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The Revision of the EU's Emissions Trading System

Report with Evidence

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Written Evidence

Generic position papers from the Confederation of British Industry (CBI) and Greenpeace were also used. They are available here:

http://www.cbi.org.uk/pdf/CBI%20emissions%20trading%20brief.pdf
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

FOREWORD—What this report is about

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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1 http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf

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.

4 HM Treasury, 2006.

5 http://reports.eea.europa.eu/eea_report_2008_4/en/pp1–19_CC2008Executive_Summary.pdf

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.

7 COM(2008) 16, 23.01.2008

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

8 http://unfccc.int/resource/docs/convkp/kpeng.pdf

9 http://unfccc.int/resource/docs/convkp/conveng.pdf

10 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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[11] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ L 275 pp 32–46, 25.10.2003)

[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.[13] 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.[14]

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"[15] 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"[16] 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.[17] 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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13 SEC(2008)52, 23.01.2008

14 State and Trends of the Carbon Market 2008, The World Bank, 2008.

15 SEC(2008)52, 23.01.2008 p.14

16 Ibid p. 14.

17 COM(2008) 16, 23.01.2008.

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.[18]

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.

[18] COM(2008) 30, 23.01.2008

22. The package includes proposals on greenhouse gas emission reductions in sectors not covered by the ETS[19], on carbon capture and storage (CCS)[20] and on renewable energy[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"[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[23]. At the time of writing, it is expected that political agreement on the draft Directive will be sought in December 2008.

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19 COM (2008)17, 23.01.2008

20 COM (2008) 18, 23.01.2008 Carbon capture and storage (CCS) is the capture of CO_2 from industrial installations and its storage in geological formations.

21 COM(2008) 19, 23.01.2008

22 European Union Committee, 27th Report (2007–08) (HL 175)

23 European Parliament, A6–0406/2008

CHAPTER 2: THE OVERALL TARGET, THE EU-WIDE CAP AND THE INTERNATIONAL CONTEXT

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.

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24 European Council Conclusions, 8–9 March 2007, Paragraph 30

25 Ibid, Paragraph 31

26 http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf

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, DEFRA[28]), 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-decision[29] 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[30] 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[31].

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 CO_2 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[32] (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)

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30 http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf

31 http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/envir/103492.pdf Paragraph 8

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[33]. 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[34] 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"[35], 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

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33 SEC(2007)52, p.15

34 Climate Change: Meeting the Challenge to 2050, OECD (Organisation for Economic Co-operation and Development), February 2008. http://www.oecd.org/dataoecd/6/21/39762914.pdf

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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36 Council Conclusions on preparations for the 14th session of the COP to the UNFCC (1–12 December 2008) http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/envir/103479.pdf

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. CO_2 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 (CO_2) 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 CO_2 emissions from fossil fuel generated power and it can also be applied to other CO_2 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[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"[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 *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[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[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

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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

39 COM(2008) 16, page 4.

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.

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 account for around 70 per cent of the country's GHG emissions (Q 345). This contrasts with the UK where, according to DEFRA[42], 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

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42 http://www.defra.gov.uk/environment/climatechange/uk/agriculture/rccf/pdf/rccf-06–09.pdf

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 CO_2 emissions reductions from new passenger cars[43], 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 Ministers[44] 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 CO_2 were to be buried, the holders of the allowances for those tonnes of CO_2 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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43 Proposal for a Regulation of the European Parliament and Council setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO_2 emissions from light-duty vehicles. COM(2007)856, 19.12.2007

44 Council Conclusions on preparations for the 14th session of the COP to the UNFCC (1–12 December 2008) http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/envir/103479.pdf

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 CO_2 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.[46] The Commission emphasised in its Communication, "Supporting Early Demonstration of Sustainable Power Generation from Fossil Fuels"[47] 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. 4cmr 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[48] 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 CO_2 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 CO_2 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

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46 SEC(2008)52, p.50

47 COM(2008)13, 23.01.2008

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 the UK's emissions reduction target from 60 per cent to 80 per cent by 2050[49].

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**

[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

Phase 1 (2005–07)

- 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.
- Within each sector, permits were then allocated on the basis of historic emission levels.
- 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.
- No auctioning took place in Phase 1.

Phase 2 (2008–12)

- 7 per cent of allowances are to be auctioned. Governed by the Community Emissions Trading Scheme (Allocation of Allowances for Payment) Scheme 2008[50], the first auction of ETS allowances took place in the UK on 19 November 2008.
- 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).
- In Phase 2, the UK's total amount of allowances was reduced, a reduction that was borne entirely by the Large Electricity Producers sector.

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."[51]. 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

50 http://www.hm-treasury.gov.uk/d/euetsscheme050808.pdf

51 COM(2008)16, p.7

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 subsidiarity[54], 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[55]. 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[56]. 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

56 SEC(2008) 54, p.18 (Commission Impact Assessment for the Proposal COM(2008) 18 on CCS)

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[57].

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"[58].

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

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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[59], 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[60] (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 CO_2

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[59]

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"[61]

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

61 http://www.euractiv.com/29/images/Comm%20paper%20carbon%20leakage%20180908_tcm29–175576.doc

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.

140. **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, CO_2 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[63] 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"[64]. 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[65]. 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.

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63 http://www.defra.gov.uk/environment/climatechange/trading/eu/pdf/2007euets-cef-gcv-gasupdate.xls

64 SEC(2007)52, 23.01.2008, p. 62

65 Commission Decision 2007/589/EC of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

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[66] 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 CO_2 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[67] against Member States over violations of EU climate change legislation, include[68]:

- 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.

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 Relase 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 UNFCCC[70]) 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 noted[72] 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

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[73] 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[74]. 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/

76 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 (4cmr) 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)[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 IDEACarbon, 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 Commission[78] 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).

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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 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.

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 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

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 those 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 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.

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, Ecosecurities

* 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[79] (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[80].

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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79 Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community (COM(2008)16, 23.01.2008).

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

Annual Report 2008 (32nd Report, Session 2007–2008, HL Paper 191)

Priorities of the European Union: evidence from the Ambassador of France and the Minister for Europe (24th Report, Session 2007–08, HL Paper 155)

The Commission's Annual Policy Strategy for 2009 (23rd Report, Session 2007–08, HL Paper 151)

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

The Treaty of Lisbon: an impact assessment (10th Report, Session 2007–08, HL Paper 62)

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

Session 2007–2008

The Progress of the Common Fisheries Policy (21st Report Session 2007–2008, HL Paper 146)

The Future of the Common Agricultural Policy (7th Report Session 2007–2008, HL Paper 54)

Session 2006–2007

Water Framework Directive: Making It Work (27th Report Session 2006–2007, HL Paper 136)

European Wine: A Better Deal for All (30th Report Session 2006–2007, HL Paper 144)

European Wine: A Better Deal for All Final report with evidence (39th Report, Session 2006–2007, HL Paper 184)