK population

Not to scale.
The British Lime Association (BLA) welcomes the opportunity to contribute towards the European Union Committee—Environment and Agriculture Sub-Committee Inquiry into the revision of the EU Emissions Trading System (EU ETS) and supports the objectives and scope of the work.

**British Lime Association**

The BLA is a constituent body of the Quarry Products Association (QPA), the trade association of the aggregates, asphalt and ready-mix concrete industries. The BLA represents the interests of six member companies, responsible for producing more than 95% of the lime sold in the UK. The BLA Members are Tarmac Buxton Lime & Cement, Hanson, Steetley Dolomite, Lhoist UK, Singleton Birch and Totternhoe Lime & Stone Co Ltd.

The BLA is also a member of the European Lime Association (EuLA) and represents the interests of Corus, British Sugar and Specialty Minerals on issues relating to lime manufacturing with Emissions Trading and Climate Change Levy Agreements.

**Industry Context**

The Lime Industry is a relatively small, but strategically vital contributor to a huge range of downstream environmental, industrial, social and construction activities. It is an essential ingredient in the treatment of drinking water, sewage and effluent treatment, acid gas treatment, soil stabilisation and contaminated land remediation in addition to the more traditional end-use markets of iron and steel production, building/construction, agriculture and chemicals.

It is vital that the contribution made by lime is not ignored, because the demise of a domestic Lime Industry would have serious implications on the competitive status of numerous downstream sectors that are important to the environmental, social and economic wellbeing of the UK.
Energy typically represents over 40% of variable costs for the industry, and therefore one of the primary concerns of BLA Members has always been to maximise efficiency and thereby reduce the CO₂ emissions from their operations.

For many years, the BLA has recognised the importance of its responsibilities in addressing climate change and has always been supportive of the EU ETS. However, there are a number of aspects within the revised proposals that do raise concerns for the Lime Industry.

The UK Lime Industry will be subject to “carbon leakage” under the Commission’s proposals. Manufacturing lime has been widely recognised in a number of studies as an energy intensive process that is highly exposed to the cost of CO₂, with limited opportunities to pass the cost on to customers. However, the BLA harbours concerns with the criteria proposed by the Commission for assessing the potential for carbon leakage and particularly the use of GVA data as an indicator.

Furthermore, the BLA is concerned by the proposed timescale for identification of these “exposed sectors” and supports the government’s proposal to improve certainty by bringing the decision forward to mid-2009.

**SPECIFIC INQUIRY QUESTIONS**

*The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached*

Despite achieving substantial energy efficiency gains and CO₂ abatement over the past 15 years, the BLA recognises the importance of continuing to make a contribution towards UK objectives and targets. However, it is vital to recognise that should domestic reduction in CO₂ simply be achieved through “carbon leakage” then this will be environmentally counter-productive. This is because there will continue to be demand for lime in the UK and so there will be a net increase in CO₂ emissions from transport and also, potentially, from production in less efficient installations in non-carbon constrained countries outside the EU.

There needs to be greater clarity on exactly what constitutes an “International Agreement”, how and when it would be implemented or ratified by each participating country and what is considered an “equivalent commitment”. There should be a provision in the Directive for the traded sector reduction trajectory to be adjusted depending on the nature and rigor of any international agreement reached. Even after ratification of an international agreement, those sectors exposed to a risk of carbon leakage need to be protected from production in countries that does not carry an equivalent cost of carbon. This is necessary to ensure that EU Industry is not disadvantaged against its global competitors.

*The sectors and gases that the Commission proposes to include and exclude*

The BLA is content with the proposed expansion plans for the inclusion of additional gases and sectors and believes that all sectors, including non-EU ETS sectors should contribute towards the reduction of GHG.

*The practical application and enforceability of the scheme*

Current proposals do not allow for European “Sector caps” to be derived from the EU Central Cap. It makes practical sense to have EU-wide sector caps that are distributed using harmonised sector benchmark methodologies using a top-down approach and for this to be subsequently reconfirmed through a bottom-up assessment.

The current definition of “new entrant” inhibits the potential to consolidate production at the most efficient sites and places a barrier for companies to take advantage of upgrading existing installations. Often emission reductions are made by consolidating and improving the larger installations and closing smaller or older less efficient plants. This is an important issue if we are to encourage investment in existing industrial installations within the UK.
The key strengths and weaknesses of the proposal

The BLA supports the efforts made to bring a level playing field to the scheme through increased harmonisation, but further measures are required to ensure that UK Industry is not disadvantaged on a European and/or Global scale.

Although the use of auctioning may appear to be the most efficient method of distributing allowances from an economic perspective, in practice it does not encourage technical innovation. If 100% auctioning were applied to the lime sector, it would add a massive ~50% to the cost of lime production and is far greater than current profit, even when assuming a conservative €30 per tonne of carbon. NERA has undertaken an economic analysis of the lime sector which clearly demonstrates that this would cause carbon leakage. The Lime Sector has developed a simple and transparent benchmark system that provides strong drivers for investment in CO₂ reduction in the industry. Such a progress fostering benchmark produces exactly the same incentive for reducing CO₂ as auctioning. However auctioning introduces a high cost penalty, which removes funds from capital intensive industries that could have been used to invest in new, innovative and more efficient plant.

The current proposals are not equitable, since if the Lime Sector were to be classified as a sector exposed to carbon leakage thus receiving up to 100% of allowances free of charge, the stated annual reduction of 1.74% and NER contribution would ensure that the sector would be competitively disadvantaged with Non-EU Countries (unless a genuinely equivalent International Agreement is reached). The contribution to the NER and 1.74% factor should not be automatically applied to free allocation and instead the level of free allocation should be based on benchmarks set at a level to avoid carbon leakage.

The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions

The BLA believes that emissions reductions should be made at the point of lowest cost. Consequently the use of project credits should be unlimited, as this will help to promote climate change mitigation internationally and also allow those activities within the scheme with long investment cycles, such as lime, time to adjust.

Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at EU level or at Member State level, and what time-frame for such decisions should be

The BLA believes that such decisions should be harmonised to ensure an equitable European market, although as previously stated auctioning should not be applied to the Lime Sector, since it will put the industry at risk of carbon leakage.

Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge, and for how long?

Economic analysis has demonstrated that for the UK Lime Industry the cost of auctioning is several times greater than its profit and it therefore has very limited capability to pass on the cost of auctioning to the customer without attracting a significant quantity of imported lime from non-EU countries. The downstream processes (referred to earlier in this note, such as drinking water) of key strategic value to the UK would become reliant on externally sourced lime, and security of supply would then clearly become an issue.

The BLA believes that the UK Lime Industry is subject to “carbon leakage” and to prevent this it would be necessary to receive free allocation based on progress-fostering benchmarks until sufficient market equalisation occurs, either through a robust international agreement which ensures that lime produced in all countries carries an equivalent cost of carbon or a boarder adjustment mechanism.

Whether the redistributive element of the Commission's proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate

The EU ETS is an environmentally targeted instrument; as such all of the Member State auction revenue should be used entirely by that Member State for the purpose of tackling climate change.
The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM)

Tackling Climate Change is a global issue. The use of project credits should be unlimited to promote the potential for achieving the highest possible emission reductions and reward proactive performers for global action.

The likely feasibility of creating links between ETS and other similar schemes around the world

The future effectiveness of the EU scheme must be based on its ability to bring other global partners on board through a genuinely equivalent International Agreement. Industry must be consulted on the criteria for assessing “equivalence” with the EU scheme, as otherwise European Industry could be competitively disadvantaged in the global arena.

19 June 2008

Memorandum by Brunner Mond

INTRODUCTION

The European Commission is proposing to amend Annex 1 of Directive 2003/87/EC in order to include the production of soda ash (Na$_2$CO$_3$) and sodium bicarbonate (NaHCO$_3$) in the EU Emissions Trading Scheme (EU-ETS).

This evidence addresses the Committee’s interest in the proposed process of Allocation and Auctioning of permits (items 6 and 7 in the Committee’s call for evidence) and the damaging effects on Brunner Mond’s UK manufacturing operations if an auctioning process is adopted for the soda ash and sodium bicarbonate business.

SUMMARY

— The European Commission is proposing to include the production of soda ash and sodium bicarbonate in EU-ETS, with emission permits issued by auctioning.

— The cost of purchasing emission permits would amount to 13% of the current sales price for soda ash, and could not be absorbed within our very narrow profit margins.

— Brunner Mond, in common with the rest of the EU soda ash and sodium bicarbonate industry, is exposed to international competition.

— Our international competitors have surplus capacity, and would be expected to increase their shipments to the EU if the introduction of EU-ETS put the domestic industry at a cost disadvantage.

— Capital investments made by Brunner Mond in recent years have significantly reduced our CO$_2$ emissions.

— Soda ash supplied by our international competitors has a higher carbon footprint than that produced in our own plants, even before emissions due to shipping are taken into account.

— Inclusion of the soda ash and sodium bicarbonate industry in EU-ETS on an auctioning basis will therefore result not only in carbon leakage but also an increase in total global CO$_2$ emissions. A process of free allocation based on benchmarks should be adopted to prevent these negative consequences.

— A common approach across the industry in the EU is the correct way forward; individual Member States should not be allowed to make separate decisions as this will lead to an unfair distortion of trade within the EU.

1. Brunner Mond’s UK Manufacturing Operations

Brunner Mond is the only UK producer of sodium carbonate (soda ash) and sodium bicarbonate. These are strategic raw materials for the nation, being essential to the manufacture of many everyday items such as glass, detergents, foods and pharmaceuticals. Based in Northwich, Cheshire the company manufactures about one million tonnes of product at its two sites, Northwich West and East.
Brunner Mond and its predecessors have been manufacturing soda ash in Northwich since 1873. In 2000 a new CHP plant, owned and operated by Powergen CHP (now E.ON), was commissioned. Brunner Mond then closed its old coal-, oil- and gas-fired integrated power stations and entered into an over-the-fence relationship for the supply of steam and electricity.

1.1 Technical description of Brunner Mond’s manufacturing process

Brunner Mond, like all European soda ash producers, manufactures soda ash using the ammonia-soda process. The ammonia-soda process was developed by Ernest Solvay in the 1860s and subsequently licensed to John Brunner and Ludwig Mond, the founders of the original Brunner, Mond & Company.

Manufacture of soda ash

The primary raw materials for the ammonia-soda process are sodium chloride brine (salt), limestone and coke. The process can be represented as a double decomposition between sodium chloride and calcium carbonate to produce sodium carbonate and calcium chloride (Equation 1).

\[ 2\text{NaCl} + \text{CaCO}_3 \rightarrow \text{Na}_2\text{CO}_3 + \text{CaCl}_2 \]  

However, the reaction between sodium carbonate and calcium chloride will not proceed unaided. The critical steps involve the use of ammonia absorbed into the brine to generate alkalinity and the carbonation of the alkaline brine using carbon dioxide of carefully controlled strength and chemical quality. This precipitates impure (“crude”) sodium bicarbonate leaving ammonium chloride in solution (Equation 2).

\[ \text{NaCl} + \text{NH}_3 + \text{H}_2\text{O} + \text{CO}_2 \rightarrow \text{NH}_4\text{Cl} + \text{NaHCO}_3 \]  

Carbon dioxide for the carbonation reaction is produced by burning limestone with coke (anthracite is an alternative) in vertical shaft kilns, in which the operating conditions and raw materials are specified to optimise the carbon dioxide content of the evolved gas (Equation 3).

\[ \text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2 \uparrow \]  

The burnt lime is slurried with water to produce a milk of lime solution (Equation 4), a highly alkaline medium, which is used to liberate free ammonia from the ammonium chloride solution (Equation 5). The liberated ammonia is recycled to the ammoniation stage.

\[ \text{CaO} + \text{H}_2\text{O} \rightarrow \text{Ca(OH)}_2 \]  
\[ \text{Ca(OH)}_2 + 2\text{NH}_4\text{Cl} \rightarrow \text{CaCl}_2 + 2\text{NH}_3 \uparrow + 2\text{H}_2\text{O} \]

Soda ash is obtained from the crude sodium bicarbonate precipitated in the carbonation reaction (Equation 2) by thermal decomposition (Equation 6). The carbon dioxide so liberated is recycled back into the carbonation reaction.

\[ 2\text{NaHCO}_3 \rightarrow \text{Na}_2\text{CO}_3 + \text{CO}_2 \uparrow + \text{H}_2\text{O} \]

The chemical kinetics require an excess of carbon dioxide to provide the driving force for carbonation and this excess is lost as unreacted carbon dioxide in the waste gas. The quantity of carbon dioxide produced at the kilns is also dependent upon the lime demand for ammonia recovery. Under certain circumstances it is necessary to waste excess carbon dioxide prior to carbonation to maintain the overall chemical balance.

Manufacture of sodium bicarbonate

The crude sodium bicarbonate precipitated in the carbonation reaction (Equation 2) is not of sufficient purity for sale. Instead, sodium bicarbonate is manufactured by carbonating an aqueous solution of soda ash (Equation 7).

\[ \text{Na}_2\text{CO}_3 + \text{CO}_2 + \text{H}_2\text{O} \rightarrow 2\text{NaHCO}_3 \downarrow \]

The co-production of sodium bicarbonate on an ammonia-soda process soda ash plant can significantly reduce the need to waste carbon dioxide. However, the capacity to produce it is limited in that if too much sodium bicarbonate is made then it becomes necessary to waste lime to maintain the chemical balance.

In summary, the ammonia-soda process relies on complex recycles of carbon dioxide, ammonia, water and energy. Over the 140 years since its invention, these recycles have been optimised both for cost and environmental considerations. It is vital that the process is viewed in totality rather than as independent units.
SUMMARY

The ammonia-soda process must not be confused with conventional lime (calcium oxide) production, where there is no similar demand for the carbon dioxide produced. For this reason, it is not included as a scheduled process in the context of the current emissions trading regulations and is exempt under the Climate Change Levy (Fuel Use and Recycling Processes) Regulations 2005.

A more detailed description of the ammonia-soda process can be found in the Process BREF for Soda Ash prepared by the European Soda Ash Manufacturers Association, a Sector Group of Cefic. A graphical representation of the ammonia-soda ash process (taken from the BREF) is given in Appendix 1.

1.2 Carbon Dioxide Emissions

Energy generation

Energy in the form of steam is required for the thermal decomposition of crude sodium bicarbonate to soda ash (Equation 6) and for the recovery of ammonia (Equation 5). In addition, both steam and electric power are required for driving a range of machinery on the soda ash plant, including the compressors for the carbon dioxide gas.

All of the steam and electric power requirements for Brunner Mond’s UK soda ash plants are generated by a gas-fired combined heat and power (CHP) plant located adjacent to our Winnington site. The Winnington CHP plant was commissioned in 2000, and represented an investment of £130 million. The plant is owned and operated by the CHP division of E.ON UK (formerly Powergen).

The Winnington CHP plant is one of the most efficient power plants in Europe, with a combined thermal and electrical efficiency of 85%. The plant has total annual CO\(_2\) emissions of 750,000 tonnes. However, Brunner Mond consumes only 25 MW of the 120 MW electricity generated by the plant; the remainder is exported to the National Grid.

Using Environment Agency guidance on allocating CO\(_2\) emissions from CHP plants, the emissions associated with the steam and electricity consumed in Brunner Mond’s UK plants are calculated to be 450,000 tonnes per year. This is equivalent to 0.5 tonnes CO\(_2\) per tonne of soda ash.

It should be noted that in investing in a state-of-the-art energy generation facility, Brunner Mond has substantially reduced its carbon dioxide emissions. The CHP plant replaced three aging boiler plants, which burnt a mixture of coal, natural gas and oil. The old boiler plants emitted 900,000 tonnes of CO\(_2\) in producing the steam required for our factories, but generated only 25 MW of electricity.

In summary, commissioning of the Winnington CHP plant resulted in:

— a reduction in CO\(_2\) emissions from 900,000 t/yr to 750,000 t/yr; and
— an increase in electricity generation from 25 MW to 120 MW.

Since the extra electricity is exported to the National Grid, emissions associated with steam and electricity consumption in Brunner Mond’s UK soda ash plants have been reduced by over 50% from 900,000 tonnes per year (equivalent to 1.0 t CO\(_2\)/t soda ash) to 450,000 tonnes per year (equivalent to 0.5 t CO\(_2\)/t soda ash).

Process emissions

Although the majority of carbon dioxide generated in the limekilns is absorbed into the finished products, there is inevitably some loss of unreacted carbon dioxide from the carbonation and bicarbonation reactions. The amount of unreacted process carbon dioxide released from Brunner Mond’s UK plants is 200,000 tonnes per year, equating to 0.2 t CO\(_2\)/t soda ash.

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http://www.cefic.org/files/Publications/ESAPA_Process_BREF_for_Soda_Ash_Issue2.pdf (The Process BREF for Soda Ash was prepared by the European Soda Ash Producers Association (ESAPA) and submitted to the European IPPC Bureau in Seville for the preparation of the Large Volume Inorganic Chemicals BREF).
1.3 Cost impact of inclusion of soda ash manufacture in Phase 3 of EU-ETS

Carbon dioxide emissions arising from energy generation were included in Phases 1 & 2 of EU-ETS. Emissions arising from the process of manufacturing soda ash are proposed for inclusion in Phase 3.

The total emissions (energy and process) associated with manufacturing a tonne of soda ash at Brunner Mond’s UK plants are 0.7 t CO$_2$/t soda ash. Taking the European Commission indicative price for emission allowances of €30/t CO$_2$, it can therefore be calculated that purchasing emission permits will increase Brunner Mond’s UK production costs by £15/t soda ash. This would represent a 13% increase in our production costs.

The soda ash business operates on very narrow margins such that the additional costs arising from EU-ETS will have to be passed on in full to our customers if the business is to remain viable. However, the next section of this document will demonstrate that our ability to pass on the cost increase is highly constrained by competitors, who will not be subjected to EU-ETS.

2. EU Soda Ash Market

2.1 EU soda ash demand

The estimated 2007 demand for soda ash in the EU is 8.7 million tonnes.\(^7\) The principal user of soda ash is the glass industry, accounting for over 60% of demand. Other important customers include the chemicals industry and the detergents industry. The current breakdown of soda ash demand in Europe is illustrated in Figure 1.

\[\text{Figure 1}\]

**EU SODA ASH MARKET BY END USE}\(^8\)**

Soda ash is a critical raw material in the production of glass, representing approximately 20% of the weight of the finished glass.\(^9\) It is also the most expensive raw material in proportion to the amount used, accounting for around 60% of a glassmaker’s raw material costs.\(^10\) Acting as a fluxing agent, soda ash lowers the melting temperature of the silica sand and therefore reduces energy consumption. There is no substitute for soda ash.

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\(^6\) Unless otherwise stated, all references to the EU are to the 27-member union that has existed since 1 January 2007 (“EU-27”).

\(^7\) Calculated from production and export figures produced by CEFIC statistical service on behalf of the European Soda Ash Producers Association (ESAPA) (2007 full-year data for EU-25); estimated production in Romania and Bulgaria; and Eurostat import data (year to October 2007).

\(^8\) From 2007 figures produced by the CEFIC statistical service on behalf of ESAPA. Note that the figures are for sales by ESAPA members in the EU-25. However, the inclusion of sales by non-ESAPA members and of the Romanian and Bulgarian market would not alter the picture significantly.

\(^9\) *UK glass manufacture—a mass balance study* (British Glass—2003).

\(^10\) *Pilkington and the Flat Glass Industry 2007* (Pilkington Group Ltd).
in the glass-making process. Increased recycling of glass reduces, but does not eliminate the need for virgin raw materials.

Flat glass is used to make the windows in buildings and cars. In order to improve energy efficiency, building regulations across Europe increasingly specify the use of double or triple glazing and low-emissivity energy-saving glass. These requirements are increasing the demand for raw glass and hence for soda ash.

Glass containers are still very important for packaging food and drinks, despite competition from PET and other plastic packaging materials. Glass containers are much easier to reuse and recycle than those manufactured from plastic, and glass remains the preferred packaging material for premium products such as wine and beer. The last few years have seen an increasing quantity of wine being imported from Australia and South America in bulk and bottled locally in Europe, a practice that brings a number of environmental advantages. The prospects for the European glass container industry are therefore stronger than they have been for many years.

The category “other glass” includes glass wool insulation. Demand for this product is growing due to the need to increase the energy efficiency of buildings, and there are plans for a number of new factories across Europe.

2.2 EU soda ash producers

There are six producers of soda ash in the EU, with a total nameplate capacity of 9.3 million tonnes per year (Table 1).

Table 1

<table>
<thead>
<tr>
<th>Producer</th>
<th>EU Capacity (t)</th>
<th>EU Manufacturing Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvay</td>
<td>5,000,000</td>
<td>Germany (2 plants), France, Spain, Portugal, Italy, Bulgaria*</td>
</tr>
<tr>
<td>Ciech</td>
<td>1,900,000</td>
<td>Poland (2 plants), Germany, Romania</td>
</tr>
<tr>
<td>Brunner Mond</td>
<td>1,300,000</td>
<td>UK (2 plants), Netherlands</td>
</tr>
<tr>
<td>Novacarb</td>
<td>500,000</td>
<td>France</td>
</tr>
<tr>
<td>GHCL</td>
<td>300,000</td>
<td>Romania</td>
</tr>
<tr>
<td>Sisecam</td>
<td>300,000</td>
<td>Bulgaria*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,300,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

*The Bulgarian plant is a joint venture between Solvay and Sisecam, with each partner being allocated a proportion of the output.

In addition to the above, BASF manufactures a small amount of soda ash as a by-product at plants in Belgium and Germany.

In 2007, EU soda ash production is estimated to have been 8.9 million tonnes. The majority of the soda ash plants in the EU are currently operating at or close to their nameplate capacities. The two plants in Romania are an exception to this, as they are currently benefiting from investment by their new owners. By operating their plants at full capacity, the EU producers are able to maximise operating efficiencies and minimise production costs, thus remaining competitive against imports.

Around 84% of the soda ash produced by EU producers in 2007 was sold on the EU market. The majority of the 1.4 million tonnes exported outside the EU, comes from the plants in Spain, Bulgaria and Romania. Latin America is the principal export market for the Spanish plant, whilst product from Bulgaria and Romania is exported to a variety of destinations including the Balkans, Africa and the Middle East.

11 Bottling wine in a changing climate WRAP case study June 2007.
2.3 Suppliers to the EU soda ash market—producers and importers

The EU producers supplied around 87% of the 8.7 million tonne EU demand in 2007. The remainder was supplied by imports. Figure 2 shows an estimate of how the EU market was split between domestic producers and importers.

**Figure 2**

EU MARKET SHARE OF DOMESTIC PRODUCERS AND IMPORTERS (2007 ESTIMATE)

Solvay and Sisecam also import soda ash into the EU from their plants located outside the EU. Sisecam is responsible for all of the imports from Turkey and Bosnia. Solvay has a plant in the USA, but is only responsible for a small proportion (less than 2%) of the imports from that origin. The majority of imports from the US and all imports from Russia and the Ukraine are by companies that have no manufacturing presence in the EU.

Although Brunner Mond’s parent company, Tata Chemicals and GHCL also manufacture soda ash in India, they are not currently importers to the EU. Brunner Mond/Tata Chemicals has a plant in Kenya. Tata Chemicals recently acquired General Chemicals of the USA which supplies part of the US material imported into the EU.

The EU-wide market shares illustrated in Figure 2 mask the fact that the sales by the various suppliers are not distributed evenly across the EU market. As a bulk commodity, soda ash is expensive to transport in proportion to its value, so producers have a strong incentive to sell as much of their output as possible close to their manufacturing plants. The pattern of trade is therefore normally that sales are made either in the country of manufacture or the immediately neighbouring countries.
Similarly, imports are not evenly distributed across the EU market. Importers tend to sell their product as close as possible to the port of import, in order to minimise land transportation costs. Thus imports from the US are concentrated in the western parts of the EU, with over 50% landing in Brunner Mond’s core markets of Belgium and the Netherlands. (Table 2).

Table 2

<table>
<thead>
<tr>
<th>Destination</th>
<th>Tonnes</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium*</td>
<td>186,000</td>
<td>32%</td>
</tr>
<tr>
<td>Netherlands*</td>
<td>139,000</td>
<td>24%</td>
</tr>
<tr>
<td>Spain</td>
<td>160,000</td>
<td>28%</td>
</tr>
<tr>
<td>Portugal</td>
<td>27,000</td>
<td>5%</td>
</tr>
<tr>
<td>France</td>
<td>60,000</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>1,000</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>573,000</td>
<td>100%</td>
</tr>
</tbody>
</table>

* A proportion of the soda ash landing in Belgium and the Netherlands is transhipped and forwarded to the UK and Scandinavia.

Imports from Turkey are concentrated in countries along the Mediterranean coast of Europe whilst imports from Russia and the Ukraine are found in Poland, the Baltic Countries and other countries that can be accessed by sea (Figure 3).

Figure 3

DISTRIBUTION OF IMPORTS TO THE EU

---

12 From 2007 US export data. Excludes exports to Lithuania, as these are for onward shipment to Russia.
2.4 International exposure of the EU soda ash industry

According to the criteria elaborated by DG ECFIN, a sector is supposed to be internationally exposed if:

— the trade ratio is > 20% (extra-EU exports + imports/domestic EU production);  
— the import ratio is > 10% (extra EU imports/domestic EU production); and  
— CO₂ cost/sales price ratio is > 5%.

For soda ash:

— the trade ratio is 29%;
— the import ratio is 13%; and
— the CO₂ cost/sales price ratio is 13% (Brunner Mond UK figures).

Therefore the EU soda ash industry clearly qualifies as being internationally exposed under the official definitions.

3. Potential Threat from US Imports

3.1 US soda ash producers

There are five producers of soda ash in the United States of America (see Table 3). All of the US producers manufacture soda ash from the mineral trona. Four of the producers are located together in Green River, Wyoming, where they extract trona from underground mines. The exception is Searles Valley Minerals, which is located in California and manufactures soda ash from trona extracted from lake brines.

<p>| Table 3 |
| US SODA ASH PLANTS |</p>
<table>
<thead>
<tr>
<th>Producer</th>
<th>Capacity (t)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMC</td>
<td>4,400,000</td>
<td>2 plants. Nippon Sheet Glass has a minority stake</td>
</tr>
<tr>
<td>OCI</td>
<td>2,800,000</td>
<td></td>
</tr>
<tr>
<td>Solvay</td>
<td>2,500,000</td>
<td>Asahi Glass has a 20% stake</td>
</tr>
<tr>
<td>General Chemicals*</td>
<td>2,500,000</td>
<td>Owens-Illinois has a 25% stake</td>
</tr>
<tr>
<td>Searles Valley Minerals</td>
<td>1,300,000</td>
<td>Acquired by Nirma in January 2008</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,500,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Tata Chemicals, the parent company of Brunner Mond, has recently acquired General Chemicals.

3.2 Production of soda ash from trona

The US soda ash producers refer to their product as “natural soda ash”, a name that has now slipped into common usage. In fact there is no such thing as naturally occurring soda ash. The mineral trona is actually an impure form of sodium sesquicarbonate, and it requires considerable energy-intensive processing in order to convert it into soda ash with a sufficient purity to compete with that produced via the ammonia-soda process.

Most soda ash production in the United States is by the monohydrate process. The trona ore is first calcined at around 200°C in order to convert it to crude sodium carbonate (Equation 8). This step also serves to destroy some of the organic impurities contained in the ore.

\[
2\text{Na}_2\text{CO}_3\cdot\text{NaHCO}_3\cdot2\text{H}_2\text{O} \rightarrow 3\text{Na}_2\text{CO}_3 + \text{CO}_2 \uparrow + 5\text{H}_2\text{O} \tag{8}
\]

The crude sodium carbonate is dissolved in water, allowing insoluble mineral contaminants to be separated by filtration and soluble organic contaminants to be removed using activated carbon. The solution is then evaporated, resulting in the precipitation of sodium carbonate monohydrate (\(\text{Na}_2\text{CO}_3\cdot\text{H}_2\text{O}\)). The monohydrate crystals are washed before being calcined at about 150°C to produce soda ash.
The revision of the EU’s emission trading system: evidence

Carbon dioxide emissions

The monohydrate process requires significant amounts of energy for the evaporation and calcination steps; published figures suggest that a typical plant uses 6.1 GJ energy per tonne of soda ash. Unlike Brunner Mond, the Wyoming soda ash producers have not invested in modern Combined Heat and Power plants, and so do not export electricity to the US network. Furthermore, they have switched to using coal instead of natural gas for their energy requirements on cost grounds. The CO₂ emissions associated with the energy requirements of a typical monohydrate process plant are therefore estimated to be 0.6 t CO₂/t soda ash.

Note that carbon dioxide is evolved during the initial calcination of the trona ore (0.15 t CO₂/t soda ash). This carbon dioxide serves no further role in the production process, and is simply vented to the atmosphere. The total emissions of a typical US monohydrate process soda ash plant are therefore estimated to be 0.8 t CO₂/t soda ash—ie fractionally more than the 0.7 t/t emissions of Brunner Mond’s UK soda ash plants.

Carbon dioxide footprint of US soda ash delivered to the EU

US soda ash for supply to Europe is first transported by rail from the plants in Green River, Wyoming to the port of Port Arthur in Texas, a distance of around 1,500 miles. It is then loaded into ships for the 5,000 nautical mile journey to Europe. The estimated carbon dioxide emissions resulting from the transportation to Europe is 0.11 t CO₂/t soda ash (0.05 t/t from rail transport plus 0.06 t/t from ship transport).

The total carbon dioxide footprint of US soda ash delivered to Europe is therefore 0.9 t CO₂/t soda ash. This compares with 0.7 t/t for soda ash produced at Brunner Mond’s UK plants.

Transport from the European port of import to the end customer is typically by lorry. These emissions are excluded from the above calculation, as they are equivalent to those arising from transporting soda ash from a European production plant to the end customer.

3.3 Exports of soda ash from the United States

The capacity of the US soda ash industry greatly exceeds the US domestic demand, and the US soda ash industry is therefore dependent on exports in order to fully utilise this capacity. Table 4 details the sales by destination of the US soda ash industry.

<table>
<thead>
<tr>
<th>Destination</th>
<th>Tonnes</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Domestic</td>
<td>6,070,000</td>
<td>54%</td>
</tr>
<tr>
<td>Canada</td>
<td>440,000</td>
<td>4%</td>
</tr>
<tr>
<td>Mexico</td>
<td>880,000</td>
<td>8%</td>
</tr>
<tr>
<td>Central/South America</td>
<td>1,470,000</td>
<td>13%</td>
</tr>
<tr>
<td><strong>European Union</strong></td>
<td><strong>570,000</strong></td>
<td><strong>5%</strong></td>
</tr>
<tr>
<td>Former Soviet Union</td>
<td>50,000</td>
<td>0.4%</td>
</tr>
<tr>
<td>Africa and Middle East</td>
<td>260,000</td>
<td>2%</td>
</tr>
<tr>
<td>East/South-east Asia</td>
<td>1,310,000</td>
<td>12%</td>
</tr>
<tr>
<td>Australasia</td>
<td>150,000</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,210,000</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Total Exports</td>
<td>5,140,000</td>
<td>46%</td>
</tr>
</tbody>
</table>

The four Wyoming-based soda ash producers are members of the American Natural Soda Ash Corporation (ANSAC), an export trade association benefiting from exemption from US anti-trust laws under the Webb-Pomerene act. ANSAC does not operate in Canada or the EU. Export sales by the ANSAC members to all other markets are handled exclusively by ANSAC—ie the individual ANSAC members do not compete with each other for sales in these markets.

14 From production data published by the United States Geological Survey and US export data.
ANSAC applied for permission to operate in the EU market in 1988, but this was refused by the European Commission. However, the Commission decision left open the possibility of co-operation in matters relating to the transport and storage of soda ash. The US producers therefore formed another Webb-Pomerene association known as the American European Soda Ash Shipping Association (AESSA). All of the US soda ash producers are members of AESSA (Searles Valley Minerals, which left ANSAC in 2004, appears to have maintained its membership of AESSA).

AESSA allows the US soda ash producers to coordinate their shipping activities to Europe. Vessels bringing soda ash to Europe often contain product from two or three producers. Storage sheds at European ports are also shared between the producers. The US producers are therefore able to benefit from considerable economies of scale in exporting to Europe.

3.4 Behaviour of the US soda ash producers on the EU market

According to US export data, US soda ash producers have shipped 570,000 tonnes of soda ash to Europe in 2007. The quantity of soda ash shipped from the US to Europe has fluctuated dramatically, as can be seen from the historical data presented in Figure 4.

Figure 4


The US soda ash producers have at times been extremely aggressive in selling their surplus production on the EU market. The European Commission found the US producers to be dumping on three occasions (in 1982, 1984 and 1995) and imposed anti-dumping duties.

The graph in Figure 4 illustrates how the US producers have been able to increase their shipments to Europe rapidly in response to changing market circumstances.

Shipment were increased by 250,000 tonnes in 1991 and by a further 260,000 tonnes in 1992 in response to the withdrawal of anti-dumping duties in September 1990. They then fell back after new anti-dumping proceedings were launched in August 1993.

Anti-dumping duties were again repealed in October 1997, and 1998 saw US shipments to Europe increase by 140,000 tonnes. The weakness of the Euro relative to the Dollar in the period 1999 to 2002 reduced the attractiveness of the European market. However, the relative strength of the two currencies started to reverse in late 2002, with the result that 2003 saw shipments jump by 260,000 tonnes.

\[^{15}\text{Commission Decision 91/301/EEC.}\]
The sudden surges of US imports have been extremely disruptive to the EU soda ash industry. In 1993, three soda ash plants in the EU with a total capacity of one million tonnes per year were shut down, largely in response to the rapid growth in US imports over the previous two years. In 2002–03 Brunner Mond decided to reduce the capacity of its Netherlands plant by 100,000 t/yr, and a 160,000 t/yr soda ash plant in Austria was closed in 2005.

3.5 Anticipated response of US producers to the introduction of EU-ETS

After the formation of the ANSAC export cartel in December 1983, the US soda ash industry was able to achieve significant annual increases in export sales. Throughout the 1980s and up to the late 1990s, the US soda ash producers expanded their capacity aggressively in anticipation of continuing strong export growth. The Asian financial crisis of 1997 and then increased competition from China in the markets of East and South-East Asia left the US producers with considerable surplus capacity. Although the global market has tightened significantly in the last few years, the US producers still have an estimated 1.5 million t/yr of mothballed capacity that could be brought on stream if there were sufficient financial incentive to do so.

In February 2008, FMC announced that it would be restarting 0.7 million t/yr of currently mothballed capacity at its Granger plant in the period 2009–12. The additional production will be sold entirely on the export market.

The US soda ash industry has proved very effective at lobbying the US government in order to protect its interests. There are numerous examples of diplomatic pressure being brought to bear on countries that are perceived to be putting trade barriers in the way of US soda ash exports, or which try to ensure that ANSAC complies with their national anti-cartel legislation.

The United States has not ratified the Kyoto Protocol, so there is no immediate prospect of the US soda ash industry being put under any pressure to reduce its CO₂ emissions. In fact, the US soda ash industry was recently able to use its lobbying power to obtain a reduction in the US federal royalties for trona extraction from 6% to 2% on the basis of the intense competition that it claimed that it was facing in the international market. This reduction in taxation was granted at the same time as the industry was increasing its CO₂ emissions by converting from natural gas to coal.

Despite itself being free from any threat of carbon taxation, the US soda ash industry is well aware of the opportunity presented by the potential imposition of emission charges on its overseas competitors. Recent lobbying material has sought to portray their product as having a lower environmental impact than that produced by the ammonia-soda process. Their comparisons are based on plants in China, which have much poorer energy efficiency than Brunner Mond’s plants, and also neglect to consider the impact of shipping.

We have no doubt that if an auctioning basis is used when EU-ETS is extended to the European soda ash industry, the US soda ash producers will use this as an opportunity to increase their sales to the EU at the expense of the indigenous producers.

4. Potential Threat from Russian Imports

There are four soda ash producers located in Russia (Table 5). The two larger plants produce soda ash via the ammonia-soda process, whilst the small plants use a unique process in which soda ash is produced from the mineral nepheline as a by-product of alumina manufacture. The soda ash produced by the nepheline process is of a lower quality, and is not sold outside the Former Soviet Union.

Table 5

<table>
<thead>
<tr>
<th>Producer</th>
<th>Capacity (t)</th>
<th>Production (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soda Sterlitamak</td>
<td>2,100,000</td>
<td>1,720,000</td>
</tr>
<tr>
<td>Soda Berezniki</td>
<td>1,500,000</td>
<td>480,000</td>
</tr>
<tr>
<td>Rusal (Achinsk)*</td>
<td>600,000</td>
<td>560,000</td>
</tr>
<tr>
<td>Rusal (Pikalevo)*</td>
<td>220,000</td>
<td>180,000</td>
</tr>
<tr>
<td><strong>Total Russia</strong></td>
<td><strong>4,420,000</strong></td>
<td><strong>2,940,000</strong></td>
</tr>
</tbody>
</table>

*Soda ash is a by-product of alumina production from Nepheline ore.

The nameplate capacity of the Russian plants dates from the Soviet era, when large capacities were built up to serve the needs of the Soviet Union and its Comecon trade partners. When the Communist system collapsed at the end of the 1980s, much of this production capacity became surplus to requirements and was mothballed. Since the late 1990s, this mothballed capacity has been gradually brought back on stream, with the result that Russian production has grown by an average of 6% per annum since 1997. Demand in Russia is also growing at about 6% per year, but a proportion of the increased production is finding its way on to the export market (Figure 5). In particular, exports to the EU have increased by 130,000 tonnes in the last three years.

![Figure 5](RUSSIAN EXPORTS—TOTAL AND EU (1997–2007))

Most of the Russian producers’ domestic sales are conducted through a single trading organisation, ETK, enabling them to command artificially high prices. They are therefore free to sell their excess production on the export markets at very low prices. The Russian soda ash producers are also able to access low-cost gas, coal and anthracite, giving them a substantial cost advantage over the EU producers. Both the Sterlitamak and the Berezniki plants have investment programmes in place, which will see continued growth in their production in the period to 2010. Our projections suggest that the production increase will be more than is required to satisfy the growth in domestic demand over the period, so the amount of Russian soda ash available for export to the EU is expected to rise.

Carbon footprint of Russian soda ash delivered to the EU

The large Russian producers use the same manufacturing technology as Brunner Mond, but with poorer efficiencies and lower environmental standards. They have not invested in Combined Heat and Power plants, and with the lower costs of gas and coal in Russia have little incentive to do so. Prior to the investment in the new CHP plant, Brunner Mond’s plants emitted a total of 1.2 t CO₂/t soda ash. It can be assumed that a typical Russian soda ash plant will have emissions of at least this level. As with imports from the US, emissions from transport must be taken in consideration when evaluating the carbon footprint of Russian soda ash sold in the EU market. Almost all of the Russian soda ash sold in the EU comes from the Sterlitamak plant. To reach the EU, soda ash must first be transported by rail to either St Petersburg on the Baltic Sea or Novorossiysk on the Black Sea, both of which are approximately 1,500 miles from Sterlitamak. Transport from St Petersburg to Antwerp by coastal shipping involves a further journey of just under 1,400 nautical miles.
The carbon dioxide emissions resulting from the transport of Russian soda ash to Antwerp are estimated to be at least 0.09 t CO₂/t soda ash. This gives a total carbon footprint of over 1.3 t CO₂/t soda ash, far in excess of the 0.7 t CO₂/t soda ash for domestically produced soda ash.

5. SODIUM BICARBONATE

Brunner Mond manufactures sodium bicarbonate as a downstream product. The production of sodium bicarbonate is dependent on the production of soda ash.

Sodium bicarbonate has a much more diverse range of applications than soda ash. Key application areas are pharmaceuticals (including haemodialysis), food, animal feed, personal care (eg toothpaste) and household cleaning products. Demand for sodium bicarbonate in the EU is growing strongly.

An increasingly important application for sodium bicarbonate is Flue Gas Treatment. Sodium bicarbonate is one of the most effective substances available for the abatement of acid gases (principally hydrogen chloride and sulphur dioxide). With new legislation specifying ever-lower emissions limits, we are predicting that demand will continue to grow strongly.

Like soda ash, Brunner Mond’s sodium bicarbonate business must compete with companies importing sodium bicarbonate into the EU. In the case of sodium bicarbonate, the main competition comes from Russia and Turkey.

Brunner Mond currently sells 16% of its sodium bicarbonate production outside the EU. We are one of the few producers of sodium bicarbonate in the world whose product meets the demanding standards required by the pharmaceutical industry, so our product is able to command some price premium. Nevertheless, a unilateral cost increase arising from EU-ETS would put these valuable export sales in jeopardy.

6. CONCLUSIONS

Brunner Mond’s soda ash business operates on extremely narrow margins. The additional costs generated if EU-ETS is introduced on an auctioning basis would make the production of soda ash unprofitable. The threat from competition from suppliers that would not be subjected to this charge would prevent us from passing on the full additional costs to our customers.

The likely consequence of the inclusion of the EU soda ash industry in EU-ETS as currently envisaged (ie through the full auctioning of carbon permits) is the closure of a large proportion of the industry and the substitution of domestic soda ash with imports from Russia and the United States. This would deprive key downstream industries of a reliable raw material supply and also result in a net increase in global carbon dioxide emissions.

For the above reasons, the optimum solution would be that the soda ash industry should be excluded from EU-ETS until such time as a global emissions-trading scheme is established which encompasses its overseas competitors. However, given that the Member States wish to include the industry in Phase 3 of the EU-ETS, it is essential that emissions allowances are granted free of charge according to a benchmarking system. Benchmarks can be established for the level of CO₂ emissions generated in a good quality manufacturing process with manufacturers being required to purchase allowances only where they fail to meet this standard. Such an approach would provide an incentive to achieve the best quality (lowest carbon) manufacturing performance and lead to the lowest possible carbon footprint for the strategic raw materials of soda ash and sodium bicarbonate in use in the EU.

For such an approach to be successful it is critical that the auctioning decision is taken at an EU level and is not delegated to individual Member States to make separate determinations as this would lead to an unfair distortion of trade within the EU and potentially even favour manufacturing operations with heavier carbon footprints than the exemplars that do exist within the Community.

18 June 2008
APPENDIX 1

AMMONIA SODA PROCESS


LEGEND
GI, GO LI, LO SI, SO  = Gaseous, Liquid, Solid streams Inlets/Outlets
energy
CO2 gas
LO3 bis

LIMESTONE
water
steam
wastewater

screening of the limestone
vapor

CALCINATION (COKE, ...) lime kilns

water

RAW BRINE
NH3 make up
waste

washing of the gas
waste

CO2 gas

RAW MATERIALS,
end products

gas washing with purified brine

PSYX Job: 412018  Unit: PAG2
Executive Summary

BUSINESSEUROPE supports the Commission’s broader objectives for the revision of the EU Emissions Trading Scheme (ETS) Directive.

Business is in favour of an improved emission trading scheme which, operated under the right conditions, will provide the most cost-effective instrument to reduce greenhouse gas emissions and to realise emission reduction commitments. At the same time, it is crucial for the viability of the system that it takes into account that business is operating in an increasingly globalised economic environment and that only companies with a good competitive position are able to invest in low-carbon options. Therefore BUSINESSEUROPE urges the following improvements to the directive:

- Prevent negative direct and indirect effects of the ETS on the competitiveness of the manufacturing sector in the absence of an international agreement with equivalent burdens for industry outside Europe.
- Continue to carry out free allocation to sectors exposed to international competition even after 2020 in the absence of such an international agreement.
- Target auctioning revenue to promote the competitiveness of EU business and EU business activities in the area of climate change.
- Agree on the rules and modalities for auctions so that they can start in time and enable companies to purchase allowances to guarantee on-going operations.
- Undertake a full impact analysis of any future international agreement before EU targets are changed.
- Carry out analyses to evaluate the burdens on the ETS and non-ETS sectors to ensure that cost-efficient reductions are identified and undertaken.
- Widen JI/CDM credit limits to improve the cost-efficiency of the ETS and promote the use of these mechanisms to promote sustainable development.
- Make the new entrant reserve allow effective operation/nationalisation of production.
- Predictability is essential: determine elements critical to EU business within the legislation rather than leaving it to the comitology procedure.

BUSINESSEUROPE has examined the Commission proposal for the revision of the EU emission trading directive. It supports the Commission’s broader objectives for this revision. The proposal includes a number of positive elements, whilst a number of other elements give cause for great concern and require significant amendment. These include:

1. Positive Elements

(a) Increased harmonisation:
- in the single EU-wide cap;
- in the sector and combustion plant definitions; and
- in the allocation of allowances to new entrants (single EU new entrant reserve).

(b) Improved predictability and confirmation of banking, ie the possibility of transferring unused allowances from one trading period to the next.

(c) The “limited” step made towards opt-out for small installations with emissions of less than 10,000 tonnes a year is welcome. Nevertheless, the threshold should be raised to a minimum for emissions for all covered installations of at least 25,000 tonnes. Small installations emitting less than 25,000 tonnes per year only account for 3% of total ETS emissions. Exempted installations should be subject to alternative measures which will deliver comparable carbon savings.

(d) On allocation provisions, we welcome that the allocation method for emission allowances will take into account the efficiency of different installations and modes of production through the further development and use of benchmarking.
2. ELEMENTS REQUIRING IMPROVEMENT

2.1 Prevent negative effects of allocating allowances via auctioning to the manufacturing sector in the absence of an international agreement

(a) Analytical background
Auctioning within the EU of allowances for the manufacturing sector would have two types of very negative consequences:

— negative economic and social consequences as European manufacturing industry faces international competition and will be burdened by additional costs linked to auctioning. These costs would come as an addition to the considerable burden imposed on energy-intensive, and particularly electro-intensive, industries through the impact on the electricity price of the EU ETS; and

— negative environmental consequences as relocation of some production outside the EU will result in higher greenhouse gas emissions, notably when this takes place in less environmentally efficient facilities (a development which the Commission defines as “carbon leakage”).

(b) Evaluation of the Commission’s proposal
The Commission’s proposal is designed to mitigate the negative environmental impacts linked to auctioning in the absence of an international agreement but fails to comprehensively address the negative economic consequences that would arise should an international agreement not create a level playing field amongst companies in competing nations. Furthermore, an unacceptably complex burden of proof (involving non-manageable tasks in terms of data collection and economic forecasting) is put on business to demonstrate, years in advance, that carbon leakage and economic consequences will result from auctioning.

In addition, the fact that the Commission could wait until as late as June 2010 before it determines which sectors are exposed to carbon leakage would create a long time of uncertainty with very negative effects on business strategies and investment planning and thereby on growth and employment in these sectors.

(c) The way forward
Against the above background BUSINESSEUROPE:

— considers that the Commission’s current approach based on carbon-leakage-linked criteria is not appropriate for preventing the negative economic impacts of EU auctioning of ETS allowances in the absence of an international agreement;

— insists that the decisions regarding the granting of free allowances must be taken in the new ETS directive itself, within the regulatory process, and must not be left to a future comitology process. The process of granting allowances must be based on a pragmatic, evidence-based approach assessing the exposure of sectors to international competition;

— asks that high priority is given to the definition of robust criteria for assessing whether a future international agreement will ensure burden-sharing with equivalent efforts; and

— insists that manufacturing industries exposed to international competition must receive 100% free allocations against independently scrutinized technology or efficiency benchmarks unless and until there is an international agreement with equivalent burdens for industry outside Europe. It should be noted that the granting of 100% free allocations does not mean that companies concerned will avoid the costs of the ETS, because in order to meet the emissions reduction cap imposed by the ETS they will still have to invest in carbon abatement technologies and buy allowances on the market. Industry covered by the ETS has to reduce emissions by 21% by 2020 compared with 2005, no matter the allocation method.

Auctioning is appropriate for sectors that can pass through costs (such as electricity). However, it is nevertheless imperative to identify and address the effects that this pass-through has on installations exposed to international competition. Auctioning should be introduced in a stepwise manner in the electricity sector to avoid dislocations in the power market.

17 The Commission’s focus on negative environmental impacts (and not an overall negative economic impacts) is reflected in recital (19) page 16 and in article 10a points 8 and 9 of document COM 2008–16. It should also be noted that the criteria the Commission uses to assess the existence of additional emissions due to carbon leakage are fairly basic. For example, the Commission only takes account of the environmental efficiency of manufacturing installations in non-EU countries. It takes no account of the carbon intensity of the electricity consumed by these installations, or of the higher CO2 emissions that could be generated by extra transport occurred by the shift of production.
2.2 Full auctioning for all “covered” sectors starting in 2020

The move to full auctioning for all sectors as envisaged in Article 10a gives little or no clarity about the equivalent measures from our international partners that would justify such a move nor on the timing by which these measures should effectively be in place. BUSINESSEUROPE urges that free allocation to those sectors exposed to international competition are continued until measures which result in an equivalent burden are effectively implemented and enforced in other major emitting countries.

2.3 Auctioning revenue should be targeted to promote the competitiveness of EU business and EU business activities in the area of climate change

Business is the source of the “income” from auctioning and, therefore, it is appropriate that this revenue is used to improve the competitiveness of EU business and to promote EU business activities in the form of increased R&D in climate-related technologies, technical improvements, renewables, energy conservation and efficiency measures.

2.4 Auctioning certainty

Where auctioning will take place, for example in the power sector, the modalities and quanta for auctioning must be established, in consultation with affected parties, by the end of 2010 at the latest. Auctions must start to be held in 2011. Moreover, it is of utmost importance to organise auctions in such a way that financial speculation is avoided.

2.5 Automatic change in targets in the event of an international government

The European business community fully supports the need to reach an international climate change agreement. The EU’s commitment to increase emission reduction efforts in the event of an international agreement is an important signal to other jurisdictions. However, any ratified international agreement must create comparable and enforceable carbon restraints before passing burdens such as higher GHG targets onto business. Therefore criteria are needed against which an international climate agreement can be evaluated. For BUSINESSEUROPE, any revision of the EU commitments should involve a full re-evaluation of the impacts on individual sectors as well as the “non-covered” sector to ensure that cost-effective emissions reductions are achieved.

2.6 Burden on the ETS sector

In the proposal, there is the considerable discrepancy between the reduction target required of “covered” sector and that of other sectors. The minus 21% target for industry based on a base year of 2005 means in reality that the covered sector will have been required to already reduce emissions by more than 30% if related to the 1990 base year. The tasks of reducing emissions must be spread across all sectors in an equitable manner through thorough and transparent analyses taking into account actions already undertaken as well as cost-efficiency.

It is essential that the right signals are given to Member States to reduce emissions within all sectors, particularly households, where cost-effective investments can be found. Furthermore, reductions in the non-ETS sectors must not lead to distortions in competition across the EU between companies.

2.7 Increasing JI/CDM credit limits will improve cost-efficiency of the ETS

Limits on the use of JI/CDM credits are appropriate in order to maintain the principle of “common but differentiated responsibility”. However, the directive’s proposed limits are too severe. Widening the limits will increase the efficiency of the EU ETS, reduce the carbon migration risk, provide a better signal to carbon market project developers and increase the contribution of the EU ETS to global sustainable development and the establishment of an international agreement on climate change.

The veto on certain types of projects by Member States must not allow the EU to redefine the “quality” of products that have been approved under the procedures contained within any international regime. Regulations on the acceptance of credits from projects must be consistent with those agreed under international agreements.
2.8 New entrant reserve should enable effective operation/rationalisation of production

The definition of “new entrant” should be adjusted to allow companies, where possible, to concentrate their production on their most efficient sites within the EU. To this end, it is key to ensure a fair and consistent treatment of the three possible industrial scenarios: running existing installations, increasing capacity of existing installations and developing new installations. BUSINESSEUROPE considers the proposed size of the “new entrant” reserve (5% of the overall cap) to be too large. The reserve should be of a size commensurate with growth in those sectors that are able to draw from the reserve.

2.9 Governance

There is concern that comitology is used for the development of many of the measures within the proposal. The comitology process lacks the transparency and effective stakeholder consultation, which is necessary to decide on essential aspects of the directive, such as allocation methodologies. In particular, BUSINESSEUROPE insists that the decisions regarding the granting of free allowances must be taken in the new ETS directive itself, within the regulatory process.

26 May 2008

Memorandum by the Centre for European Policy Studies (CEPS)

The Centre for European Policy Studies (CEPS) wants to address a number of questions that has been raised by the Sub-Committee.

QUESTION 4, The Key Strengths and Weaknesses of the Proposal

(a) The extent to which the scheme as currently designed will encourage technological innovation?

Technological innovation depends to a large extent on certainty or rather predictability (see below), the level of price and whether the price signal is undistorted. In this section, we will only focus on the former. The third item will be answered under the next question.

Within multi-stakeholder CEPS Task Forces, comprising of (almost) all industries, government and EU officials, NGOs and independent experts, the issue of predictability has been covered intensively. The conclusion has been the following: There can be no absolute certainty. Uncertainty is a normal factor for many investment decisions. Uncertainty relates to demand, prices for electricity and other products, factor prices (primary energy, feedstock, labour, transport, etc), technological progress, competitors’ strategies as well as regulatory risks, under which the EU ETS falls. Instead of absolute allocation certainty, increased predictability in the total allocation and the allocation rules for individual installations based on the principle of a (relative) reward for low emissions and a (relative) penalty for high emissions will facilitate investment to reduce emissions in existing installations and investment in new efficient installations, thereby replacing old inefficient plants. Such predictability can be achieved through the following:

— Assurance that the EU ETS will continue until 2030 and beyond. That condition is already met.
— Early certainty on “allocation methodologies” (for the commitment period) and a reasonable level of predictability as to how allocation methodologies change over the medium to the long-term, for example by determining how future allocation methodologies will be developed, through for example a road map how and when methodologies will be adapted.
— The actual length of the commitment period is not as important as usually thought. A five to eight years period seems reasonable according to our findings. Because of the unpredictability of international negotiations on the global situation and climate science, very long-term allocations over 20 or 30 years or more are not recommended. These could lock the EU into an arrangement involving unsustainable capital stock and result in stranded investment in the future.
— A final precondition is that there is reasonable predictability on the future medium to long-term target. This can either be done at EU-level (eg similarly to the proposed EU integrated climate and energy package) or at member state level. Different member states including the UK are experimenting with different models. The key is that methodologies for setting long-term targets are transparent.

The Commission proposal by and large seems to meet the conditions that the CEPS multi-stakeholder work has proposed.
(b) **Whether the ETS will result in the appropriate price signal being sent**

Once “reasonable” predictability is ensured, the next important issue is that the price signal is undistorted. This will be analysed in the next session.

Within the EU ETS, a weakening of the price signals can be due to (i) national differences and (ii) free allocation. Weakening of distortions from national differences would disappear under the Commission proposal, if properly implemented. More complicated is the issue of a weakened price signal because of free allocation.

Continued free allocation, which constitutes a subsidy is foreseen for sectors in risk of losing “competitiveness” as a combination of CO\(_2\) being a significant factor in variable costs and being subject to international competition. While such free allocation may be justified, it constitutes a weakening of the price signal and thereby reduces the incentive for innovation. There is also a risk that the EU hands out free allowances to those sectors that in fact can pass through all or parts of the carbon costs. This would mean another round of windfall profits, although this time not for the power sector but for industry. Subsidising industry—unless justified—would be bad macro-economic policy. As a result the European Commission under the leadership of DG Enterprise and Industry has launched a process involving industry, member states, research and stakeholders to assess as exactly as possible the vulnerability of sectors and sub-sectors, to be completed by mid-2011. This process has been criticised by industry as undermining predictability. While theoretically this might be true, practically there is no reason why this process could not be concluded by the mid-2010 (ie one year earlier as the European Commission has proposed). This would mean could that there is certainty for industry as to allocation rules for 2013 for at least two years ahead the commitment period and somewhat more than a year after the new ETS directive is expected to be formally adopted.

(c) **Whether the ETS will be efficient and/or equitable**

The vast ETS literature\(^{19}\) has identified four major design flaws; (i) overallocation, (ii) distortions to competition within the EU internal market, (iii) windfall profits to the power sector, and (iv) lack of transparency and predictability. These design flaws have been a caused by a high degree of decentralisation, free allocation and short-term allocation periods. The mixture of a centralised EU-wide cap, EU-wide allocation methodologies and auctioning to the power sector as proposed by the European Commission addresses these shortcoming. The issue of predictability has been addressed in question 4a) and the one on equity will be covered in question 6.

**QUESTION 5, THE POTENTIAL APPLICATION OF ARTICLE 24A**

The proposed article 24a has in the literature been referred to also as so-called “Domestic off-set projects” (DOPs). DOPs mirror the concept of the project mechanisms articulated in the Kyoto Protocol, but are used within the home country to reduce emissions in the non-trading sectors (eg transport and buildings).

There are two principal argument in favour of DOPs. The first is that they extend the price signal and thereby initiate a “market search” for abatement opportunities. The second is that DOPs can reduce total compliance costs by bringing hitherto non-identified low-cost reduction sources into the fold and thereby assist in decarbonisation.

The first argument, ie the “market search function” is unquestionable. The second argument needs qualification. DOPs give the ETS sector access to the non-trading sectors. This would normally mean that low-cost options would be picked up by the EU ETS sectors. While this can lower the EU ETS allowance price, reaching the EU climate change targets can be more costly from the macroeconomic point of view. This would be so if the emissions reduction obligations in the non-trading sectors were not adapted by taking into consideration that the low-cost reductions are accounted for by the EU ETS sectors. Ie when allowing additional credits into the ETS, it would require an adjustment of the ETS cap to avoid this potential negative macro-economic effect. As the ETS does not foresee an ex-post cap adjustment, this would almost automatically mean an (ex-ante) quota for DOP credits.

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\(^{18}\) Free download: http://shop.ceps.eu/BookDetail.php?item_id = 1474

In addition, there is fear that DOPs are potentially complex and incur transaction costs inherent in all project mechanisms. This may run counter the objective of keeping the EU ETS as simple as possible. The discussions around the CDM have shown this. In particular, DOPs would introduce the issue of “additionality” into the ETS as only additional reductions will contribute to the EU targets. No doubt, many other contributions to the inquiry will focus on this.

The House of Lords Sub-Committee may instead investigate whether there is really a need to create an additional clause for DOPs or whether they cannot de facto be better implemented under the current Art. 24 on unilateral opt-ins.

**Question 6, What Decisions about the Proportion of Permits to be Allocated for Free Rather than Auctioned should be Taken at EU or Member State Level?**

The high degree of discretion of member states regarding allocation has led to a situation where industry has been able to put pressure on governments not to hand out fewer allowances (for free) than other governments. While EU-wide allocation rules would do away with this, member states discretion as to the split between free allocation and auctioning would lead to the same situation with the likely result of a race towards free allocation. The experience from phase 1 and 2 suggest a EU-level decision as default option.20

Still, one could image that a high level of auctioning to the power sector could pose in some member states either security of supply risks or drive up power prices dramatically. In this cases, one could imagine that member states could apply for a derogation based on EU rules and criteria and to be approved by the European Commission.

As to the industrial sector, where free allocation may cover a high percentage of allocation, member state discretion should be avoided as a result of the phase 1 and 2 experiences. One would expect that the European Commission process (described in answers to question 4b) would be able to identify the sectors and installations that may be vulnerable to carbon leakage.

**Question 7, Which Sectors (if any) should Continue to Receive a Proportion of their Emissions for Free?**

The first phases of the EU ETS has triggered a debate on “competitiveness” (of industry) and carbon leakage which is documented in a sizable body of literature.21 There is an emerging EU consensus (see Matthes and Neuho 2007) that the following sectors could claim a risk of carbon leakage (as a combination of CO2 being a significant factor in variable costs and being subject to international competition):

- Non-refractory ceramic goods other than for construction purposes; refractory ceramic products.
- Iron and steel.
- Cement.
- Pulp, paper and paperboard.
- Basic chemicals, man-made fibres.
- Basic precious metals and non-ferrous metals.

While the choice of free allocation is pragmatic—free allocation constitutes a subsidy—it allows only for compensation of direct effects, ie costs arising due to the fact that emissions need to be covered by an allowance. It does not address the vulnerabilities of those sectors that results from indirect effects, ie through higher input costs, notably higher power prices as a result of the ETS. This would need to be addressed by some sort of subsidies, meaning the relevant policy instrument is the State aid guidelines.

20 For example under rules of phase 1, a new natural gas combined heat and power plant—producing both electricity and heat—would in Germany receive allowances corresponding to 130% of its expected emissions. The corresponding figures are 120% for Finland, 90% for Denmark and 60% for Sweden. For a new natural gas combined cycle electricity production unit (no heat) the differences are even larger. In Germany the installation would receive 105% of the required allowances. In Finland 100%, in Denmark 82%, and in Sweden 0%—Sweden does not give allowances for non-combined heat and power.

The importance of a global carbon market has been demonstrated among other by the Stern Review. The relative low costs for achieving climate change objectives assumes global trading of emissions rights. The most likely and possibly fastest way to develop a global carbon market is through linking of national and regional schemes. There is plenty of evidence that such schemes will be in operation in Australia, New Zealand, the US or Japan for the post-2012 period.

While the current EU ETS directive in Article 25 has allowed for linking the EU ETS with other emissions trading schemes by international agreement, the proposed new directive goes a step further. It foresees different types of linking arrangements, eg via a treaty, an international agreement as foreseen under EU law and through a “reciprocal recognition” of non-EU allowances. This provision is innovative both internally and internationally as essentially schemes could be linked through administrative decisions. Whether the clause will actually be used remains unclear at the moment. At this stage the principal value is that it triggers a debate internationally as essentially schemes could be linked through administrative decisions. Whether the clause will actually be used remains unclear at the moment. At this stage the principal value is that it triggers a debate internationally as essentially schemes could be linked through administrative decisions. Whether the clause will actually be used remains unclear at the moment. At this stage the principal value is that it triggers a debate internationally as essentially schemes could be linked through administrative decisions. Whether the clause will actually be used remains unclear at the moment. At this stage the principal value is that it triggers a debate internationally as essentially schemes could be linked through administrative decisions. Whether the clause will actually be used remains unclear at the moment. At this stage the principal value is that it triggers a debate internationally as essentially schemes could be linked through administrative decisions. Whether the clause will actual
Levels of Emissions Reductions

The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached.

1. Although the proposals have detailed the provision for a reducing cap to enable a 30% reduction to be met should international agreement be reached, we have concerns over the definition of an International Agreement and perhaps more importantly the timing on when this may be reached and therefore the gradient of the reduction curve if this is delayed until after 2013.

2. We suggest that the definition of an International Agreement should include ratification, given this, it is highly probable that this may not be finalised until some time after Phase III commences in 2013. If this is the case in order to meet the 30% reduction criteria, participants will be given an increasingly steep reduction on the overall emissions cap. We suggest that there should be a minimum period between the ratification of any International Agreement and the reduction of the cap to meet the 30% target to give participants sufficient time to meet the steeper gradients and to avoid market uncertainty.

Scope and Operation

The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture.

3. We support the expansion of the scheme to include other sectors and gases as this inevitably increases efficiency. However, any expansion must not compromise the existing scheme, and this must only be achieved where the baseline for expansion sectors is accurately known. If there is any doubt, any expansion should be run in parallel to the EU ETS for at least a year to gain knowledge in this area and a robust monitoring and verification regime must be used.

4. We support the continued exclusion of LULUCF as we feel to maintain the integrity of the scheme work needs to be undertaken in this area to ensure the correct treatment of these temporary carbon savings.

The practical application and enforceability of the scheme

5. We are happy with our experience of the scheme to date. There have been a few issues during the first phase, and lessons have been taken on board in the design of Phase II, such that we feel the EU ETS is now a robust working market. We are keen that this is maintained and it is therefore essential that when changes are introduced, ie auctioning, these are brought about with the working market in mind. For example, the introduction of high volume auctions may have a large impact on the market price and trading volumes leading up to the auction date. In our view, it is therefore preferable to auction allowances little and often.

6. One of the scheme’s strengths is that the proposed tight cap delivers a meaningful price signal to participants. This, in addition to the information set out on how the cap should be set post 2020 is both reassuring to participants and assists in maintaining a robust emission market.
The key strengths and weaknesses of the proposal. You may wish to consider in particular: the extent to which the scheme as currently designed will encourage technological innovation; whether it will result in the appropriate price signal being sent; whether it will be efficient and/or equitable.

7. We believe that the free allocation of allowances to sectors which are able to recover the cost of allowances through their received price is the current Scheme’s fundamental flaw. We are therefore pleased that this particular element is proposed to be corrected during Phase III.

8. The electricity generation sector are proposed to have 100% auctioning of allowances from 2013, other sectors will start with 20% auctioning and increase to 100% by the end of the Phase in 2020. We see no reason why all sectors, who are not subject to carbon leakage, should not have 100% auctioning from 2013.

9. In the absence of full auctioning across the Scheme, we would like to see the EU move to instructing a minimum level of auctioning in all Member States in Phase III, and the UK government targeting auctioned allowances on the power generation sector. The removal of the current free allocation process, ensuring that the cost of carbon is reflected in all future planning, investment and operations decisions will ultimately encourage lower carbon technologies and processes. It is essential that the higher polluter is given this signal, by having to purchase their allowances, to drive down carbon emissions.

10. To a certain extent, the scheme (Phase III in particular) will encourage technological development, however, in order to make some large step changes it is important that the very high cost and risks of achieving this does not rest solely within the business community and, we suggest, some Government assistance should be forthcoming.

Allocation and Auctioning

Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be.

11. As stated above, in the absence of full auctioning across the Scheme, we would want the EU to instruct a minimum level of auctioning in all Member States for Phase III. Member States should then be free to work within these levels to determine the level of allowances to be given for free and those that should be auctioned. The harmonisation of markets across the EU is important where these markets interact or compete against each other. However, it should be noted that some sectors, for example, power generation, do not compete against each other across the EU, and therefore harmonisation in this sector is not necessary.

Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge, and for how long?

12. Only those sectors that are subject to, and can provide evidence of, carbon leakage should be given any free allowances. Any provision of free allowances, must be made in an open and transparent way, and on going evidence must be provided for the free allowances to continue. We do not support giving free allowances to the power generation sector, as we suggest that the power generation market can or will suffer from carbon leakage.

Whether the redistributive element of the Commission’s proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate.

13. We suggest this issue is outside the practicalities of the scheme, and as such should be discussed at Member State level.

The International Dimension

The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM).

14. We understand and accept that a balance needs to be struck between effort at home and abroad, and that the UK needs to show some leadership in finding real carbon cuts at home. Given this balance will depend on a number of factors including the speed of development of new technology and the availability of good-quality projects, we do not believe that identifying a precise balance is helpful.
15. Project credits have an important role to play in delivering global emission cuts which should be recognised. We believe that projects developed under the Clean Development Mechanism deliver real and enduring carbon emission reductions in developing countries which currently do not have any emission reduction targets and, in the absence of legally-binding targets, open a pathway to Kyoto for many developing countries.

16. There is also substantial potential for technology transfer from these projects to other countries whether directly covered by the EU ETS or not. Allowing the use of credits for compliance under the EU ETS supports these project streams, supports innovation in UK business, and allows reductions to be made at lowest cost.

17. The UK is emerging as a market leader in the financing of these kinds of projects. Imposing low limits on the use of credits within the UK damages the ability of UK companies to invest in emission-reducing projects in the developing world, and might check the development of this important new market.

18. To protect the credibility of the EU ETS and other international emissions trading, it is imperative that projects are subject to rigorous accreditation to ensure minimum quality standards are met. Within the CDM this role is carried out by the UNFCCC’s CDM Executive Board and we are confident that this system is providing the necessary robust and rigorous assessments of proposed projects.

The likely feasibility of creating links between the ETS and other similar schemes around the world.

19. Ideally, directly linking the EU ETS with other emission schemes outside the EU will help to deliver emission reductions at the lowest cost to the global economy, and will aid development of a more liquid market. This should only happen, however, when other schemes are established, and when the principles behind those schemes as well as their operation allow a direct linking.

20. It is vital that any linked schemes operate with similar underlying processes to ensure the robust nature of the EU ETS is maintained. Areas to consider would include:

(a) Mandatory caps on emissions.
(b) Equivalent monitoring, reporting and verification standards.
(c) Similar access to limited external credits.
(d) Absence of market interventions ie price caps, buy outs.

21. In the absence of such direct linkages, project credits from the CDM and JI markets can act as important linking mechanisms and help to ensure that the EU ETS is not operating in a vacuum from the global economy.

June 2008

Memorandum by the Church of England’s House of Bishops’ Europe Panel

1. The House of Bishops’ Europe Panel is a sub-committee of the House of Bishops. It acts as a point of reference for items affecting the Church of England’s relations with Europe and the European Union institutions.

2. The Europe Bishops’ Panel (EBP) welcomes the opportunity to contribute to the Committee’s inquiry into the European Commission’s proposal for revisions to the EU’s Emissions Trading Scheme (ETS). Over the last three years the EBP has devoted a considerable portion of its time to the European Climate Change Programme in general and the proper functioning of the ETS in particular. This interest reflects the seriousness with which the Church takes the threat that climate change poses to the integrity of God’s creation, the vocation of humanity to actively steward and care for creation, and the awareness that climate change is already impacting disproportionately on many of the world’s poorest communities.

3. Recognising that British climate policy and the global process is largely being shaped in Brussels, not London, the Church appointed in November 2007 a representative to the EU institutions. Based in Brussels this office is responsible for articulating and advocating fresh thinking regarding the EU’s progression to a low carbon economy. This submission is reflective of this work.

Executive Summary

4. The EU’s ETS, the jewel in the crown in the EU’s climate change programme, is the prototype for a global carbon market. It provides a cost effective and economically efficient way of cutting greenhouse gas emissions by enabling reductions to be made wherever they are cheapest. The EU deserves credit for establishing this project, even it its environmental impact to date has been limited. The ETS remains a project under
The revision of the EU’s Emission Trading System: Evidence

construction. The Commission’s proposals for ETS reform provide a crucial opportunity to learn valuable lessons from its early operation to improve both its simplicity and predictability. The Commission’s proposals need to be judged from the perspective of environmental effectiveness and the degree to which a reformed ETS can stimulate the innovation necessary to achieve a low carbon and sustainable economy.

5. The Commission’s proposals present a significant advancement on the current arrangement:

(a) We support the decision to restrict the scheme’s scope to heavy industrial emitters, rather than widening its remit to include other sectors such as agriculture and surface transport. This should give the scheme greater market cohesion and simplicity.

(b) We hold that replacing national caps with an EU-wide cap comprising Europe-wide sectoral limits distributed to the individual member-states represents a significant breakthrough. It would remove one of the major variables that have contributed to the scheme’s volatility.

(c) We favour an automatic transition to 100% auctioning of allowances in 2012, but the proposal to progressively move to full auctioning ensures at least that the “polluter pays” principle is central to the scheme’s operation.

(d) We welcome the proposal to remove current restrictions on the linking of the EU’s ETS to other cap-and-trade systems. This opens the way for greater international collaboration, not least with the USA.

(e) We welcome the move to tighten access to the offset market. External credits need to supplement rather than supplant the drive for domestic emission reductions, without undermining the EU’s wider international responsibility.

6. In a number of areas, however, the proposals are insufficient and more radical reform is needed:

(a) We remain concerned that the EU’s reduction targets are not aligned with prevailing scientific evidence. Setting more stringent emission reductions targets now would arguably provide additional incentives for companies to invest in innovative technologies.

(b) We recommend that the future management of the ETS be given to an independent European Carbon Bank. A carbon market is only as effective as the institutions that oversee it. The absence of a strong central and independent authority undermines the scheme’s effectiveness.

(c) We agree with the proposed redistribution of auctioning rights on the grounds of economic justice, but we think that the decision to permit some member states to increase emissions in the non-ETS sector is short-sighted both economically and environmentally.

(d) We are concerned that most of the emission reduction within the ETS will be achieved by a one-off shift from coal to gas, rather than by the introduction of new clean technology such as carbon capture and storage (CCS). Further consideration needs to be given to how technological innovation can be funded and commercialised.

(e) We believe that innovative green technology could be commercialised through public-private partnerships using the revenues accrued from the auctioning of allowances under the ETS. The Commission’s proposal allows for this possibility but it fails to make sufficient provision for it.

Proposed Level of Emission Reductions

7. The Commission’s proposed target of 20% reduction by 2020 is clearly not aligned with scientific evidence. The 2007 Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) argues convincingly that industrialised countries should take on reduction targets of between 25% and 40% below 1990 levels by 2020. To keep the increase in global temperatures in global temperatures below the two degree threshold, global emissions need to come down to near zero by the end of the century. This will require industrialised countries, including EU member states, achieving this target by 2050.

8. We are concerned that under existing proposals a significant proportion of the EU’s 20% target will be met by emission reduction credits from outside the EU. These credits only cancel out increases in EU emissions; they do not result in a net reduction in global emissions. We are therefore supportive of the position taken by WWF in pressing for an overall greenhouse gas emission target of 30% below 1990 levels by 2020 to be achieved within the boundaries of the EU. Internationally, the EU should invest the financial equivalent of an additional 15% emission reductions in developing countries to assist them decarbonise their economies and adapt to climate change impacts.
The Scope and Operation of the EU’s ETS

(i) Scope

9. We welcome the Commission’s proposal to extend the coverage of the ETS to the petrochemical, ammonia and aluminium sectors as well as nitrogen oxide emissions from the production of various chemicals. Further consideration needs to be given to the inclusion of methane from active coalmines. We are encouraged, however, that the Commission has restricted the scheme to heavy industrial emitters. These sectors provide well-verified data and clear potential for reductions in emissions, which are essential ingredients for the effective working of any emissions trading scheme.

10. In follows that we agree with the Commission’s decision not to include surface transport or shipping within the ETS. Although both sectors generate significant greenhouse gas emissions, emissions that are predicted to rise in coming years, further analysis is required to decide whether the ETS is the most appropriate mechanism to deal with either sector. Reaching a global sector agreement through the International Maritime Organisation would be the most effective mechanism to address shipping. Rising transport emissions is best addressed by other regulatory means, such as by road pricing and by imposing stringent emissions standards for cars.

11. We agree with the decision both to exclude agriculture from the scope of the scheme, as well as those industrial installations currently covered by the scheme that produce relatively low levels of emissions. The agricultural sector comprises a very large number of small businesses whose emissions would be hard to verify. Monitoring costs would naturally be very high. This would make it difficult to determine the levels of savings achieved. The allocation of a small number of permits to individual farmers would generate insufficient incentive since they would not find it worthwhile to trade them.

(ii) Cap setting

12. We support the proposal to abandon national caps in favour of an EU-wide cap. This would remove much of the competitive distortions and carbon price volatility that was experienced under Phase 1 of the scheme. Agreeing a linear emission reduction trajectory, setting the cap to 2020 and beyond, which can be automatically adjusted following an international climate change agreement, provides much greater predictability. Delivering an EU central cap set out over 15 years provides a sufficiently long timeframe for business to factor the carbon price into their investment decisions. The automatic adjustment to the linear reduction trajectory on the conclusions of the negotiations in Copenhagen 2009 sends a clear signal to the wider world that the EU has the mechanism to deliver on its commitment.

(iii) Technological innovation

13. In light of the recent analysis provided by Deutsche Bank, we are concerned that the emissions targets for the sectors covered by the ETS will to a large extent be met by a one of shift from coal to gas, rather than through investment in low or zero emission technologies such as carbon capture and storage. This raises a number of related problems. A higher dependency on gas carries with it significant geopolitical and economic risks. The projected economic growth in China and India means that competition for gas supplies will become ever more intense with the threat of higher prices. The location of the principal sources of natural gas in many of the most unstable regions of the world means that gas supplies are not necessarily dependable.

14. Analysts predict that CCS could potentially reduce the EU’s carbon dioxide emissions by half by 2050. Further effort therefore needs to be made to commercialise this technology. The Commission’s proposal to change the regulatory framework for CCS is helpful, but it will not lead to its adoption on an industrial scale. This will only occur when the price-per-tonne of carbon avoided by use of CCS is lower than the price of carbon. Resolving this issue requires a concerted and co-ordinated effort at the European level to provide the necessary political and financial support to those CCS projects currently underway in the EU.

(iv) The Practical application and enforceability of the scheme

15. The Commission’s proposals for both simplifying and strengthening the scheme’s compliance and enforcement procedures are crucial to its good functioning, both in terms of achieving the proposed reduction targets but also in potentially linking with third countries. We remain concerned, however, that insufficient attention has been given to the infrastructure required for the scheme’s administration. The Commission’s proposals place far too much emphasis on committee procedure (“comitology”). This risks allowing key decisions to be subject to intense political and industrial lobbying.
16. We recommended that further consideration be given to the creation of a European Carbon Bank (ECB). An independent body comprising technical, economic and financial expertise charged with managing the scheme’s operation would be preferable to current arrangements. Just as the European Central Bank is mandated with the responsibility for controlling inflation within the Euro-zone, so an ECB could be mandated with taking whatever steps are considered necessary to create and sustain a transparent and efficient carbon market. Detaching the ETS from politicians’ electoral cycles would eliminate the dangers of political horse-trading generally associated with “comitology”. This would provide additional market assurances to business and investors. It is difficult to conceive how current arrangements are sustainable long term when the EU’s-ETS is linked with other trading systems.

ALLOCATION AND AUCTIONING

(i) Method of allocation

17. We agree with the Commission’s assessment that auctioning of allowances, as the basic principle of allocation, is simple, transparent and efficient. It creates the greatest incentive for investment in a low carbon economy by forcing the market to factor in the cost of carbon. It best complies with the “polluter pays” principle, and it avoids giving windfall profits to those sectors that have previously passed on the notional cost of allowances to their customers despite receiving them for free. We recommend that unless a pressing and convincing case can be made otherwise, 100% auctioning of allowances should be the norm for all sectors covered by the ETS from 2012 onwards.

18. We are therefore disappointed that the Commission has deviated from its own assessment on the grounds that it is prudent to use the period 2012–20 to phase out the free allocation of allowances so minimising the risk of carbon leakage. Research provided by the Carbon Trust shows that except in a few sectors (steel and cement) the threat of companies moving to countries with less stringent environmental rules is exaggerated. The Carbon Trust estimates that just 1% of EU emissions will be off-shored by 2020 as a result of the ETS. Even if carbon leakage is a possibility, we question whether the free allocation of allowances is an effective counter-mechanism. The Commission’s own impact assessment concluded: “Allowing allowances for free does not appear to be an efficient or even effective instrument to remedy impacts on competitiveness”.

19. We hold that the more the EU deviates away from 100% auctioning allowances the less transparent and efficient the ETS becomes. It potentially reduces the incentives for investment in a low carbon economy. It also threatens to create new areas of tension between member states as to how allowances to be allocated for free should be distributed. The Commission’s proposal to resolve this issue through committee procedure, using a formula combining a top-down approach to determine the total level of free allocation and a bottom up approach to agreed benchmarks lacks clarity. The Commission’s proposal risks distorting the market and diluting the “polluter pays” principle.

20. It is therefore imperative that the Commission’s decision to undertake by June 2011 an evidence-based review of sectors that may be at risk from carbon leakage is independent and resilient to industrial lobbying. We are encouraged, however, by the timing of this review. Securing an international framework agreement on climate change in Copenhagen in 2009 should help address the political concerns that member states have regarding the loss of competitiveness through carbon leakage.

(ii) Redistribution of auctioning rights

21. We support the Commission’s proposal allowing for a 10% redistribution of auction permits away from those members states that have an average income-per-head that is more than 20% above the EU average, except where the whole climate and energy package is estimated to exceed 0.7% of GDP. This makes economic sense given the weak economic performance of many newer member states. It is also equitable in that the arrangement takes account of the different levels of development across the member states. The level of redistribution suggested by the Commission would not, however, diminish the pressure on companies based in these countries to lessen their efforts to reduce emissions. In the absence of any reform to the EU’s budget, the proposal would provide newer member states with additional auctioning revenue to assist with any structural adjustment programmes.

22. We believe that the redistributive features of the Commission’s proposals would carry greater weight if there were harmony across the EU regarding the distribution of emission caps for the non-ETS sectors. Under current arrangements, poorer member states will be permitted to increase their emission in non-ETS sectors by up to 20% while richer member countries will have to cut their emissions by up to 20%. The analysis provided by Simon Tilford, from the Centre for European Reform, in his May 2008 article, How to make EU
The Revision of the EU’s Emission Trading System: Evidence

Emissions Trading a Success, provides a clear warning as to the dangers of such an unfettered approach. Internationally, the EU can hardly expect China and India to place caps on their own emissions, while it is at the same time exempting relatively wealthy countries such as the Czech Republic or Poland from taking similar action. Long term, once the burden-sharing agreement is phased out, such an arrangement risks leaving new member countries at a competitive disadvantage. Again a better solution would be to either use the EU budget more creatively or use the revenues accrued from auctioning to subsidise the costs of energy efficiency measures in poorer member-states.

(iii) Use of auction revenues

23. The Commission proposes that 20% of revenue auctions should be ring fenced for climate related issues. We welcome the decision in principle, but we think that the figure is far too low and needs to be reconsidered. Auctioning revenues should not be used or seen by member state governments as a “windfall profit”. Rather, they present an opportunity to finance the substantial investments needed in technological responses to climate change within the EU as well a contributing to adaptation and mitigation projects in vulnerable countries in the developing world. We recognise the resistance of some member state governments to imposing legally binding hypothecation at an EU level, but we believe that, in the absence of clearer investment signals from national governments, as well as any progress in reforming the EU budget, the move would be warranted and in keeping with the findings of the Stern Commission.

The International Dimension

(i) Linking with similar schemes around the world

24. We welcome the Commission’s proposal to removal of all restrictions on external linking to allow linkage with regional, national or sub-federal systems. Current provisions have enabled the ETS to link with those Annex B countries that have ratified the Kyoto protocol. This has permitted linkage arrangements with Iceland, Norway and Lichtenstein, but these same provisions have handicapped the EU in taking forward negotiations with other third parties. Ideally, the EU’s-ETS would only be linked with those systems covered by an international agreement, but the proposals are sufficiently flexible to allow linkage in the absence of such an agreement. The EU should continue to press the USA to sign up to a post-2012 agreement, but the revisions to the ETS directive sensibly provide the opportunity for closer collaboration between the EU and the US regardless.

25. There are clear signs that the US position on climate changing is gradually shifting to an acceptance of the necessity of imposing mandatory cuts on domestic emissions. At a federal level, several climate change bills are currently before Congress, most notably the Jefford-Boxer, Kerry-Snow and the Lieberman-Warner bills. At a state level, both California and New York have passed legislation to reduce GHG emissions by adopting emissions trading schemes similar to the ETS, while 10 North-eastern states have formed the Regional Greenhouse Gas Initiative (RGGI). These developments are underpinned by a shift in public opinion about the dangers of climate change and increased frustration from the business community fearful of exclusion from an emerging but lucrative market.

26. The diversity of bills in front of Congress, with their differing scope and application, suggests that whichever model is decided upon, negotiations for a linking agreement will be intensely complicated. There are clear economic, political and environmental benefits in securing a linking agreement, but these benefits could be lost if any arrangement is poor designed or executed. The decision by the Commission to list 10 criteria against which any impact assessment study will be conducted is helpful. The question remains, however, whether the decision to link to another emissions trading scheme will be taken on political rather than technical grounds, and the degree to which any decision with inspire market confidence whilst preserving the environmental integrity of the EU’s-ETS. We recognise that member states will ultimately want to reserve for themselves the final decision, but we suggest that the responsibility for any impact assessment study should be entrusted to an independent European Carbon Bank rather than being left to the Commission.

(ii) Clean Development Mechanism (CDM)

27. We recognise that the CDM provides a market mechanism by which companies can earn emission credits by investing in developing countries. A 2007 report by Lehman Brothers, The Business of Climate Change: Challenges and Opportunities, indicates that by mid-2007 EU member states had committed to investing 7.5 million Euros by 2012 under the CDM and JI. These investments promise a reduction of more than two billion
tonnes of carbon dioxide. The CDM therefore provides a source of technological transfer to assist developing
countries in introducing cleaner energy.

28. In theory at least it does not matter where the emissions reduction takes place as the environmental effect
is the same. In practice, however, the primary political purpose of the EU’s-ETS is to provide a market
mechanism by which the EU meets its emissions targets by decoupling economic growth and emissions. Unless
the EU and other developed economies can drastically cut their own emissions it is difficult to see how they can
persuade developing economies to stabilise and in time reduce their own emissions. It is self-defeating when a
country such as Spain is only able to meet its Kyoto target by extensive use of the CDM and JI. The
Commission calculates that in the absence of an international agreement carbon prices within the EU ETS
could fall to as low as four Euro per tonne if the EU maintained its current stance on imported credits and if
there was no successor to Kyoto.

29. It follows therefore that regulating access to the CDM must be done in such a way that it does not
undermine the market incentive for companies to invest in new green technologies at home, nor close of
developing countries access to clean technologies. The Commission is therefore right to impose stricter
controls on the use of imported credits under the CDM, especially in the absence of an international
agreement. However, as argued previously, we believe that it would be far more effective to make provision
for the reduction targets to be met within the boundary of the EU and for the financial equivalent of an
additional 15% emissions reduction to be invested in developing countries to assist them with their adaptation
and mitigation efforts.

June 2008

Memorandum by ClientEarth

Memorandum of ClientEarth on the proposals of the European Commission for a Directive amending
Directive 2003/87/EC to improve and extend the greenhouse gas emission trading system of the Community

1. INTRODUCTION AND SUMMARY

1.1 ClientEarth is a non-profit environmental law, science and policy organisation incorporated as a limited
liability company and registered in a charity in England and Wales. The charitable objects of the organisation
include promoting and encouraging the enhancement, restoration, conservation and protection of the
environment, including the protection of human health, for the public benefit.

1.2 We understand that, in connection with its scrutiny of the European Commission’s climate and energy
package published by the European Commission on 23 January 2008, the Committee will be focusing its
inquiry on the proposed revisions to the EU ETS. The call for evidence notes that “closer examination of those
proposals will to some extent touch upon other elements of the package of climate change and energy
measures”, including the draft Decision on Greenhouse Gas Emissions (which affects sectors not included in
the ETS); the draft Directive on geological storage of carbon (referred to as the carbon capture and storage
(CCS) Directive); and the draft Directive on the promotion of energy from renewable sources (the subject of
a separate inquiry by the House of Lords EU Sub-Committee B).

1.3 In this memorandum, we wish to draw to the Committee’s attention a specific set of issues relating to the
EU ETS and the CCS Directive, and in particular, the provision in the draft CCS Directive for “capture ready”
fossil fuel power stations to be consented by Member States. We recently submitted comments to the House
of Commons Environmental Audit Committee inquiry into CCS, specifically setting out our views with regard
to CCS.

1.4 In summary, we consider that:

— The level of the EU ETS cap (and the effort sharing targets) should be strengthened to reflect the
scientific assessments of climate change, including the Fourth Assessment Report of the
Intergovernmental Panel on Climate Change (IPCC) demonstrates that developed (Annex 1)
countries need to reduce emissions by 25 to 40% by 2020 and by 80% to 95% by 2050.

— Carbon pricing under the EU ETS alone will not be sufficient to support development of low carbon
technologies, and in the initial phases of a carbon trading scheme, additional measures must be put
in place to avoid investment in long-lived high carbon infrastructure (based on the Stern review on
the economics of climate change).

— The CCS Directive would allow fossil fuel power stations including coal power stations to be
consented by Member States on a “capture ready” basis, and article 32 is of greatest concern.
2. General Comment on Environmental Effectiveness and the Level of the Cap

2.1 The proposed revision and extension of the EU ETS undoubtedly represents a significant improvement from the initial phases of the scheme, and the proposals for an EU-wide cap and auctioning in some sectors, in particular power generation, are welcome.

2.2 The EU ETS scheme is a cap and trade scheme for emissions of greenhouse gases. The purpose of the scheme is to meet the environmental objective of reducing emissions of greenhouse gases from the largest stationary emitters in the European Union. The provision for a cap recognises that it is the overall quantity of carbon dioxide (and other greenhouse gases) in the atmosphere that matters while the provision for trading recognises that emissions reductions should be made in the most cost effective way. The efficacy of the scheme in environmental terms is therefore dependent upon the level at which the cap is set. How the permits are distributed to emitters (by free allocation or auction) will also influence decisions of emitters (to reduce emissions or purchase permits).

2.3 In our view, the proposed cap for phase 3 lacks the level of ambition that would match the most recent scientific assessments of climate change, including the IPCC’s Fourth Assessment Report. The overall EU target for greenhouse gas emissions reductions in ETS and non-ETS sectors is 20% by 2020, rising to 30% if there is an “international agreement committing other developing countries to comparable reductions and economically more advanced developing countries to contributing adequately according to their responsibilities and respective capabilities”. In the ETS, the proposal is to set the cap at a 21% reduction in EU emissions levels from 2005 by 2020 with provision for an increase to 30% upon conclusion of a satisfactory international agreement.

2.4 The definitive Fourth Assessment Report of IPCC demonstrates that developed (Annex 1) countries need to reduce emissions by 25 to 40% by 2020 and by 80% to 95% by 2050 in order to be on track for stabilisation at 450 ppm CO$_2$-equivalent. This is the kind of stabilisation level needed to have any prospect of limiting global average temperature increase to no more than 2°C, the long standing objective and commitment of the European Union, as well as European leaders including British Prime Ministers. The EU should commit to a principled, science-led cap and targets that reflect the types of contributions that Member States will need to make to reducing global emissions.

2.5 Although climate change, by its nature, requires reductions in greenhouse gas emissions on a global level, we also consider that the EU can play major role in demonstrating that a low carbon economy is possible. In addition, while the carbon market is developing and until a credible carbon price is established, the EU must take steps to ensure that investment decisions in long-lived, high carbon infrastructure, which will lock the EU’s economies into a high carbon trajectory, are avoided. Stern concludes that issues of credibility are particularly important for investments in long-lived capital stock such as power stations, industrial plant, and buildings:

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\text{If businesses believe that carbon prices will rise in the long run to match the damage costs of emissions over time, this should lead them to invest in low-carbon rather than high-carbon assets. But in the transitional period, where the credibility of carbon pricing is being established worldwide, there is a risk that future carbon prices are not properly factored into business decision-making, and investments may be made in long-lived, high-carbon assets. This could lock economies into a high-carbon trajectory, making future mitigation efforts more expensive.}
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2.6 Investment in high carbon options now will make it more expensive and more politically difficult in the future to reduce domestic (EU) emissions.

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23 European Commission, COM(2008) 30 Final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.

24 IPCC (2007), Mitigation of Climate Change, Chapter 13, Policies, Instruments and Co-operative Arrangements, Box 13.7.


26 Stern, Chapter 15 at page 370.
2.7 This assessment leads to two conclusions. The first, as discussed above, is that the cap must be stringent and based on a long term stabilisation goal to be environmentally effective. Second, however, Stern’s analysis also points to the conclusion that carbon pricing alone will not be sufficient, because of the credibility issues in the early years of the carbon market as discussed above, and also because additional measures will be required to support low carbon technologies. On technology policy, Stern states “Carbon pricing alone will not be sufficient to reduce emissions on the scale and pace needed” and “Effective action on the scale required to tackle climate change requires a widespread shift to new or improved technology in key sectors such as power generation, transport and energy use”.27 We address this point in the context of the proposed European legal framework for CCS.

3. THE EU FRAMEWORK FOR CCS

3.1 The proposed CCS Directive aims to establish a licensing system for the geological storage of carbon as part of the CCS process. Although referred to as the “CCS Directive”, the Directive in fact deals principally with geological storage of CO₂ and establishing a licensing regime to allow such storage. However, the proposed Directive also hides one of the most contentious issues of the whole EU climate and energy package: how Europe will deal with new coal power plants, the dirtiest fossil fuel and the single largest emitter of carbon (the most efficient advanced supercritical capture ready 1.6 GW coal plant is estimated to emit eight million tonnes of CO₂ into the atmosphere every year). Across Europe, in the order of 50 new coal power stations are planned for the next five years.28

3.2 The EU is considering allowing new coal power plants (as well as gas combined cycle power plants) to be built on a “capture ready” basis. Article 32 of the proposed directive is of greatest concern. In order to be “capture ready”, a new coal power plant will only have to have empty space next to it for the CCS equipment to be fitted in the future; be near a suitable storage site (such as an old oil field); and have a technical retrofit assessment report.

3.3 Article 32 proposes amending the Large Combustion Plants Directive 2001/80/EC in the following terms:

Member States shall ensure that all combustion plants with a capacity of 300 megawatts or more for which the original construction license or, in the absence of such a procedure, the original operating licence is granted after the entry into force of Directive XX/XX/EC of the European Parliament and of the Council, (*), have suitable space on the installation site for the equipment necessary to capture and compress CO₂ and that the availability of suitable storage sites and suitable transport facilities, and the technical feasibility of retrofitting for CO₂ capture have been assessed.

3.4 A report prepared by the International Energy Agency titled CO₂ Capture Ready Plants29 makes it clear that “capture ready” does not mean very much. It states that:

“[A] high degree of uncertainty is inevitable when making a plant capture ready. It is not clear when the underlying global politics of climate change mitigation may justify extensive use of CO₂ capture and storage and hence retrofitting. Neither, given the current rapid developments in capture technology concepts, is it possible to specify in advance which capture technology will be available to retrofit to a particular plant. The precautionary principle suggests, however, that doing nothing until these uncertainties are resolved is not the best option. Indeed, it is quite likely that clarity will only emerge when political and market conditions dictate that new fossil plants are built with capture and so the need for capture ready plants no longer exists!”

3.5 This statement confirms that it is only political and market conditions— including regulation—that will drive private sector investment in CCS. Recent analysis of the “capture ready” concept provides further confirmation of the uncertainties inherent in the concept and the difficulties that such uncertainty creates for subsequently being able to achieve the retrofit of CCS technology at capture ready power stations.30

3.6 The core of the EU’s approach on CCS relies on the EU ETS to deliver CCS by establishing a cap and a carbon price.31 In our view, the EU ETS, even in the third phase, will not be sufficient to drive delivery of CCS within an appropriate time frame. The risk to the climate system of delay in demonstrating and implementing CCS (or implementing alternative energy options should CCS not prove technically or commercially feasible)

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27 Stern, Chapter 16: Accelerating Technological Innovation at page 393.
30 Dr Nils Markusson and Professor Stuart Hazeldine (2008). How ready is “capture ready”?—Preparing the UK power sector for carbon capture and storage, A report written by the Scottish Centre for Carbon Storage for WWF-UK.
31 In addition, some support for demonstration of CCS in the EU is planned, of which the UK Government’s post-combustion CCS demonstration competition is one example.
is too serious to ignore. According to Dr James Hansen of NASA and Columbia University, one of the world’s leading climate experts:

“The only practical way to prevent CO₂ levels from going far into the dangerous range, with disastrous effects for humanity and other inhabitants of the planet, is to phase out the use of coal except at power plants where the CO₂ is captured and sequestered.”

3.7 Rapid demonstration and then deployment of CCS technology is needed urgently around the world. The technology will be critical in managing the CO₂ emissions from the coal power stations that will continue to power the world’s major economies for the next 50 years. This will only occur through leadership in demonstration and regulation requiring CCS to be deployed.

3.8 The regulatory alternative to “capture ready” is to set an emissions performance standard for emissions of carbon dioxide from power plants. The State of California introduced this approach in January 2007 and now requires any baseload power to meet an emissions standard of 500 kg of CO₂ per MWh. Any new coal fired power plant would have to present a reasonable, economically and technically feasible plan that CCS will operate from the outset to meet the California EPS. The projected net emissions over the life of the proposed power station must also be pre-approved by the regulator.

3.9 This regulatory approach should be distinguished from “mandating CCS”. The emissions standard applies to all forms of power generation. Electricity generated from low carbon sources such as renewable generation clearly meets the standard. Coal only meets the standard if CCS is operational from the outset—but the technology is not prescribed and it is up to the market to decide which generation and which type of technology to invest in.

3.10 This form of environmental standard can help drive innovation. In the case of CCS, a standard alone, while effective to stop investment in new unabated “capture ready” coal power, will not be effective to deliver CCS, and the EU and Member States must consider funding and support for innovation and demonstration to complement an emissions standard.

3.11 The great advantage of an EPS is that it will force energy companies (and Member States) to identify the real cost of CCS technology. As a result it will create a real price for clean electricity from coal and a real price for CO₂ emissions. If the EU had an EPS energy companies would have to show that they fully understood all the costs and risks associated with CCS technology before they were allowed to build a new coal power plant. An EPS would let the EU have clean energy now while letting the market chose which clean solution to build.

3.12 Uncertainty surrounding the price of CCS technology will not only affect investment decisions relating to new coal power plants. Most energy companies have a portfolio of different energy assets, including wind, nuclear, gas and coal. If the cost of coal with CCS technology is fully understood energy companies will be able to make realistic comparisons between coal and cleaner sources of energy. An EPS may make electricity generated from unclean coal more expensive but in turn this will encourage everyone to focus on using electricity more efficiently.

3.13 The draft CCS Directive should be amended to introduce an emissions performance standard at EU level so that Member States cannot grant consents for new combustion plants that do not conform to the standard.

19 June 2008

Memorandum by The Confederation of UK Coal Producers

The Confederation of UK Coal Producers (CoalPro) represents member companies who produce over 90% of UK coal output. CoalPro is not opposed to the development of any form of energy. CoalPro is pro-coal. CoalPro is opposed to an over-reliance on any single form of energy.

CoalPro is pleased to be able to respond to the Committee’s Call for Evidence in relation to their inquiry into the revision of the EU’s Emissions Trading System. CoalPro is concerned to ensure that the Committee understands the inter-relationship between the Commission’s proposals for the revision of the EU ETS and other existing and proposed community environmental legislation. The combined and cumulative effect of this legislation will have a major detrimental effect on investment in both existing and new coal-fired generation resulting in a potentially massive over-reliance on gas-fired generation with serious implications for security of supply both in the UK and across Europe. To an extent, this is a timing issue, the critical date being 31 March 2016.

The revision of the EU’s Emission Trading System: Evidence

The existing Large Combustion Plants Directive (LCPD) means that from eight to 11 GW of coal-fired generating capacity will have to close by 31 March 2016. Over that period a further five GW of nuclear plant is also likely to close as it reaches the end of its life.

The LCPD also requires further investment in the abatement of nitrogen oxides (NOx) at all remaining coal-fired plant if it is to continue to operate after 31 March 2016. There is no guarantee that such investment will be forthcoming.

In addition, the proposed Industrial Emissions Directive envisages further reductions in NOx emissions that will require yet further investment at ongoing coal-fired plants if they are to continue in operation after 31 March 2016. There is even less guarantee that such additional investment will be forthcoming.

As if this were not enough, DG Environment are proposing a revision of the National Emissions Ceilings Directive (NECD) involving draconian overall national reductions in emissions of sulphur dioxide (SO2), NOx and particulates (approximately 50%, 70% and 50% respectively) by 2020. This proposal is at present undergoing Inter-Service Consultation. It should be noted that the UK will be unable under any reasonable scenario to meet its legal obligations for 2010 for NOx emissions under the existing NECD. It is not alone; a number of Member States are in the same position.

To meet these proposed further NECD limits on emissions will require an enormous investment in NOx abatement and retrofitting of more effective SO2 abatement equipment.

Against this background, further closures of coal-fired generating plant by 2016 are likely unless there is a benign investment climate. Taken together with the likely closure of nuclear plant, a generation gap of 20 GW or more could emerge by 31 March 2016, representing over a quarter of all existing electricity generating capacity. This is less than eight years away.

This gap of 20 GW or more by 2016 cannot be closed by new nuclear capacity (not available in time) or by renewables or energy conservation given the already demanding targets for these technologies. It can only be met by coal or gas. Without investment in new or uprated coal-fired plant, the UK will be 60% or more dependent on gas for its electricity supplies by 2016.

I apologise for this lengthy introduction but it is important to recognise the impacts of other European environmental legislation before considering the possible effects of the proposed revision of the EU ETS. The point is that there will be a massive over-dependency on gas-fired power generation unless there is a benign investment climate for coal-fired generation.

The proposal for 100% auctioning of carbon allowances from 2013 will impact severely on coal-fired generation, the costs of which will increase sharply. This does not represent a benign investment climate. The combined effect of other European environmental legislation and 100% auctioning of carbon allowances under the EU ETS is thus likely to lead to an excessive overdependence on gas. As similar trends are also probable throughout Europe, the implications for electricity prices and security of supply are obvious.

If the Committee, and indeed policy-makers generally, are content with this emerging situation, then fine. If they are not, then the proposal needs very careful consideration.

CoalPro accepts that it is difficult to dispute the intellectual rationale for 100% auctioning, particularly given the windfall profits made by all electricity generators under Phases I and II of the scheme. However, 100% auctioning will not prevent windfall profits which will continue to accrue to all forms of electricity generation other than coal.

I now turn to the individual questions on which evidence is sought.

Level of Emissions Reductions

1. The emissions reduction targets are demanding but the 20% target is achievable. The 30% target will be very difficult to achieve. However, under the proposal as it stands, taken together with the impact of other existing and proposed European environmental regulation, achievement of the target will not be met by technological innovation but by large scale fuel switching from coal to gas.

Whilst this may result in interim targets being achieved, it will make it all the more difficult to achieve the 60% (or more) reduction in carbon emissions required by 2050. Gas is also a relatively high carbon form of generation and there is a real risk that large-scale investment in new, unabated gas-fired capacity will result in a high level of carbon emissions being locked in as well as all the attendant price and security of supply implications.
It is accepted that the future of coal-fired generation requires the application of carbon capture and storage (CCS) technology. But the same must apply to gas if large reductions in carbon emissions are to be achieved by 2050.

Scope and Operation

2. No comment.
3. No comment.
4. The Scheme will not encourage technological innovation. It is far more likely to lead to fuel switching from coal to gas on a large scale.

This will lock in a relatively high level of carbon emissions making attainment of the 2050 objective even more difficult. Windfall profits will continue to accrue to gas-fired generation. Other low carbon technologies (nuclear, coal with CCS) may be locked out.

The proposal to allow CCS as an abatement measure in the EU ETS will, other things being equal, stimulate investment in CCS. However, other things are not equal. CCS cannot be retrofitted to the UK’s existing coal-fired fleet. This is relatively inefficient and the energy penalty of CCS is too great. It can and should be applied to new/replacement high efficiency coal-fired capacity. Investment in such high efficiency capacity is thus a pre-requisite for CCS.

CCS will not be demonstrated at commercial scale until about 2014. This is too late to build new coal-fired capacity with CCS before the critical date of 31 March 2016. New coal-fired capacity can be built “carbon capture ready” prior to that date but will be penalised by having to purchase 100% of their carbon allowances prior to the retrofit of CCS. There is a serious risk that unabated gas-fired plant will be constructed instead.

5. No comment.

Allocation and Auctioning

6. The position in Member States varies widely, not least in the proportion of electricity generating capacity which is coal-fired. Decisions should be taken by Member States.

7. The rationale for sectors receiving a proportion of their emissions for free relates to international competitiveness and the potential for “carbon leakage”. 100% auctioning is proposed for electricity generation because it is assumed the cost can be passed on. CoalPro believes this fundamentally underestimates the effect on the competitive position (and hence carbon leakage) of electricity-intensive industry sectors. Electricity prices will increase not only because the cost of carbon will be passed on but also because of the likely extremely high price of gas in a Europe increasingly dependant on gas-fired power generation.

8. No comment.

The International Dimension

9. The effect on the competitiveness of European industry will be offset if operators are allow to utilise the CDM to the greatest possible extent.

10. No comment.

CoalPro recognises that it would be appropriate to put forward an alternative proposal to 100% auctioning for the electricity sector designed to stimulate investment in new technology and to avoid large-scale, and ultimately counter-productive fuel switching. This is set out below:

(i) Gradually increase the proportion of allowances which is auctioned, starting at, say, 20% in 2013. This will not penalise new, high-efficiency, “CCS ready” coal-fired generation in its initial operating period, thus militating against fuel switching, but will stimulate CCS retrofitting once CCS has been proved.

This will also stimulate investment in replacing the UK’s existing coal-fired fleet with the high-efficiency plant which is a pre-requisite for CCS.

(ii) Recirculate the auction revenues to investment in low-carbon electricity generation, including CCS. It is simply unacceptable that such, potentially huge, revenues disappear into the Treasury pot in all Member States. This is not a normal revenue-raising measure. It is a specific environmental measure and the revenues should be devoted to that purpose.
CoalPro will be pleased to discuss the evidence set out above with the Committee should the Committee consider that appropriate.

June 2008

Memorandum by the Environment Agency

1. **Summary and Recommendations**

1.1 The European Commission’s review of the EU Emission Trading Scheme (EU ETS) is a key opportunity to help mitigate the impacts of climate change. The EU ETS must cap allowances to drive carbon reductions and stimulate investment in low-carbon technology.

1.2 The main points of our response are:

*Cap-setting and allocation.* The scheme should move towards EU centralised cap-setting from Phase III onwards. Auctioning should replace the issuing of free allowances as soon as possible. Any free allocation that does continue for reasons of competitiveness should be on the basis of benchmarking.

*Scope of the scheme.* The scheme should apply to aviation as soon as practically possible. The revised Directive should include a process for including new sectors, using a set of agreed criteria.

*Linking.* The scheme must link to other trading schemes in order to establish a global carbon market. Care must be taken to ensure equivalence of how a tonne of CO$_2$ is measured. Preference should be given to linking with schemes that operate within a Kyoto Protocol successor framework.

*Streamlining.* The best solution for streamlining the scheme would be for all Member States to use a consistent and broad definition of combustion. The scheme should include an emissions threshold to remove the smallest emitters.

*Monitoring Reporting and Verification (MRV) and compliance.* This must be uniformly applied so that the scheme is underpinned by the confidence that one tonne of CO$_2$ is the same in each Member State.

*Supplementarity.* The definition of Supplementarity needs to be tighter and consistently applied. Buying credits from overseas should not remove the incentive to invest in low carbon technology in the EU or slow down innovation. Kyoto credits must be quality assured. MRV standards must be the same as those in EU ETS.

2. **Introduction**

2.1 The Environment Agency welcomes the opportunity to submit evidence to the Sub-Committee D’s inquiry into the European Commission’s proposals to revise the EU’s Emission Trading Scheme.

2.2 We are the Competent Authority for the EU ETS in England and Wales. We manage the Emissions Trading Registry and the new entrant reserve (NER) on behalf of the other UK regulators.

3. **Key Inquiry Issues**

The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached.

3.1.1 We support a linear emission reduction trajectory of 1.74% per year to be reviewed by 2025. This provides much greater predictability in the cap-setting process and provides business with the certainty to factor the carbon price into their investment decisions.

3.1.2 We support the automatic target increase from 20% to 30% should an international agreement be reached. The EU set the 20% limit as a starting point for international negotiations for a follow on agreement to the 2008–12 Kyoto target.

The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture.

3.2.1 The sectors that the Commission proposes to include within the EU ETS are significant sources of greenhouse gases and there is considerable potential for emission reductions. These sectors lend themselves to robust and standard approaches to monitoring and can therefore be accommodated in the scheme. Inclusion into the scheme may accelerate the implementation of abatement technology. We recommend caution when
allocating free allowances in cases where relatively cheap abatement exists as this may provide a profit windfall.

3.2.2 We see a number of difficulties in bringing methane from active coal mines into the EU ETS. Active mines tend to be very large and interconnected resulting in problems in defining installation and operator boundaries. We also consider that there will be problems in accurately quantifying the amount of gas, complicated by the very low air flows through mines.

3.2.3 With regard to LULUCF, further work is required on improving the accuracy of emission monitoring, and the associated reporting and verification systems and, also, the permanency of locking up carbon. Administration costs of the scheme are also an issue as this sector is largely made up of a number of small companies.

3.2.4 The EU has agreed in principle to include aviation in the EU ETS, but no date has been set as to when EU ETS will be applied to the sector. The scheme must apply to aviation as soon as practically possible.

3.2.5 Surface transport is also a major source of greenhouse gas emissions and there could be significant benefits from bringing them into the EU ETS. The agreement in principle to bring aviation into EU ETS set a precedent for sources such as road vehicles and shipping. We believe that further analysis of this possibility is required. This analysis must include the administrative cost (both absolute and per tonne of CO\textsubscript{2}) of including these sectors in EU ETS as opposed to alternative measures to cut emissions.

The practical application and enforceability of the scheme.

3.3.1 The inclusion of a definition for “combustion installation” should end inconsistent application of the scope of the Directive, provided it is adopted properly by all Member States. In Phase I, Member States used different interpretations of combustion installations causing differences in the coverage and competitive distortions in the internal market. We support a broad definition of combustion as this simplifies the scheme and captures all emissions. However, a broad definition could bring smaller emitters into the scheme and so we would wish to see an emissions threshold.

3.3.2 The backbone of a robust carbon market is monitoring, reporting, verification (MRV), compliance and enforcement. The current monitoring and reporting guidance (MRG) is a legally binding Commission decision, directly applicable to member states. The Commission’s proposal for a Regulation duplicates this without adding significant additional value. However, a Regulation is harder to update than the existing Guidance.

3.3.3 Currently the MRG provides little in the way of standards for verification. This is a weakness in the scheme as verification is critical for ensuring its probity. Formal standards are therefore required and we believe this is best achieved by amending the MRG rather than a separate Regulation. The scheme should develop EU-wide electronic tools to manage the MRV process.

3.3.4 The civil penalty must remain effective as a deterrent against non-compliance. We therefore support the view that the civil penalty is index linked.

The key strengths and weaknesses of the proposal. You may wish to consider in particular:

— The extent to which the scheme as currently designed will encourage technological innovation.
— Whether it will result in the appropriate price signal being sent.
— Whether it will be efficient and/or equitable.

3.4.1 Capping carbon allowances to below business as usual is fundamental to driving the carbon price. Member State national allocation plans for Phase II have been cut by the Commission by around 10%. Allowances are now trading around €25 per allowance (one tonne of CO\textsubscript{2}) from a low of just €0.05 cents in 2007. The introduction of a centrally set cap should help to deliver a well functioning carbon market that drives emission reductions. We support a cap set below business as usual, together with a clear indication of what reduction will be required over future years, to drive Europe to a low carbon economy.

The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions.

3.5.1 We support the new Article 24a. We welcome the future linking of the EU ETS to other developing carbon trading schemes, provided equivalent standards of MRV, compliance and enforcement are maintained. This is essential to maintaining the scheme’s credibility, integrity and effectiveness.
Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level and what the time-frame for such decisions should be.

Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge and for how long.

3.6.1 We support the European Commission’s proposal to move towards 100% auctioning of allowances. Until this is fully achieved, we support the proposal to allocate free allowances according to community-wide rules (benchmarking) within sector caps, subject to competitiveness impacts being addressed.

3.6.2 We see this as a transitional measure until all of Europe’s major competitors are part of a global carbon market, when there will be no need for free allocation.

3.6.3 The proposal for European benchmarks could be an important step towards achieving global sectoral agreements.

The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM).

3.7.1 To date, non-EU credits are cheaper than EU credits thus incentivising operators to look for carbon savings outside Europe. Harmonising the limits to purchasing project credit limits provides a level playing field between EU Member States and as such, limits should be set at an EU wide level.

3.7.2 The definition of Supplementarity needs to be tighter, to make sure that buying non EU credits does not remove the incentive to invest in low carbon technology in the EU or slow down innovation. Credits generated through the Clean Development Mechanism and Joint Implementation projects must be quality assured. MRV standards must be as good as those in the EU ETS.

3.7.3 We support restrictions on the use of project credits to ensure domestic reductions help achieve the EU’s overall 2020 reduction targets. We have not undertaken any analysis on whether the Commission’s proposed project credit limits are set at the right level.

The likely feasibility of creating links between the ETS and other similar schemes around the world.

3.8.1 We believe a broader and deeper carbon market is at the core of a global solution to climate change. It will drive global emission reductions and increase cost-effectiveness. We welcome the future linking of the EU ETS to other developing schemes, provided equivalent standards of the MRV, compliance and enforcement are maintained. This is essential to maintaining the EU ETS credibility, integrity and effectiveness.

June 2008

Memorandum by The Environmental Industries Commission

Introduction

The Environmental Industries Commission’s (EIC) core message is that a move to a low carbon resource efficient economy is not only environmentally essential but brings huge opportunities. This message has increasingly gained acceptance in mainstream business and Government.

One area where there are huge economic opportunities in tackling the environmental challenges we face is the developing carbon trading sector. Carbon trading will be a key component of future efforts to tackle climate change and central to its success will be a strong, effective EU Emissions Trading Scheme (ETS).
By capping carbon emissions the EU ETS has the potential to be a key instrument in driving the much-needed transition to a low carbon economy and stimulating innovation in new technologies that will increase the competitiveness of the UK and EU in global markets.

Before addressing the specific questions set out in the Committee’s call for evidence I would like to take this opportunity to address the crucial issue of competitiveness and the impact the proposals for Phase III of the EU ETS will have.

**COMPETITIVENESS VS ENVIRONMENTAL PROTECTION**

In Phase I the EU ETS was hampered by problems concerning the over allocation of allowances—due, in a large part, to the poor quality of some of the historic and future emissions projections used to determine allowance allocations. In contrast Phase II allocations are based upon independently verified emissions data.

In Phase II the situation has improved and we’re now starting to see an ETS emerge that has the potential to help the EU achieve the much-needed transition to a low carbon economy.

By setting strict emissions caps, reducing the free allocation of allowances, expanding the Scheme to cover as many sector as possible—including aviation—and limiting the use of overseas credits so that the EU ETS drives domestic emission reductions, the EU has primed the EU ETS to meaningfully drive investment in the low carbon technologies the rest of the world will need to adopt if we are to have any chance of averting dangerous climate change.

EIC has argued consistently that the future of international competitiveness will be in leading the transition to a low carbon, resource efficient economy and that the key driver of this transition is world leading environmental standards. This is a message that is finally beginning to hit home and we believe that Phase III offers a valuable opportunity to apply for the EU to lead the way.

It is, therefore, of concern that we are still seeing inflated claims made by some sectors about the costs of the Commission’s proposals for Phase III and the impact they will have on EU competitiveness.

There is no evidence to justify claims that the EU ETS will damage competitiveness. For example, a recent Carbon Trust report concluded: “Overall, the EU ETS can extend with deeper emission cutbacks in Phase III (post 2012), without damaging UK or European competitiveness.”

EIC believe that high environmental standards are essential for our future economic well-being and for the competitiveness of the EU economy.

A key question throughout the legislative proposals for Phase III, therefore, is whether the EU has the will to face down vested interests and put in place a framework for Phase III of the EU ETS that drives real emission reductions.

**LEVEL OF EMISSIONS REDUCTIONS**

1. *The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached*

EIC welcome the Commission’s proposals to set a cap on total emissions at the EU level from the start of Phase III. This is a significant step forwards from previous phases, where Member States were able to set their own caps through National Allocation Plans.

From the start of Phase III allowances will be reduced annually by 1.74% in order to put the EU ETS on a pathway to meet its contribution to achieving the overall EU target for reducing greenhouse gas emissions from 1990 levels by 20% by 2020. To align with the timeframe for meeting this target, Phase III will be extended to run from 2013–20.

EIC welcome the clarity a longer Phase with annual reductions will provide but believe the Scheme is still not ambitious enough.

The aforementioned debate surrounding competitiveness has drawn attention away from the critical issue of the level of emission reductions the scheme delivers and, in particular, whether or not the cap for Phase III is sufficient for the EU ETS to play a central role in averting dangerous climate change.
THE REVISION OF THE EU’S EMISSION TRADING SYSTEM: EVIDENCE

SCOPE AND OPERATION

2. The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture

A central principle of emissions trading is that it allows for required carbon savings to be achieved in the most cost-efficient way—thereby helping to resolve concerns about the impacts on competitiveness in Europe. However, for this to be the case the EU ETS must include as many sectors as is practical.

Extension to further sectors and gases, coupled with caps that drive real carbon emission reductions, would help to ensure the gains of the EU ETS are not cancelled out by growth in other sectors.

LULUCF

EIC believes that urgent action needs to be taken to address emissions from land use, land use change and forestry, which account for 20% of global greenhouse gas emissions.

One mechanism may be to allow Clean Development Mechanism credits from forestry projects into the EU ETS.

Aviation

EIC welcome the European Commission’s proposal to include aviation in the EU ETS.

The proposal states that all flights within the EU would be included in the ETS from 2011. However, international flights departing from or arriving at EU airports would not be included until 2012. The Commission plans to set the cap on aviation’s carbon dioxide emissions at the level of average annual emissions in 2004–06. This would be kept the same for the next three trading periods.

EIC believe that including aviation in the EU ETS will increase demand overall for carbon emission reductions and from Members’ analysis will have the impact of increasing the price of carbon faced by all participants since airlines have limited direct opportunities for reducing emissions.

Members believe that airlines will be able to recover their costs (as power producers do) by passing on costs to consumers. This may have a relatively small impact on customer demand but not on competitiveness of the sector overall.

Shipping

It is unclear why shipping cannot be brought within the EU ETS using similar principles as currently proposed for the inclusion of aviation within the EU ETS.

Small Installations

In cases where the environmental gain is disproportionate to the administrative and financial burden that the EU ETS places on installations it would seem logical and economically sensible that installations with relatively small emissions are allowed to opt out of the EU ETS, provided that they are covered by other emissions abatement legislation, and that legislation has enforcement mechanisms and reduction targets of comparable rigour in place.

Any threshold for determining inclusion in the scheme should, however, be based on actual emissions from an installation in the context of the EU ETS. The nature of the installation and the capacity of the installation are not considered relevant.

3. The practical application and enforceability of the scheme

EIC is of the view that any practical application of the scheme must support the underlying aim of the scheme, namely the reduction of greenhouse gas emissions. The public also needs to be confident that the scheme’s aim of reducing greenhouse gas emissions is being achieved.

This is best achieved through a consistent approach to allowance allocation across Member States and industry sectors using appropriate baseline methodologies. Robust monitoring and verification procedures are also necessary.
EIC believes, therefore, that monitoring, reporting, verification should be harmonised across all Member States.

A consistent approach as becomes even more important if the scheme is to be expanded to include other greenhouse gases.

Whilst EIC is of the view that enforcement of the scheme can from a practical perspective be best achieved at a national government level, a consistent approach in terms of enforcement needs to be adopted across all Member States.

4. *The key strengths and weaknesses of the proposal. You may wish to consider in particular:*
   - the extent to which the scheme as currently designed will encourage technological innovation;
   - whether it will result in the appropriate price signal being sent; and
   - whether it will be efficient and/or equitable.

EIC broadly welcome the Commission’s proposals for Phase III of the EU ETS. Below we have set out what we believe are the strengths and weakness of some of the key proposals and, where appropriate, our proposed resolution.

**STRENGTHS**

**Phase Length**

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<tr>
<th>Strengths</th>
<th>Weakness</th>
<th>Resolution</th>
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<tbody>
<tr>
<td>EIC believe that the proposal for Phase III to run from 2013 to 2020 to align with the wider EU carbon emission reduction target is welcome. Furthermore, EIC supports the decision to apply the 1.74% annual reduction for Phase IV of the Scheme (2021–28). This will provide certainty to businesses and investors helping encourage the necessary investment in emission reductions.</td>
<td>EIC welcome the clarity a longer Phase with annual reductions will provide but believe the Scheme is still not ambitious enough.</td>
<td>See Phase III Cap below.</td>
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**Phase III Cap and the Use of Overseas Credits**

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<tr>
<td>EIC welcome the Commission’s proposals to set a cap on total emissions at the EU level from the start of Phase III. This is a significant step forwards from previous phases, where Member States were able to set their own caps through National Allocation Plans.</td>
<td>EIC believe that the debate surrounding competitiveness has drawn attention away from the critical issue of the level of emission reductions the scheme delivers and, in particular, whether or not the cap for Phase III is sufficient for the EU ETS to play a central role in averting dangerous climate change. EIC believe that the wider target for a 20% reduction in carbon emissions by 2020 is too low. Whilst the EU has agreed to increase it wider target for</td>
<td>Commit to a wider 30% reduction target by 2020. The cap for Phase III of the EU ETS should then be set to correspond with a 30% reduction target. This should include a strict, harmonised limit on the use of overseas credits. This limit should be set at a level to ensure that supplementarity is maintained whilst also ensuring overseas credits can continue to play a role in engaging all nations in the fight against</td>
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carbon emission reductions to 30% in the context of an international agreement for tackling climate change, it is not clear what this framework has to look like in order for the EU to consider it sufficient to increase its target—and, therefore, the cap for Phase III to ensure the EU ETS makes the necessary contribution.

A single non-changeable and a corresponding Phase III cap would be more appropriate.

Waiting for a 2012 agreement to emerge also leads to uncertainty in the use of overseas credits in two areas:

1. Project developers are unable to invest in Phase III CDM projects, for example, if there is uncertainty over whether the credits can even be used.
2. Overseas credits play a valuable role in engaging developing countries in the fight against climate change.

As international negotiations continue on a post 2012 framework for tackling climate change, uncertainty over the level of overseas credits that can be used in the EU ETS means that the EU is unable to use investment in emission reduction projects as a bargaining tool to encourage developing countries to take on binding emission reduction targets.

A straightforward 2020 emission reduction target, a Phase III cap to correspond and a strict limit on the use of overseas credits would be more appropriate and provide greater certainty.

**Auctioning and Allocation of Free Allowances**

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<th><strong>Weakness</strong></th>
<th><strong>Resolution</strong></th>
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<tr>
<td>EIC believe that auctioning is the most efficient, transparent and equitable means of allocating allowances and will help the market recognise the true cost of carbon emissions.</td>
<td>The level of auctioning for sectors exposed to international competition.</td>
<td>Make a decision on the level of auctioning for sectors exposed to international competition as soon as possible after an agreement on a post 2012 international framework for tackling climate change has or has not been agreed.</td>
</tr>
<tr>
<td>EIC welcome proposals to greatly increase the level of auctioning.</td>
<td></td>
<td>In the context of a post 2012</td>
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5. The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions.

The key purpose of the EU ETS is to achieve real greenhouse gas emission reductions in the most economically efficient way. Therefore, if such reductions can be best economically achieved through the recognition of domestic offset projects outside of the scope of the EU ETS then such an approach should be considered.

EIC is, however, concerned to ensure that the environmental integrity of the scheme is maintained and that the use of credits from domestic offset projects does not lead to double counting of emission reduction—whereby non-ETS sectors are generating credits simply through compliance with existing environmental legislation that can then be sold to EU ETS sector.

**Allocation and Auctioning**

6. Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be

EIC believes that any allocation of free allowances needs to be harmonised across Member States. Clear criteria should be established by the Commission for the assessment of exposure of sectors to international competition and the risk of carbon leakage. Such criteria should be transparent and objective and should not favour one Member State against the others.

Decisions regarding the level of free allowances to be allocated should be taken as soon as possible after an agreement on a post 2012 international framework for tackling climate change has or has not been agreed. If a truly global agreement is reached the risk of “carbon leakage” will be a lot smaller because more countries will have binding emission limits, therefore the proportion of allowances allocated for auction can be increased.

7. Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge, and for how long?

It is proposed that the power sector and carbon capture and storage will be subject to 100% auctioning from 2013. Installations in other sectors will receive a partial free allocation, starting at 80% of their emissions for the period 2005–07 in 2013. This will gradually decline by equal amounts each year to zero free allocation in 2020.

Expectations will be made for installations in sectors that are exposed to international competition and, therefore, pose a risk for “carbon leakage”—whereby the installations relocate productions to countries outside the scope of the EU ETS that do not set similar emissions caps, therefore leaving them free to pollute. Installations in these sectors will receive up to 100% of their allowances for free—a decision will be taken on which sectors are at risk by 2010.

EIC believes that auctioning is the most efficient, transparent and equitable means of allocating allowances and we welcome the proposal to gradually phase out the free allocation of allowances on the basis that this will assist with establishing a carbon price.

For those sectors exposed to international competition there is concern auctioning could drive business outside the scope of the EU ETS to areas where they would be free to pollute. The evidence suggests this concern is much overplayed, however it highlights the importance of securing a post 2012 international agreement on tackling climate change.

As aforementioned, if a global agreement is reached the risk of “carbon leakage” will be a lot smaller, therefore the proportion of allowances allocated for auction can be increased.

In the context of a post 2012 international agreement, EIC believes that the Commission should look to apply 100% auctioning across all EU ETS sectors from the start of Phase III.
8. *Whether the redistributive element of the Commission’s proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate*

It is proposed that part of the rights to auction allowances will be redistributed from the Member States with high per capita income to those with low per capita income in order to strengthen the financial capacity of the latter to invest in climate friendly technologies.

EIC believe that the level of auctioning should be harmonised across all Member States. Furthermore, we support the proposal that 20% of auction revenues should be hypothecated.

**THE INTERNATIONAL DIMENSION**

9. *The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM)*

In addition to competitiveness, one of the key debates emerging from proposals for Phase III concerns the extent to which organisations operating under the EU ETS can make use of overseas credits to meet their targets.

The Commission has set out two proposals for the use of overseas credits in Phase III. The first is based on achieving the EU’s overall target of reducing emissions by 20% by 2020. Under this scenario operators will only be able to make use of any unused credits from Phase II of the EU ETS. The Commission estimates that this will allow operators to achieve more than a third of the emission reductions required in Phase III through the use of overseas credits.

Following a post-Kyoto international agreement the EU has committed to increase it target to reduce carbon emissions to 30% by 2020. In this context the limit on the use of overseas credits will be automatically increased up to half of the additional reduction effort.

EIC believe that the continued use of overseas credits is crucial for engaging all nations in the fight against climate change and forming the foundation of global trading scheme. However, there must be a limit on the use of such credits, as overseas emission reduction projects must supplement rather than undermine domestic action.

10. *The likely feasibility of creating links between the ETS and other similar schemes around the world*

EIC believe that the European Commission should begin to link the EU ETS to other emerging carbon markets as they are implemented so that the EU ETS can form the foundation of a global carbon market. However this should be done with caution. It is particularly critical that the EU ETS is not undermined by linking to another ETSs that do not have such rigorous environmental goals.

The issue of supplementarity will also need to be clearly defined if the EU ETS is to link with other Schemes around the world. It will be crucial that the European Commission develops clear guidance for companies and Member States on the quantity of overseas carbon credits that can be utilised. A clear division between what is available to the public and private sector would also greatly aid the planning process for industry.

20 June 2008

Memorandum by the European Association for Coal and Lignite (EURACOAL)

**PRELIMINARY REMARKS**

With its Proposal dated 23 January 2008, the European Commission intends to completely revise and thereby clearly strengthen the CO2/GHG Emissions Trading Scheme after 2013. A policy dominated by climate protection alone is foreseen; major energy and industrial structural issues are not considered appropriately.

In its proposed form, the Directive would probably lead to a drastic increase of energy prices both for European industry and also for EU citizens. Distorted competition for European industry compared with non-European competitors and a drop in the standard of living for the population, resulting from significant increases of energy prices and the delocalisation of employment outside Europe—not subject to the stringent European emissions reduction system—, can also be foreseen.
The European Commission’s Proposal would result in competence for energy policy being transferred from Member States to the European level. Furthermore, the considerable time pressure to discuss to what extent major elements of national energy and industrial policies will be managed centrally, with national characteristics at best only playing a minor, role is not acceptable.

The fast tempo for the procedure concerning the Directive is due to the forthcoming European Parliament elections in 2009. On the other hand, swift approval of the Directive enables national economics to see early on which regulations they will have to adapt to as from 2013. On the other hand, hastily adopting an economically disadvantageous Emission Trading Scheme already creates the conviction that the European economy must consider that its worst fears have come true, with all the negative impacts on decisions to invest. Furthermore, as experience with constantly high CO\(_2\) prices is lacking, the time pressure required by the European Commission for approving the Directive means that with the given qualified reduction objectives, initially, the milder and more balanced forms of the Emissions Trading Scheme would be selected.

**Suggestions to Improve the Proposal**

- The Proposal is based on CO\(_2\) reduction in the ET sectors of—21% (2005 till 2020). The total objective amounting to only 14%, this results in the ET sector being over-burdened. The European Commission did not give a proper explanation for this. Potential that is achievable at less cost in other sectors, as shown for example for Germany by the BDI/McKinsey Climate Study, remain unexploited.

  It is therefore suggested to establish 14% as reduction objective for all sectors.

- By choosing 2005 as reference year and by imposing an identical reduction factor of—21% for all Member States, “early actions” (ie reductions achieved between 1990 and 2005) are penalised. Here, a “level playing field” and also consideration of respective national circumstances have to be ensured.

- For climate protection, it does not matter in which region of the world emissions are reduced. We agree with the European Commission that if possible all states, all sectors and all greenhouse gases be integrated in a climate protection policy. As this is difficult to achieve for the time being, the European coal industry considers unlimited JI/CDM is necessary. This is also true for linking up with other Emissions Trading Schemes.

- The main criticism of the European coal industry is the planned 100% auctioning of CO\(_2\) certificates. It would lead to citizens and the national economies of the Member States with a considerable share of coal in their electricity mix having to carry the financial burden of European climate protection policy. Already for the first eight years till 2020, with an average price for certificates under €30/t, a burden in the range of up to €200 billion (!) for coal-fired power stations and consumers of coal-fired electricity alone would have to be reckoned with.

Coal-fired electricity generation will have to continue making a substantial contribution to European energy supply for decades. A responsible policy must acknowledge this. The EU can significantly contribute to climate protection and at the same time set an example for the world by implementing well-timed and available opportunities to reduce CO\(_2\). Already replacing older coal-fired plants with average efficiencies of approximately 30% by techniques already available today with 45% efficiency achieves a specific reduction of CO\(_2\) emissions by coal-fired power stations of more than 1/3. Unfortunately, CCS cannot make a substantial contribution to climate protection before 2020.

The abrupt introduction of 100% auctioning of certificates would deprive enterprises of means they need to modernise the power plant portfolio. This would also be questionable in terms of industrial policy because it would weaken the energy economy of precisely those states with a high share of coal-based electricity generation, without giving them a chance to adapt their power plant portfolio in time.

To reduce the negative effects of auctioning, the European coal industry suggested introducing fuel-specific benchmarks combined with fuel-specific compliance factors. In this case, the operator of an installation would have to acquire certificates not for all emissions, but only for the difference with Best Available Technology. The economic incentive to reduce emissions is maintained. New investments in the energy industry remain possible, also because the enterprises are not deprived of the necessary capital. A varied energy mix is maintained. Bottlenecks and increasing prices for electricity would generally be avoided. Auctioning, on the contrary—after including the requirements of auctioning-, results in the total cost of producing electricity (new installations) being higher than price of electricity. Auctioning thereby encourages power plant projects to be abandoned. Less efficient installations continue to be operated and the share of highly efficient power plants does not increase.
If benchmarks, as alternative to 100% auctioning, were not to obtain a majority, the European coal industry’s opinion is that, if necessary, cautious auctioning would be possible. The following considerations would have to be taken into account, in order to combine investment styles, cost-efficency, competitiveness and security of supply:

— Gradual auctioning over a longer period, also for the electricity sector eg parallel to energy intensive industries and establishment of the share of auctioning by Member states.
— To support investments in modern plants, free of charge allocation to these plants on the basis of fuel-specific benchmarks.
— Use of the proceeds from auctioning primarily for climate protection, eg power-plant related R & D and demonstration (improved efficiency, Carbon Capture and Storage).
— Full acceptance of JI/CDM.

30 April 2008

Memorandum by the European Federation of Energy Traders (EFET)

EFET highly appreciates your invitation to submit to your call for evidence concerning the revision of the EU’s emissions trading system and we are gladly willing to express our views of the European Commissions amendment proposal.

EFET, with more than 90 member companies operating in 21 countries, represents the most active traders under the ETS. EFET is a strong supporter of trading mechanisms as the most cost-efficient way to curb GHG emissions.

EFET is especially concerned with the proper functioning of the emissions trading system and market. A number of key criteria should be fulfilled to ensure this:

— liquidity in terms of traded volume and active traders;
— level playing field for participants;
— clarity and predictability on regulatory aspects;
— clarity on factors that drive supply and demand;
— long-term certainty about the market framework; and
— trustworthiness and transparency in reported emissions.

Firstly, we shortly enumerate some key elements in the proposal that EFET supports (having advocated these to the European Commission in an earlier stage):

— a longer, eight year trading period, parallel with the 2020 targets;
— inclusion of more sectors and gases where appropriate;
— exclusion of small installations; and
— harmonised allocation throughout the EU as to the cap, the allocation rules and the new entrant reserve.

However, we have concerns about several other important issues.

New Entrant Reserve

As to the size of the New Entrants Reserve (NER), we recommend a careful reconsideration: in fact, the current limit seems fairly high, given the fact that the NER is not needed for electricity production. Reservation of too many allowances may cause unnecessary uncertainty in the market. We would like to stress that NER management should be transparent and information hereon timely. To strengthen transparency and predictability, the proposal should also include clear rules about what happens to un-allocated NER.

International Agreement

Depending on the question if a satisfactory international agreement is reached, the EU CO₂ target will be either 20 or 30%. EFET does not take a position on those targets as such, as this is a mainly political choice. However, EFET has concerns on the timing. In case an international agreement should be achieved later than what is now assumed (2009 or 2010), there might be too little time to adapt to the 30% target. EFET therefore
The revision of the EU’s emission trading system: evidence

recommends applying an implementation time of at least three years for adaptation to the 30% target. In other words: the starting date of the EU cap decrease will start only three years after the decision to have a 30% reduction target.

Kyoto credits

While, under the current proposal, Member State governments are allowed to use carbon credits for their national targets, the ability to use CERs/ERUs in the EU ETS is heavily restricted and subject to the conclusion of an international agreement on climate change. As a consequence, a situation of uncertainty for private entities involved in emission reduction projects is created. Moreover, as an international agreement on climate change is not likely to be concluded before late 2009, uncertainties are likely to persist for a long period of time.

During the last years, private investors from developed nations have provided large amounts of funding to greenhouse gas reduction projects, especially under the Clean Development Mechanism. If financial returns on those long-term investments are affected by sustained political uncertainties, the immediate result is the scaling back of new investment into low carbon technology in developing countries. Ultimately, the CER/ERU restrictions for the EU ETS would harm the development of an efficient market for emission reduction projects and would reduce the overall cost-effectiveness of the carbon markets, as low-cost abatement potential in developing countries would not be fully tapped.

EFET endorses the ability to use CERs/ERUs proportionate to required emission reductions. Sectors with restrictive caps should be given freer access to the use of CERS for compliance. The clear framework for CER usage, currently reserved to Governments, should be extended to operators of power plants and other industrial installations requiring emission allowances. It is also important to ensure that a CER created in one EU Member State is recognised in any other Member State; otherwise the market transparency and equal treatment of companies from different EU countries are put at stake.

Auctioning

Now that the Commission has chosen auctioning as the basic allocation tool, it should be clear to the Member States—who will be the auctioneers—that auctions should serve as a means to have a fair, transparent and unambiguous way of distributing emission allowances. Although the Member States will have the auction revenues, revenue maximisation must not be the aim of these auctions.

As stated before, EFET strongly supports EU-wide harmonisation. This also counts for the execution of auctions: all auctions from the 27 Member States should have the same auctioning rules and should be fully coordinated regarding eg timing, frequency, size, pre-qualification and information disclosure. Preferably auctions will be carried out by one central EU body. But at least a European central interface should be established for coordination and communication of the member states auctions. Member states should be obliged to make available a minimum number of EUA’s per year.

Power companies, who will face the lion’s share of third phase auctions, sell forward a large portion of their electricity production, or source forward a large portion of their electricity sales to consumers. If the auctions of EUA’s will, as the proposal suggests, start as late as 2013, then there will be only the possibility for power companies to buy EUA’s in the secondary forward market, to lock in the costs as they sell electricity forward. To build up more trust in the market prices, it will be necessary to establish early an underlying certificate market by selling certificates via auctioning. Therefore the first auctions should already start before the third compliance period take off, as soon as the final cap for the third phase is known, preferably in the course of 2011.

We hope and trust that our contribution will be valuable for your recommendations to the UK Government.

19 June 2008
Memorandum by the High Commission of India

INTERVENTION BY PRIME MINISTER DR MANMOHAN SINGH AT MAJOR ECONOMICS MEETING ON CLIMATE CHANGE

9 JULY 2008
HOKKAIDO, JAPAN

I welcome the fact that we are all engaged in serious negotiations for enhanced implementation of the UNFCCC through long term cooperative action.

It is very important that the provisions and principles of the Convention, especially common but differentiated responsibilities and respective capabilities, are respected in these negotiations and their outcomes in letter and spirit.

The first and overriding priority of all developing countries is poverty eradication.

More than 600 million people in India are still without access to modern energy sources and a quarter of our population lives on less than a dollar a day.

The imperative for accelerated growth is even more urgent when we consider the disproportionate impact of climate change on us as a developing country with little choice but to devote even more and huge resources to adaptation in critical areas of food security, public health and management of scarce water resources.

And, this comes at a time when we are faced with an ever increasing energy bill putting our energy security at extreme risk.

Sustained and accelerated economic growth is, therefore, critical for all developing countries and we cannot for the present even consider quantitative restrictions on our emissions.

Moreover, there should be no detraction of public and private development transfers and flows. Rather there must be new and additional resources made available to developing countries.

We have not seen demonstrable progress on even the low levels of agreed GHG reduction from developed countries and, indeed, the prognosis is that their emissions as a whole will continue to rise even in the years to come.

This must change and you (the G8) must all show the leadership that you have always promised by taking and then delivering truly significant GHG reductions.

Let me assure you that as a responsible nation that is particularly mindful of its international obligations, India is committed to a path of sustainable development. Though India’s per-capita emissions are among the lowest in the world and we are certainly not free riders or major emitters, we have recently adopted a strong National Action Plan on Climate Change.

Our efforts, of course, would be greatly enhanced with global support, especially in terms of financial flows and technology access.

India is determined that even as we pursue our economic growth and development, our per-capita emissions will not go beyond those of the developed countries.

But, this convergence idea is also a challenge to the developed countries. The quicker you reduce your emissions, the greater the incentive for us to follow.

I am grateful to Chancellor Merkel, President Sarkozy and Prime Minister Gordon Brown, who have welcomed this approach.

If we are to honestly address the climate change challenge, it is important that we recognize the right to equal sustainable development and historical responsibility.

An equitable burden and carbon space sharing paradigm is also the key to realizing the ultimate objective of the Convention.

And, for real success, we have to eschew unsustainable consumption patterns and lifestyles worldwide.

I also believe that technology is a critical transformation agent for both mitigation and adaptation.

Collaborative R&D between developing and developed country institutions for affordable advanced clean technologies as well as their transfer, deployment and diffusion in developing countries needs to be expedited.

There is also a need for a fairer IPR regime for advanced clean technologies so that rewards for innovators are sufficiently remunerative and at the same time they are made available to developing countries at affordable cost. Indeed there is a strong case that critical technologies be treated as global public goods.
It is also important that standards and norms are reflective of the developmental context to which they apply. Climate Change is a certainly huge challenge for all of us. But it should not be used to add conditionalities to the already complex development challenges that we face in developing countries or maintaining economic status quo or attempting to introduce protectionism by another means. We should look at it as a challenge and as an opportunity and work together for cooperative action on an issue of great importance to the future of mankind.

Thank You

PM’S INTERVENTION ON CLIMATE CHANGE AT HEILIGENDAMM MEETING OF G8 PLUS 5

8 JUNE 2007

HEILIGENDAMM, GERMANY

Madam Chancellor,

Dear Colleagues,

I must thank you for raising this issue, of such significance for us and our future generations. We all have a vested interest in making our planet secure for our children and grandchildren. India’s GHG emissions are among the lowest in per-capita terms. Moreover, being only around 4% of the world’s emissions, action by us will have a marginal effect on overall emissions. Nonetheless we recognize wholeheartedly our responsibilities as a developing country. We wish to engage constructively and productively with the international community and to add our weight to global efforts to preserve and protect the environment.

We are determined that India’s per-capita GHG emissions are not going to exceed those of developed countries even while pursuing policies of development and economic growth. We must work together to find pragmatic, practical solutions, which are for the benefit of entire humankind. These should include mitigation and adaptation strategies with fair burden sharing and measures to realize sustainable patterns of consumption and production.

The process of burden sharing must be fair. It should take into account where the primary responsibility for the present levels of GHG concentration rests and not perpetuate poverty among the developing countries. No strategy should foreclose for them the possibilities of accelerated social and economic development. The principle of common but differentiated responsibility and respective capability is very important.

The time is not ripe for developing countries to take quantitative targets as these would be counter-productive on their development processes. Adaptation is the key for developing countries. It needs to be adequately resourced without detracting funds meant for development, which, in any case, is the best form of adaptation.

The determination of any particular stabilization goal and the time-frame in which it should be achieved needs to be made at the United Nations Framework Convention on Climate Change. This should be preceded by a scientific consensus on impacts at different levels of GHG going beyond the current IPCC findings, which still document many uncertainties.

It is important that critical and promising clean technologies are made affordable for developing countries, where there is large reliance on fossil fuels. The IPR regime should balance rewards for innovators with the common good of humankind.

We also believe that the carbon market has a significant role to play in tackling climate change and that we should spur private sector involvement in climate related technologies and investment. The Clean Development Mechanism (CDM) has worked well and needs to be expanded to include approvals for programmatic approaches. Enhanced level of GHG abatement commitments by the developed countries would significantly stimulate CDM projects.

Let us leave Heiligendamm determined to continue our exchanges and to invigorate the existing for where these issues are being negotiated. In the meantime, our representatives could continue informal discussions way to carry forward our dialogue and build on what we believe in common.

Thank you.
TALK BY SPECIAL ENVOY OF PRIME MINISTER, SHRI SHYAM SARAN IN MUMBAI ON CLIMATE CHANGE

21 APRIL 2008

CLIMATE CHANGE—FROM BACK ROOM TO BOARD ROOM—WHAT INDIAN BUSINESS NEEDS TO KNOW ABOUT INDIA’S APPROACH TO MULTILATERAL NEGOTIATIONS ON CLIMATE CHANGE

I wish to thank the Ministry of External Affairs and the Confederation of Indian Industry (CII) for inviting me to address this distinguished gathering of business and industry leaders on the subject of Climate Change. Of course, CII itself has done an excellent job by bringing out an extremely informative publication recently, entitled “Building a Low-Carbon Economy.” I wish to pay special tribute to Shri Jamsyd Godrej, Chairman of the CII Mission for Sustainable Growth and Climate Change, for taking the initiative in alerting Indian business and industry to the issues that are on the table and more important, both the challenges and opportunities likely to emerge in the coming years as the world comes to term with this new and existential threat to its very survival. For there is not doubt any more that the risks emanating from climate change, caused by anthropogenic greenhouse gas emissions, are real and serious and unless addressed expeditiously could have catastrophic consequences, perhaps even in our own lifetime, and that the worst suffering would be visited upon precisely those least able to cope, that is, the poor and disadvantaged across the globe, but particularly those residing in the developing countries.

How does India respond to this threat, despite the knowledge that its own contribution would probably make only a modest difference? Our total emissions are only a fraction of the global figure—just 4% compared to 20% for the US and 16% for China. If you take per capita figures, then the differences are even more stark. India emits about 1.1 tonnes of CO₂ per capita while the corresponding figure for the US is more than 20 tonnes. Furthermore, the energy intensity of India’s economy has been consistently declining and today, we are able to deliver 8% plus annual growth with only 4% increase in energy consumption. This trend is likely to continue and could even accelerate if government and industry were able to work together on improving industry standards in a host of energy intensive sectors.

For India, the most important argument in favour of adopting climate friendly technologies and embracing an environmentally sustainable strategy of growth stems from a very compelling and practical reality ie unless we are able to develop economically viable and new sources of energy, energy will become a major constraint on our growth. If we continue to rely on fossil fuels to underpin our growth, and fossil fuels become increasingly more scarce and expensive, as oil has already become, there is little doubt that our ability to sustain high levels of growth of our economy over the medium and medium to long-term, could face severe constraints. Therefore, even if there were no climate change argument, we would still need to evolve an energy strategy that, over time, would involve a shift from fossil fuels to non-fossil fuels, non-renewable sources of energy to renewables, and conventional to non-conventional sources of energy. Such a strategy would, by definition, also be climate friendly.

There is no escape from the reality that as India develops, is consumption of commercial energy is bound to increase. Therefore, realistically speaking, even with continuing decline in the energy intensity of GDP growth, carbon emissions will rise in the years to come, before they flatten and decline as new and hopefully renewable sources of energy kick in. It is to our advantage to build a low-carbon Indian economy and to be even ambitious in this regard. But this is a national effort dictated by our own growth choices. When it comes to multinational negotiations on dealing with climate change, the dynamics are different.

India’s stand in international negotiations, as also that of most developing countries, is based on the simple principle—“The polluter pays”. If we consider the period between 1850–2000, cumulative CO₂ emissions will show how the available carbon space is currently occupied. The US leads with 30%, the EU-25 with 27.2%, China with 7.3% and India with only 2%. It is for this reason of historical responsibility that in the UNFCCC, negotiated in 1992, it was agreed by consensus that emission reductions would only be required of the developed countries. The ensuing Kyoto Protocol formalized this understanding by setting targets for emission reductions would only be required of the developed countries. The ensuing Kyoto Protocol formalized this understanding by setting targets for emission reductions by so-called Annex I countries, or developed countries during the first commitment period lasting up to 2012, with the promise of even deeper cuts in the subsequent commitment period post-2012. The explicit understanding has all along been that developing countries would not be required to undertake legally binding mitigation targets. Their mitigation efforts, according to UNFCCC, will have to be fully compensated through transfer of financial resources and technical know-how from developed countries.
Therefore whatever action we take domestically to pursue sustainable development, let it be clearly understood that there is no legal obligation on the part of India, under existing international instruments, to take on binding emissions reduction obligations, now or in the post 2012 period.

I say this, because considerable and sometimes deliberate confusion has been sown in the minds of our civil society and business and industry through the use of terms such as “post-Kyoto regime” or negotiation of a “new international framework for climate change” or a “post-2012 climate treaty.” What we are currently engaged in are multilateral negotiations within the existing UNFCCC and its Kyoto Protocol. The principles underlying these agreements have been reaffirmed most recently at Bali in November 2007. What is currently being negotiated is (i) fresh emission targets that the developed countries must adopt—post 2012 in the second commitment period under the Kyoto Protocol; and (ii) an Action Plan that would enable the more effective implementation of the objectives of the UNFCCC, including through measurable reportable and verifiable action on the transfer of financial resources and technology from developed to developing countries.

There is a persistent attempt on the part of the several developed countries to avoid their legal obligations under the UNFCCC and the Kyoto Protocol, by advancing a wholly fresh set of arguments. We will need to be particularly alert in this respect. Let me deal with some of the major arguments one by one:

(i) Countries like the US, Japan and some EU countries have begun using the argument that so long as so-called “major emitters” like China and India, remain outside the emissions reduction regime, their own efforts will make little difference to the global goal of reducing and stabilizing anthropogenic CO₂ emissions. China can speak for itself but India certainly does not consider itself to be a major emitter though it is a major economy. Neither the total volume of our CO₂ emissions nor our per capita emissions today, would qualify us in that category. Nor is it justifiable to simple extrapolate current emissions trend to arrive at conclusions for 30 or 40 years hence. The major emitters today, as also those historically most responsible for cumulative emission levels, continue to be the developed countries.

(ii) The US President has recently been reported as saying that the US cannot be expected to agree to emissions reductions unless India and China undertake similar obligations. He also argued that doing so will result in the US industries and jobs moving out to countries that do not have emission reduction commitments and would in any case not lead to global mitigation. We reject this argument.

First, it ignores what we call the “legacy” aspect ie the historical responsibility for cumulative emissions.

Second, it brings in extraneous considerations of industrial competitiveness and employment that is completely contrary to the principle of equity that underlies the historic Rio compact which is enshrined in the UNFCCC. To accept the US argument is to accept what I call the NPT Approach to Climate Change—that is, I get to keep what I have because I got here first. You have to stay where you are because you are a latecomer. This is precisely what has been done in the nuclear domain.

(iii) There is another important distinction we must maintain when discussing carbon emissions. This is a distinction between what I would call “lifestyle emissions” and “survival emissions”. Reducing emissions that require an adjustment in affluent lifestyles and reduction of waste, for example, cannot be equated with reducing emissions which may impact on the already low levels of livelihood of people in developing countries. Capping or reducing emission levels in India may mean that 600 million Indians who do not have access to electricity today, must be permanently denied this very basic energy service. Should this be put on the same level as putting a speed limit on Germany’s autobahns, which could result in major energy savings, or a gasoline tax in the U.S., which will have a minimal impact on the already high standards of living in those countries?

(iv) In recent months, countries like Japan, supported by the US, have advocated a “sectoral approach” to reducing carbon emissions. The idea is to identify high energy intensity industries like power, steel, cement transportation and building and construction and to set uniform global efficiency norms and lower carbon emission standards for each sector. It is argued that this bottom-up approach would be more logical and practical than setting of top-down national targets for each country. Now, as developing countries, we do not have any problem with our developed country partners adopting a range of measures, including sectoral measures, to set and to reach their overall national targets. We would also welcome any collaboration with advanced countries to improve our own efficiency standards, exchange best practices and bring about technological upgradation in our own industries. This can be done bilaterally or multilaterally. Unfortunately, the sub-text is that internationally binding norms for specific sectors must also cover major economies or so-called “major emitters” like India. The justification given is that if major developing economies were to be excluded then there would be a competitive disadvantage to industry in the developed world. Their costs will go up
as they upgrade and retool their existing units. The developing countries, not having to meet these norms, will have lower costs in addition to lower wages.

(v) This argument, deceptively reasonable, again violates the very basis of the UNFCCC. The UNFCCC did not qualify the responsibilities of the developed and developing countries with extraneous considerations such as maintaining inter-se competitiveness. Nor is there any reference to maintaining a so-called level playing field, already stacked heavily against the developing countries. Now there is a barely disguised attempt to overturn this very basis equity principle through so-called sectoral approaches.

(vi) There is a very real danger that in adopting sectoral standards among themselves, the developed countries would use the competitiveness argument to put up protectionist tariffs against products from developing countries. This must be resisted at all costs.

Let me now turn to issues relating to the transfer of financial and technological resources from developed to developing countries to enable the latter to pursue environmentally sustainable strategies of growth. This, again, is a fundamental principle underlying the UNFCCC and has been reiterated in the recent Bali Action Plan. The transfer of such financial and technological resources are not conditioned by any mitigation actions to be taken by recipient countries. In fact, the record on this score has been dismal, and with an economic down-turn looming large on the horizon, the prospects are not very encouraging. India has argued for additionality of funds for climate change related activities in developing countries. For technology transfer, we have argued that since climate-friendly technologies are in the nature of public goods, addressing an urgent global challenge, the IPR regime in respect to such technologies must be adjusted to enable them to be adopted by developing countries at affordable prices. A global Climate Change Venture Capital Fund could be set up which could purchase patents on such technologies and enable their transfer to developing countries. We have also suggested an international collaborative effort among major developed and developing countries to promote new climate friendly technologies. This could be called CLEAN-NET. Unfortunately, none of these proposals have received a serious response from the developed countries.

At a recent meeting, an argument was made that developing countries should institute a zero-tariff regime for a designated list of “green goods” and also create an investment-friendly regime to enable companies possessing green technologies to invest in such countries. Again, one has to be careful in dealing with such propositions. They can distort trading patterns, detract from the legal obligations which developed countries have in respect of transfer of finance and technology and introduce considerations of trade competitiveness which do not belong to the domain of climate change.

Let me summarize India’s negotiating position on Climate Change:

(i) The UNFCCC remains the multilateral, legally binding instrument available to the international community to deal with the challenge of Climate Change. Its principles and objectives continue to be fully valid and must govern all our future activities on this subject. The Bali Action Plan has removed any ambiguity on this count.

(ii) The Kyoto Protocol to the UNFCCC will remain in force post-2012. What is under negotiation is the setting of emission reduction targets by developed country parties in the second commitment period which commences in 2012. The Kyoto Protocol does not expire in 2012, nor are developing countries expected to take on reduction commitments in post-2012 period.

(iii) The responsibility to support sustainable development strategies in developing countries, through the transfer of financial resources and technology from developed countries, is not linked to any conditionalities.

(iv) While developed countries are free to adopt sectoral approaches as a means to achieve their national emission reduction targets, there cannot be an imposition of industry-wide norms on a global basis, nor recourse to arguments about maintaining trade competitiveness or a level playing field.

Does this mean that India is not prepared to make its own contribution to meeting the challenge of Climate Change, as responsible player in the international community?

While we insist that all parties to the UNFCCC and its Kyoto Protocol fulfil their legal obligations under these instruments, we have made a number of positive and forward looking proposals:

(i) In the G8 + G5 Summit at Heilengendamm, Germany, last year, Prime Minister, Dr Manmohan Singh made an extremely important proposal. He gave a public assurance that while India’s carbon emissions will inevitably rise in the short and medium term as we pursue accelerated growth, we would ensure that at no time would our per capita carbon emissions exceed the average of the developed countries’ per capita emissions. The Prime Minister was thus responding to two related complaints frequently voiced by our developed country partners—first, that India is not prepared to
accept any current or future limitation on its carbon emissions, and second, that its efforts are not commensurate with what it expects the industrialized countries to do. By giving an assurance that our per capita emissions would never exceed the average per capita emissions of the developed world, we have responded to the first complaint; we have accepted a limit on our emissions. We have, however, linked this limitation to the scale of effort that the developed countries are themselves prepared to put in. The more ambitious they are, the lower the limit that India would be prepared to accept. Thus, there is an inbuilt mutuality of incentive. Further, by insisting on the per capita standard, we maintain the equity principle. In the long-term there would have to be convergence of per capita emissions globally.

(ii) We have agreed to play an active role in the CDM market, which can and is playing an important role in enabling the developed countries to meet their emission reduction targets under the Kyoto Protocol, even while transferring, though as yet in a limited manner, climate-friendly technologies to developing countries. India has the largest portfolio of CDM projects to date, and this is a major opportunity for Indian industry. Our effort in multilateral negotiations is to ensure that the CDM mechanism continues beyond 2012 and in a more expanded form.

Irrespective of what happens in international negotiations on Climate Change, it is important that we evolve and pursue a strategy of environmentally sustainable development, for reasons of our own vital national interests. An India which is heavily dependent on fossil fuel imports to sustain its high level of growth, is an India which will be increasingly vulnerable. In the short to medium-term there may be few alternatives to fossil fuels and our strategy must, therefore, be to secure such supplies from a diversity of sources to ensure predictability as well as affordability. We can also increase supplies of energy by further improving energy efficiency standards, through technological upgradation, improved management and adoption of best international practices. A Vice-President of Dow Chemicals recently said—“...improving energy efficiency is the cheapest and most renewable fuel of all.” We will need to accelerate the development of renewable and non-conventional sources of energy including nuclear energy, wind energy, bio-mass and solar energy.

We are in the process of formulating India’s National Action Plan on Climate Change. It is likely to be released in June this year. In a very real sense, this Action Plan really constitutes a Strategy for Sustainable development. It will include major national level missions, such as a Solar Mission, a National Solid Waste Management Plan, a nation-wide effort to create a huge carbon sink of afforested land of an additional six million hectares, a Water Conservation mission and the adoption of international best practices and efficiency norms for a range of key industries. All these are seen as public-private partnerships, where government action must be supported and supplemented by private sector, by civil society and the country’s citizenry at large. Climate Change is everyone’s business and can only be tackled by mobilizing all our available and organizational energies.

India’s business and industry is, I am glad to say, ahead of the curve in recognizing the challenge and gearing itself to deal with it effectively. The CII publication on Building a Low Carbon Economy contains many useful recommendations. Several are very much in line with Government’s own thinking on the subject. The idea of a domestic market which could catalyse higher efficiencies industry-wide is something worth exploring. The provisions of the Energy Conservation Act would certainly lend themselves to a possible market-based approach in achieving efficiency norms that are being formulated by the Bureau of Energy Efficiency in consultation with business and industry. We need to discuss this further.

I would like to conclude this presentation on a note of optimism. India can play a leadership role on the subject of Climate Change, because it has its own particularities. It is heir to a civilizational legacy which places high value on the preservation of the environment and the maintenance of ecological balance. We look upon Nature, instinctively, as a source of nurture, not as a force to be subdued. This is a very powerful asset. India also has a wider spectrum of choice precisely because we are not already locked into a specific pattern of development. We can chart our own course, if we so choose. In making our choices, we must always observe Gandhiji’s wise dictum: The earth has enough to meet our needs, but will never have enough to satisfy our greed.

18 September 2008

Memorandum by the International Chamber of Commerce

1. The International Chamber of Commerce (“ICC”) is the largest, most representative business organisation in the world. Its thousands of member companies in over 130 countries have interests covering every sector of private enterprise. The United Nations, the World Trade Organisation, and many other international intergovernmental bodies are kept informed of the views of international business through ICC. ICC United
Kingdom ("ICC UK") is the British affiliate of ICC. Members in the UK include 25 of the top 30 FTSE companies, many smaller firms, law firms and business associations.  

2. ICC UK takes an active role in policy discussions on environmental issues, and we very much welcome the opportunity to respond to this call for evidence. In view of the remit of ICC to promote trade and investment across borders, this submission is limited to addressing a number of issues of international effect, as per section four of the call for evidence published on 22 May 2008. That is not to say that members of ICC UK do not have concerns about other elements of the proposals, for example, the proposed methodologies for allocating emission allowances. However, by focusing on the “international” elements of the proposed Directive to revise the EU ETS ("Draft Directive"), we are seeking to build constructively on ICC’s role as the primary international business organisation. 

3. Should you wish any expansion or clarification of our views we would be happy to respond to any written queries and also to provide oral evidence to the Committee.

**USE OF OFFSETS**

4. There is no clear consensus amongst the membership of ICC UK as to the level of project credits which should be permitted within the third phase of EU ETS. Although some members broadly support the proposed restrictions on the use of Joint Implementation ("JI") and Clean Development Mechanism ("CDM") credits (in the interests of delivering a robust carbon price), the majority of ICC UK’s membership consider the limits set out under Article 11a of the Draft Directive to be unacceptable—particularly in view of the possible compliance burden on European business. 

5. In addition to the level of project credits which should be permitted within the third phase of the EU ETS, we believe that attention should also be given to two supplementary factors, likely to impact on the ability of EU operators to meet obligations by investing in offset projects. These are:

   (i) the permissibility of project types; and

   (ii) transitional arrangements for the use of project credits in the event that an international agreement on climate change is delayed beyond 2012.

6. With regard to the latter, ICC UK has fundamental concerns that the provisions set out in Article 11a of the Draft Directive are insufficiently robust to provide a positive signal to investors and operators about the viability of credits post-2012. Notwithstanding the Commission’s optimism that a global deal will emerge under the “Bali Roadmap”, we believe that the provisions contained in the Draft Directive will, if enacted, hugely undermine the market in offset credits, leading to a very significant reduction of finance for carbon projects in developing countries.

7. In order to ensure an uninterrupted supply of offset credits, particularly in the light of the lead-time required for the identification and development of CDM/JI projects, we suggest that further attention is given as to how the Draft Directive can provide greater certainty for investors and operators. Possible policy options include, but are not necessarily limited to:

   (a) extending the provisions set out under Article 11a (4) of the Draft Directive providing certainty on the acceptance of credits from projects in Least Developed Countries to all developing countries;

   (b) establishing a risk guarantee fund to compensate investors in projects for post-2012 emissions reductions in the case of failure of the international (and/or bilateral) policy process.

In addition to improving the functioning of the EU ETS, we firmly believe that a policy approach along these lines would send a positive signal to the international community regarding the EU’s confidence in securing an ambitious international agreement on climate change by 2013.

8. As regards the permissibility of project types, the majority of ICC UK members are not in favour of any additional restrictions on the type of project credits that can be used for compliance purposes—and, moreover, would support the relaxation of existing restrictions, such as for forestry and sink-based projects, provided that the integrity and credibility of project credits are not compromised.

9. In this connection, ICC UK has concerns that the restrictions on project types envisaged by Article 11a of the Draft Directive (subparagraphs 4 and 6) would adversely affect the supply of offset credits in phase three of the EU ETS in the absence of a global agreement on climate change.

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33 Please note that on this occasion the views provided are those of ICC United Kingdom rather than those of ICC as a whole.
10. A majority of members also have concerns regarding the proposal contained in the Commission Working Document accompanying the Draft Directive to establish structures and procedures to scrutinise quality standards set internationally on the use of project credits. Whilst it is recognised that transparency and consistency is fundamental to the credibility of a system of environmental credits, there is a general concern that the EU risks raising doubts about its commitment to the on-going UNFCCC process by signalling that it will seek to enforce through domestic legislation any measures which cannot be agreed upon internationally. This issue is addressed on a conceptual level in paragraphs 16—18, below.

**LINKING WITH OTHER SCHEMES**

11. ICC UK believes that it is vital that the design of the EU ETS allows the fullest possible opportunity for linking with emissions trading schemes in third countries. Properly constructed links to other regional or national schemes would serve to increase liquidity and may also stabilise investor expectations, thus helping to mobilise capital for the necessary transition to a global low-carbon economy. The recent launch of the International Carbon Action Partnership is a welcome development which underlines the growing interest of other countries and regions in the world in linking up with the EU ETS.

12. Accordingly, we very much welcome the Commission’s proposal that the current linking provisions be amended to allow for the EU ETS to link not just with ratifying Parties listed in Annex B to the Kyoto Protocol but also to national or regional emission trading schemes within third countries that have yet to ratify the Protocol. By analogy, we would not support any move to introduce provisions within the Draft Directive to adjust the effect of Article 25 upon the conclusion of a future international agreement on climate change.

13. Recognising that the establishment of links needs to be carefully considered to ensure that the environmental integrity of the EU ETS is not diminished, we would suggest that the EU should adopt formal criteria (incorporating exclusion criteria and control measures) for assessing the potential for linking with other schemes—building upon the analysis set out in the Commission Working Document accompanying the Draft Directive. As a guiding principle however, we would suggest that the EU should avoid promulgating formal criteria that is so strict as to preclude the development of environmentally beneficial linkages.

14. In a similar vein, we would urge European legislators to give further consideration to whether emissions trading systems with relative emissions targets should be precluded, a priori, from linking with the EU ETS (as per Articles 25 (1a) and (1b) of the Draft Directive). We believe that this is particularly important given that the participation of developing countries in a future international agreement on climate change could be based on adherence to relative targets.

15. Given the potential complexities which have been identified in linking the EU ETS with other schemes, we would suggest that the EU should pro-actively engage with third-countries with a view to harmonising the design of other national emissions trading schemes with that of the EU ETS. The International Carbon Action Partnership may represent one possible forum through which to further develop this dialogue.

**OTHER ISSUES**

**“Carbon leakage” and trade based remedies**

16. Whilst we fully welcome the inclusion of provisions within the Draft Directive to review the potential impact of the EU ETS on the competitiveness of certain energy intensive industries, we have fundamental concerns regarding the decision to cite border adjustment measures as a potentially viable policy option to safeguard the competitiveness of European industry in the absence of a post-2012 global agreement. Although we recognise that the idea of imposing taxes on carbon intensive imports has received a considerable degree of attention in recent months, we believe that insufficient consideration has been given by European policy makers to the possible pitfalls of such an approach. In this connection, particular points for consideration include:

(a) the higher cost of inputs that would emerge, which may cause problems for European producers further down in the production chain, potentially limiting any positive effects in terms of avoiding net carbon leakage;

(b) administrative costs and complexities, which would be highly significant;

(c) legal implications, in particular compatibility with WTO rules; and

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17. More fundamentally, we believe that it is politically clumsy for the Commission to leave the door open to pursuing a punitive approach to international cooperation on climate change at a time when the Parties to the UNFCCC are committed to agree a new international agreement on climate change by 2009. Given the myriad difficulties which these negotiations already face, we believe that reference to border adjustment measures should be removed from Article 10b of the Draft Directive. The UK Government’s position on this matter to date is therefore strongly supported.

The EU ETS and international climate diplomacy

18. ICC UK fully recognises the imperative to provide for a degree of flexibility within the Draft Directive in view of ongoing negotiations to establish a new international agreement on climate change under the auspices of the United Nations Framework Convention on Climate Change (“UNFCCC”). Whilst accepting this premise, we believe that the design of the EU ETS should nevertheless give precedence to providing certainty and predictability for European operators and investors for the period through to 2020.

19. In this regard, ICC UK has concerns that a number of the provisions contained in the Draft Directive, which appear intended to confer the EU with negotiating leverage in the UNFCCC process, will severely impair the predictability of the overall regulatory framework (see eg paragraphs 6, 9 and 14, above). We would suggest that where these objectives conflict, the Draft Directive should be amended in favour of the interests of regulatory certainty. This should be regarded as an overriding imperative of the legislative process given the need to send appropriate long-term carbon price signals to enable regulated businesses to make informed investment decisions.

20. To the extent that the Draft Directive might be designed to contribute to the ongoing international process, European legislators should endeavour to offer positive incentives/signals to encourage the Parties to the UNFCCC to enter into an international agreement by 2009. By contrast, the threat of punitive measures or excessive conditionality requirements should be avoided.

19 June 2008

Memorandum by the Royal Society for the Protection of Birds

INTRODUCTION

The RSPB is Europe’s largest wildlife charity with over one million members. We manage one of the largest conservation estates in the UK with 203 nature reserves, covering more than 140,000 hectares. The RSPB is part of the BirdLife International partnership, a global alliance of independent national conservation organisations working in more than 100 countries worldwide.

The RSPB welcomes the Commission’s proposals for revising the EU ETS. They introduce a number of features that we have long advocated and that will make the mechanism more effective; in particular, a centrally set cap, auctioning and hypothecation of auction revenues. We consider that the Commission could have been more ambitious and, in this submission, outline some ways in which the proposals might be improved.

1. Level of emissions reductions

1.1 In the context of the EU’s overall aim to keep average surface temperature rise to less than two degrees Celsius above pre-industrial levels, which we support, we consider the level of emission reductions proposed in the climate and energy package to be unsatisfactory, if not irrational, in two main ways.

1.2 Firstly, the Commission proposes that a lower target should be adopted if there is no satisfactory global agreement on climate change mitigation than if there is such an agreement; yet if there is no agreement then surely there would be an even greater need for the EU to cut emissions. We appreciate that there may be a concern that the competitiveness of some industries may be adversely affected if other industrialised and industrialising countries do not commit to cut their emissions. However, according to Stern, the costs of doing nothing are much greater than those of acting to combat climate change, and so both the economic and the environmental imperative should be for the EU to cut emissions more deeply in the absence of a global accord.

1.3 Secondly, if there is to be any chance of keeping average global temperatures to less than two degrees then developed countries need to cut their emissions by between 25 and 40% by 2020, from 1990 levels, according to the Intergovernmental Panel on Climate Change (IPCC), with a 40% cut giving the best chance of achieving...
the goal (IPCC Fourth Assessment Report, box 13.7 on page 776). Indeed, at the December 2007 Conference of the Parties to the Climate Change Convention in Bali, the EU rightly but unsuccessfully tried to insert text to this effect in the final Bali Action Plan. As a leader on climate change, we would expect the EU to be advocating domestic emission reductions towards the top end of the IPCC’s range (ie 40%) rather than below the bottom of it, as in the case of the 20% target.

**Scope and Operation**

2. *Sectors and gases that the Commission proposes to include and exclude*

2.1 We are in general agreement with the range of sectors and gases that the Commission proposes to include, although we differ significantly on some of the detail of the proposal. For example, we consider that it is essential for aviation emissions to be given a value of greater than simply that of carbon dioxide, to allow for the fact that their contribution to radiative forcing (and hence climate change) is significantly greater than for carbon dioxide alone; we thus propose a so-called “multiplier”.

2.2 In the longer term, we would like to see emissions and removals of greenhouse gases from land use, land use change, and forestry (LULUCF) accounted for in the same way as in any other emissions sector, and perhaps dealt with by the EU ETS. However, we consider that this could not be done in the short or medium term. This is in part because emissions from land use and land use change are hard to estimate reliably. (For example, nitrous oxide emissions from nitrogen-based fertiliser are very dependent upon local variations and microclimate.) Also, the operation of the EU ETS is quite complex, requiring significant, regular and reliable input of information from participants. Even large power companies and the iron and steel industry have, at times, found participation quite difficult, especially when learning about the scheme. It is unclear to us whether most land owners are ready to take part in the EU ETS.

2.3 We consider that a means of including emission reductions from deforestation in developing countries needs to be found, as we discuss further in paragraphs 5 and 9 below.

3. *The practical application and enforceability of the scheme*

3.1 We foresee no significant barriers to the application or enforceability of the scheme.

4. *The key strengths and weaknesses of the proposal*

4.1 Overall, we consider that the Commission proposals significantly strengthen the EU ETS and will render it far more effective than the first two phases have been. In particular, we welcome the introduction of the centrally set (EU-wide) cap, auctioning of allowances, of (partial) hypothecation of auction revenues and the inclusion of emissions from aviation (as part of a separate but linked Directive). We would have preferred the Commission to go further (for example by auctioning 100% of allowances, hypothecating 100% of auction revenues) and will be working with the EU Parliament and Council to try to rectify these deficiencies.

4.2 The Commission’s proposals will not only make the EU ETS more effective but will also make it far simpler to administer. Largely scrapping National Allocation Plans (NAPs) will, alone, save large amounts of civil servant’s time as well as avoiding the temptation for Member States to over-allocate allowances as they did in both the current and previous phases.

4.3 In response to the specific questions posed by the Committee, we see the level of the emission reduction target as being the key to both the price signal and the encouragement of technological innovation. A tight cap will lead to a high carbon price and will consequently tend to encourage technologies that are not currently near market. Of course, participants in the EU ETS would be expected to take least cost options to reduce their emissions and many of these, especially energy efficiency, are typically cheap. However, if business sees that they will have to lower their emissions considerably, by 80% or more by 2050, and if they were capped at 40% of 1990 levels, as opposed to the proposed 20 or 30%, this should drive technologies that are significantly more expensive than those currently in use.

4.4 Employing far more auctioning will certainly make the EU ETS more efficient in both economic and environmental terms. It will, for example, encourage early action and penalise the continued use of inefficient plant. However, it will not necessarily do so in an equitable way, depending upon one’s definition of equitable. Within any particular emission sector in the EU, the treatment of participants will be the same now that there will be an EU-wide cap, which will make matters more equitable. On the other hand, some sectors will find it

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36 The EU did succeed in inserting a footnote reference to the relevant part of the IPCC Fourth Assessment Report, Chapter 13 of the Working Group III report.
the revision of the EU’s emission trading system: evidence

5. The potential application of the new Article 24a

5.1 We would be extremely concerned were this provision be implemented and would rather it were deleted. The EU ETS is based upon the Kyoto Protocol with EU emission allowances being “backed” by Member States’ Assigned Amount Units (AAUs) from the Protocol. Similarly, the only types of project-based credit currently recognised by the EU ETS are, in practise, from the Protocol, in the form of credits from the Clean Development Mechanism in developing countries and Joint Implementation in developing ones. We consider that the post-2012 EU ETS should similarly conform with the international post-2012 UN Climate Convention regime, once negotiated. We do not think that the EU should invent its own credits on an ad hoc basis when there is a globally agreed system of crediting.

5.2 Moreover, we are concerned that all external credits constitute a leak from the EU cap, thereby reducing national targets, and that project-based credits may not be additional to what would have happened anyway, yielding no overall emission reduction. Our view is that the aim of the EU ETS should be to reduce emissions in the EU rather than in the World outside the EU. Whilst we support the limited use of external credits because they can help developing countries on the path to reducing their emissions, we would not wish to see their unconstrained use.

Allocation and Auctioning

6. Decision making about the proportion of permits to be allocated for free

6.1 We strongly support auctioning of allowances, for the reasons given earlier, and wish to see 100% auctioning from the beginning of 2013. We are not convinced by arguments that some energy intensive sectors (such as aluminium and cement) need special treatment in order to maintain their international competitiveness. A number of authoritative studies (which we will provide on request) have found that although there can be justified concerns about competitiveness these are invariably offset by other factors.

6.2 If some allowances were to be given away, we consider that the decision should be made at the EU level in order to prevent a race to the bottom by Member States, such as occurred in setting NAPs in phases I and II of the EU ETS, where only the direct intervention of the Commission before phase II saved a massive over-allocation of the type seen in phase I. Such a decision would need to be made as early as possible after the current legislation has gone through the co-decision process in the EU.

7. Emissions permits allocated free of charge

7.1 We believe that no sectors should receive their emissions permits allocation free of charge.

8. The redistributive element of the Commission’s proposal

8.1 We do not believe that the redistributive element of the Commission’s proposal is appropriate. The purpose of the EU ETS is to reduce the EU’s greenhouse gas emissions. It is not, and should not be, a mechanism for supporting the economies of poorer countries; the EU has other, better mechanisms for this.

The International Dimension

9. Meeting obligations under the Clean Development Mechanism (CDM)

9.1 We consider that the use of external credits should be limited, both quantitatively and qualitatively. The quantitative limit should be dependent on the level of the cap, taking into account the principle that the EU ETS should primarily reduce emissions at home, rather than abroad. If the cap is to be 20%, by 2020 from 1990 levels, then few if any external credits should be allowed because such as target is well below that called for by the science and so the priority would be to only reduce EU emissions. Were the cap to be set at 40%, as the science indicates that it should, then a significant number of external credits might be allowed (5 or even 10%).
9.2 Qualitatively, we consider that only credits from the UN climate change convention (including its Kyoto Protocol and any other future sub-agreements) should be allowed in the EU ETS. These would include CDM credits but are likely to also include other types of allowances yet to be agreed as part of an international post-2012 regime. Of particular interest to us would be allowances generated under sectoral agreements in developing countries, such as that proposed by Papua New Guinea for reducing emissions from deforestation in developing countries. Under this sort of agreement, a country would undertake to reduce its emissions from a particular sector, such as forests, and receive credit for doing so.

9.3 Any decision on quantitative limits would clearly have to be made after an overall target were set and a decision on a qualitative limit would have to be made after an international post-2012 agreement was concluded.

10. Creating links between the ETS and other similar schemes around the world

10.1 In principle, we favour linking the ETS with similar schemes. However, the schemes would need to be very similar in almost all respects and, in particular, would need to be backed by Kyoto or similar internationally agreed credits. Certainly, for any other scheme to be compatible with the EU ETS, it would require similar emission reduction targets, include auctioning and contain similar compliance provisions.

June 2008

Memorandum by The Scottish Government

LEVEL OF EMISSIONS REDUCTIONS

1. The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached

The Scottish Government supports the Commission's proposal for the level of the EU ETS central cap, and the proposal for its automatic adjustment once a comprehensive international climate agreement has been reached.

SCOPE AND OPERATION

2. The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture

The Scottish Government agrees with the Commission's proposals for the inclusion of CO₂ emissions from petrochemicals, but not with the inclusion of aluminium smelting, due to the risk of carbon leakage in this sector.

The Scottish Government is collaborating with the UK Government to explore the potential for including emissions from LULUCF into the ETS. The Scottish Government supports the UK position that difficulties with monitoring, reporting and verification of emissions from this sector mean it is not suitable for inclusion at this stage.

3. The practical application and enforceability of the scheme

In our partnership with the UK Government in implementing the scheme, the Scottish Government has not encountered any problems with application or enforceability that were not to be expected in a major, ground-breaking scheme such as the ETS.

4. The key strengths and weaknesses of the proposal. You may wish to consider in particular:
   the extent to which the scheme as currently designed will encourage technological innovation;
   whether it will result in the appropriate price signal being sent;
   whether it will be efficient and/or equitable.

The Scottish Government believe the Commission's proposals are generally strong and in the right direction. In particular, a set trajectory for reductions in the central cap, together with increasing levels of auctioning, will result in a robust price signal being sent. Proposals for opt-out of small emitters are also welcome.
5. The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions

The Scottish Government is collaborating with the UK Government to examine the issues raised by this proposal. One of the matters we’ll want to examine from the proposal is the need for limits on credits.

**ALLOCATION AND AUCTIONING**

6. Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be

The Scottish Government considers that the proportion of allowances to be distributed free of charge should be set using a central methodology. But auction levels should be determined on the basis of a minimum level. This would provide flexibility to allow Member States to auction more should national circumstances call for it. The Scottish Government considers the date for determining EU rules on free allocation should be brought forward to Dec 2009 to provide earlier certainty.

7. Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge, and for how long

The Scottish Government supports the Commission’s intention that from 2013, with the exception of electricity generators and Carbon Capture and Storage infrastructure, and except where there is deemed to be a risk of carbon leakage, all installations will receive 80% of their share of the EU cap free of charge. The Scottish Government also agrees that this should decrease by an equal amount each year to arrive at 0% free allocation in 2020. The Scottish Government agrees with the Commission’s view that an evidence-based approach to decisions on the risk of carbon leakage is required, and is involved in the UK Government’s discussions with industry on this issue.

8. Whether the redistributive element of the Commission’s proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate

The Scottish Government recognises this is partly a reserved issue, but it would have impacts for implementation of the scheme, which is a devolved matter. The Scottish Government strongly supports the UK Government’s view that environmental legislation is not the appropriate framework for the redistribution of resources between Member States.

**THE INTERNATIONAL DIMENSION**

9. The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM)

The Scottish Government considers there should be a limit on the use of credits from outside the EU, but is currently involved in discussions with the UK Government on the Commission’s proposals for the use of, and limits on, project credits.

10. The likely feasibility of creating links between the ETS and other similar schemes around the world

The Commission’s proposals increase the feasibility of creating links between the ETS and other similar schemes around the world. The Scottish Government welcomes the flexibility in this regard as this is key to encouraging mandatory cap-and-trade systems around the world.

18 June 2008

**Memorandum by the Spanish Embassy**

1. Reference year, 2005. The Commission’s proposal takes 2005 as a reference year to distribute the effort and establish the reduction national objectives in the diffuse sectors. The new Member States are in favour of maintaining 1990 as basic reference, given that it is a year before their economic collapses and with much higher emissions. But 2005 suits Spain better, as it represents its current reality. The choice of 2005 is key to maintain equal efforts among the Member States.
2. **Use of flexibility mechanisms by Governments and companies.** The Commission proposes a restricted use of the flexible mechanisms. Spain understands that, in this sense, the package should be flexible, as in this way the global costs of implementation will be reduced, promoting at the same time the transfer of clean technologies to the developing countries and the progressive involvement of the Governments in the fight against climate change. It is also essential that the companies can have a fair access to the flexible mechanisms.

3. **LULUCF.** The package does not take into account the emissions/absorptions from the forestry sector. The Commission claims that there are still important methodological uncertainties on that matter. Spain believes that in this sense, the Commission’s proposal is not well grounded. The carbon sinks must be part of the national objectives of reduction of emissions. Also, regarding the emissions trade, credits from forestry projects must be allowed.

4. **Effects on income from auctioning.** It is established that 20% of the income from auction of emissions rights should be applied to the fight against climate change. This provision is not compulsory. However, as some other countries, Spain maintains in principle an opinion opposed to the pre-allocation of the income.

5. **Distribution of income from auctioning.** A 10% of the rights of emissions that are auctioned, are distributed among the Member States applying principles of “solidarity and growth”. The distribution is done according to estimated GDP per capita and direct costs of the implementation of the package. This is a very controversial issue. The new Member States demand that the achievements derived from the implementation of the Kyoto Protocol are taken into account in the allocation. Others regard the Commission proposal as a cohesion policy that does not fit into the environmental legislation. Spain supports the text that the Commission has proposed.

6. **Flexibilities between ETS and non ETS sectors.** Some Member States wish to make the package flexible by allowing the transfer of “efforts” between the sphere of the trade in emissions rights and that of diffuse sectors. They are flexibility options on which, in principle, Spain has negative reservations of study. In accordance with the impact report elaborated by the Commission, the share of responsibility proposed between both spheres relates then to a cost-efficiency criterion. Consequently, the transfer of emissions between these spheres through flexibilities between ETS and non ETS sectors would lead to greater global compliance costs.

7. **Increase of the effort: from −20% to −30%: when and by which procedure.** The package includes an automatic adjustment mechanism in case that an international agreement to tackle climate change is reached. The adjustments would affect mainly to the national objectives of reduction, the volume of emissions rights within the framework of emissions trading, and the access to flexibility mechanisms. It is being debated under which conditions and through which procedure these adjustments must been carried out (codecision and comitology). Spain maintains that, in principle, the procedure must be that of codecision. Nevertheless, it could also assess the possibility of comitology.

8. **Sectors exposed to competitiveness: special rules and identification date.** The Commission’s proposal presents exceptional measures (“protective”) for sectors that compete in a global market and that are unable to transfer costs. Within this framework, some sectors are exposed to carbon leakage. In line with the majority of delegations in the Council, Spain believes that the best option to tackle the issue of carbon leakage is to reach an international agreement. Likewise, Spain is in favour of establishing special rules for the exposed sectors in view of the possibility of failure to reach the above-mentioned agreement promptly. Nevertheless, greater certainty for the industry is requested. This would be achieved by bringing forward the dates on which the exposed sectors are determined and on which the Commission must submit a report on this subject to the Council and the European Parliament. Lastly, Spain maintains reservations of examination with regard to the need to reimburse non direct costs (derived from the increase in energy prices) to the sectors exposed to carbon leakage.

9. **Biofuels: default values.** The Commission has created a Group Ad Hoc on the biofuels’ sustainability criteria. Spain (with the European lands of the lowest productivity) is discriminated against in relation to Northern Europe after being expressly excluded from the option to use default values in article 17.3 of the proposal. According to this article, default values can only be used for biofuels produced outside the Community or within the Community in lands of high productivity (crops of Southern Europe are excluded). This entails a grave imbalance in the market, Spain being left in a weak position with respect to the Northern Europe countries in the market of biofuels production (consequently, the estimates of future agro-energy crops in Spain are being jeopardized).

27 June 2008
Memorandum by the World Wildlife Fund-UK

VIEWS ON THE LEVEL OF EMISSION REDUCTION

1. The proposed level of emission reductions and the automatic change from 20% to 30% should an international agreement be reached

WWF considers that the EU should adopt an economy-wide 30% emission reduction target from the outset—with the effort for achieving this target split between the ETS and non-ETS sectors.37 Consideration should only be given to adopting a weaker target should an international climate agreement not be reached. Furthermore we believe that this target should be delivered within the boundaries of the EU—with further investment in developing countries provided on top of this. The reasons for this are set out below:

To prevent catastrophic climate change we must keep the global average temperature rise as far as possible below two degrees centigrade above pre-industrial levels. To have a high chance of doing so, the 2007 IPCC Assessment38 report confirms that immediate and globally ambitious actions are required, and suggests that industrialized countries should take on greenhouse gas reduction targets of between 25% and 40% below 1990 levels by 2020.39 Indeed, this was the range endorsed by all EU Member States at the international climate conference in Bali at the end of 2007.

In terms of historic responsibility, industrialised nations are responsible for approximately three quarters of all CO₂ emissions from fossil fuels since 1850. Clearly industrialised nations such as those in the EU have a moral obligation, as well as the financial and technological means, to cut their emissions first and foremost—and in addition to this to provide significant support to developing countries in reducing emissions (including those from deforestation and forest degradation) and where possible adapting to the already inevitable impacts of climate change. The level of climate change which the world is already locked into is imposing severe additional development challenges for people in low income countries—from food production, water and energy supply, through to impacts on health and tourism sectors. Indeed last year the UNDP estimated that by 2015 the costs of adaptation in developing countries could be approximately US$86 billion per year.40

Developing countries are also looking for the industrialised world to go first and show leadership. Demonstrating the achievability and viability of a low-carbon pathway, and of a serious political intent to deliver it, is vital to bring the developing world on board. The EU must play to win at the international negotiations.

In order to meet these obligations therefore WWF considers that the overall EU Energy Package must be sufficiently ambitious to fulfil two distinct goals:

— it must put the EU on a low carbon trajectory which ensures that it plays its fair part in keeping the mean global temperature increase as far below two degrees centigrade as possible; and
— it must provide certainty that long term substantial financial support will be provided to developing countries to assist them in decarbonising their economies and where possible adapting to the impacts of climate change.

The current economy-wide greenhouse gas emission reduction target of a 20% cut by 2020—which allows a large proportion of the emission reduction to be met by the purchase of credits from Clean Development Mechanism (CDM) projects—will not ensure these goals are achieved. Fulfilling these two goals clearly requires the EU to move beyond the mindset of merely offsetting its own emissions.

In light of this WWF is calling for the EU to commit to:

— an overall greenhouse gas emission reduction target of 30% below 1990 levels by 2020 to be achieved within the boundaries of the EU;41 and
— the financial equivalent of an additional 15% emission reductions (below 1990 levels) to be invested in socially and environmentally robust adaptation and mitigation activities.42 Such levels of funding would correspond to the EU’s fair share of the financial flows to developing countries which the UNFCCC has estimated are necessary. These funds could flow via a variety of mechanisms eg via environmentally and socially robust market-based mechanisms AND other financial instruments.

37 With the EU ETS sectors continuing to deliver two-thirds of the effort as proposed by the European Commission.
38 IPCC: Intergovernmental Panel on climate change, the ca 2,500 scientists from 130 countries elaborating the world’s most authoritative scientific review on climate change.
41 For the EU ETS sectors this translates roughly into a 36% cut in emissions from 2005 levels.
42 Again, with the EU ETS sectors taking on their fair share of this commitment.
2. The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture.

There is a suggestion that the European land use, land use change and forestry (LULUCF) sector should be included as a sector in the Emissions Trading Scheme—like the power sector and energy intensive sectors. The overall cap would be expanded to accommodate an emissions reduction target for this sector and it would be able to buy and sell allowances from the other sectors within the scheme.

The EU ETS was designed specifically as a domestic climate policy to address emissions from large industrial point sources of greenhouse gas emissions. It is crucial that the scheme really starts to deliver significant emission reductions from these sectors. As such we consider that revisions to the Directive must look to improve the operational and environmental effectiveness of the existing scheme—rather than looking to significantly expand the scheme at this time—particularly to non-industrial sectors.

As the agriculture and forest sector in the EU is very heterogeneous with a multitude of actors ranging from very small to large land owners and users, any inclusion of this domestic sector in the EU ETS would require, firstly, a cap on its aggregate land use emissions in line with the caps of the other sectors and, secondly, a harmonised set of measurements across the EU in line with the monitoring and verification procedures for fossil fuels. Both are very difficult due to practical reasons, related to implementation.

In addition the European Commission consider that “The emissions trading system should only be extended to emissions which are capable of being monitored, reported and verified with the same level of accuracy as applies under the monitoring, reporting and verification requirements currently applicable under the Directive . . . It is not the case for emissions from agriculture or forestry.”43 As such it is not proposing to include this sector in the scheme post 2012.

WWF agrees with the Commission and strongly recommends that the European land use and forestry sector is not included in the EU ETS. However, we would strongly support targeted policies and measures to effectively address greenhouse gas emissions from these sectors.

4. The key strengths and weaknesses of the proposal focussing on (a) the extent to which the scheme as currently designed will encourage technological innovation; (b) whether it will result in the appropriate price signal being sent; (c) whether it will be efficient and/or equitable.

Whilst the EU ETS, if designed in a robust way, will be critical for helping to achieve the EU 2020 and longer term emission reduction targets by incentivising low carbon operational and investment decisions, it should not be considered a silver bullet for tackling climate change. Further policies and measures are clearly needed. Indeed the European Commission accepts this through its dedicated policies to bring forward renewable energy and improve energy efficiency in various sectors of the economy.

The Stern Review also warned that carbon markets needed to be complemented by other policies, such as tax and regulation, and also by targeted action to promote the rapid deployment of emerging low-carbon technologies. The Review noted that: “Carbon pricing alone will not be sufficient to reduce emissions on the scale and pace required.”44 “The next 10 to 20 years will be a period of transition, from a world where carbon-pricing schemes are in their infancy, to one where carbon pricing is universal and is automatically factored into decision making. In this transitional period, while the credibility of policy is still being established and the international framework is taking shape, it is critical that governments consider how to avoid the risks of locking into a high-carbon infrastructure, including considering whether any additional measures may be justified to reduce the risks.”45

For example although there are very significant uncertainties over the likely cost of Carbon Capture and Storage (CCS), it is very unlikely that the carbon price under the EU ETS will be sufficiently high to cover the full costs or give investors sufficient confidence to invest in a novel, high risk technology such as CCS. For this reason, WWF and other groups are calling at UK and EU levels for a greenhouse gas emission standard, similar to that already in force in California, to apply to new and, over time, existing power plant.46 Such a standard would act to reinforce rather than undermine the EU ETS. The principle is similar to policy in the field of appliances, where it is accepted practice to have a minimum efficiency standard with incentives (fiscal measures and product labelling) to incentivise and reward the best performers.

45 Stern Review, Executive Summary, 30 October 2006.
46 For more information, see Evading Capture. Is the UK power sector ready for carbon capture and storage, on www.wwf.org.uk.
5. The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions

Article 24a would allow credits from offset projects from sectors within Europe not covered by the EU ETS (so called domestic offset projects) to enter the scheme. In WWF’s view this would be a serious setback to the scheme’s ability to influence emission reductions in the sectors covered by the scheme, and indeed across the EU as a whole.47

The inclusion of domestic offsets was discussed during the negotiations of the Linking Directive. However, it was decided that for the first phase that only credits from JI and CDM projects would be allowed. WWF considers that domestic offset projects should continue to be excluded from the EU ETS for the following reasons:

- If there is significant greenhouse gas abatement potential in a sector (for example transport or LULUCF) then arguably it should be governed by a separate policy and not be used to allow emissions from the ETS sectors to grow. For example in the UK the Government is developing a new mandatory UK emissions trading scheme (the Carbon Reduction Commitment) for non-energy intensive businesses and services not covered by the ETS.
- Ad hoc development of projects is not a particularly effective way of tackling emissions from a sector. Indeed the inclusion of domestic offset projects may be used as an excuse to delay the implementation of a more focussed policy for a sector.
- Inclusion of domestic offsets may make it more complicated to determine the direct contribution of the ETS sectors to EU greenhouse gas emission reduction targets and to determine whether they are playing their fair share or not.
- There is the risk of double counting of emissions reductions—both as a contribution to meeting the EU ETS cap, and towards achieving the effort sharing targets.
- Access to project credits (be they from JI/CDM or domestic offset projects) could make it cheaper for ETS sectors to meet emissions caps. But access to significant volumes of credits could disincentivise investment in clean technology within those sectors and slow down innovation. Crucially, it could help to “lock in” decisions on high-carbon infrastructure (of particular pertinence here for the power sector) which would have a significant impact on emissions from those sectors for many years to come. Indeed, this is why WWF advocates that purchase of project credits should be additional to and not instead of a strong focus on domestic emission reductions.

For future phases of the scheme the emphasis must be placed on reducing emissions from the ETS sectors rather than expanding their access to cheap emission credits from other sectors.

Views on Allocation and Auctioning

6. Whether decisions about the proportion of permits to be allocated for free, rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be

WWF agrees with the Commission’s proposal—that the level of auctioning should be decided at the EU level, as left in the hands of Member States auctioning would likely remain at a low level post 2012. Member States had the option to auction up to 5% and then 10% of their allowances in the first (2005 to 2007) and second (2008 to 2012) phases respectively, but few have chosen to do so—instead succumbing to industry lobbying regarding intra-EU competitiveness concerns. In the second phase on average only 3.7% of the allowances will be auctioned.48

7. Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free of charge, and for how long

Within a trading scheme auctioning allowances is a key design feature which helps to ensure that the progression towards a low carbon economy takes place in the fairest and economically most efficient way. Auctioning of emission allowances includes the following benefits:

- It ensures the full cost of carbon is factored into investment decisions.
- It supports the “polluter pays” principle.

47 As the use of credits from offset projects does not actually reduce net greenhouse gas emissions—it merely allows the capped sectors to pollute above their cap.
It avoids the accumulation of windfall profits to the most polluting sectors that can come about as a result of free allocation. For example, the power sector in many countries enjoyed spectacular windfall profits in the first phase of the EU ETS as it passed on the value of the allowances it was given for free to the price of power. In the UK alone it was estimate that this resulted in profits of £1.2-1.3 billion in 2005. These profits are likely to continue in phase II. Indeed a recent report commissioned by WWF estimated that the profits to the German, British, Polish, Spanish and Italian power sector alone could be up to €71 billion by the end of the second phase.

It is currently proposed that from 2013 the power sector will have to pay for all of its allowances. This is a very welcome move and it is critical that the European Parliament and the European Council do not weaken this key proposal.

It is also proposed that energy intensive sectors and aviation receive 80% of their allowances for free in 2013 with this percentage declining every year to reach zero by 2020. Furthermore, the Commission proposes to identify by end of June 2010 the energy intensive sectors and sub-sectors which may be at risk of relocating outside the EU in the absence of a global climate change agreement. The Commission then plans to make appropriate proposals on how to support these sectors by June 2011—these may include adjusting the proportion of allowances that are received for free by the sectors/sub-sectors.

WWF accepts that only in the absence of a robust international agreement on climate change should the European Commission investigate possible measures to address the risk of relocation to specific energy intensive sub-sectors. In light of this we agree with the Commission’s proposal to wait until June 2011 before making suggestions on support measures. However, in the meantime we strongly believe that the Commission should advocate 100% auctioning for all sectors from the start of 2013.

In particular we see no reason why aviation should not be subject to full auctioning from the start of the third phase. This sector is clearly not at risk of relocation and research suggests it is also likely to reap windfall profits akin to those accrued by the power sector. Indeed a recent study undertaken on behalf of the UK Government concluded that a substantial level of auctioning would be needed to avoid such windfall profits. As stated earlier, the EU needs to offer substantial investment to help developing countries in reducing emissions and where possible adapting to the impacts of climate change. Revenue from auctioning provides a valuable source of funding for climate mitigation and adaptation activities.

WWF therefore recommends that:

— All auctioning revenues should be used to fund climate protection and adaptation measures.
— At least 50% of the auctioning revenues should go to assistance for developing countries; and
— The remaining 50% of revenues earmarked for climate mitigation and adaptation activities within the EU.

### The International Dimension

9. The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism

Please see our response to question 1 for our general view on this and why the EU needs to move beyond the mindset of merely offsetting its emissions. In addition:

Access to emission reduction credits within a 20% or a 30% economy wide emission reduction target as is currently proposed by the European Commission will both delay domestic reductions and will likely keep investments in high-carbon infrastructure—such as new unabated coal fired power stations—financially viable. This could lock us in to high emissions for decades to come—putting 2020 and longer term emission reduction targets out of reach—or at a minimum making future reductions much more costly for taxpayers and companies to meet. Indeed a lesson from the recent past cautions against too much flexibility in meeting emission reduction targets. Final decisions made last year by the European Commission on access to volumes

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50 EU ETS phase II—the potential and scale of windfall profits in the power sector (2008), by Point Carbon and summary by WWF can be found here http://www.panda.org/news_facts/newsroom/index.cfm?uNewsID = 129962
52 Stern put the cost of halving deforestation by 2020 at c $5 billion per year—likely a very conservative estimate.
of project credits in phase II of the EU ETS meant that sectors covered by the scheme are allowed to increase their emissions by up to 150 million tonnes of CO₂ above their 2005 emission levels. This is the equivalent of the annual emissions from around 31 coal fired power stations. Clearly this is not acceptable for a scheme which is meant to be driving down emission reductions within the EU.

Secondly—crucial to the integrity of the CDM is that projects are truly “additional” (that they would not have happened in the absence of the mechanism) and that they contribute to sustainable development in the host country. However, there are significant concerns over whether the CDM is achieving these twin objectives. To highlight just two of the growing number of studies that have raised concerns over the lack of additionality:

— a recent report to WWF by the Oko-Institut concluded that approximately 20% of credits generated by CDM projects are likely to not be additional. This is the equivalent of around 34 million tonnes of CO₂ per year; and

— an assessment by International Rivers found that the majority of hydropower projects in China applying for CDM registration (370 projects comprising 11.7 GW of power and 9.4% of total expected annual CDM credits worldwide) were mostly non-additional.

The sustainable development goal is also often overlooked with developing countries competing with each other to attract and host new projects at the expense of ensuring that they meet sustainability criteria. For example India sets rather ambitious criteria on paper but to date the government has failed to reject a single project put forward for approval. Furthermore, since the sustainability component of the CDM has no monetary value, no differentiation is made between projects that contribute to the development of a local community and those which do not.

In light of these concerns WWF considers that only external credits from CDM projects which meet the Gold Standard accreditation and/or equivalent quality must be allowed to enter the EU ETS from 2013. And we maintain that access to credits should be in addition to, and not instead of a strong focus on domestic action which across the EU economy delivers at least a 30% greenhouse gas reduction by 2020.

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53 Schneider, L. 2007. “Is the CDM fulfilling its environmental objectives? An evaluation of the CDM and options for improvement”—a report prepared by the Oko-Institut for WWF.
55 The Gold Standard is an independent, transparent, internationally recognised benchmark for high quality carbon offset projects. It is restricted to renewable energy and end-use efficiency projects, requires projects to follow a conservative interpretation of the UNFCCC-additionality test and provides evidence by a UNFCCC-accredited independent third party that they are making a real contribution to sustainable development.