House of Commons
Environment, Food and Rural Affairs Committee

Draft Climate Change Bill

Fifth Report of Session 2006–07

Volume II

Oral and written evidence

Ordered by The House of Commons to be printed 27 June 2007
Environment, Food and Rural Affairs Committee

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

Current membership

Mr Michael Jack (Conservative, Fylde) (Chairman)
Mr Geoffrey Cox (Conservative, Torridge & West Devon)
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Mr James Gray (Conservative, North Wiltshire)
Patrick Hall (Labour, Bedford)
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Powers

The Committee is one of the departmental select committees, the powers of which are set out in House of Commons Standing Orders, principally in SO No. 152. These are available on the Internet via www.parliament.uk.

Publications

The reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at

www.parliament.uk/efracom

Committee staff

The current staff of the Committee are Chris Stanton (Clerk), Nerys Welfoot (Second Clerk), Dr Antonia James (Committee Specialist), Marek Kubala (Inquiry Manager), Andy Boyd and John-Paul Flaherty (Committee Assistants) and Mandy Sullivan (Secretary).

Contacts

All correspondence should be addressed to the Clerk of the Environment, Food and Rural Affairs Committee, House of Commons, 7 Millbank, London SW1P 3JA. The telephone number for general enquiries is 020 7219 5774; the Committee's e-mail address is: efracom@parliament.uk. Media inquiries should be addressed to Laura Kibby on 020 7219 0718.
**Witnesses**

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Dr Kevin Anderson, Research Director and Dr Alice Bows, Senior Research Fellow, Tyndall Centre for Climate Change Research, Mr Brian Samuel, Head of Policy and Mr Dan Staniaszek, Evaluation Director, Energy Saving Trust  
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Mr Martyn Williams, Senior Parliamentary Campaigner, Friends of the Earth, Ms Ruth Davis, Head of Climate Change Policy, Royal Society for the Protection of Birds  
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**Wednesday 16 May 2007**

Mr Rupert Edwards, Managing Director and Head of Portfolio Management, Carbon Markets, Climate Change Capital, Professor Michael Grubb, Chief Economist and Mr James Wilde, Director of Insights, The Carbon Trust  
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Mr Michael Roberts, Director of Business Environment and Ms Gillian Simmonds, Senior Policy Adviser, Business Environment, Confederation of British Industry (CBI), Mr Gareth Stace, Head of Environmental Affairs and Mr Roger Salomone, Energy Adviser, EEF, the Manufacturers' Association  
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**Monday 21 May 2007**

Mr William Wilson, Director, Cambrensis Ltd, Barrister, Environmental Law Unit, Burges Salmon LLP, Mr Michael Woods, Partner, Stephenson Harwood, Council Member of the UK Environmental Law Association and Co-convenor of UKELA’s Climate Change Working Party and Mr Tom Bainbridge, Partner, Nabarro, Co-Convenor of UKELA’s Climate Change Working Party  
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Mr Peter Lehmann, Chairman and Mr John Chesshire, Vice Chairman, Fuel Poverty Advisory Group  
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Mr Jonathan Brealey, Director of the Office of Climate Change and Mr Robin Mortimer, Head of the Climate Change Bill Team, Office of Climate Change  
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Rt Hon David Miliband MP, Secretary of State for Environment, Food and Rural Affairs and Mr Robin Mortimer, Head of the Climate Change Bill Team, Office of Climate Change  
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Additional papers have been received from the following and have been reported to the House but to save printing costs they have not been printed. Copies have been placed in the House of Commons Library where they may be inspected by Members. Other copies are in the Parliamentary Archives, Houses of Parliament and are available to the public for inspection. Requests for inspection should be addressed to the Parliamentary Archives, Houses of Parliament, London SW1A 0PW. (Tel 020 7219 3074, Fax 020 7219 2570, archives@parliament.uk). Hours of inspection are from 9:30am to 5:00pm on Mondays to Fridays.

World Development Movement – Memorandum Annex A: Emissions invisible (CCB 17)
The Meridian Programme – Memorandum (CCB 42)
Mrs Phoebe McLeod – Memorandum (CCB 43)
Tyndall Centre for Climate Change Research – Briefing Note 17
Aldersgate Group – Briefing paper: Carbon Costs: Corporate Carbon Accounting and Reporting
Mr Brian Haynes – Background note
Campaign for Clean Air in London – Background note
Oral evidence

Taken before the Environment, Food and Rural Affairs Committee

on Monday 14 May 2007

Members present

Mr Michael Jack, in the Chair

Mr James Gray
Patrick Hall
Lynne Jones

David Lepper
David Taylor
Mr Roger Williams

Government targets, 2°C & the ‘real’ carbon budget

MEMORANDUM SUBMITTED BY
Drs. Kevin Anderson & Alice Bows (CCB 37)
Tyndall Centre for Climate Change Research
The University of Manchester
EFRA Committee inquiry into the draft Climate Change Bill
14th May 2007

What’s the UK & EU position?

We should …
“prevent the most dangerous effects of climate change”

- The UK Government and the EU define this as 2°C
- Historically, correlated with 550ppmv CO₂(or eq?)
- Led to UK Government’s 60% reduction target by 2050
But…

- The science linking 550ppmv to 2°C has moved on

550ppmv CO₂ has ~88% chance of exceeding 2°C
450ppmv CO₂ has ~70% chance of exceeding 2°C

(% probabilities from Meinshausen, 2007)

When it comes to targets ...

the final carbon target (e.g. 60% in 2050) has little
relevance to the 2°C or 550/450ppmv concentrations

What is important are the cumulative emissions of carbon

i.e. CO₂ remains in the atmosphere for over 100 years,
consequently each year’s emissions add to those emitted in previous year
UK Domestic Carbon Emissions - Draft Bill’s targets & pathways

Year

1990 2000 2010 2020 2030 2040 2050

Emissions (MtC)

0 20 40 60 80 100 120 140 160 180

Slide 5

Domestic emissions already released (i.e. ex. international aviation & shipping)

60% reduction

Climate Bill’s implied trajectory (though 26% by 2020)

Slide 6

UK Domestic Carbon Emissions - Draft Bill’s targets & pathways

Year

1990 2000 2010 2020 2030 2040 2050

Emissions (MtC)

0 20 40 60 80 100 120 140 160 180

Climate Bill’s implied trajectory (though 26% by 2020)

(through 32% by 2020)
**Slide 7**

UK Cumulative Carbon-Emission budget implied in the Bill's pathway (ex. international aviation & shipping)

- Area = Cumulative carbon budget
- Bill equates to ~5.5 to 6.0 GtC (2000-2050)
- (ex. international aviation & shipping)

**Slide 8**

Adding International Aviation & Shipping to the Bill's Budget

(based on significantly reduced growth in these sectors)

- Assuming
- A low growth future for aviation & shipping (v. optimistic emission scenario)
- Approx. ~1.5 GtC to add to carbon budget
Consequently, the Bill implies:

- a UK total cumulative 2000-2050 budget of ~ 7 to 7.5GtC
- an atmospheric concentration of ~600 to 750ppmv CO₂
- a 92% to 100% chance of exceeding 2°C
- a 50% chance of exceeding 4°C

*NB. the above assumes growth in aviation & shipping well below current trends. In absence of such reductions the above figures would be considerably worse*

To provide a more reasonable chance of 2°C …

- 450ppmvCO₂ would give ~ 30% chance of not exceeding 2°C
- this correlates with a UK budget of ~4.8GtC for 2000-2050

*NB. ~25% of the 50yr budget has been used in just 7 yrs*
UK 450ppmv CO₂ emission pathway

4.8 GtC
(between 2000 & 2050)

450ppmv CO₂ locks UK into an unprecedented emission pathway

~ 9% p.a. reduction (~2014-2030)
450ppmv CO₂ locks UK into an unprecedented emission pathway

Year
1990 2000 2010 2020 2030 2040 2050
Emissions (MtC)
0 20 40 60 80 100 120 140 160 180
more demanding reductions
exceeds 450ppmv budget

... so where does this leave us?
- The Climate Change Bill is more in tune with a 4°C future than 2°C
- The 2°C emission pathway is far more demanding than is generally recognised
- Immediate & stringent action is necessary to reduce energy demand
Memorandum submitted by the Energy Saving Trust (CCB 04)

The Energy Saving Trust is pleased to respond to the Environment, Food and Rural Affairs Committee inquiry on the Government’s Draft Climate Change Bill. The Energy Saving Trust was established as part of the Government’s action plan in response to the 1992 Earth Summit in Rio de Janeiro, which addressed worldwide concerns on sustainable development issues. We are the UK’s leading organisation working through partnerships towards the sustainable and efficient use of energy by households, communities and the road transport sector and one of the key delivery agents of the Government’s climate change objectives. Our response focuses on the key areas of the Energy Saving Trust’s activities and related issues that are relevant to the inquiry including those specifically identified by the Committee. Please note that this response should not be taken as representing the views of individual Energy Saving Trust members.

TARGETS

1. **The validity of the Government’s domestic targets to:**
   - reduce CO₂ emissions by 60% below 1990 baseline levels by 2050; and
   - reduce CO₂ emissions by 26–32% below 1990 baseline levels by 2020.

   We strongly support the UK Government’s intention to unilaterally set long-term legally binding targets. Given the importance of climate change—to quote the Prime Minister, “... probably the greatest long term challenge facing the human race”—the UK is right to do so. However, we would expect the 2020 target to be at the top end of the range and for any recommended increase, in either the 2020 or 2050 target, by the Carbon Committee to be implemented accordingly.

2. **Why the carbon budget for the period including the year 2020 cannot exceed 32%**

   We see no reason why the carbon budget for the period including the year 2020 cannot exceed 32% if the Carbon Committee recommends a stronger target.

3. **The rationale for a five-year budgetary period**

   We do not support the proposed five year budgetary period. Sharing the burden equally over the whole period is clearly better for several reasons:
   - It gives time to increase actions if early years under-achieve.
   - There is significant potential for existing cost-effective measures to be implemented.
   - It provides incentives for early development of new technologies, although these will be subject to technological development cycles.
   - Early action is better for the environment.

... alternatively ...

- Revisit 2°C threshold – perhaps 3°C, 4°C, or more?
- Advise planners etc to adapt to the very significant & potentially catastrophic impacts of a ~ 4°C world
The experience of the Climate Change Programme Review (CCPR) has shown that the focus on a particular timeframe (in this case 2010) results in a sub-optimal analysis of options, including rejection of policies that have minimal impact in the given timeframe. The Energy Saving Trust believes that a regular series of targets needs to be set from now to 2050 although we do not believe that annual targets are practical, due to changes in weather or economic activity. Conversely, targets over a five-year timeframe, or longer, are too infrequent to assess progress towards the 60% goal.

The Energy Saving Trust therefore proposes a series of rolling five-year average targets. These would be set every year, from now to 2050, on the basis of an equal percentage reduction each year towards the 60% goal. So, while there would be a nominal target for each year between now and 2050, actual targets would be set for the end of each rolling five-year period. The target would be the average of the five nominal annual targets up to and including the given year. The annual percentage reduction required to achieve the 60% goal is 1.7%.

This is illustrated in the table below. 2005 emission levels were 656 MtCO$_2$ equivalent (MtCO$_2$e),$^1$ while a 60% reduction from the 1990 baseline gives a 2050 target of 310 MtCO$_2$e. The first full five-year target period would end in 2009, for which the five-year average target would be as shown in the middle column, ie 635 MtCO$_2$. The target for 2010 would then be 624 MtCO$_2$, and so on. The final column shows that greater absolute reductions in emissions are required in the earlier part of the period than later. We believe this percentage reduction approach is better than a straight line approach since the scope for absolute savings now is higher than it will be once emissions approach the target figure. Of course, detailed targets need to be informed by economic analysis of long term options.

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<th>actual year-on-year reduction MtCO$_2$ equivalent</th>
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4. Monitoring and early warning systems to ensure achievement of targets is on track

We believe that the “rolling five-year average” series of targets approach we discuss in response to Q3 will help provide early warning. Clearly robust monitoring and reporting of progress against targets will be required.

In our view, the Carbon Committee should be given a remit to report and publish monitoring results on a regular (say, annual) basis, for open and widespread public scrutiny. It is important to ensure a robust evaluation process of each implemented policy measure. Regular reviews based on actual observations from a variety of sources are needed to evaluate whether the policy is still effective. Such reviews should be transparent; and have input from all parties affected by the policy.

5. Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non-compliance

We believe that Parliament has a key role in ensuring accountability of Government with respect to compliance with targets and in challenging instances where Government decides not to progress specific recommendations that the Carbon Committee might make. It would be helpful to establish a wider understand of the legal position and the potential use of sanctions in cases of non-compliance during the implementation of the Bill.

**Carbon Budgeting**

6. The facility—in any given budgetary period—to “borrow” emissions rights from a subsequent period, or to “bank” any “surplus” emissions reductions for use in the next budgetary period

We support the concept of banking as early action is helpful to the environment. However, we do not support the principle of borrowing although we do accept the rational for a limited degree of flexibility to allow for unforeseen circumstances. This should certainly be no greater than 1%. Our proposal for a series of rolling five-year average targets provides some flexibility and upfront long term targets.

7. The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources

We believe that the focus should be on reducing UK emissions although credits from internationally projects have a role to play. However, these need to be robust and deliver real long term additional carbon savings. We note that major concerns have been expressed by many environmental NGOs on international projects, which has led to the creation of the CDM gold standard. In our view the best projects are energy efficiency and renewable projects that can be replicated elsewhere to deliver long term sustainable benefits to developing nations.

We see no reason why sectors that do not face international competition should not secure emission reductions in the UK, for example all reductions required of the household sector should be made by the UK household sector. However, consideration needs to be given to the current framework of the EU Emissions Trading Scheme and the ability to use non-UK credits. We therefore believe that the use of international credits to meet UK objectives should be limited to between 5 and 10% although ideally UK carbon budgets should be delivered by UK carbon reductions. We would strongly advocate that the use of non-UK credits is reported in a transparent manner.
8. **The range and validity of changes in circumstances in which budgets can be subject to review and revision**

We believe that budgets should only be allowed to be reviewed upwards on the advice of the Carbon Committee. Clearly organisations need to be given sufficient time to respond to any such revisions, which would suggest that a minimum notice period of three years might be required.

9. **The reporting procedure and Parliamentary accountability**

Please see our response to question 12.

**ADAPTATION**

10. **Whether adequate provision is made within the Bill to address adaptation to climate change**

This is not an area of our expertise.

**COMMITTEE ON CLIMATE CHANGE**

11. **Its composition and appointment, including length of tenure and degree of independence**

We agree that this should be an independent non-departmental public body and that representatives should be experts as opposed to sector representatives. It is important to ensure that all UK sectors are covered by the expertise of the committee including households, communities and transport. Currently proposals have a noticeable gap on demand-side expertise that needs to be filled. As it stands the current composition of the Committee would appear to have a strong upstream bias, which is non-representative of the required expertise and is likely to distort the work of the Carbon Committee unless corrected.

As it will be difficult to find experts with comprehensive experience in more than one or two areas, we would expect the size of the committee to be at the top end of the proposed number or even slightly higher. The selection process for members should be one that is open and transparent and in compliance with the Nolan report. The length of tenure of individual members should be sufficient to ensure continuity and consistency of approach whilst providing the most relevant expertise possible.

12. **Its function and responsibilities**

In our view, the role of the Carbon Committee is that of a separate, dedicated body, independent of. It should be responsible for overseeing the analysis, reporting and forecasting on matters pertaining to meeting the carbon budgets and to help ensure Government remains on track with its climate change objectives. Consequently, Government should be obliged to formally respond to any recommendations that the Carbon Committee might make.

In considering specific factors when advising on targets, it is important to ensure that all sectors make an equitable contribution to reducing carbon—including transport. Whilst the identified factors are all important the requirement is to reduce carbon and fiscal circumstances cannot be used as an argument for not taking action as perhaps has happened previously. Difficult decisions have to be made and may have a short term financial impact but longer term there are considerable economic benefits when compared to taking less carbon mitigation action.

As we outline above, the Carbon Committee should be given a remit to report and publish monitoring results on a regular (say, annual) basis, for open and widespread public scrutiny. It is important to ensure a robust evaluation process of each implemented policy measure. Regular reviews based on actual observations from a variety of sources are needed to evaluate whether the policy is still effective. Such reviews should be transparent; and have input from all parties affected by the policy.

There is a clear need for greater independent assurance in UK emission modelling, for example the detailed workings of the DTI energy model are known by a small handful of officials. We believe it would be an appropriate role for the Carbon Committee to make available the assumptions and calculation methodology, and to host periodic (eg annual) gatherings of renowned experts and other interested parties for expert scrutiny. In our view, we believe that the information should also be available on the internet, in a format that would allow a wide variety of interested parties to examine the forecasts, both for the whole economy and for specific sectors/end uses that may be of interest to them.

The UK Government’s approach to forecasting emissions has evolved largely from DTI’s energy model, the primary purpose of which is to project energy supply and demand. From this, it is relatively straightforward to compute carbon emissions, and add in non-energy sources of greenhouse gases (GHGs) from other models. Over the last few years, there have been a large number of updates and refinements that will have helped improving modelling expertise as a result. However, given the importance of climate change, we suggest that the Carbon Committee should work with Government to consider whether a “next generation” bespoke single model, with a primary focus on the vitally important task of forecasting future
greenhouse gas emissions, is required. In this respect we note that the DTI energy model was not designed to undertake the long term forecasting that is required for GHGs. Any such model will need to interface closely with the existing historic emissions database led by Defra and required for IPCC reporting purposes.

The Carbon Committee should also have a remit to share its experience internationally.

13. **Its powers in determining carbon budgets and the provisions within each budget**
   
   Please refer to our answer to question 12.

14. **The adequacy of its range of functions in overseeing the targets**
   
   Please refer to our answer to question 12.

15. **The resources available to the Committee**

   Clearly the Carbon Committee will need to have sufficient resources made available for it to operate efficiently, including the services of a full time secretariat. The relationship of the Committee with the Office of Climate Change (OCC) will be key. We believe that the OCC should remain as a cross-departmental body independent of any individual department or policy area and that it should support the work of the Committee by undertaking the policy analysis, appraisal and forecasting roles directly, and by interfacing with policy officials in each department, including HM Treasury and HMRC.

   Both the Committee and the OCC will need to have access to the expertise of the current Interdepartmental Analysts Group (IAG) to undertake the work identified above and with sufficient time to do so. Historically the IAG workload has largely been dictated by spurts of Government policy and has had insufficient resources to undertake this as well as it might, despite the best efforts and undoubted expertise of its members. The scale of the challenge, and the experience of the CCPR process, indicates that IAG, in its current form, is not the right vehicle going forward to provide the analytical evidence base to underpin Government’s climate change objectives. The work of this group needs to be integrated with the OCC and Carbon Committee by being put on a proper footing under long term and strategic direction with sufficient resources and time to deliver the required outputs.

**ENABLING POWERS**

16. **The adequacy and implications of the proposed enabling powers allowing the Secretary of State to establish greenhouse gas emission trading schemes by means of secondary legislation**

   We support the proposed enabling powers to establish greenhouse gas emission trading schemes by means of secondary legislation and would welcome the extension to all climate change facing legislation to avoid un-necessary delays in taking action.

**INTERNATIONAL IMPLICATIONS**

17. **The validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post-2012**

   We believe that the Bill is a good example that all major greenhouse gas emitting countries should follow. However, on its own it is unlikely to be sufficient to encourage them to do so. We believe that UK Government and the Carbon Committee should be proactively encouraging and helping other countries in taking the same steps as the UK through sharing relevant experience and expertise.

**GENERAL**

18. **Whether there are other domestic climate change issues which it would be appropriate to include in the Bill**

   We would welcome enabling powers for Government to introduce any new climate change measures through secondary legislation (as opposed to primary legislation).

   We would also advocate that future domestic targets and forecasts should include international aviation and shipping although international mechanisms to “assign” emissions to individual countries will also be required. Aviation in particular is an important, and rapidly growing, sector of emissions which contribute to global CO2 and other greenhouse gas emissions and it is especially important to take full account of radiative forcing. However, we accept that reporting against the Kyoto Protocol targets requires aviation and shipping emissions to be excluded.

Energy Saving Trust

*May 2007*
Q1 Chairman: Good afternoon ladies and gentlemen, welcome to the first evidence session in the Environment, Food and Rural Affairs Select Committee inquiry into the draft Climate Change Bill. As you may realise the field of inquiries and commentators in this area has become quite crowded, but you are very welcome to the first session. As always, this Committee is ahead of the game on it and we are very grateful to the Tyndall Centre for Climate Change for your written contribution and we welcome, for the record, Dr Kevin Anderson who is Research Director and Dr Alice Bows, Senior Research Fellow, Tyndall Centre for Climate Change Research and Mr Dan Staniaszek, Evaluation Director, Energy Saving Trust, gave evidence.

Q2 Chairman: If that is the case, do you think that in terms of the structural deficiencies that the current plan has, this Bill plugs the gaps? Does it provide you with sufficient additional ways in which action will result?

Dr Anderson: No, it falls way short of that.

Q3 Chairman: Do you want to give me a little scenario as to where it falls way short?

Dr Anderson: The first thing is that there is a misconception between efficiency and actual reductions in emissions. People think that if you improve the efficiency of something, by definition then you reduce emissions, but you do not at all. You may reduce the emissions, but you may of course increase the emissions because of the rebound effect.

Q4 Chairman: When you say “the rebound effect”? Dr Anderson: The rebound effect is that, if you make your car slightly more efficient so you can get more miles to the gallon, you might end up driving more miles because it is cheaper to run. This occurs at all levels with efficiency and it is a well-known phenomenon amongst academics and energy analysts. It is quite hard to actually quantify what the results will be, but the important thing I am saying there is that it is not simply improving efficiency, it is actually how you use products or how many houses you have and how you live within those houses that matters. So making a house efficient is all well and good, but if you end up wanting to live at 22°C in the house instead of 16°C or 18°C, you may end up with an increase in your emissions. It is really important to have an overall carbon target and strategy to aim towards and your efficiency is one of the mechanisms you use to move in that direction. Efficiency is just one and it is not a conservation in itself.

Q5 Chairman: The central headline plank of the Bill is the setting into law of the existing target of the 60% reduction from 1990 by 2050. Dr Anderson and Dr Bows, the evidence which you very kindly sent us, the briefing note number 17, leaves one in no doubt that you do not think that the target that is proposed in the Bill is adequate for the task and you have very kindly produced for our consumption and education a little slideshow. I just want to enquire whether all members of the Committee have that document because I am going to ask Dr Anderson and Dr Bows whether they would be kind enough just to go through this thing slowly. I found the summary in your document pretty good, but as I got further into it, it then got quite technical and quite statistical; not that we do not understand numbers, but it is the thinking behind it which your presentation seeks to

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1 Not printed.
put a little transparency on and understanding. Would you like to go through that slowly but surely for us by way of explaining the content of your briefing note number 1?

**Dr Bows:** I will just explain the slides.² Starting on the first page with slide 2 rather than slide 1—we do not need to go through the title—the position is that the UK and the EU would like to prevent the most dangerous effects of climate change and this is an aspiration that is stated in a number of different policy documents. The UK Government and the EU define this as not exceeding a two-degree temperature rise above pre-industrial levels. Historically, this was correlated with a certain level of carbon dioxide concentration in the atmosphere and that level was 550 parts per million. It says there in brackets “or equivalent”. That is because there is some ambiguity in some of the policy documents as to whether it is just CO₂ or whether it includes the other greenhouse gases. Following the report of the Royal Commission on Environmental Pollution, the UK Government adopted a 60% carbon reduction target that was based on this 550ppm CO₂ level.

Q6 **Chairman:** Could I just be very rude and stop you there? In the Bill in the first clause it says “It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 60% lower than the 1990 baseline”. Does that “UK carbon account” convey to you as experts a clear definition as to what it is?

**Dr Bows:** No.

Q7 **Chairman:** Do you have any idea what the UK carbon account is?

**Dr Bows:** No.

**Dr Anderson:** There is almost no mention within the document of cumulative emissions which is what the budget is; it is about cumulative emissions, it is the bank balance, how many pounds you have in the bank that you can spend.

Q8 **Chairman:** Do you have any idea from the Energy Saving Trust standpoint what this carbon account is?

**Mr Samuel:** No; it does lack clarity.

**Mr Staniaszek:** It is the first time the phrase has been used to our knowledge and stating it clearly as the CO₂ equivalent emission levels would be much more understandable.

Q9 **Chairman:** In the second sub clause, in l(2) is says “The 1990 baseline’ means the amount of net UK carbon dioxide emissions for the year 1990”. It does not define what this “net” is, it does not define how it is calculated, it just makes it as a statement. So we have in the first two sentences of the Bill something that talks about a “carbon account” and it then talks about “UK carbon dioxide emissions”. I presume, Dr Anderson, that falls into your lack of clarity box.

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² Ev 1.

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**Dr Anderson:** Yes, it is just muddled thinking.

Q10 **Chairman:** How could we, if we were looking to improve the Bill, bring some clarity into it? What terminology should we be using to describe what this thing is about?

**Dr Anderson:** As long as the terminology is consistent I do not really mind if there is a glossary, but broadly we use the word “budget” and the budget is the cumulative budget, how much of the total amount of CO₂ we can spew out into the environment between now and some date in the future and that is our budget, measured in tonnes of carbon or tonnes of carbon dioxide.

Q11 **Mr Williams:** The Chairman has already raised the issue of CO₂ equivalents of other greenhouse gases. Do you think those should be included in the Bill as well or is it because they are not quite as persistent as carbon dioxide that they are not quite so important? I am talking about nitrogen oxides and methanes.

**Dr Bows:** They should be included in the Bill. To date the UK Government seem to have concentrated solely on CO₂ but we have to address the other greenhouse gases.

Q12 **Mr Williams:** How could the Bill be improved to include those other greenhouse gases as well? Could we talk about carbon dioxide equivalents?

**Dr Anderson:** Yes, you could do.

**Dr Bows:** You could do, but you would have then actually to be talking about that and not just be saying it and then interchanging it with carbon dioxide. This has been the problem in the past that it is not clear; people talk about carbon dioxide emission reductions when they mean greenhouse gas emission reductions and that kind of thing. It just needs to be absolutely clear and then obviously the policies are going to be different. When you are dealing with CO₂ you are generally dealing with energy, whereas when you are dealing with the other greenhouse gases they are more process emissions or agriculture and that sort of thing so those need to be much more explicit.

Q13 **Chairman:** I am sorry Dr Bows I interrupted the start of your presentation. We will go back and I will try to be quiet.

**Dr Bows:** All I was going to say on slide 3 was that the science that links the 550ppm level to the 2°C has since moved on, as much of that was done prior to 2003. According to some work that was carried out by Meinshausen and presented at the Defra Exeter conference, 550ppm CO₂ has about an 88% chance of exceeding the 2°C and these are just CO₂; these do not include the other greenhouse gases. When it comes to the targets, the final percentage reduction in a particular year has little relevance to the 2°C or the 440 or 550 concentrations because what are important are the cumulative emissions. This is because when we are talking about CO₂ it
exists in the atmosphere for over 100 years and so the emissions we release today add to those that we released over the past year and then the past 99 years. It is not the percentage reduction; rather it is the cumulative emissions that matter. If you look at slide 5, what we have here at the left hand side are carbon emissions, along the bottom we have the year from 1990 up to 2050 and with the black solid line we have just plotted the UK’s domestic carbon emissions; so this is just from the sectors that do not include international aviation and international shipping. This is just taken directly from Defra’s website, so the emissions that are submitted to the UNFCCC. Then we have drawn a trajectory that is taken from the Climate Change Bill that passes through a 26% reduction in 2020 and then reaches the 60% reduction in 2050. There is a graph underneath which is very similar, but in this case it passes through a 32% reduction in 2020 and that is just to reflect the Government’s two targets for 2020, just to show that they are not terribly dissimilar and that they both reach the 60% carbon reduction target in 2050. Then on slide 7 we have shaded this area under the curve because that is your cumulative emission budget effectively. The total emissions that the UK will release, if it goes by the Climate Change Bill, are reflected in this area under the curve. Due to the fact that there is a bit of a range in 2020, this equates to around 5.5 to 6 billion tonnes of carbon between 2000 and 2050, so clearly we actually have data for the years 2000 up to 2005, 2006 has been estimated, but from then on, it is just following the Climate Change Bill. In slide 8 we have asked what happens if we include international aviation and international shipping. It is often commented that these are just a small proportion of our emissions so we do not consider them at the moment and also that they have been omitted from Kyoto. However, what we see in this slide is that they are actually very significant. So we have added to the data from 1990 up to 2006 the aviation and shipping additional emissions which is why the solid line is now somewhat higher and then we follow the Climate Change Bill for the domestic emissions but we have included in this some assumptions about aviation and shipping. What we have assumed are lowish growth futures for aviation and shipping, a couple of percent lower than existing emission increases until 2012 and then from then onwards for aviation around a 3% increase in emissions up to 2035 and then 1% and then somewhat lower for shipping. Basically, the message is that this adds an additional portion of carbon emissions to your carbon budget or to your area under the curve and that is illustrated in the purple shaded area there. Under these assumptions, this would suggest that the Government are currently omitting an additional 1.5 billion tonnes of carbon by choosing to omit international aviation and shipping. This is a rather significant portion if you consider that their total budget before was between 5.5 and 6 billion tonnes.

Q14 Chairman: May I ask for clarification? There is an indication that the Government wanted to make some allowance for domestic aviation and shipping.

When you used the term “international aviation and shipping” does this mean the total carbon dioxide consequences of shipping and aviation activity that commences in the United Kingdom or finishes? What does that mean? Dr Bows: Domestic aviation and shipping is just the aviation and shipping which exists within the UK’s boundaries and that is included in the total domestic emissions, so the grey shaded area incorporates that part. The international aviation and shipping is assumed to be a 50% of all arrivals and departures for aviation and for shipping and in fact the aviation data is slightly more accurate in terms of the existing data that we have up to 2006 which is based on methodology that actually considers the departing flights and how far they have gone and the different kinds of aircraft et cetera. The shipping data is much more estimated because we do not have good information on shipping emissions but basically it is international, so it is going out of the UK’s seas and abroad to deliver goods. On slide 9 we just say that consequently, if you tot up the aviation and shipping additional emissions and include those within the domestic emissions budget, you get a new total UK cumulative carbon budget over a 50-year period between 2000 and 2050 of between 7 to 7.5 billion tonnes of carbon. If the same apportionment regime is used that the Government used in order originally to come up with its 60% target, this would equate to something closer to a 600 to 750 parts per million CO2, rather than the 550pm that the Government originally started from. If we then look at the probabilities, again based on the Meinshausen paper, of what a 600 to 750ppm CO2 concentration might look like in terms of probabilities of exceeding different temperature thresholds, this is a 92 to 100% chance of exceeding 2°C or a 50% chance of exceeding four degrees. Finally, we just move on to what would give us a more reasonable chance of not exceeding the two-degree threshold, so a 450ppm CO2 alone would give us a 30% chance of not exceeding it, still not a huge chance, but would give us a reasonable chance and we have calculated that this correlates with a UK carbon budget of around 4.8 billion tonnes of carbon for the period 2000 to 2050. Again, this is based on the same apportionment approach that the Government used originally, but because we are spending this budget at quite a high rate at the moment, we have effectively spent about 25% of this 50-year budget in just seven years because we are still emitting at a very high rate. If you look at slide 11, this just illustrates graphically what we will have to do if we want to stay within this 4.8 billion tonnes of carbon budget between 2000 and 2050. Again, the data that has been submitted to the UNFCCC is in there up to 2005 and then what we assume is that all domestic sectors can stabilise their emissions until 2010 to 2012, so we are assuming that, although there are some policies existing to attack the carbon emissions in the UK, they only manage to stabilise emissions rather than actually reduce them and in fact in 2006 the emissions are thought to have gone up according to the provisional figure. Then, what we are also assuming for international aviation and shipping is
that they actually lead to an increase in emissions because the growth rates, particularly in aviation, are very high. What that means, because again you are spending your budget very quickly, is that in order to keep the area under the curve within your budget, you have to make very significant cuts from the year around 2012 right down to the early 2030s. In fact, if you look at slide 12, what we are talking about are unprecedented carbon reductions of around 9% per year over that period around 2014 to 2030 just so that we can stay within our carbon budget.

Q15 David Taylor: Slide 10 says in the middle “based on apportionment approach used for the 60% target” that is the UK’s contribution to global reductions. Can you remind us in a couple of sentences what that approach assumes in relation to the parallel contribution of other growing economies like China, India, Brazil, and Russia?

Dr Bows: It was based on the contraction and convergence regime that was used by the Royal Commission when they first came up with a 60% target which assumes a convergence date of 2050, which means that there are equal per capita emissions globally by 2050. That therefore allows the emissions of some countries which are very low emitting at the moment to rise somewhat and then start to decline towards the per capita value, whereas industrial countries like the UK and the United States will have to make very significant reductions from the start.

Q16 Lynne Jones: Is the reason why your curves are going up purely because of the aviation?

Dr Bows: Aviation and shipping, yes.

Q17 Lynne Jones: I had a Parliamentary Question about stabilising greenhouse gases to 450 to 550ppm and the minister said that global greenhouse gas emissions, CO2 equivalents, would need to fall by between 10 and 65% below 1990 levels by 2050 and therefore the 60% target was in line with this, but that is a huge variation. Do you recognise the figures 10 to 65%?

Dr Anderson: Did you say global?

Q18 Lynne Jones: It says global GHG emissions would need to fall by between 10 and 65% below 1990 levels by 2050. Why are they quoting such a huge range?

Dr Bows: I do not know why they would be quoting such a huge range. I know that there is uncertainty, but my understanding is that for global emissions there is a good degree of understanding of the kinds of levels that will need to be reached by 2050.

Q19 Lynne Jones: Which is what?

Dr Bows: I do not know what the figure is exactly.

Dr Anderson: The latest IPCC report, the UN report, has only just come out and the full document supporting the science is not available as yet, only the summary document. The upper end of that is my understanding of what is necessary because the latest report tends to suggest that the lower end of previous reports is now not scientifically justified and the situation actually looks worse than we initially thought and we are now having to incorporate a lot more feedbacks into the system where the environment starts to kick back because of emissions that we have put out and the consequence of that is that in fact our emissions have to be lower.

Q20 Lynne Jones: It is a more realistic range than between 10 and 65.

Dr Anderson: Yes, it would tend to suggest it is more the upper end of that range. I do not know where you got the 10%.

Q21 Lynne Jones: So nearer the 65%.

Dr Anderson: Yes. Ten per cent might have been appropriate in 1990 but not for 2007.

Dr Bows: The last point is just that because this trajectory on slide 13 has to be very steep in order to stay within budget is just to illustrate the fact that if you want to move that trajectory at all, if you move it to the left where the white arrow is, then that would require even more stringent carbon reductions and if you want to move it to the right then you will exceed your carbon budget. There really is not a lot of room for manoeuvre is what that is trying to illustrate. Effectively, the Climate Change Bill is more in tune with a four-degree future than two degrees. The two-degree emission pathway is much more challenging than is generally recognised and immediate and stringent action is necessary to reduce energy demand because energy demand is the aspect of the energy system that we can affect in the shorter to medium term, whereas changing our carbon to low carbon supply is a more medium- to long-term measure. We really need to focus on the shorter term and look at energy demand. Alternatively, we need to revisit the two-degree threshold and perhaps consider three or four or more degrees and advise those planners who are trying to adapt to climate change that they are adapting to much more significant impacts.

Q22 Chairman: Going back to this piece of legislation, if you had been given a free hand to draft what the target should be, would you have come up with something like this carbon budget approach as opposed to percentage reductions over time?

Dr Anderson: Yes. What they have come up with is just this side of meaningless; it keeps people happy but it does not actually have anything to do with climate change. You have to look at it in a cumulative emissions budget manner. What temperature you think is appropriate, dangerous or not dangerous, that is a political decision. Science can inform it, but it cannot give you that decision. Government have come up with 2°C and the science then correlates 2°C to an emissions budget. The Government have come up with an apportionment regime and then the science and basic maths tell us what that means to the UK’s budget. A very clear set of correlations can be made, but those are missing within this document and our evidence can show

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14 May 2007 Dr Kevin Anderson, Dr Alice Bows, Mr Brian Samuel and Mr Dan Staniaszek
why it is missing within this document: because you cannot link 2°C to any targets that would be politically acceptable.

Q23 David Lepper: Is there an issue here that the science which informed the Bill was out of date or is it a question of the political interpretation of the science that informed the Bill that you feel is the real issue? Were those who came up with what is in the draft Bill badly advised or is it a question of interpretation of good science?

Dr Bows: The message is clear from the Defra conference in 2005 that the 450 level was going to give you a much more reasonable chance of not exceeding the 2°C. At that stage it was clear that 550 was too high. The science is there and has been there for a good year or so and there is general consensus within the scientific community. Yes, there has been a misunderstanding or misguidance somewhere between the science and what has been produced in the Bill.

Dr Anderson: I would go a bit further than that. A lot of the people who are providing advice are not prepared to be direct about the implications of what the science is pointing out because people almost laugh at it when you say 9% per annum—I saw some of the faces here when 9% per annum was mentioned. This is basically adding together the bits of the science the Government are happily funding and it comes up with 9% per annum and no-one is going to accept 9% per annum reduction in carbon dioxide emissions from 2014. The problem is the science points us in that direction, if you choose 2°C as your target. What we are trying to do is juggle with these balls and we have no way of juggling them; they do not fit together. We are trying to make coherent targets which are inherently incoherent. Unless we are going to be honest about this which means, say, 4°C, then we can reach targets that would be politically acceptable and explain to our children why the world is in the situation it is in or we accept 2°C and explain to the public today why in fact we have to develop very, very stringent targets. It is a really uncomfortable set of choices; it is a Sophie’s choice. There is no easy way out anymore because we have chosen not to act since 1990 to 2007; not just the UK, the UK has probably been better than most countries but the globe has decided not to act over that 17-year period and we have squandered most of the money that we had in the bank, that budget that we had.

Q24 Patrick Hall: Can I just be reminded how robust the science is about the 2°C being okay? If I am putting it loosely, please make me more precise. Why is 2°C okay?

Dr Bows: This is not an area that we are experts on, but those people who work in the Tyndall Centre on adaptation look at different levels, different temperature increases globally and then the impacts, the consequence of that temperature rise. It is political; it depends who you are as to whether two degree is very serious or not. For people in the UK I imagine that 2°C is probably quite liveable with, whereas if you are someone who lives on a small island state and your island has already gone under, then I guess 2°C is very, very dangerous. It is not a scientific measure of danger and there can not be a scientific measure of danger in those terms because we are talking about so many different types of people across the world and how they are going to be affected.

Q25 Patrick Hall: Is not one of the key issues the speed at which the climate is warming and changing? Is that not the issue? You could have four degrees over millions of years and presumably nature and everything adapts. Is it not a measure of the speed?

Dr Bows: Yes, it is also a measure of the speed. We have not had temperature increases at this sort of speed in hundreds of thousands of years, from what I understand, but this is not my area.

Dr Anderson: They could have chosen that as a target. Rather than having something as simple as 2°C, they could have chosen a rate, say 0.1°C every ten years; they could have chosen that and that could be the target to aim for and scientists could have worked from that. Broadly, we are not talking about 2°C in millions of years. The arguments are that this sort of temperature will be achieved within—

Q26 Patrick Hall: It is locked in already.

Dr Anderson: A large proportion of that 2°C is already locked in because of our inaction and the science has been telling us for some considerable time as well. Quite what proportion is difficult to say because the science is still evolving, particularly in relation to the feedbacks.

Q27 David Taylor: Can we turn to the Energy Saving Trust? The Bill sets CO₂ budgetary emissions for a five-year period and the carbon budgets are set for three lots of those five years and there has been some mixed reaction to that approach; the Environment Agency generally being supportive and others expressing concerns about the way in which blame would be allocated as the five-year periods tend to straddle probable future parliaments and the EST is suggesting a rolling five-year average target. The underlying maths of it all seem fine but does that not, in essence, build in a half-cycle two-and-a-half-year lag all the time, if the target for any one year is the average for the five years of which that forms the final year? You are really two-and-a-half years out all the time. Is that a significant factor over the period that we are looking at?

Mr Staniaszek: I do not think it is and it is not any worse than the three lots of five years because within the five years, you can only project what your emissions are going to be for those five years and on our rolling five-year basis you are in the same scenario, but you are doing it every year. The real benefit of what we are doing is firstly that it allows you to avoid the parliamentary cycle issue, secondly the fact that they have only proposed three lots of five years, which is 15 years, whereas we really need to look at the whole 45-year period through to 2050. Beyond 15 years there are no targets, so why should anyone consider actions that are perhaps going to have an impact in 20 or 25 years, whereas
on our model there are targets to be met every year? The Carbon Committee or whoever is looking at this would need to look at the short term and the medium term as well as the long term. We believe our model ensures that Government keeps its eye on the ball throughout that period.

**Q28 David Taylor:** One of the advantages perhaps of the Government’s approach is that it is possible to measure compliance at key points in the next 40-odd years and to identify sanctions that might be imposed if those compliance points are not going to be adhered to. How would compliance be assessed and sanctions be imposed on a rolling five-year basis?

**Mr Staniaszek:** You would measure compliance on an annual basis, so you would look back over that five-year period and say you had met that target or not and apply the sanctions, much as you would in your fixed five-year period but you would be doing it every year. Every year would be important and every year there would be a target that must be met.

**Q29 David Taylor:** Do you think that is a realistic approach?

**Mr Staniaszek:** I do think so. If you take monetary policy, for example, we have a target of 2% inflation and the Monetary Policy Committee varies interest rates according to that and if we had a longer timeframe to look at, things could get out of hand but we have a target that is adjusted every month. It would reinforce the importance of this as something that cannot be forgotten about for a five-year period and suddenly we are either going to hit the target or not. Every year there would be focus on what we had achieved, why we had not achieved it, what we needed to do to get it right next year.

**Q30 David Taylor:** I do not want to focus too much on your analogy with the economy, but the lag between a hike in interest rates and its impact on inflation is a couple of years or so; the lag between steps taken to improve the chances of compliance in terms of carbon emissions is likely to be rather longer. Are you not going to be building in very substantial over-reaction to short-term problems, if you are not careful?

**Mr Staniaszek:** I do not think it is possible to overreact from what we heard earlier. We need to maximise the carbon savings as soon as possible.

**Q31 David Taylor:** I am not denying that, but maybe the analogy is not one we should take further.

**Dr Anderson:** Why would the lag be necessarily longer?

**Q32 David Taylor:** I am asking you. I suppose I am asserting that it could well be longer than the analogy you used, which was in essence between interest rates and inflation.

**Mr Staniaszek:** It depends what the response is. If there were a very basic increase in the price of energy for example, then that would have a very significant impact. I would agree with Kevin that if one were having to devise brand new policies from scratch then, yes, there would quite possibly be a five-year time lag; in other areas it could be much swifter.

**Q33 David Taylor:** Let us pass the idea of the EST to Tyndall. Do you believe that that rolling five-year average is a more appropriate and more effective way of proceeding?

**Dr Anderson:** We have not looked at it in detail so it would be unfair to comment. What is important from those comments you made is that we must revisit how we are doing on a regular basis, at least annually. There are things, for instance air passenger duty. If you bothered to put, say, £200 on a flight, it would certainly have an impact far more quickly than two years. That would be politically quite difficult to do but there are plenty of mechanisms out there that can bring about quite rapid changes which we understand relatively well.

**Q34 David Taylor:** Mechanisms which will still allow the Government of the day to be re-elected in two and a half years’ time I am sure?

**Dr Anderson:** It depends.

**Q35 Chairman:** I want to focus for a second on this question of the targets and the monitoring. We do not know, if this Bill is passed by Parliament, exactly when it is going to start numerically measuring. Is there any sort of current reporting cycle for UK emissions? I would imagine that if you are going to, for a 12-month period, report on how we are doing, it is not going to be on the first day of the following year: there will be a lag before you have collected all the data. What is the lag?

**Dr Bows:** My understanding is that the 2006 domestic emissions data came out about a month ago, so it is about—

**Q36 Chairman:** So it is about a six-month lag.

**Dr Bows:** I would say that the likelihood is that if you wanted to make that quicker, I am sure that that would be possible because we have not actually been doing it for that long. In the aviation industry, for example, you can collect various statistics and they collect them and they publish them; the CAA publishes them monthly for example. If people were more used to collecting emissions data on a monthly basis and submitting them more rapidly, then you could speed up that process.

**Q37 Chairman:** Is this data always accurate and robust unlike, for example, growth figures for the economy, where you have to keep adjusting them six months down the road because you did not have all the data that you needed?

**Dr Bows:** All data that is collected is going to be based on some sort of estimate, but you will make the best estimate that you can.

**Q38 Chairman:** The reason I am asking this question is that the Bill talks about five-year discrete periods, so that in year five, you are automatically going to be in year six, but from what I can see the Bill does not make any allowance for the period of adjustment
of a subsequent carbon budget in relation to these discrete five-year periods so they are actually five- and-a-half-year periods or whatever, unless you start exactly on the anniversary of the fourth or fifth month. You see the line of thinking? It is a question of when the five years begin and whether you are going to have a gap between the two five-year budgets whilst you work out how you did on the previous ones and what you are going to do for the next five, in other words you have nothing happening.

**Dr Anderson:** I would hope that would not be how they were operating and that would obviously be a foolish way to run the system. Maybe that is how it is enshrined in here and that is worrying if it is, but clearly that is something that needs to be overcome and the rolling approach and the far more regular checks seem to be somewhat healthier than that.

**Q39 Chairman:** To sum up, on the rolling approach you could have a detailed annual review, the report to Parliament, which the Bill has, but you could on a rolling basis establish the trends up and down in a rather more realistic fashion than in discrete terms.

**Mr Samuel:** You could keep rolling forward and moving forward rather than having a stop-start approach or the danger of a stop-start approach with the five-year cycle.

**Dr Anderson:** The science will change. Your budget that you set now will not be the budget you have in five years’ time. The IPCC would have reported and if it is anything like previous reports then what is likely to happen is that each time it reports—and this may not be the case—there will be other things that scientists have said were too uncertain to include that would be included. Currently the direction seems to make it worse and worse each time that happens, so it would not be unwise, given that we are planning the future of the planet, to say we should be quite precautionary about this. We must recognise the budget is likely to go down. We cannot just have these nice five-year programmes and assume the science is going to stay robust and keep the same for five years. It might change. It might of course be that Clarkson is correct and there is nothing wrong with climate change and we can forget budgets altogether but it could well be in four or five years’ time that we discover that methane has got a lot more than we thought, so we have to constrain our budget even more and that has to be taken into account, that flexibility to respond to the science must be in here.

**Q40 Mr Williams:** Some would argue that it would be much more rigorous and immediate if we had annual targets and you could make adjustments for exceptional circumstances like a particularly cold period or a particularly hot period or changes in energy prices. What would your response to those suggestions be rather than having a five-year budgetary period or a five-year rolling period?

**Dr Anderson:** Market signals would probably be one that some economists, which we are not, would probably come up with as a concern. Markets are good at dealing with flexible energy prices so they can no doubt deal with this, but a three-year indicative target would be quite useful.

**Q41 Mr Williams:** What is wrong with an annual target, having an annual target in the Bill and an annual target being the key issue?

**Mr Staniaszek:** You are much more likely to overshoot or undershoot and it would be possible to seek to adjust it for external factors like the weather and no doubt, over time, that would become more and more sophisticated and accurate. However, every time there would be a lot of analysis around it, “Well, numerically we’ve overshot the target but it was because it was a colder year or a warmer year” and a lot of focus around that adjustment, whereas over the five-year period we are proposing, those would tend to iron each other out and you would just say that was the budget, you either met it or you did not meet it and you focus on the reasons why you did not meet it rather than on whether the assumptions you made were right. That would be my argument.

**Q42 Mr Williams:** Would you just like to comment on that?

**Dr Anderson:** Presumably if you had a five-year target, you would still have a fairly good indicator of what you must have to try to achieve each year.

**Q43 Mr Williams:** The question is what is in the Bill?

**Dr Anderson:** Yes, what is in the Bill? I would have to have a lot more detail. My immediate thought is that I would probably propose something like a five-year target as long as there is an ability for it to absorb new science.

**Q44 Chairman:** Tyndall, you are the experts in this and we are about to be presented at some stage with enshrining in law a target. Part of our inquiry is to tease out whether there are any weaknesses in the target-setting and review process. Given your presentation and the possibility that we might overshoot because the Government’s target in the Bill does not look at the problem in the way that your carbon budget does, we would very much welcome, after these exchanges, perhaps some further thoughts on what is the right way to measure progress to achieve the right end result. You are contrasting that between 2°C and 4°C and what might be politically acceptable, but at some point Parliament have to come to a decision on it.

**Dr Anderson:** I am not sure our expertise goes down to that level of what we might think of as micromanagement. We can tell you what the carbon budget needs to be these 50 years and we can give you something about trajectories but as to the actual details between one year or five . . .

**Chairman:** Bearing in mind that one of the major discussion points around this Bill is whether you are going to have one-year budgets or not, and we want to know what the adequacy or inadequacy of that is, as a control measure the Energy Saving Trust have
said they would prefer something on a cumulative or rolling basis. You sort of hinted that might be right, I am just asking you to think again on that.

Q45 Lynne Jones: Irrespective of how your targets are set there has to be some means of enforcement and maybe there is an inter-relationship between the two but, as is proposed, if the Government do not meet their targets, they can be subject to judicial review. Is judicial review an appropriate or an adequate sanction to impose?

Mr Samuel: It is appropriate in the sense that you need to have a process in place to see how Government have performed. At the end of the day is it realistic for the Government to actually take themselves to court and to impose stringent penalties on themselves? In a normal operating environment, if someone breached an environmental protection act or law, there would be those stringent penalties attached. I would say that you would need something like that but how likely is it that it is actually going to happen. The role of Parliament is going to be immensely important and critical in holding Government to task on meeting their targets.

Q46 Lynne Jones: One of the problems is that the scenario would be the Government fail to meet their target and then Friends of the Earth or some organisation takes out a judicial review process by which time it is too late, you have missed the targets. Have you any suggestions about how this could be a more effective process? Surely the way you set the targets should be amenable to some kind of sanction, so that the two things are inter-related.

Dr Anderson: I would personally like to see it taken out of the Government’s hands. I know there is a lot of disagreement about this and I was discussing it with some people outside before coming in. The Committee really needs to have some teeth. It should not just be an advisory committee, the Committee itself should actually manipulate the instruments, the instruments it will be given by Government; it should be allowed to play with these things to achieve the targets. It should not be the role of Government as a whole, which has other political concerns, to manipulate the instruments. They should be manipulated by the Committee so the Committee needs teeth, some powers. The Monetary Policy Committee already has those and I would like to see a suite of instruments given to the Committee—obviously it will be a long-term process organising this—and let the Committee do that. It is concerning, when you look at the criteria for the Committee, which is a climate change committee, they begin with economic analysis, business competitiveness, financial investment, technology development and diffusion, energy production and supply then (f) climate science. I thought it was a climate change committee so surely (f) should come first. It seems to me the wrong way round. This is far too advisory in a woolly sense; there are no real teeth in there and that would probably overcome the almost certain political drive there will be to spin the whole thing regardless of which Government. The Committee could actually overcome that and provide some confidence about the targets they are going to try to meet.

Q47 Lynne Jones: So what powers should the Committee be given and what should be the relationship between the Government and the Committee and the other issues about resources for the Committee?

Mr Staniaszek: I would agree that the Committee needs to have some powers. Exactly what those are is not very straightforward to answer but if, for example, it were able to dictate levels of taxation on energy, whether that is air passenger duty or energy use in the homes or business, that would be one of the potential tools they could have. The analogy with the Monetary Policy Committee is that it sets the interest rates so it needs to have a number of tools which it can use to act and I would very much support the independence and the ability for it to take this action.

Q48 Chairman: How realistic is that? The Monetary Policy Committee, under section 11 of the Bank of England Act, has one job and one job only which is to hit the target for inflation which has been set by the Chancellor and it has one weapon to deal with that which is the setting of an interest rate. If you gave this Committee a range of other tools, what would they actually be? You would have to affect every emitting sector potentially if you were going to try to correct the direction of travel that was not heading in the right direction, whatever the law defines that direction to be.

Mr Staniaszek: We do not specify what those tools might be. I am just responding to the question. All we are doing is basically supporting the suggestion that the Committee needs to have some powers for it to be seen as effective and seen as independent.

Q49 Mr Gray: This whole thing is central surely. You are quite right in saying you would have to give the Committee powers, but if you did give it sufficient powers to achieve the targets, then you would be creating a very constitutional curiosity, would you not? You would be creating a committee which had quasi-judicial powers, which would be taking you to court, requiring you do things. You would be setting up a very, very powerful non-governmental organisation effectively, would you not, which would be an odd thing to do and quite different from the Monetary Policy Committee which only has one thing to do? I am afraid to say you have all been so far a little bit vague on this whole question of sanctions. You have all said it is important that something should happen. Surely unless we have clarity about sanctions, the whole Bill is worthless and just a whole series of wish lists. What is your view about sanctions? How are you actually going to make this work?

Dr Anderson: It is not up to us to make it work. If you can get consensus in Government so they did not score party-political points when someone said 9% is the reduction we are going to go for and to achieve that we have this massive hike in energy
taxes, then if all the parties say fine they agree with that, the problem is of course that it will become political, so the choice of instruments and how they are used will ultimately be a political decision. It is not one that you can analyse scientifically and objectively. We can provide some guidance.

Q50 Mr Gray: This is legislation, this is a Bill, this is an Act of Parliament and will be on the statute books. We are not talking politics, we are not talking about party politics, we are talking about an Act like the law against rape. This is going to be the same as that. Assuming Government do not achieve these targets as laid down in the Bill, what would you like to see happening?

Dr Anderson: So your sanctions are just about the Government here, not about other industries which do not respond to targets that there may be?

Q51 Chairman: If I have understood what both sets of witnesses have said today it is that in terms of sanction, they would actually look at it, if I have understood you correctly, in toughening up what the Committee has as its range of powers. Rather than go for a judicial review as the rap across the knuckles, you would approach it in a different way in that the Committee would have levers it could push, buttons it could press, things would happen as a result of what the Committee said, did and the powers to enable that to happen. Is that roughly what you were getting at?

Dr Anderson: Yes, that is correct. The responsibility would no longer be on the Government. The Government would have some very strong responsibilities in setting the initial target, the 2°C and so forth.

Q52 Chairman: Again, just to be crystal clear, your argument would be that if the Committee saw, for example, that aviation emissions were the root cause of us missing the target, they might recommend a £50 increase in air passenger duty and have the ability to impose it.

Dr Anderson: They would not recommend it, they would impose it. Obviously there would be some negotiation with the Secretary of State, but they would broadly have the rights to impose iterative targets that they would modify and tweak over the periods of the trajectory.

Q53 Patrick Hall: Is that Tyndall’s position?

Dr Anderson: No.

Q54 Patrick Hall: It is your position?

Dr Anderson: We do not have collective decisions.

Chairman: Fine; we do not want to pin you down and put you in an awkward position.

Q55 Lynne Jones: What resources would the Carbon Committee require to carry out this task and are you concerned that the Office of Climate Change and the Interdepartmental Analysts’ Group will have sufficient resources to meet this task?

Mr Samuel: They have not had the resources in the past; the OCC is a fairly new body, typically staffed with people with one-year contracts, so there is a lack of long-termism around that. The Interdepartmental Analysts’ Group is a group of very well qualified individuals who frankly probably, despite their best endeavours, have not had sufficient time to undertake the work that they have been required to do at various stages and meet demands from Government. Clearly, the individuals and the modellers need to have sufficient time to actually do this work as their day job. That is a key point and what has actually happened in the past is that you have had a focus on short-term policy measures which the members of the IAG have understood and known rather than looking at longer-term policies and taking a more detailed analysis and perhaps bigger risks in moving forward on that. So it has been difficult for them and having a long-term framework will help with that as well. I know that the resources at the moment are not sufficient to undertake this type of work.

Q56 Lynne Jones: How do you know that?

Mr Samuel: Because of past experiences from the climate change programme review.

Dr Anderson: I would also like to see the members of the Committee being preferably full-time employed. My understanding is that there is something like a secretariat and these will just be almost voluntary figures, who will turn up for the odd day here and there. That is not adequate. The issue is far, far too complex to do that, so the actual Committee members would have to be, in my view, full time on whatever length of contract is necessary to perform this function.

Q57 David Lepper: I just wanted to focus on one aspect of the work of the Climate Change Committee for a moment and that is the emissions forecasting model that it will use. From what has been said earlier, I suspect both sets of witnesses would feel that the current emissions forecasting model used by Government, which is adapted from a DTI model, is perhaps not really fit for purpose. Am I right?

Mr Staniaszek: That is certainly our view. You are right that the main plank of the current modelling is the DTI energy model; there are other bits that go in like land use, but the DTI model is about energy supply and it was not designed for the purpose of long-term carbon emissions forecasting. Our very strong recommendation is that we look at a next generation bespoke model that is all about meeting that carbon target.

Dr Anderson: I would take a different view again. I almost would not bother spending the money on the forecasting. We have historically been appalling at it, particularly on energy forecasting. I rather prefer the “What if?” scenario approaches to some sort of astrological-based computer model to tell us what the emissions will be in 2017 or 2025. Just look at the historical precedent for this. We always get them wrong. If we rely on the models they will be wrong.

Patrick Hall: That sounds like life really, does it not?
Chairman: Do you mean we always get it wrong?

Q58 Patrick Hall: Yes, there is a good chance that human beings get things wrong. Let us look at one possible area. We have had a discussion about the budgetary periods, one year or three years or five years or five-year rolling budgetary periods. The Bill suggests that these budgets should be flexible, be able to be revised up or down and that built into the system is the ability to bank or borrow and also the ability to purchase credits abroad. Could I ask you all to focus on this purchasing-credits-from-overseas aspect? Is this not a cop-out altogether? What sort of political signal does it give if we want to encourage other countries throughout the world to take these issues seriously? Some of you have suggested that there should be a cap on the ability to do this, but that there should still be an ability. Can we have some views on whether or not it should exist at all and if it should, then why it should be limited?

Mr Samuel: From our perspective ideally it should not exist and certainly not for those sectors such as the household sector or the transport sector that are involved in the business of international competitiveness. As regards existing schemes at the moment, you do have the EU Emissions Trading Scheme which is not robust at all, with very weak national allocation plans, but there is an international agreement to trade. Therefore, from our perspective that is in place and it is perhaps unreasonable to expect people not to take that into consideration. Ideally, the UK should be making sure that its targets are met by UK reductions.

Q59 Patrick Hall: Yes, but the Energy Saving Trust has proposed a limit, has it not?

Mr Samuel: Certainly. I would be very surprised if Government went against international agreements and that is why we are suggesting a limit. If emissions reductions are traded internationally, then as regards the UK it should be capped.

Q60 Patrick Hall: How compatible with a market is it to try to impose a limit on one of the parties?

Mr Samuel: It provides a degree of market flexibility, so we are trying to take a pragmatic approach to this, but ideally the best means of reducing emissions would be to ensure the UK did it on its own territory.

Q61 Patrick Hall: Yes, but since we are participating in the EU Emissions Trading Scheme, which is going to look at whether aviation et cetera can be included, if we were to have a limit on the ability to purchase credit from overseas, in terms of the five-year budgets, then that would require Government to stop British organisations from participating in the Emissions Trading Scheme. Is that not a great danger and would it not be very confusing?

Mr Samuel: The real problem is that the carbon offsetting schemes that are out there at the moment are not sufficiently robust and the emission reduction projects likewise do not deliver additional emission reductions. If they were made far stronger, then we would be more supportive. At the moment, you are not having a transfer of sustainable energy best practice skills across developing countries and you are seeing essentially leakage of emissions. It is not acceptable as it is at the moment and that is why we are proposing a cap.

Dr Anderson: I disagree completely with us trying to offset by indulgences from outside of the EU, which is broadly all that we are doing with it as far as I can see. I have no problems about markets within the EU because there is an overall cap and we can argue about whether the cap should cost enough or not and it is up to us to do that. The problem about going outside of that is that whilst we might meet sustainability goals or whilst we might do great things abroad, and if we need to do those we should do those anyway, we should not then allow that to be an offset for emissions from the UK. Again it is this rebound issue. We do not know if we invest in renewable power in India, whether that encourages people in India to start to behave differently and if they behave differently, do they then start buying scooters so they can travel between villages. I am not saying whether it is a bad or a good thing. All I am saying is that we do not know what the CO₂ implications are of our interventions in these countries. We might say they are good for sustainability goals: they have nothing necessarily to do with CO₂. I would completely disagree with any form of going outside of the EU, unless the country you go to has a national emissions cap and you are buying off their cap. That is why I object; I do not object within the EU, but as far as I am aware no-one else has a cap like that.

Q62 Patrick Hall: May I ask the Energy Saving Trust whether that point that has just been made by Dr Anderson about the big distinction between what happens within the EU and trading outside, or purchasing credits from outside, is a valid point?

Mr Samuel: It is a valid point; there is a big distinction. However, at the moment the national allocation plans within the EU are not sufficiently robust so there is still a further complication there.

Q63 Lynne Jones: Just picking up on that, you are not saying that people cannot spend money on offset schemes, it just should not count towards our national targets.

Dr Anderson: People can spend money wherever they want to. I personally completely disagree with personal offset schemes as well. It is just another form of buying indulgences. There is no guarantee you would reduce emissions; you might even increase the emissions and in fact there are quite good examples of how you could increase emissions as well, but it helps us sleep at night. I am concerned about the idea of actually enshrining that in some national law; it is bad enough individuals doing it but the state sanctioning it is more concerning.

Q64 Patrick Hall: That is relevant to what we are looking at because the Bill would enable that to come forward at some point, even personal allowances. So there needs to be a debate on that.
Dr Anderson: There has been a consultative document out on offset which is still out at the moment; I am not sure whether they have completed the consultation yet. The consultation process is about whether the offsetting schemes are robust or not. Well I do not give a damn whether they are robust or not: they are philosophically flawed as far as I can see. Even if they are the best schemes out there, even if you can guarantee the trees last, even if you can guarantee the energy efficiency schemes work, but you still cannot guarantee any reduction in CO2 emissions, that is my concern.

Q65 Lynne Jones: Given your scenario that we are heading for a four-degree rise in temperature rather than two, to what extent should we be concentrating on adaptation rather than reduction? We need to do both obviously.

Dr Bows: There is nothing really on adaptation in the Bill. There is a lack of emphasis on adaptation generally, but it should never be a “rather than”. We have to do everything that we can possibly do in order to mitigate emissions and we have to be realistic about the temperature rises that we are going to have to adapt to and not enough is being done. If we are not talking about levels of three or four or more degrees in the Bill, then we are not considering the actual adaptation that will be required.

Q66 Lynne Jones: So at the moment the Government have targets that they are pretending are going to meet the 2°C target and they are not. Therefore they have to start being realistic and say either they are going to meet the two-degree target or they have to accept that it is not politically possible and they have to start spending loads of money on flood defences and all these other things.

Dr Anderson: It is even more complicated for Government than that. Even if the Government set up a framework so that they are making their contribution towards the 2°C future, they also have to look at whether they seriously think the rest of the world is doing that and if the rest of the world is not doing that, and I guess that is the conclusion they would come to, then they would have to inform the planet they have done their bit for mitigation towards 2°C but it does not appear to be occurring globally at the moment and they do not have a lot of time to figure it out, they have to start adapting to higher temperatures and look at what impacts that will have and let the planners know that. The planners have to know the temperatures are likely to be somewhat higher than that.

Q67 Lynne Jones: Is there any feasible mechanism within legislation to require these adaptations or is it just something that you have to leave to Government in terms of its public spending policy?

Dr Anderson: Planning laws presumably. Planning laws can significantly change and take account of these sorts of issues. To some extent, they probably already are and the Environment Agency certainly gives advice on things like flood risk.

Q68 Lynne Jones: Those are other laws, rather than the Climate Change Bill.

Dr Anderson: Yes. Adaptation is not our expertise in our area of Tyndall so we are not able to discuss that. It would seem wise to have something in here that provides some mechanism for ensuring adaptation is driven forward in a far more serious manner than it is currently.

Q69 Chairman: May I move us on to the secondary powers? One of the model features is the ability to set up within the United Kingdom limited trading schemes by the use of secondary legislation, effectively I guess those will be the things that are outwith things like the EU Emissions Trading Scheme. Are they feasible? If so, what sectors might they apply themselves to? Do you have any practical comments about how the Bill deals with these second order trading activities?

Dr Anderson: You are generally talking about smaller companies than the 20 megawatts necessary at the moment as the marketing to the EU ETS.

Q70 Chairman: Yes.

Dr Anderson: We have no particular comment other than if people want to do trading and it will reduce emissions then fine.

Mr Samuel: The advantage is by a cap and trade approach you can then actually put a cap on new energy demand or carbon emissions and provided that is delivered within the UK, then we would support that approach. It also provides a carbon price and at the moment, you do not have a carbon price in the market, so individuals in particular do not understand and cannot equate the value of carbon into their everyday lives. Until they can do that, then how likely are the vast majority to take action?

Dr Anderson: You would have two carbon prices then. You would have the EU ETS carbon price and you might have smaller trading organisations with a different carbon price.

Q71 Chairman: There are many prices of carbon out there at the moment and that is part of the confusion. Does this ability to do smaller-scale trading start to address one of the problems which I would have liked to touch on when we were talking about targets? The fact is that whatever way you set a target, you are setting a one number description of the sum total of actions of a lot of different parts. Do we need to be more sophisticated in looking at the sectoral make-up of emissions and trying to set targets for them and, where they are not incorporated in things like the EU trading scheme, put in this kind of secondary market for them as a way of helping them to achieve their targets?

Dr Anderson: The one thing you would have to be careful about presumably would be double counting. If you were a hairdresser and you were purchasing electricity, then your electricity is already coming from a supplier that is part of the EU ETS, so if you are then looking at your carbon emissions in your hairdressing salon and relating that to another one down the road, you would have to take
account of the fact that some of these emissions were already factored in, but your gas emissions, as I understand it, are likely not to be factored in. Those issues would have to be thought about, whether that double counting was important or not, and these would probably vary from sector to sector to some extent. Of course pretty much all centrally generated electricity is now in the EU ETS.

Q72 Chairman: So it is going to be quite difficult to find an emissions market to become part of these trading schemes that does not run into the methodological problem you have just enunciated.

Dr Anderson: If it is a problem. Given the scale of the problem, a bit of double counting, as long as it is pointing in the right direction, does not really worry me.

Q73 Lynne Jones: What about personal carbon allowances?

Dr Anderson: That is an area we have done a lot of work on at the Tyndall Centre and we have been pushing that for quite a long time. It is one thing we should be seriously considering. Yes, I think personal carbon allowances, given the scale of the problem that Alice outlined with some of the graphs, might circumvent some of the political opposition from the public about this, if we get the public directly involved. The idea that Big Brother tells us we have to do this, rather than giving individuals a choice to do what they want, which is what a personal carbon allowance system does, brings some real benefits, when you talk about these sort of scales of reductions, of going down that approach. If we are just looking at 20% reductions, 30% reductions, I would think the personal carbon trading approach is simply not something to be considered, it is not really appropriate. There are plenty of other mechanisms for giving out those sorts of levels of reductions. When we talk about the levels of reductions that are necessary for 2°C or even 3°C, all the instruments we have out there have never been tried at this sort of level; we have never tried to bring about such radical shifts in society. Personal carbon trading is one of the options you have to consider seriously there. The idea of getting people to buy in, some communal approach to dealing with this very serious issue, may actually thwart some of the opposition that we would get to the Government simply saying they will put a tax on petrol or a tax on aviation or whatever.

Q74 Lynne Jones: So should there be enabling? It is not practical to introduce carbon trading within the near future, but should the Bill have enabling legislation to introduce it some time to prepare for that in the future?

Dr Anderson: Yes, it should be seriously considering it and setting that legislation in train. Actually I would say that if we felt that it was that important, we could introduce personal carbon trading relatively quickly. It is not something that has to be that far away.

Chairman: Looking as clauses 28 and 29, they look as though they could become the vehicle to do just that. We will have to look to see whether we think that that is an adaptable piece of language. Gentlemen, thank you very much indeed. There may be some further questions that we would like to write to you about and if, as a result of these very useful exchanges, there are any additional points you would like to make, please feel free to do so. We really would appreciate further comments particularly from the Tyndall Centre about this question of the setting and the monitoring of targets, because that is going to be quite an important part of the political debate about the Bill and some further objective advice on that would be very useful indeed. May I thank you again for your written submissions and for your contributions today?

Memorandum submitted by Friends of the Earth (CCB 22)

1. INTRODUCTION

1.1 Friends of the Earth welcomes the publication and pre-legislative scrutiny of the draft Climate Change Bill, and the opportunity to contribute to the Committee’s inquiry.

1.2 Friends of the Earth has long called for a legal framework to manage UK carbon dioxide emissions through The Big Ask campaign, which has won widespread public and Parliamentary support. In the last session of Parliament, 412 MPs signed Early Day Motion 178 calling for a Climate Change Bill.

1.3 So the draft Bill is welcome. However, Friends of the Earth has argued consistently that the purpose of such a framework should be to keep UK emissions within its “fair share” of the total global emissions that can be released without causing a global temperature increase of more than two degrees Celsius. The draft Bill does not yet meet this test—the targets contained in the Bill are insufficiently ambitious and do not cover all the emissions the UK is responsible for. Friends of the Earth is also concerned that the Bill’s reporting and scrutiny processes are insufficiently robust enough to give confidence that targets will be met.

1.4 The following submission expands on these points.
2. VALIDITY OF THE TARGETS IN THE DRAFT BILL

2.1 The requirement in the draft Bill for cuts in carbon dioxide emissions of between 26–32% by 2020 and 60% by 2050, based on 1990 levels\(^1\) means that the Bill is giving legal force to existing Government targets, rather than establishing new aims. It is therefore worth recalling the origins of these targets.

2.2 The target for a 60% cut by 2050 became Government policy (and that of most other parties) following a recommendation of the Royal Commission on Environmental Pollution’s 22nd Report: Energy—The Changing Climate in June 2000. The 2020 target is essentially a development of the Government’s policy of making good progress towards the 2050 target by 2020—and broadly represents steady progress towards the 2050 target.

2.3 The RCEP report recommended that:

“The government should now adopt a strategy which puts the UK on a path to reducing carbon dioxide emissions by some 60% from current levels by about 2050. This would be in line with a global agreement based on contraction and convergence which set an upper limit for the carbon dioxide concentration in the atmosphere of some 550 ppmv and a convergence date of 2050.”

At the time of the RCEP report, stabilising atmospheric concentrations of carbon dioxide at 550 parts per million by volume (ppmv) was seen as broadly in line with limiting the temperature increase to no more than two degrees Celsius above pre-industrial levels. With advances in scientific understanding, it no longer is. The Government’s climate policy “Climate Change—The UK’s programme 2006” says:

“in the mid-1990s the EU proposed that the aim should be to limit global temperature rise to no more than 2°C to avoid dangerous climate change . . . At that time, it was thought that this equated to atmospheric carbon dioxide levels below approximately 550 ppmv. The more recent work of the IPCC suggests that a limit closer to 450 ppmv or even lower, might be more appropriate to meet a 2°C stabilisation limit.”

2.4 Secretary of State for the Environment, David Miliband MP, has defended the 60% target—though not as sufficient to tackle the problem. In an entry on his blog on this issue\(^2\) he wrote:

“The argument for changing the target is that the science is more urgent and dangerous than when the 60% target was developed in the 1990s, so industrialised countries may need to go beyond 60% cuts to fend off the dangers of climate change.”

Instead, the Secretary of State defended the target largely because he perceived it to be acceptable to a range of stakeholders:

“The argument against is that a coalition from green groups,\(^3\) political parties and business groups has come together around the 60% target, and it represents a very big ‘three to one’ leap for the country which is itself very challenging and will force fundamental changes in the way we live and work . . . my view is that it would not be wise to move off the 60% now. It has resonance and drive. It provides a clear rallying point. And it is more than stretching enough to lead change domestically and internationally.”

2.5 Therefore the target for a 60% cut by 2050 is—and has been accepted by the Government to be—out of date. Friends of the Earth do not believe this target should be included in the Bill. It is worth noting a recent Tyndall Centre briefing note on the draft Bill estimates that the targets imply atmospheric concentrations upwards of 600 ppmv, and possibly in excess of 750 ppmv, contributing to a world warmer by 4 or 5 degrees.\(^4\) Such a level of warming would be catastrophic.

3. EXCLUSION OF INTERNATIONAL AVIATION AND SHIPPING EMISSIONS

3.1 The draft Bill specifically excludes emissions from international aviation and shipping in Section 15. This is in line with the Government’s interpretation of existing targets for carbon dioxide—progress towards both the 20% target for 2010 and the 60% target for 2050 are reported this way. Yet this is an anomaly: because negotiators failed to agree how to include international aviation and shipping emissions in the Kyoto process, the UK has unilaterally stopped counting them in domestic policy, and has no domestic aims or targets to restrict them.

3.2 The origins of the targets suggest no logical reason for such exclusion. The 1997 manifesto commitment to cut carbon dioxide emissions by 20% by 2010 did not exclude these sectors. And while the RCEP report that led to the 2050 target did not specifically mention them, the work was based on a global carbon limit, meaning that all emissions—including those from international aviation and shipping—must by definition be included.

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\(^1\) The use of a “carbon budget” approach in the draft Bill actually means average emissions for the five years around these years would be at these levels, rather than this being precisely the emissions cuts in those years.

\(^2\) www.davidmiliband.defra.gov.uk/blogs/ministerial...blog/archive/2007/02/27/5538.aspx\&comments

\(^3\) As a “green group”, Friends of the Earth has perhaps not been sufficiently clear in its view of the 60% target. Friends of the Earth has frequently complained that Government is not on track to meet even its own targets, which may have led to the impression that simply meeting the targets is enough.

\(^4\) Tyndall Centre for Climate Change Research, University of Manchester.
3.3 The UK’s share of international aviation and shipping emissions could add around 10% to the UK’s total carbon emissions. Analysis by the Tyndall Centre has found that in 2004, when the Government reported emissions at 150 MtC on the basis of excluding these emissions, the UK’s share of international aviation would have added a further 9 MtC and international shipping, a further 5 MtC. Since 2004 emissions from these sectors are likely to have grown significantly faster than other sectors.

3.4 Clearly the ultimate goal should be to arrive at a common, international agreement on how emissions from international aviation and shipping are to be allocated, so that all emissions are accounted for. Such agreement is unlikely to be reached any time soon, so this cannot remain an excuse for simply ignoring emissions from international aviation and shipping. Indeed a carbon management system that does not count these emissions out is much like a calorie-controlled diet that does not count calories from chocolate.

3.5 The Government already have a methodology to report these emissions as a “memo item” (ie not included in the targets) under the Kyoto protocol. This existing methodology should be used to include the UK’s share of international aviation and shipping emissions from the first carbon budget period.

4. WHAT SHOULD THE TARGETS BE?

4.1 Calculating the correct target for the Bill complex. For a start, scientists are not able to say precisely what concentration of carbon dioxide in the atmosphere is “safe” or “unsafe”—rather their work leads to a series of probabilities that global temperature rise will exceed two degrees Celsius. Arriving at the “right” target first requires a judgement as to how much of a risk of exceeding that level should is acceptable.

4.2 The target for the UK further depends on how global emissions are distributed between countries. Finally, because carbon dioxide persists in the atmosphere for many years, the real determinant of the severity of climate change is not emissions in 2050, but total cumulative emissions by 2050. The cumulative emissions resulting from meeting a target in 2050 are dramatically reduced if the largest cuts are made early in the period (a “ski-slope” graph) rather than leaving them until the end of the period (a graph like a falling bullet). As viewed on a graph of emissions, it is the area under the line that matters—not the end point.

4.3 Last year Friends of the Earth commissioned (along with The Co-operative Bank) a major report from the Tyndall Centre on this question. This used the same international distribution of emissions as the RCEP in 2000, but limited atmospheric concentrations of carbon dioxide to 450 ppm rather than 550 ppm. The report found the UK could emit 4.600 million tonnes of carbon between 2000 and 2050—approximately 28 years of emissions at current levels. Since 2000, almost six and a half of these years have been emitted.

4.4 The targets in the Bill must meet the challenge of living within this carbon budget. The Tyndall Centre report found that a cut of around 70% by 2030 and 90% by 2050 would be necessary once the UKs true emissions, ie including international aviation and shipping were counted in full. However, the report assumed there was no reduction in emissions in the next five years—and starting to make cuts earlier means the cuts need to be less dramatic later.

5. SCOPE TO AMEND TARGETS ETC UNDER THE BILL

5.1 There are powers in the draft Bill to amend targets should there be “significant developments . . . in scientific knowledge about climate change.” The Bill also allows the inclusion of aviation and shipping emissions, should international agreement be reached on these issues.

5.2 The principle of allowing the target to be amended to reflect scientific understanding of the problem and international agreement on allocation of emissions is of course correct. But this wording requires new developments in understanding after the passing of the Bill, so the existing scientific view that the 60% target and the 550 ppm concentration it implies are insufficient to prevent dangerous climate change may not be considered a new development.

6. RATIONALE FOR FIVE YEAR BUDGETS AND ACCOUNTABILITY FOR MEETING THEM

6.1 As explained above, the UK must live within a carbon budget over an extended period, rather than simply hit a target at some point in the future. Therefore the principle of carbon budgets is one that Friends of the Earth wholeheartedly agrees with. However, as well as being scientifically correct, the Bill must design a system that is politically workable—in that it gives us confidence Ministers will stay within those budgets.

6.2 Climate change requires Governments to take action that will bring benefits (or avoid problems) at a time long after it has left office. It requires successive Governments to do their bit and not to shirk action in the hope a future Government will pick up the slack. It must ensure that every Government can be held to account, and cannot pass the buck to a future Government—or blame a previous one.
6.3 Friends of the Earth believes that there is a very real danger that as drafted—with five year budget periods that will almost inevitably overlap with two Parliaments—the Bill will fail to do this. Even the very first proposed budget period will take in two Parliaments: the period will run from January 2008 to January 2012—an election in May 2010 would fall almost precisely in the middle of this period.

6.4 It is far from impossible to imagine a situation where a Government approaching an election might duck tricky decisions or delay a policy until after the vote. The temptation to do this when approaching an election where the Government is seriously worried it might lose would be even stronger. The blame for missing the budget would then be shouldered by the successor Government. They in turn could simply water down the budget while blaming the previous Government for doing too little in the early stages to make the original budget possible. Everyone blames each other—but crucially carbon emissions are not cut as required.

6.5 Friends of the Earth’s have called for annual targets to prevent this buck-passing. There have been wild claims about annual targets—such as they would require the closure of airports if emissions are off track. To our knowledge no person or organisation has ever proposed such targets, other than people who have been arguing against annual targets. However the argument does (albeit crudely) highlight the challenge of allowing some flexibility to take account of short-term fluctuations in weather, relative fuel costs, etc with a firm steer that keeps Governments on track.

6.6 The proposed five-year budgets allow flexibility, but the buck-passing “loophole” means they fail to provide the firm steer. The Committee on Climate Change will help to an extent through annual reports on progress—but under the Bill as drafted will be second guessing what Ministers were intending to achieve before they can judge whether they have met those objectives.

6.7 Friends of the Earth believes that combining indicative annual milestones with the legal framework of the budget periods would offer flexibility and a firm steer. Every Government responsible for a part of a budget period can best be held to account if they have stated clearly what they intend emissions to be in each year. The Committee can then judge progress against what was planned. The Committee can, if appropriate, take account of inclement weather, or price shocks, in reaching its assessment. But the basis of the assessment should be whether it matches up to what Ministers were trying to achieve.

7. COMPLIANCE AND SANCTIONS

7.1 In a case of failure to remain within the budgets, it has been argued that Judicial Review would offer a route to hold Government to account. However, in the event of a Government exceeding the budget, while a Judicial Review may be relatively easy to win it is hard to see what it would change—it would already be too late.

7.2 A much more useful process would be a way to challenge in advance a policy or suite of policies which did not appear likely to meet the budget(s). Should such a challenge be successful, Ministers could be required to amend the policies and thus still meet the budget.

8. BORROWING AND BANKING

8.1 Friends of the Earth are content that allowing a restricted level of borrowing need not dramatically weaken the budget concept—though obviously it does offer another way to shift the burden to a future Government so should not be extended beyond the 1% (and could be reduced). Banking surpluses seems somewhat theoretical at present—but again is consistent with the carbon budget principle.

9. PURCHASING CREDITS FROM OUTSIDE THE UK

9.1 The Bill places a heavy emphasis on carbon trading as a mechanism to deliver the most cost effective way to reduce carbon emissions—based on the principle that a tonne of carbon emitted has the same effect whether emitted in Birmingham or Bangalore.

9.2 The difficulty is that while this is certainly true of carbon emitted, it is much harder to be certain that a tonne saved in the UK is actually equivalent to a tonne saved elsewhere in the world. This depends on many factors—such as whether that tonne would have been (at least partially) saved anyway, whether was a reduction on current emissions, or from a projection of future emissions.

9.3 The Bill should not allow trading to meet carbon budgets unless the frameworks for such trading are sufficiently robust to deliver the global carbon cuts needed. Until that time serious consideration should be given to restricting the use of trading as a mechanism to meet the budgets, perhaps by:

- Specifying the amount of effort to be made to meet budgets domestically, and the amount that can be “bought in”.
- Establishing an “exchange rate” where an independent assessment determines the equivalent number of credits that need to be purchased in a particular trading scheme to be equivalent to a
tonne of carbon saved domestically. Robust schemes may allow a credit for one tonne to count as one tonne saved in the budget—but a less robust trading scheme may require credits for two or three tonnes to be bought to have the same effect on the budget.

— Restricting trading to only robust schemes.

10. **Reporting Procedure and Accountability**

10.1 Friends of the Earth welcomes the fact that the Government will annually respond to the report of the Committee on Climate Change. However, there are significant delays in the reporting of emissions under the Bill—more effort should be put into speeding up this process. Furthermore the Government’s current practice of publishing provisional emissions figures four months after the end of a year is not built into the Bill and should be.

11. **Committee on Climate Change**

11.1 The Committee should be (as is proposed) analytical not representative and as independent of Government as possible. Friends of the Earth would therefore like to see Select Committees approving the membership. There is also a good argument for the Committee to set budgets and targets, not just advise on them. It is also notable the one area the Committee is not asked to advise on is the main aim of the entire Bill—to reach a 60% cut by 2050. This must be changed.

12. **International Implications of the Climate Change Bill**

12.1 Since the announcement of the Bill in last November’s Queen’s Speech, Friends of the Earth has taken numerous calls from organisations in other countries about the campaign for the Bill. Organisations in at least 15 countries across Europe are now beginning to plan how they can call for similar legislation in their countries. It would therefore appear that a robust Bill could lead to many other countries considering similar frameworks.

12.2 Ultimately any framework to tackle climate change must ensure the UK stays within the limits of emissions the climate can absorb. Showing the UK will live within its limits must surely help in persuading other countries to do so.

Friends of the Earth

*May 2007*

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**Memorandum submitted by the Royal Society for the Protection of Birds (CCB 11)**

**Summary**

The RSPB considers that human-induced climate change poses the biggest long-term threat to global biodiversity. We therefore work on the development of policies and measures that will allow both mitigation of and adaptation to climate change. The RSPB therefore welcomes the draft Climate Change Bill and congratulates the Government on bringing forward this innovative and important piece of legislation. However, for the Bill to work effectively we believe it could be improved in a number of ways.

(i) The Bill’s mid-term and long-term targets must be adjusted to represent the UK’s fair share of the reductions needed to avoid dangerous climate change.

(ii) The Bill should explicitly identify its overall goal, of staying within the two-degree safety limit through a globally equitable settlement.

(iii) The Bill must require the Government to set and report against annual milestones.

(iv) The Committee on Climate Change, when advising on the balance between international and domestic effort, must reflect the need for the UK to decarbonise its own economy.

(v) The Bill must restrict provisions for altering budgets once these have been established. Other flexibility mechanisms, including banking and borrowing, are sufficient to safeguard rational policy making.

(vi) The Government must bring forward a programme of action on adaptation once every three years, including action for biodiversity, water resources, flood risk management, planning, farming and forestry. The programme must be based on the principles of sustainable development.

(vii) The Committee on Climate Change must be given a duty to consider sustainable development in its decision-making, as must the Government in establishing its programmes of measures under Section 6 of the draft Bill. The Committee must also include adequate representation from the devolved countries, and have expertise on the subject of environmental policy making.
TARGETS

The validity of the Government’s domestic targets to reduce CO₂ emissions by 60% below 1990 baseline levels by 2050, and 26–32% below 1990 baseline levels by 2020

1. The Government has committed itself through the Energy Review 2003, and through its membership of the EU, to help limit average global temperature rises to two degrees Celsius above pre-industrial levels. Evidence from the IPCC has demonstrated that to have a reasonable chance of achieving this, the concentration of CO₂ equivalent greenhouse gases in the atmosphere must rise no higher than 450 ppmv. It is unfortunate that the Government’s consultation document on the Climate Change Bill ignores or elides the weight of evidence supporting a 450 ppmv rather than a 550 ppmv upper limit. This enables the Government to argue, wrongly in our view, that a 60% reduction by 2050 represents an equitable contribution to avoiding dangerous climate change.

2. In fact, it is widely understood that for the Government to ensure that the UK plays an equitable part in keeping us below the two degree safety limit, we must make cuts of no less than 80% in emissions of CO₂ equivalent by 2050.

3. It is also our view, that the goal of achieving the two degree safety limit in a globally equitable manner should be stated clearly on the face of the Bill, and that the Committee on Climate Change should be charged with ensuring that the UK’s targets in future, represent an appropriate share of this goal. Since this is the ultimate environmental and social aim of the legislation, it is appropriate for it to be clearly articulated, and to set the framework for any future revision of targets.

4. Our analysis of the trajectory in emission reductions required to achieve an 80% cut by 2050, leads us to conclude that even the top end of the proposed range of 26–32% by 2020 is barely adequate to ensure we are on course. The graph below illustrates this point.

5. Achieving an 80% reduction by 2050 requires an annual average reduction rate of 3.5% per annum, even assuming that we achieve our target of a 20% reduction by 2010. A smooth trajectory from 2010 would require us to have achieved something closer to a 40% cut by 2020, than a 30% cut. We would therefore wish to see a more detailed analysis of the projected emissions reduction curve which led the Government to opt for its 26–32% range, illustrating that this can achieve our long-term goal in a cost effective and sustainable manner, before we are reassured that the current medium-term target is appropriate.

6. In our view, the Bill introduced to Parliament should therefore have 80% as the minimum long-term target, and 32% as the minimum 2020 target, with provision for the Committee on Climate Change to make a prompt recommendation on appropriateness of the medium-term target at the earliest opportunity. We do not believe that the Bill should constrain the Committee from recommending a steeper reduction curve up to 2020 than that required to achieve 32%.

Why the carbon budget for the period including the year 2020 cannot exceed 32%

7. It is not clear to us why the Government have established the proposed range with an upper limit. In our view, one of the fundamental flaws of the current draft legislation is the undefined relationship between climate science and targets. This applies equally to the mid-term as well as the long-term target.
The rationale for a five-year budgetary period

8. We understand and have some sympathy with the Government’s view that the budgeting period should be longer than a year. In our view, there are arguments in favour of either a three-year or a five-year approach. Three years would allow alignment with UK fiscal planning, and would facilitate investment in new grant schemes and technologies, helping to balance the revenue derived from carbon-related fiscal measures with spending. It would also have the very great merit of being a period encompassed within the lifetime of one parliament, meaning that it would remain clearly the responsibility of a single Government to stay within budget.

9. A five year period, on the other hand, would allow streamlining with international commitments and trading schemes; and is likely to be particularly appealing to the present Government, which sees these mechanisms as central to tackling emissions at home and abroad. However, a five-year cycle is long enough for buck-passing between parliaments, leaving many climate change campaigners concerned that the Bill will not move us on substantially from the current situation, where mid-term targets have not produced a sense of urgency across Government and have been missed.

10. Hence, whilst we can see the logic of adopting a longer budget period, the RSPB believes that this proposal will only be acceptable if is accompanied by a series of clearly identified annual milestones, enabling people to understand annual performance against a proposed trajectory within the budget period.

Monitoring and early warning systems to ensure achievement of targets is on track

11. As stated above, it is imperative that we have in place a set of annual milestones demonstrating our proposed reduction trajectory, and a clear reporting requirement against these. This would improve both transparency and accountability.

Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non-compliance.

12. It will not be easy to ensure that successive Governments treat the targets established in the Climate Change Bill with urgency; however, placing these on a legal basis is an important first step. Ensuring absolute transparency of reporting, including annual reporting to Parliament against milestones, will also be essential. We also believe it important that individual departments and ministers, not just the Secretary of State for the Environment, should be given responsibility for cutting emissions within their sectors, with quantitative targets, and held to account if this does not happen.

13. On the matter of sanctions, we do not believe that a system of fines or censure for individual ministers is workable. The potential for judicial review currently enshrined in the Bill also offers a relatively weak and distant prospect of rebuke for a failing Government, particularly if the failure occurs over a five year budget period, and it can reasonably be argued that some of the responsibility for non-compliance lies with a previous administration.

14. One option that could be considered would be to require any over-shoot on the target to be paid for by Government through the purchase of Clean Development Mechanism (CDM) or Joint Implementation (JI) credits on the carbon market, for example at the rate of two credits per tonne of “overspend”. This would have the merit of promoting further carbon reductions—and would be similar, for example, to the requirement for firms to buy Renewables Obligations Credits (ROCs) to address any shortfall in meeting their own renewables obligation.

Carbon Budgeting

The facility—in any given budgetary period—to “borrow” emissions rights from a subsequent period, or to “bank” any “surplus” emissions reductions for use in the next budgetary period

15. We think it is reasonable to bank and borrow up to the limits prescribed in the Bill, but only where there is minimal scope for adjustment of the actual carbon budget in a given period (see below).

The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources

16. We recognise that the UK economy is already linked to international trading schemes through the Kyoto protocol and the EU Emissions Trading Scheme, and that has indicated its interest in supporting linked schemes in future. In theory, we support this approach; a tonne of carbon is equivalent wherever it is emitted, and securing cost-effective savings is clearly desirable.

17. However, we have grave reservations about the ability of the international carbon market to deliver the reductions needed now; and we also believe that the credibility of the Government’s position on the international stage, relies on the UK’s ability to make cuts in domestic emissions.
18. Our reservations about the efficacy of the market are two-fold. Firstly, the caps in place under the Kyoto protocol and the ETS, are demonstrably inadequate to drive the reductions needed to avoid dangerous climate change. Secondly, both trading schemes involve trading with “uncapped” players, through the JI and CDM mechanisms; such trading, unless strictly limited, also undermines the market’s ability to drive emission reductions.

19. We would therefore prefer Government to place limits on trading with international carbon markets where possible, until these markets have appropriate caps and are not significantly distorted by trade with uncapped players. Such limits must also ensure sufficient domestic effort to demonstrate to other international players that a developed economy has the will and capacity to decarbonise rapidly and in good faith.

The range and validity of changes in circumstances in which budgets can be subject to review and revision

20. In our view, there should be no provision for the revision of budgets once they have been set. We understand the need for a balance between certainty and flexibility in the Bill’s framework. However, we think that a five-year budget period, with a banking and borrowing facility, and the ability to purchase credits from abroad, is more than sufficient to deliver flexibility. The capacity to alter a budget allocation once it has been set sends a signal to other countries, to businesses and to citizens, that the environmental and social target at the heart of the Bill can be sacrificed for short-term economic or political gain. If, for any reason, long-term or mid-term targets are altered, such changes can be reflected, if necessary, in the budget period subsequent to that in which the changes are proposed and agreed.

The reporting procedure and Parliamentary accountability

21. On the whole, we welcome and support the proposed reporting procedure. In our view, however, the length of the proposed budget periods makes it particularly important that reporting should be against annual milestones. By this we mean, that in setting its budget for a five year period, the Government should indicate the cuts they envisage on an annual basis, and report progress against these indicative figures. Failure to achieve a milestone would not trigger penalties or force Governments into a specific course of action to address the shortfall; but it would enable parliament and the public to keep a clear track on performance.

Adaptation

22. In our view, the current provision is not adequate. We are committed to a certain amount of climate change as a result of historical emissions, and have an increasing amount of evidence about the impacts of that change. Government needs to take a lead in ensuring that certain key sectors are adapting to these impacts in an integrated and sustainable manner. Many of these sectors—biodiversity conservation, water supply and treatment, flood management, farming and forestry—are ones where Government has considerable direct influence, and must adapt its own policies to ensure that we minimise any damage resulting from climate change.

23. The RSPB is particularly concerned that a renewed investment will be required in wildlife protection and enhancement to prevent further declines in biodiversity, which is already under severe pressure from development, pollution, persecution and water shortages. Without intervention, leading scientists in the field of biodiversity conservation believe that over one third of land-based species on earth could be committed to extinction by 2050.

24. We will propose to Government that they strengthen the provisions in the Bill to include an obligation to bring forward a programme of action for adaptation, on a three-yearly basis. Three years in this context make more sense than five, since alignment with the CSR planning cycle is more relevant than compliance with international mitigation obligations. This programme should include measures for ensure sustainable and integrated adaptation to climate change across key sectors, including biodiversity; water resource and flood risks management; planning in the built environment; farming and forestry. We will ask the Government to include in the Bill an annual reporting requirement against its action programme, and to develop a set of headline indicators in order to measure progress. In the field of biodiversity, our view is that progress towards existing key targets—including Biodiversity Action Plan targets— are a firm basis for such reporting.

Committee on Climate Change

25. We welcome the establishment of the Committee, and are broadly supportive of the proposals for its composition and role, with a number of omissions/exceptions.

26. We believe that the Committee should have the role, in future, of advising on any proposed changes to mid and long-term targets in the Bill, based on an equitable share of the cuts necessary to avoid dangerous climate change. Appointments to the Committee should be scrutinised by an independent body, for example an appropriate Parliamentary Select Committee. At present, there is no requirement to include experts in
the field of environmental policy on the Committee. This seems perverse, given that climate change is the
most serious environmental issue of this and arguably any generation and will have huge impacts on natural
resources, including biodiversity. We wish to see this addressed, in part by the inclusion of members with
environmental expertise.

27. We are also concerned that sustainable development has not been included as one of the factors the
Committee must consider when making its decisions. The Committee’s advice could have significant
implications for biodiversity and other natural resources. For example, recommending a particular
trajectory for reductions that relies heavily on renewable energy technologies, including biofuels or onshore/
offshore wind has implications for the terrestrial and marine environments. These implications must be
considered alongside issues such as competitiveness and fuel poverty. The RSPB will be developing
proposals for the application of a sustainable development duty both on the Committee, and on the
Secretary of State in applying his duties under Section 6 of the Bill, to bring forward measures to stay within
the proposed carbon budget.

28. Finally, if a UK emissions reduction framework is delivered through the draft Climate Change Bill,
it will be imperative to ensure that the devolved countries are adequately represented on the Committee, and
are considered during its analysis and deliberations.

ENABLING POWERS

29. We are broadly supportive of the introduction of enabling powers to facilitate the creation of new
trading schemes. However, we are not convinced by the argument that these powers fill the gap in the
Government’s climate change armoury. We accept that fiscal measures can be introduced efficiently through
the Chancellor’s budget, and European regulation by means of the European Communities Act. It is not
clear to us, however, that there is an efficient vehicle for introducing new regulations at the domestic level
to tackle climate change, which may prove more cost effective in some cases than trading schemes. We will
be seeking more information from the Government about how to address this issue.

INTERNATIONAL IMPLICATIONS

30. The Climate Change Bill is the first of its kind in the world, and should be welcomed and celebrated as
a major step forward. We congratulate the Government on the Bill, and on the welcome focus on responsible
carbon budgeting as the best way of achieving manageable cuts, over time. We hope other nations will follow
the UK lead and adopt carbon budgeting as a mechanism to drive down emissions.

31. However, we are concerned that a number of its draft provisions could, if retained, undermine rather
than support the role of the UK as an international leader on climate change. In particular, the targets in
the Bill must better reflect our fair share of the global burden of emission reductions; there must be a stronger
emphasis on domestic effort over international trading; and the Bill must prevent targets and budget
allocations being undermined for short term political gain through amendment provisions.

RSPB
May 2007

Witnesses: Mr Martyn Williams, Senior Parliamentary Campaigner, Friends of the Earth and Ms Ruth
Davis, Head of Climate Change Policy, RSPB, gave evidence.

Q75 Chairman: We welcome from Friends of the Earth, Martyn Williams. Mr Williams, what
precisely is your position in the organisation?
Mr Williams: I am the Senior Parliamentary Campaigner for Friends of the Earth.

Q76 Chairman: And Ruth Davis, the Head of Climate Change Policy for the Royal Society for the
Protection of Birds. Both of you welcome in your
evidence having a legislative solution to this problem
and I am sure you heard the previous evidence
session with some of the reservations that witnesses
put forward about measurement targets, direction of
travel and particularly the interesting question of
sanction if things go wrong. Having heard that
critique and appraisal, are you still just as
enthusiastic, Mr Williams, about having a piece of
legislation or would you rather have plans that
worked?
Mr Williams: As the previous witnesses said, it is not
an either/or, it is both. Legislation, which nobody
then does anything about or introduces any policies
or plans is clearly pointless. We still welcome the fact
that there is a Bill and a Bill has been brought
forward and that Parliament and everybody who is
now involved in this consultation process has the
opportunity to make that Bill robust and to make
that Bill work, but we do not welcome all of the
words that are in this current Bill because of some of
the problems that previous witnesses outlined. The
biggest worry of all is the one that the Tyndall
Centre outlined and I was personally very pleased to
see this Committee beginning its whole evidence
session by looking at the science of what we need to
do about climate change. When we at Friends of the
Earth first started the whole process of thinking
about a climate change bill that is exactly where we
started. We thought: what is the challenge, what
does need to be done, what is the maximum temperature and concentration and therefore emissions we can afford and how can we frame a piece of legislation that gives us the framework to live within that? It is exactly right that you have begun your evidence sessions in the same way and it means following through on that and making sure that this Bill changes from what it is now, which is the right idea of a legal framework, to one which has the right numbers in it and the right sanctions and so on to make sure we have confidence in it as well.

Q77 Chairman: Okay. A brief word Ruth Davis on that line?

Ms Davis: I broadly agree with everything that Martyn says and it is too easy to dismiss the legal instruments and some of the discussion earlier was rather negative about the framework. The fact that we have a budgetary framework in legislation is a really genuine step forward and it gives us an opportunity to think about actual amounts of carbon going up into the atmosphere and manage policies accordingly in a way which has not happened previously. The framework and the exposure to public scrutiny and parliamentary scrutiny that come from having brought the Bill forward are very important.

Q78 Chairman: So you will be looking for legislation to underpin the target for farmland birds will you?

Ms Davis: I would be absolutely delighted. Is that an offer on the table?

Q79 Lynne Jones: Given the evidence we have just heard about the importance of the 2°C rise in temperature target, what is a more realistic target? You have said the 60% is not, so what are we looking at?

Mr Williams: We asked Tyndall to do that work for us. The fundamental thing is that is not the end point: it is about living within this budget. The budget they gave us was between 4.5 and 5 billion tonnes of carbon in the first half of this century. There are different lines on the graph that you can draw to live within that budget. The first seven years are drawn because, if you look through them, we have emitted that carbon. From hereon in you can make different assumptions. We cannot see any scenario whatsoever in which the 2050 target should be lower than an 80% cut. We cannot see any way in which you can live within the carbon budget which we have got with a lower target than 80%, unless you say something stupid like we could make a 60% cut tomorrow and live at that level for the rest of this 50-year period. The target has to be a minimum of 80% but really it is not that 2050 target which all parties— and I admit Friends of Earth and other NGOs— have made so much of in recent years. It is not the end target that matters; it is the shape of the line and the area beneath the curve.

Q80 Lynne Jones: In practical terms how likely is it that we could meet these kinds of targets? The RSPB is talking about a 3.5% annual reduction. We heard from Tyndall that the way we are going, we are looking at a 9% because of the lag. What sort of political instruments will we need to get anywhere near those kinds of high targets?

Mr Williams: Tyndall’s work actually arose from a report that we commissioned from them along with the Co-operative Bank and a very important finding of their work was not only that these cuts were much bigger than people had previously suggested, but they also were deliverable and were politically possible. Further work is needed to specify exactly what the methods are, but they look broadly across sectors to see what potential savings we could be making and found that the kind of cuts that we needed were available. It did need massive investment in renewables; it did need a much faster move towards making homes more energy efficient and towards encouraging people to drive less and use public transport, but even when they are driving, to use much greener and more efficient cars than we are using at the minute. Their finding was that this was not just a frightening number that we had to achieve, but also that it was possible to achieve them.

Ms Davis: The question is really what cost we are prepared to pay for this. It is not a question of practicality. The work that the Tyndall Centre have done, but you can go back further than that and look at work that the Carbon Trust have done previously, demonstrates the technologies and potential policies are there in place should we choose to make the political choices to take those forward. The most recent type of IPCC report just goes further to illustrate that on a global scale. There is no huge technology gap which makes it impossible for us to get to where we need to be, but there is an unwillingness to pay effectively, either in terms of the political capital that it would cost to make certain decisions or in terms of the investment required to do it. When you ask whether it is practical for us to do it, it is practical in terms of it being practically physically possible. The question is much more whether it is likely to be politically acceptable and financially economically acceptable. Different question.

Q81 Lynne Jones: Are the Stern figures, the proportion of GDP, at £1.5 billion a year? What are we talking about? Are the Stern figures acceptable from your perspective in terms of reaching the targets?

Mr Williams: Broadly Stern reflected quite a lot of other pieces of work that were being done at a similar time and obviously each one came out with a slightly different figure. The general message that it is affordable to tackle this problem on a global basis as well as on a UK basis and that not tackling it would cost us an awful lot more came out in virtually every report that came out. Whether it was a 2% versus 10% or a 5% versus 15% would vary from report to report.

Q82 Lynne Jones: But the low carbon building programme looks sort of peanuts relatively.
Mr Williams: It does rather.
Ms Davis: It is worth referring back to the IPCC report, which has a range of different GDP reduction figures quoted for tackling the problem. None of them, in my view, were unacceptable, given what is at stake and even at the higher end of those levels, you are looking at something up to a 2, 3, 4% reduction in GDP. Moreover, they do not take into account, in a lot of cases, the potential economic feedbacks associated with allowing ourselves to go much over the two- or three-degree limit. They may actually be rather high estimates of the likely impact on GDP, once that GDP itself has been affected by the impacts that are involved and which Stern did consider in slightly more detail.

Q83 Chairman: So change the targets in the Bill is your first and simple message and you go for 80%.
Mr Williams: A minimum of 80%. We would go for a requirement on the Bill, absolutely on the face of it. Whatever the target is now, it needs to be determined by the science. It needs to be held under review so that should the science say it is either more difficult or easier, that should be taken account of.

Q84 Chairman: Let me ask you this question. You are quite right to observe that we start from the science base. Science is always the subject of debate within the scientific community. In your judgment who should be the scientific body that sets the objective measure? Obviously we have the Carbon Committee who are setting budgets and there are mechanisms inside it, but they all have to draw off some basis of the science. Who is the safe bet?
Mr Williams: This is where the interface between the politics and science is interesting. The figures that Tyndall presented to you this morning and the work which they produced to you was entirely on the basis of what is the Earth’s evidence, your main line of concern is the impacts that are involved and which Stern did put forward their belief. Our belief is very clearly and it is a higher rise, this is also the point at which some of the more dangerous feedback mechanisms associated with climate change would be expected to kick off. It may be the case that it is very difficult to stop at the 3°C rise. Once you have reached that point, you could be defrosting bogs in Siberia or releasing methane hydrates from sea floor which would actually take you well beyond the 3°C and up to 4°C and 5°C and that is the concern. We believe in the 2°C and believe that the Government must therefore act appropriately in order to make sure we stick to it.

Q85 Patrick Hall: We are not far away, if we do not do things quickly, from a position of asking for 100% cut, which presumably is impossible, some people might say 80% or 90%. Actually 90% was recommended to you by Tyndall was it not from its research?
Mr Williams: Yes.

Q86 Patrick Hall: If people think that something is absolutely impossible, then they will not do their best, they will not attach credibility to it and will just give up. You have to arrive at quite a difficult balance here.
Mr Williams: Yes, it is, but it is delay that has got us to this position, is it not? It is fact that we did not actually make the cuts earlier on. The real difficulty, the nature of this cumulative curve, means that if we do nothing for 10 years, it does not mean we only have 40 years to meet our 50-years target, it means we have 40 years and we have already spent some of the money in the bank. You are absolutely right to say that the end point is rushing up on us twice as fast, but it is not simply getting closer, it is also getting more difficult with every year of delay.

Q87 Chairman: I want to move on to the question of the timescale in which we appraise the targets that are set. Already a fairly fearsome political debate is emerging between those who wish to see annual targets and the Government who seek a five-year target. In the RSPB’s evidence it says “In our view, there are arguments in favour of either a three-year or a five-year approach”.1 Looking at the Friends of the Earth’s evidence, your main line of concern is overlap on the five-year target between parliaments. We heard earlier a statistical analysis by the Energy Saving Trust which suggested that you could have tough annual reviews but at the same time have a roving target that would enable you to establish clearly a trend. Tyndall very kindly agreed that they would look further at this. Perhaps you could just explain your respective positions. Ruth Davis, could you explain why you equivocate between three or five?

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1 Ev 30 para 8.
**Ms Davis:** There are arguments in favour of both. The five-year budget period fits more neatly into international commitment periods and so if you do, as the current Government do, have a view that linking trading schemes is one of the key ways in which you are going to achieve your outcomes, then there are some convenient reasons for making sure that your domestic budgeting period is actually aligned to the budgeting periods that are operating within the ETS within a post-Kyoto regime.

**Q88 Chairman:** We do not know what is post-Kyoto yet, do we?

**Ms Davis:** Unlikely to be anything less than a five-year period would be generally the view that is emerging, but you are right of course. In favour of this three-year regime is the potential to link it to comprehensive spending review cycles and the very great merit that it does not then have such a considerable risk of spanning over two parliaments. You will find, if you look at the evidence, that actually our main focus in the debating round was probably rather similar to the Friends of the Earth’s focus, which is that neither of these are really acceptable and particularly the five-year period is not acceptable if there is not a series of annual milestones which allows you to hold Government accountable on an annual basis. Really the main thing that is missing from the budgetary framework as we see it at the moment is that ability to sustain annual accountability and that is where we would like to put the main thrust of our argument.

**Q89 Chairman:** Let us just stick on that. The Bill says that there has to be an annual report to Parliament, in other words there is something annual in the legislation. Is that not sufficient for your purpose?

**Ms Davis:** No, it is not and for the quite subtle but still important reason that with a five-year budget period, if the Government of the day have not actually established in people’s minds what its intended trajectory is, it is possible for them to report at the end of the year that emissions have gone down insufficiently, or may even have gone up, yet because there is no clear milestone against which to judge such an outcome, the argument could be put forward that actually that is not a problem, because it would be made up at some point in the future during year three, four or five. The point about having that annual milestone is that we wish to be able to see, as the public and I would assume as Parliament, in a relatively straightforward way what the Government were intending to achieve during that year and what it actually achieved and where the gap is; that then gives you the opportunity to argue strongly for an adjustment of policy to address the gap.

**Q90 Chairman:** Statistically, if you have discrete annual periods, it is going to take a number of those discrete annual periods, is it not, to work out whether you are on or off the trend direction that you want to go? It is a bit like the Chancellor with his annual Budgets trying to steer the United Kingdom economy along its so-called trend rate of growth.

**Ms Davis:** There is a certain amount of truth in that, but actually, if you look back at the last five years or so of reporting against our failure to manage our CO₂ emissions in particular, it would be possible for a single year to correlate that with changes in fuel price or with winter temperatures or whatever. Even where that is the case, even where one can see that correlation—and you may argue that has nothing to do with the trend—because of the nature of the carbon budgeting process, because you are talking about the total amount of carbon actually under the line, the actual amount emitted, it does not really matter a hoot whether the reason you failed was because of a cold winter or because of a change in the fuel price, you are still absolutely under an obligation to redress that during the following year. If you have that annual reporting mechanism, it gives you the opportunity actually then to be able to put in process policies to adjust what has happened and it also gives you an opportunity to explain why there has been a failure. There may be a year in which you can point to an adjustment in fuel prices and that is why you failed; there may be a year in which you cannot point either to a cold winter or an adjustment in fuel prices.

**Q91 Chairman:** I come back to your evidence. What you say is “In our view, there are arguments in favour of either a three-year or a five-year approach”. Which one do you want?

**Ms Davis:** I would probably personally prefer the five-year budget period with those absolute guarantees of annual milestones, but I repeat my point from the beginning of the conversation, that actually it is the annual accountability which is the thing which is most seriously missing from the Bill at the moment.

**Q92 Chairman:** Just to be very precise on this, because I am going to ask Mr Williams to lay down his position with some clarity on this as well, what you are saying is that when you have annual accountability, let us say you go for the five-year target, you would break that down to what you should be in years one, two and three and if at the end of year one you were not on track, then you would want a programme of action. In other words, the Secretary of State, having reported to Parliament on the annual position, shall then come forward with a series of measures to ensure that he stays on track or something like that.

**Ms Davis:** How else are we to make sure we are actually going to stay within our five-year budget?

**Q93 Chairman:** That is missing from the Bill at the moment in your judgment?

**Ms Davis:** Absolutely.

**Mr Williams:** We come to very similar conclusions. It may help to explain the thinking we had when we first started coming up with the idea of a climate change bill, which was that there is a challenge to reconcile the inevitable variability from year to year of emissions. They are never going to fall in a dead straight line. We are all drawing these straight lines on graphs or curves on graphs but they will not go
like that, they will wiggle around. We know that. Somehow we have to balance the flexibility to allow those little wiggles along with the really tough and rigorous steer to keep the Government heading in a downward trim direction, even if every year is not quite the same. When we brought forward our proposal and drafted our first climate change bill, which was presented by Michael Meacher and various other MPs, we set a straight annual target, but we had a fairly flexible regime for what happened if the target was breached. It was not, if the target is breached the Secretary of State is banged up in the Tower immediately or anything like that. It was a very straightforward thing which said that if you were to breach the target by a small amount the Secretary of State would have to report on what he was going to do. If it were a larger amount, we would have given new powers to committees such as this one to propose policies to get us back on track and require the House of Commons to vote on it. If it were an even larger amount, we would also have given this Committee powers to censure the Secretary of State. The idea was not that the target would be met every year, but that MPs would be able to interpret the level of miss or the level of hit in the target and react accordingly and give Parliament the powers to do it. We could press on banging away with that, but we also see the carbon budget as a very good concept. The whole discussion with Tyndall showed how it is the budget that matters, not any particular point within it. We think it is therefore a useful tool, but it has this crucial flaw, that it is going to be the responsibility of two parliaments in nearly every case and I am afraid back passing and everything else are things we would expect to arise. We put this to ministers and we have raised this in public meetings with them and their usual response has been to say that if they set a carbon reduction target which makes a 10% reduction over a five-year period, then everyone will know that there is supposed to be a 2% cut each year. To an extent that is true and the further argument therefore is that the Committee will assume it should be a 2% cut each year and will judge the Government on the basis of that. That then leaves the additional argument for the Government, when the Committee reports that this 2% per year target has not been reached, to say they were not actually trying to do that, they were not doing anything this year and they are going to 3% next year and the year after to make up for it. We would just like to reduce the wiggle room for ministers and we think it is easier for the Committee to hold a minister to account for what they said they would deliver rather than to try to second guess what the minister is planning to deliver and then hold him to account on that.

Q94 Chairman: When you talked about what they were trying to do, in terms of the gift of the Government, what can it do? It can negotiate within the European Union for certain caps within the Emissions Trading Scheme. It cannot tell motorists to stop driving. It can send economic signals, but unless it takes draconian legislative powers to restrict what individuals do and it has tried with the Climate Change Levy to make some changes in the industrial/commercial sector, I suppose there are some limits when the Government say this is what they want to do as to what they actually can do.

Mr Williams: The implication of the question is that therefore the annual target is not valid. I would say it makes it more valid. It does mean that in order to persuade motorists to drive cars that are more efficient you need to come up with a set of policies which tries to encourage them to buy the more efficient cars rather than the less efficient cars, but if you are relying on things like tax signals, there is a level of imprecision as to how well that will work. So you need to come back the next year to see whether it has started to work or whether you need to turn the volume of that policy up or turn it down. The Government could organise a programme, as they have done in Germany, where they are working their way through the housing stock, insulating, bringing up to very high energy standards, a proportion of the buildings each year. They can start off doing one million homes a year, but if they found after years one, two and three that was not delivering adequate savings and they would still be missing their annual targets, then they would have to increase that to 1.5 million homes a year or think of something to go on top of it. It is very much like the Budget. It is not that the Chancellor does it in a very precise way each year or that every single prediction he makes comes true and he takes in exactly the amount of tax he predicted. It is that every year he reviews how much came in and how much he spent and whether there was an overspend here or an under collection there and then adjusts the policies for the following reasons to try to get back on track. We do not have that at the minute with climate change policy.

Q95 Chairman: But he does have the three-year comprehensive spending review which has a pretty major effect on some of what you have just described.

Mr Williams: That would be the argument for going back to a three-year carbon budget, because then you would have those two things aligned.

Q96 Chairman: To be clear on where you stand on this, do you favour something like a three-year budget, but with some tough annual reporting and action statements being enshrined in the Bill?

Mr Williams: Personally I prefer the five-year budget. What worries me about moving to a three-year budget is that the Government would then look for further flexibility within the budget. The five-year budget has the capacity to borrow from the future budget period if things are not looking good and it is a fairly well restricted facility where they can only borrow 1% in a future budget period. The suspicion is that if Members of Parliament argue strongly, or anybody argues strongly, for a three-year budget, they would want to borrow 3% of a future budget in order to give them more flexibility. What might look on the surface like a more robust system would actually be more flexible and more difficult to understand. The five-year budget works
Q97 Lynne Jones: Tell us about sanctions then, if they miss the targets. You are critical of the judicial review option and want to see some look ahead as to whether they are meeting the targets and some sanction imposed before on the basis of what is likely to happen. Can you tell us how that would work?

Mr Williams: For a start there is a sense in which this is a management programme framework. It is not about seeing who fails and then throwing some sort of punishment at them: it is about making sure we can spot early when things are going wrong and hold Government to account and make them take a series of steps which gets us back on track essentially. What is missing from the Bill is any ability to do that in advance. At the minute, when you miss a budget period you find out after you have missed the budget period. You had some discussion earlier about the delay in reporting which can make that quite some time after missing a budget period. Therefore any judicial review is really just saying you failed. I cannot see the point in that. There is scope for judicial review and probably the parliamentary assessment of plans needs to come beforehand. The Committee should have a forward-looking job as well, where it looks at the policies which are available.

Q98 Lynne Jones: Are you talking about the Carbon Committee?

Mr Williams: The Carbon Committee should have the ability to project what carbon emissions are likely to occur from the Government plans and say whether they are sufficient or not to meet the budgets which have been laid out and their report and the Government’s response to their report ought to be approved by Parliament. If the Carbon Committee says that your insulating one million homes a year needs to be extended to one and a half when the Government decides not to do it, Parliament should get a vote on whether or not to accept the Government’s refusal to do that.

Ms Davis: This is a Friends of the Earth idea which I am only becoming familiar with because of sharing a platform with Martyn, but it is an absolutely excellent one. I also think it would work to overcome the optimism bias of some government current projections about their policies, which has been fairly repeatedly exposed over the course of a number of years. The Committee having a chance to scrutinise promises and redress that optimism bias would help us all with more intelligent policymaking so it is a sensible plan.

Q99 Lynne Jones: At the moment the mechanism would be that the Carbon Committee makes a recommendation and the Government put their proposals to Parliament. You are saying that instead of the Government putting proposals to Parliament the Carbon Committee’s proposals should be put direct to Parliament and voted on by Parliament rather than through the Government.

Mr Williams: No, I am sorry. That is not what I meant to say. I think I would probably be fairly happy with that, but that was not what I intended to say.

Q100 Lynne Jones: Once it is from the Government the Government will then decide what it is going to accept and what it is not and then it will whip the vote in terms of what they propose, whereas if this is an independent committee which has made a recommendation and put that to Parliament, it will be much more difficult to whip it without Parliament being seen to be just doing the Government’s bidding rather than what an independent adviser has recommended.

Mr Williams: You have convinced me. It is true that there is a challenge for the way in which Parliament will have to deal with this Bill in a way, is there not, because if people are seen to be missing targets then something needs to be done about it? As far as the judicial review comes in, first of all Parliament ought to be approving and disapproving of the Government’s responses to the Committee, but there could be a route through that where you leave the government bit out. Also, if the Committee has recommended a particular course of action is necessary and the Government decide to ignore the Committee’s advice and that advice is well founded in science and well researched and has real weight, then it may be possible for a group like Friends of the Earth to bring a judicial review against the minister who decides to ignore that advice. That decision to ignore the advice or to do something different to what he had been advised may be reviewable in the courts. The advantage of that is, a bit like Parliament as well, that you have two ways of keeping the Government to the advice they are given, that it happens in advance so you are not just waiting for failure. The disadvantage is that bringing in such a review is prohibitively expensive and very difficult to do. It can be successful. We saw Greenpeace successful recently in reviewing the nuclear consultation decision and a court finding that was not acceptable and telling the Government it had to do it again. In a similar way it could be possible for an NGO in the future to bring a judicial review which found that climate change policy was not up to the job and the Government would have to go back and do it again. The advantage is that that would happen in advance rather than waiting until all the targets had been missed and then saying it was a bit late.

Q101 Chairman: You advocated a rather novel procedure in your evidence where you actually suggested that if we missed the target then the Government should go out and buy the deficit.

Ms Davis: That was us and it was mildly tongue in cheek. I was trying to investigate what mechanisms there are currently available for ensuring that Government meets its own environmental obligations. The most effective one, interestingly enough, is the sanction which is imposed when it infringes EU legislation, which is a fine. On the whole Government do not like paying those fines
and tend to respond rather rapidly to the prospect of infraction procedures. The problem with the proposal of going out and buying credits is that the perception would be that you had bought your way out of the problem. The way round that, if you were going to try to turn it into a financial penalty, would be to try to set the level at which you were buying those credits so punitively high that no Government would want to find itself in a position where it was paying that amount of money. It has potential as an idea, depending on how high you set that level. What I am not proposing is that people just go out and buy carbon credits in the market according to the price they are now because Government will probably do that anyway as one way of seeing that it can meet its own targets within the five-year period.

Ms Davis: I would not agree with the extent of the proposition that Kevin was putting forward in the evidence earlier, for the reasons which members of the Committee pointed out. You may have to use a whole range of different instruments to affect a whole range of different sectors in order to be able to achieve your outcomes and they have very clear social and economic impacts according to which one you choose at any given moment, which affects all sorts of things other than climate change policy. It seems to me that it has to remain within the gift of Government to decide how they choose to meet those targets because of the particular social implications of going down that route. That does leave a difficult question then as to how you achieve a sensible balance between a committee with teeth and one which actually becomes a de facto non-governmental, non-elected policymaking body with all sorts of implications. Things could be done to make it a lot stronger than it is now. I do think that the representation is quite bizarre. There is nobody with any experience of environmental policy, for example, which just seems extraordinary to me. I also think some of the ideas you were discussing with Martyn in relation to the ability of the Committee to scrutinise proposals that Government are putting forward and then to bring that scrutiny to Parliament would be really well worth investigating. I do think probably that the distinction between setting the targets and setting the budget and critiquing the policies versus actually making policies has to be maintained and the policymaking still has to lie with Government and Parliament.

Mr Williams: I would probably agree. I would say that the Committee should most certainly have the power. It is bizarre that the Committee gets to advise on how to set all the budgets and how to set the trajectory to the 2050 target, but it is not allowed to say whether the 2050 target is the right one or not. To me that seems quite bizarre. It could do that absolutely expertly and we could get to the 60% cut and find that was nowhere near enough and they would never have had a chance to say that. It is crazy.

Chairman: With the Monetary Policy Committee it is the Chancellor who sets the target for inflation.

Mr Williams: Yes, but this is supposed to be the expert committee which advises Government on its climate change policy and they cannot advise it on the absolute number one, most central aspect of it.
Q108 Patrick Hall: May I come in on that point about the target which must not be moved that would be on the face of the Bill, whereas the Government are saying five-year budgets should be built in to take on board new science or understanding? How would the two organisations represented here today amend the Bill then in order to address that key point?

Ms Davis: The first thing we would propose is that what is enshrined on the face of the Bill is not just a minimum target but is the overall environmental aim of trying to stay within the two-degree safety limit and operating under principles of global equity and that those two things should be established as the actual environmental purpose of the Bill. The purpose is not to achieve an 80% cut: the purpose is to avoid dangerous climate change or at least for us to pay our fair share in the world of dangerous climate change. That would help to start off with. Tending to like belt and braces, as NGOs do, we would probably also be happy to see a first bite at the target, at the number, at the figure on the face of the Bill, because we would not like to see it at this stage slip below an 80% level. We cannot see any evidence that there is any reason why it should and that is broadly in accordance with those principles of global equity, then also to amend the Bill to enable the Committee on Climate Change to have the capacity to adjust that end-point target according to the principles which have been established on the face of the Bill in relation to two degrees and global equity.

Q109 Patrick Hall: One point we have not yet raised is to do with the elements of flexibility within the five-year budget period. I believe the RSPB said there should not be flexibility apart from that which is already proposed, that is to say the ability to bank and borrow and whatever, but also the ability to purchase credits from overseas which you raised earlier on with the other people giving evidence. What is the view of both of you on that? Should there be an ability to purchase credits overseas or should that be limited to within the EU, as the Tyndall Centre representative Dr Anderson suggested, or should there be a cap on that which the Energy Saving Trust proposes?

Ms Davis: We would very much like to see restrictions on the amount of trading and overseas credits. We touched on some of the reasons earlier but there are two main reasons from our point of view: the first is that actually, as it stands at the moment, the two trading mechanisms, the trading within the EU ETS and trading within the flexibility mechanisms which are allowed within Kyoto, buying CDM or JI credits, are both ones where there is no cap, capable of ensuring that we would actually achieve our two-degree and global equity environmental end goals. There is obviously a cap on the ETS, but as it stands at the moment it is wholly inadequate to drive the kinds of changes we need. In principle we support the idea of cap and trade schemes as a way of achieving sensible and cost-effective reductions in carbon, but when you have trading schemes which are effectively trade rather than cap and trade schemes there is absolutely no guarantee of a good environmental outcome. In that context we would like to see some kind of restriction, but we do obviously recognise the difficulties that members of the Committee raised earlier about the fact that we obviously have a substantial amount of our power-intensive industries and major power generators already brought into the EU ETS. In that context we cannot undo that, nor should we be seeking to do so, and there will inevitably be a certain amount of trading. It is worth bearing in mind that when individual countries put forward their national allocation plans to the European Trading Scheme they themselves make an offer as to how much of that they expect to be achieved through international credits. It is not as though we do not have some ability to restrict that as a country: we do. It is slightly fuzzy at the edges, because if we are then trading in credits, and many other countries in the EU have very high acceptability levels for international credits, that makes that tricky, but at the moment we are already suggesting our national allocation plan would be relatively low in international credits. We would like to see that principle maintained in the domestic accounting and the amount of credits used has to be absolutely clearly delineated in the reporting. That is the other thing: it must be completely obvious to people how much of this has been the result of domestic efforts and how much of it is has been the result of effectively buying in pardons.

Q110 Patrick Hall: Is that your position?

Mr Williams: Very similar position; certainly all the same worries. We thought of three ways of potentially restricting that trading to try to avoid too much leakage from this carbon budget into other countries and other systems. One would simply be to say that certain trading schemes are not robust enough to be allowed at all; we would just rule them out, simple as that, and have others which were judged as being robust enough to be allowed. So it may be that the ETS was an allowable scheme but some of the others were not. Another would be just to set a crude limit and say you cannot trade more than 5 or 6 or 7 or 10% of the target. If 90% has to be delivered at home 10% can be traded. This does not necessarily stop the leakage, but at least it restricts it to a fairly small proportion of the budget. Then the final way would be to be slightly more sophisticated and to try to make some analysis of
how leaky different trading schemes were and to try to take account of that almost in an exchange rate. If you know that saving one tonne of carbon in this country through some scheme operating in Birmingham and then deciding not to do that and buying a saving in from Bangalore, which seems to be David Miliband’s favourite place for trading from, and if you know that Bangalore scheme is leaky in some way and actually you need to buy two or three or four tonnes there in order to make up for the one tonne you were going to save in Birmingham, then you could have a kind of exchange rate. I believe that as you have this Committee on Climate Change set up to be the experts, they are the perfect people to advise on this, but we do need something to restrict it so this budget does not become meaningless and entirely bought overseas.

Q111 Chairman: Would you like to say a word or two about the Bill’s deficiencies on the subject of adaptation? I think the RSPB’s evidence commented on that.

Ms Davis: We obviously recognise and welcome the need to focus on the mitigation problem but we are also in a situation now where we have bought into a certain amount of climate change and we increasingly understand what the impacts of that are likely to be, even if that is just the two degrees which we would all like to see it restricted at. We have the greatest weight of evidence about impacts on the natural world and potential impacts on natural resources and the livelihoods of many of the poorest people in the world who have the least ability to be able to respond to that. We think the Climate Change Bill provides an opportunity for a Government to do two things: one is to assess an integrated programme of action across the sectors which are going to be most affected in the UK and the second is to embed some principles along parallel lines to the principle of global equity, which would underpin funding for adaptation to protect natural resources, eco-systems and people.

Q112 Chairman: This is a bit woolly. In your evidence it says “We will propose to Government that they strengthen the provisions in the Bill to include an obligation to bring forward a programme of action for adaptation, on a three-year basis”.2

Ms Davis: It is quite difficult at this stage to try to propose the individual measures within the Bill. What we are not proposing and which I do not think would be appropriate, would be to have a huge extra packing case full of individual actions that we propose Government should take as part of its adaptation programme.

Q113 Chairman: Do you want a national adaptation committee built into the Bill?

Ms Davis: No, I do not think so. A programme of action which operated under certain clear principles that might be, for example, making sure that you looked at sustainable development across a range of different sectors, that you protected natural resources and the natural environment whilst you were bringing forward that programme, and that you protected those people who were least able to respond financially to the problems of climate change impacts, would create the kind of structure we need for Government to start thinking about this.

Q114 Chairman: The reason I am a bit cynical about this is that every year we comment on Defra’s Annual Report and the PSA targets are couched in the kind of language you are talking about and we have the devil’s own job pinning down the Government to understand whether they are getting anywhere near achieving some of this.

Ms Davis: That is a very good point. The evidence also suggests that one of the things which would be needed to be done very early on in that process would be to try to identify what the actual ends as opposed to means targets should be. It would be inappropriate for the RSPB to be proposing end targets for an adaptation programme for flood risk management, for example, in the evidence we put forward to the Committee. I am not personally qualified to do that and I do not necessarily think other people within my organisation are. I could certainly propose some end points in terms of adaptation in relation to biodiversity. Whether or not it is actually appropriate to try to pin those into the Bill at this stage is another question. More important is to get a structure and to get an obligation on Government to identify what it thinks those end points should be. For example, in the case of biodiversity, I would have said that we would be looking for some kind of assurance that Government will take the action necessary to deliver the 2010 target for halting the loss of biodiversity in the face of climate change. I feel qualified to make some sort of statement about that in relation to biodiversity; I do not in relation to all of the other sectors which are involved there. Please do not take that as a suggestion that I do not think there should be end targets. It is simply that I do not think it is necessarily my job to try to invent all those across all the relevant sectors. I am sure the NFU would not thank me if I started to try.

Q115 Mr Williams: You talked about environmental protection, but that is different from adaptation, is it not? I think it is Natural England who have proposed environmental corridors so that species can move to areas which are more suited to them. Do you have any ideas about that?

Ms Davis: There is some quite disputed science around corridors. This has been a fashionable slang word which has been used in the nature conservation world for a very long time, but if you look at their impact on different taxa they can quite easily become migration routes for invasive species and they can also act as predator traps for certain species moving along them. Birds tend not to use corridors, they tend to move more effectively through the landscape if there is a series of habitat features which provides them with food and shelter actually embedded in the landscape. We try to talk about permeable

2 Ev 31 para 24.
Q116 Mr Williams: It seems to me that evolution takes place as a result of the changes in the environment. Where they are too quick extinction takes place rather than evolution. Do we have any idea how quickly evolution can take place in the face of rapid change of the environment?

Ms Davis: Yes, we do have some ideas and the rate of change varies very dramatically. In the right circumstances, for example where you have glacial retreat down a mountain, you can see in the palaeological record that trees will track the snowline almost year for year; and that at time, responses have been terribly rapid in those contexts, which is a sign of hope. In other situations, it has been obvious that there has been some kind of seismic shift which has left not just a lag in terms of one environment turning into another, but also no clear geographical pathway for things to move along. In these cases, you can see extinctions as a result of fairly rapid change. The biggest problem we have at the moment, is that we are looking at a massively fragmented landscape in comparison with the one where most of these changes have happened previously, which means I am afraid that we have a lot of reasons to be pessimistic about the response of biodiversity to climate change. That is one of the core reasons for looking for additional investment in trying to allow some of those species to respond.

Q117 Chairman: I want to draw our questioning to a conclusion by seeking your observations in the context of including matters connected with shipping and aviation emissions at a later stage in the Bill as to the legislative route by which one would have to approach that, namely the use of enabling powers, whether you would be content for those aspects to be added in later. What do you think about that?

Mr Williams: No. There is just no sense to it. There is sense to having a clause in the Bill which says that when an international agreement is reached which allocates those aviation emissions to countries in a particular way that the Bill is amended so that we use the internationally agreed way of doing it consistent with other countries. At the moment there is no such international agreement and there is not really very much prospect of one arising any time particularly soon. Negotiations are thoroughly stalled and blocked by some fairly heavily vested interests who just do not want the issue discussed. It is something of a myth to say that we cannot allocate these emissions from aviation and shipping to the UK carbon account, as it is called in the Bill, because we already do it. We actually already report on the emissions from what are known as bunker fuels for international aviation and shipping and we report them under the Kyoto Protocol every year. The difference is that they are reported as what is known as a memo item, so they do not form a part of our target, but every year we have to say what we have done to meet our target for domestic emissions and that our bunker emissions were as follows. We believe that, seeing we have the methodology and the thing is there, we should start using that right from day one in order to include carbon dioxide in this account and if that needs to be adjusted at some point in the future you can guarantee that there will be a smaller adjustment to our accounts than if we simply ignore it.

Q118 Chairman: Let me ask you a practical question. There has been quite a lot of discussion about mechanisms to deal with the aviation emissions, but virtually no discussion about how you deal with shipping emissions. What instruments exist for the UK Government to bear down on emissions from shipping?

Mr Williams: I am happy to answer that, but the reason it should be in the Bill is more fundamental than that. It is perfectly logically consistent, so you should not do anything to deal with shipping emissions and you should not do anything to allow aviation emissions to stop running at that tremendous rate. It is just that if you are going to hold that position, then you have to say that you are therefore going to bear down on households or cars or industry in the country in order to create the space for those emissions to grow. The reason for including it in the Bill is not simply because we should control those emissions, it is because without counting them it is a bit like being on a diet where you count your calories but you decide not to count calories from chocolate. It just will not work. There are various technologies for making shipping more efficient; it is really just the same as everything else. You can cut down on the amount of goods which are shipped around the world by buying and purchasing locally and using things which are more local to us, but there will always be some trade in goods and some ships travelling backwards and forwards and when you do transport things by ship, you should do it in the most efficient way possible.

Q119 Chairman: You have not actually answered my question. You have given me a nice little commentary about how you might have some strategy by adapting your supply-side route but an awful lot of rather old and dirty ships and cruising round the world chucking out as many emissions as aviation and it is the silent partner. I come back. You have ships going round the United Kingdom, ships going in and out. Apart from reducing the amount of shipping what practical things can you do to bear down on marine emissions?
Mr Williams: More efficient engines.

Q120 Chairman: How are you going to impose that?
Mr Williams: In the same way as we reached agreement to move from single hull tankers to double hull tankers when we decided internationally and globally—

Q121 Chairman: That was an International Maritime Organisation decision.
Mr Williams: And there is no reason why the International Maritime Organisation should not be—

Q122 Chairman: We did an inquiry into the question of the dismantling of ships and it was notoriously difficult to deal with the appalling environmental and human consequences of beached vessels in places like India and Bangladesh. In fairness the Government have written to this Committee and we posted the replies in public on a six-monthly basis to show that they are inching towards improvements in that area, but if the same pace of development were applied in emissions we would never get anywhere.
Mr Williams: I agree that if the same pace of development were applied to any of the aspects of challenging climate change we are not going to get anywhere. The way to do it is clear: the fact that it is difficult I accept. The fact that it should be included in the Bill and counted seems to me to be unanswerable. I do not dispute that making these changes will be difficult. The international nature of the problem makes it that bit more difficult than tackling it on our own.

Q123 Chairman: Just so we are clear, if the Government followed your advice, you made the point that in terms of the overall carbon budget, if you cannot shift it in one place, then other sectors are going to have to take a disproportionate share of the budget to keep us within our overall position.
Mr Williams: Yes.

Q124 Chairman: I should just be grateful for your observations on the practicalities of the smaller-scale emissions trading schemes which the Bill proposes but our previous two witnesses could not quite envisage where they might be applied. I do not say that critically because I cannot see either from the Bill. It sounds great but is it practical?
Mr Williams: It can be and it is being discussed. There are proposals under consultation at the minute which could work. The difficulty with this section of the Bill, these enabling powers, and with other sections of the Bill—and we discussed resources for the Committee and things like that—is that they are very vague in the Bill. It is powers for the Government to set up a scheme which frankly could be a good scheme or could be a bad scheme and we will not know until we see the scheme. It is useful that the powers are there to enable the Government to bring these things forward, but it is a bit difficult to comment on them in the meantime. The kind of sectors which could be included could be the public sector; you could include schools and hospitals. There is a lot of controversy around that. Do you want your schools and hospitals spending money on carbon trading or on educating kids and making people better? It could be done. You could also include supermarkets, a very big sector. You could impose a cap on supermarkets to cut their energy use every year but if Tesco’s want to cut by more and sell some permits to Sainsbury’s then fine, what is the problem with that? It is perfectly possible to bring forward very useful and helpful schemes under that section, but until we see the schemes it is by no means a blank cheque for anything that comes forward.
Ms Davis: That is right. There is scope; there has certainly been consideration of scope for surface transport emissions trading focused at the supply end. It is not that there is nowhere to go in terms of trading schemes. What I find mildly depressing about it is that the focus seems to be entirely on trading schemes and there are some situations in which some very straightforward simple environmental regulation would be more acceptable, it would be cheaper, it would be clear for everybody to understand and it would get you some carbon emission reductions faster.
Chairman: Perhaps you might drop us a little note some of your practical suggestions on that. One interesting thing which comes out is that there are still many questions that this Committee must put ultimately to the Secretary of State. If you were thinking of adding a little bit of information to us about the questions which we should ask, possibly making up for things we have not asked you now, but which you were geared up to tell us about, we should love to have those.

Q125 Patrick Hall: One point Mr Williams made whilst the Chairman was asking a question about shipping was a comment that we could trade less.
Mr Williams: Yes.

Q126 Patrick Hall: I want to explore that briefly. I thought that the consensus generally was that we can have economic growth and tackle climate change because much of the technology to do the tackling exists. Is it Friends of the Earth’s position that we cannot have economic growth and tackle climate change and therefore we should look forward to a permanent recession in order to deal with these things? Of course that is politically impossible and developing countries would not sign up to that.
Mr Williams: Trading less does not mean that we have less economic growth. What it means is that we buy apples from UK farmers rather than all our UK farmers sending their apples off to somewhere else and we buying all our apples in. If we ship all our apples to France and then buy all of our apples from France that is a huge amount of shipping but it does not actually mean any fewer apples are being eaten. It is those kinds of changes which could be made. Then there are enormous numbers of goods which are fabricated in various different countries and are moved from one place in one state to another place to be finished off to another place to be sold and often another place to be recycled once they are...
finished with. If you can start to make some of these processes slightly more local and make the purchasing on more of a local basis, then you do not need the transport. There is a difference between saying you do not need to transport everything around and you do not need to trade them.

Q127 Patrick Hall: Globalisation then is the enemy and we will not deal with global climate change unless we strike at the heart of more powerful economic forces that we call globalisation.

Mr Williams: If by globalisation you mean ever more energy-wasteful shipping of stuff round the world for no point, then yes, that is the enemy. That is not what I see as globalisation. Part of globalisation is taking a global view of tackling climate change and agreeing globally that we have a carbon budget to live within and we need to work out how we are going to do it. No, I see neither globalisation nor trade as being the enemy. They are both things which need to be controlled and we need to live within the environmental limits that we face.

Ms Davis: In the end this is not quite such a controversial proposition as in a way you are making it out to be. We have a Government which are spending, quite rightly, a lot of time thinking about sustainable patterns of consumption and production and that is what this is about. It does not just apply to climate change; it applies to a whole range of things. Unless we can come up with a model of human development which is not as wasteful of resources as the one we have at the moment, we are kind of stuffed. It is not a question of economic growth versus environmental limits; it is a question of finding reasonable ways of living within a resource-constrained environment.

Patrick Hall: Absolutely, but the message to developing countries is that if they cannot look to trade as a way of getting themselves out of poverty then they are simply not going to sign up to agreements on limiting carbon emissions. We have to watch the signals which are given out on this.

Chairman: Before we get too far away from the Bill may I thank you both very much indeed for your observations both today and in the evidence you sent us. I have asked for one or two other little thoughts from you and we would be very grateful for those. If in addition to that there is anything else you would like to draw to the Committee’s attention, please feel free to do so. Thank you very much for coming before us today.
Wednesday 16 May 2007

Members present

Mr Michael Jack, in the Chair

Mr Geoffrey Cox Mr Dan Rogerson
Mr David Drew Sir Peter Soulsby
Patrick Hall David Taylor
Lynne Jones Mr Roger Williams
David Lepper

Memorandum submitted by Climate Change Capital (CCB 09)

1. Introduction to the Authors

Climate Change Capital (CCC) is a specialist investment banking group that occupies a distinctive position. With access to a substantial and flexible capital base, we focus on businesses created or affected by the convergence of laws and policies on energy and the environment. Our dedicated team of 90 professionals located in London, Washington, Madrid and Beijing are experts in the fields of renewable energy, clean technology, biofuels and emissions reductions markets.

Rupert Edwards has been with CCC since January 2004 and is Managing Director and Head of Portfolio Management, Carbon Markets. Prior to CCC Rupert spent 14 years in financial markets at JP Morgan in London, where he held positions including head of the European Government Securities Trading Business. Rupert Edwards has an MSc in Environmental Technology (Distinction) from Imperial College, London and an MA in History from Trinity College, Cambridge.

2. The Climate Change Bill

2.1 CCC welcomes the Government’s proposed Climate Change Bill. It represents a significant step forward in efforts to create an economy-wide policy framework for delivering a low carbon economy. To date the UK’s CO2 budget has covered only part of the economy, and UK investors have had to rely on policy signals on the need to deliver emission reductions from UN and EU institutions that currently have not delivered certainty that carbon will have a value post-2012. While this is not surprising, since international negotiations can take time to reach a consensus, the lack of certainty over carbon prices post-2012 means investment in low carbon infrastructure both in the UK and in developing countries is being delayed.

2.2 While it is very likely that the UNFCCC’s Conference of the Parties will agree on the form of a successor to Kyoto by 2009, implementation of a UK framework for delivering emission reductions with regularly updated carbon budgets and emission reduction targets will mitigate investment risk by providing certainty that, at least in the UK, a carbon price will exist post-2012 and for the foreseeable future. The lack of a sunset clause in the Bill is important. Investment decisions are taken based on returns made over 15-25-year periods. Long-term signals on the price carbon will enable investors to make informed decisions about whether to invest in high or low carbon infrastructure in line with carbon targets set by Government.

2.3 CCC believes the creation of a Committee on Climate Change to advise on the nature of targets and budgets and assess government policy and progress towards meeting those targets is a significant move forwards in terms of depoliticising the issue of climate change. One of the barriers to date concerning the development of effective climate change-mitigating policies has been the gap between what climate change science indicates needs to change in the UK (and global) economy and the policy decisions, which carry political risk of unpopularity, politicians are prepared to take to make these changes. The introduction of a Committee on Climate Change to provide independent advice on the interface between science and policy will, we hope, act to remove some of the political controversy surrounding the UK’s approaches to reducing carbon emissions. In this way, Ministers—who will ultimately remain responsible for setting and meeting targets—will be provided with some “political cover” to make tough decisions on future policies.

2.4 Following on from this the proposal to include enabling powers to implement additional greenhouse gas emission trading schemes if required to meet carbon targets is a revolutionary new approach to climate change policy and one that will form a key pillar to the success of the proposed legislation in delivering the carbon targets. There is significant cross-party consensus on the need to tackle climate change and so we are hopeful that this key part of the Bill will be endorsed by the Scrutiny process. Without it, the potency of the Bill will be significantly weakened.
2.5 While in light of the findings of the Stern Review and 2007 IPCC reports, the proposed carbon targets of 60% CO\textsubscript{2} emission reductions by 2050, and an intermediate target of at least 26% reductions by 2020 are disappointing, it is recognised that the use of statutory domestic emission reduction targets represents new political territory and therefore establishing the Bill with these well-established targets in place may be a pragmatic first step. However the increased scale of the climate change problem confirmed even in the past few weeks by the IPCC indicates that more stringent targets will be required and so ideally these needs should be factored in to create targets greater than those proposed. At the very least the changing science indicates a strong need to retain the proposed option for Government to review these targets (on the advice of the Committee on Climate) in line with new scientific evidence or international policy changes. This will provide a lever to introduce more stringent targets as required.

Climate Change Capital

*May 2007*

**Memorandum submitted by the Carbon Trust (CCB 36)**

**PRE-LEGISLATIVE SCRUTINY OF THE DRAFT CLIMATE CHANGE BILL**

Thank you for this opportunity to contribute to the Committee’s examination of the Government’s Draft Climate Change Bill. The submission below addresses the Carbon Trust’s views on a number of aspects of the Bill that the Committee is considering in particular.

As you will be aware, the Carbon Trust is an independent company funded by Government and tasked with helping the UK move to a low carbon economy. We do this by working with business and the public sector to reduce carbon emissions, and by capturing the commercial opportunities associated with developing low carbon technologies.

**TARGETS**

The Bill sets long term targets for a 60% reduction in carbon dioxide emissions by 2050 and a 26–32% reduction by 2020. These goals are considerably lower targets than those called for by opposition parties and non-governmental organisations (NGOs) and the emerging science is indicating that more rapid and greater progress may be required. However the Committee on Climate Change will be able to review these targets in the light of available evidence and the latest science, and the Government should be open to act on its advice.

The Bill is designed to deliver certainty of required emissions reductions and increase the accountability of Government. We support the Bill’s proposal for five year carbon budgets. When combined with an independent annual review of performance and long-term targets, we believe that five year budgets will achieve these goals in a more flexible way than annual targets, and in addition this approach will also assist business delivery of these goals, for two reasons:

(a) Stability of policy and investment decisions: Five year budgets give firms a clear signal to inform investment decisions over the short and medium term. However, since the Government has time to react if it starts to under-perform over a five year budget cycle, it is more likely to make the right kind of long-term policy decisions to stimulate business investment to address these goals, than in an annual cycle where there could be an incentive to make more short-term sub-optimal policy decisions. Clear targets and stable policy will increase business confidence and allow them to make the required low carbon investment decisions.

(b) Flexibility and accountability: Five year cycles mean that fluctuating circumstances (such as weather and energy prices) will have less effect on Government’s performance versus these targets. The Bill also proposes other flexible features in the five year budget process, including banking, which allows in any given budgetary period the facility to “borrow” emissions rights from a subsequent period, or to “bank” any “surplus” emissions reductions for use in the next budgetary period. Banking will allow Government to develop stable policy responses and creates an incentive for it to go beyond a given budget target. In addition, the independent review process will still ensure that Government is held to account on an annual basis for its performance.

**CARBON BUDGETING**

The concept of banking ensures that there is always an incentive for the Government to over achieve against a current carbon budget, instead of waiting to take further action in a subsequent period. From an emissions perspective, it implies that there will still be certainty over the aggregate absolute amount of CO\textsubscript{2} that will be emitted over a series of cycles, so we are supportive of this feature.
The appropriate level of domestic action versus international purchase of carbon credits to meet domestic targets is another feature on which the Government will be given independent advice from the proposed Committee on Climate Change. The Committee will take due account of both the need for action based on climate change science as well as the potential impacts on the UK economy and the competitiveness of UK firms. We believe that stimulation of international abatement through Joint Implementation and Clean Development Mechanism has a role but needs to be balanced by true domestic action.

I have enclosed a copy of our recent report, Allocation and competitiveness in the EU Emissions Trading: Options for Phase II and beyond for your information. This outlines key issues and specific decisions required to ensure that the EU ETS provides an effective, efficient framework that protects the competitiveness of business in the UK and Europe, while providing clear and stable incentives to support low carbon investment, and generally addresses number 7 of the issues the Committee’s inquiry is exploring.

COMMITTEE ON CLIMATE CHANGE AND ENABLING POWERS

The introduction of a Committee on Climate Change to advise on targets and budgets while taking due account of a wide range of factors including environmental goals, competitiveness and impacts on the economy, creates a new level of independent objectivity in the process. The new enabling powers will also increase the Government’s ability to introduce new policy instruments such as cap and trade and trade-based obligation schemes and as such we see this as a very positive inclusion in the Bill. I have also enclosed a copy of our publication, The UK Climate Change Programme: Potential evolution for business and the public sector, which makes the case for a new mandatory trading scheme for large, less energy intensive organisations that fall outside the EU ETS. The Government have taken this option forward in the form of the proposed commitment on energy performance, which we would support as an example of an instrument that could be pushed forward using the new enabling powers.

GENERAL

One potential omission from the Bill is the exclusion of other greenhouse gases (GHGs) in the target and budget setting process. Because CO₂ comprises 85% of the UK’s total GHGs it makes sense for the Government to first focus efforts and discussion in this area. There has been a significant reduction in other GHGs since 1990 with no consensus on further achievable cuts; this should be reviewed in due course.

We also caution against assuming that the establishment of carbon budgets and the requirement to set these three cycles ahead solves the problem of investment security for companies, for two reasons. First is that for some investments, even 15 years may be insufficient to support strategic investments. More seriously, it is unrealistic to expect most investors to be able to translate goals expressed in terms of national quantity targets, covering all sectors, into financially relevant indicators (notably, carbon prices) for their particular product. The Draft Climate Change Bill, as it stands, thus does not in itself solve the business problem of investor confidence.

The Carbon Trust

May 2007


Q128 Chairman: Welcome to our second evidence session on the Draft Climate Change Bill and for the record we formally welcome Rupert Edwards, the Managing Director and Head of Portfolio Management of Carbon Markets for Climate Change Capital, who has just been trying to initiate the Committee into an early understanding of how the carbon market works; we are still in the infants class on understanding it, but you made a good effort and we are very grateful to you. From the Carbon Trust we welcome Professor Michael Grubb, their Chief Economist and Mr James Wilde, their Director of Insights. How good is your crystal ball, Mr Wilde, because we are all interested to know whether you think this Bill is going to be effective or not, because I notice from the evidence that you very kindly sent, when we are looking at the question of the targets you say in your evidence to us: “The Bill sets long term targets for a 60% reduction in carbon dioxide emissions by 2050 and 26–32% reduction by 2020. These goals are considerably lower targets than those called for by opposition parties and non-governmental organisations . . .”* It is a bit of a cop-out really; what do you think about the target, is 60% the right number or not?

Mr Wilde: The precise debate around whether the number should be 60 to 80% for 2050 and the precise trajectory as to how we get there, whether we have a near trajectory or we have a lot of early action, is a specific question for the Committee on Climate Change. They can review available evidence based on the science of climate change and the need to reduce emissions, and also the impact on our economy and the competitiveness of our firms.

* Ev 45. para 3.
Q129 Chairman: The reason I asked that question is that a number of our witnesses and indeed contributors have been a little bolder; they have put the argument that scientific evidence exists already—never mind about changes that might come—to say that 60% is the wrong number and another number should be substituted, a number bigger than 60%. You are in the carbon business, what do you think?

Professor Grubb: If you would like me to add, there is still quite a lot we do not know. We know enough to be setting targets, we know we need to set targets right out to mid-century to give a good steer but the exact trade-off between what is doable economically and politically and in terms of getting society’s buy-in to potentially quite substantial changes and the exact severity of impacts we are still going to learn about more as we go forward. I personally think that a target phrased as “at least 60%” is a perfectly reasonable position to take at present, it should not be phrased so as to rule out the possibility of strengthening; I also think from my earlier background in international affairs it is questionable whether we would be able to tie the UK down lock, stock and barrel to something for the next four to five decades when we have got ongoing global negotiations about how much others were willing to do as well.

Q130 Chairman: The reason I asked that question is that we are now running behind the simple linear extrapolation of the 1994 to 2050 60%, 1% a year, neat sort of figure, and the suggestion that others who, for example, advocated 80%, they have said that there is more evidence around to suggest that a higher number like that should be the right number because, if you like, the global warming effects are worse than we had anticipated, but you are sort of saying it is all right to start off with 60 at least and give you a bit of wiggle room and take into account the economic impact. One might say that is a slightly wishy-washy position to be in.

Professor Grubb: Actually I would argue the opposite. The key thing is what actions does this Bill engender and what actions does it engender now and over the next few years, and from some many years of observing target-setting practices in many governments, if one is falling behind on existing targets calling very shrilly to tighten the far out target is not a solution, if we are already struggling to meet a credible trajectory towards 60% and saying it should be 80% is not going to actually solve that problem—it might possibly create risks of devaluing the credibility of the actual commitment.

Q131 Chairman: Do we really need this Bill? In other words, if you had some credible policies, as you have indicated, that would actually deliver on what we are supposed to be doing at the moment, do we actually need a Bill?

Mr Wilde: There is a place for this Bill because it is going to create certainty over the aggregate emissions reductions that the UK expects or targets to achieve, and it also increases accountability for Government. That is important for two reasons. The first is that the five-year budget cycles that have been introduced will enable Government to set sensible, long term policies. If they are not on track within a given five year budget cycle they do not need to rush in new policies to get back on track, they can stick with sensible long term policies. Also, the system that has been introduced creates some level of certainty for businesses so that they can start planning the types of investments they need to make over the medium and long term. The flexibility and accountability that is within this scheme is also sensible, so it means that the Government are held to account, which is absolutely right, with the independent Committee on Climate Change playing an important part in that, but it is done in a flexible way so that over those five year budget cycles it takes into account adjustments in weather and in energy prices and, with the flexibility around borrowing and banking, it all makes for a sensible way to hold the Government to account. Really this is all about making sure that the Government set the right set of long term policies that are going to drive the right types of actions, both in terms of developing low carbon technologies, the right types of investment decisions and the right types of behavioural change so that we make a transition to a low carbon economy.

Q132 Sir Peter Soulsby: Let me just follow that up because one of the major criticisms that we have heard from others of the Bill has been the argument that the five-year budgetary cycle is too long. Do I take it from what you are saying that you actually would reject those arguments, you actually think that the way the Government is approaching it is sensible?

Mr Wilde: We think it is entirely sensible and we support the five-year budget cycle.

Q133 Sir Peter Soulsby: What about the argument that five years is a long time, more than the lifetime of a Parliament, and governments can escape the responsibility for their own actions?

Mr Wilde: Within the scheme there is an annual review process, so every year in effect the Government is held to account, and so on an annual basis the Government will have to say this is how we are performing versus the report that the Committee on Climate Change have put in place. That creates a political driver for the Government to make sure that they are putting the right long term policies in place to drive actions.

Q134 Sir Peter Soulsby: One of the suggestions we had put to us was from the Energy Saving Trust which was for a rolling five-year average target. How do you respond to that as a suggestion?

Mr Wilde: Can you explain how that would work?

Sir Peter Soulsby: I am not sure I can.

Chairman: Like any rolling target.

Mr Drew: A moving average.

Chairman: A moving average figure.

Lynne Jones: Where you cannot borrow from years ahead.
Q135 Sir Peter Soulsby: It seemed like a good idea when they put it to us.

Mr Edwards: That is a nice mathematical idea and it might smooth out the bumps, but I do not think it is practical. One thing it might affect, for example, is the five-year periods that are likely to occur for budgeting for allowances in the Emissions Trading Scheme, and I am not sure how you could relate a five-year moving average target in the Climate Bill to that. I do not think it will work.

Q136 Chairman: None of you favour an annual target?

Mr Edwards: Industry in the past has been crying out for some long term clarity and three five-year budgetary periods is a pretty good deal.

Professor Grubb: Can I add a couple of points? On the single year versus other periods I personally find it very, very hard to see how a binding single year approach would work, given the extent of fluctuations arising from weather and other things. Therefore, to make it credible you start adding lots of bells and whistles to what you really mean by a single year which ends up averaging it out over a few years anyway, so I just do not quite see the huge advantage of it. Most actors are capable of thinking a few years ahead and seeing if they are, in these years, on the path for a certain average over the next five years of the budget. I would see an interesting idea in the moving average, but I am not sure I see the advantage, and actually does it not just mean that you have to define the average every year for the next 20 years as to what it would be and so forth. Coming back to your earlier question about do we need this Bill, I joined the Carbon Trust coming from a policy research background; what struck me was the scepticism that much of business has about general government policy announcements or declarations, or even decisions laid out in principle in a White Paper, and I think generally the somewhat sceptical business mind tends to need to see something a bit harder that has got either teeth, legal clarity or constitutional independence, a mandate to do things, which cannot really be lobbied away. It seems to me that the institutional security and clarity is one of the things that this Bill would bring which would actually add quite a lot to the credibility of what the Government has already said it wants to do.

Q137 Chairman: Three colleagues have caught my eye so far and I am going to ask them—but I am just going to ask you to restrain yourselves, colleagues for a second—in this order: Lynne Jones, Patrick Hall and Roger Williams, but I would like, Mr Edwards, if you could just respond perhaps to give your own view about the 60% target. Do you think that the UK is not going to solve the climate problem on its own.

Q138 Lynne Jones: It is really on that point, do you accept that if we are going to avoid dangerous climate change we are looking at trying to ensure that we do not increase global temperatures more than the 2°C, and the scientific evidence is that the measures in this Bill are going to move us towards a 4°C increase in temperature; therefore, can we afford to wait, to say let us leave the Carbon Committee to look at it for a couple of years? Why should we not be using the best possible science now to actually set targets that can actually achieve that aim, otherwise is it not dishonest to say that this Bill is going to avoid dangerous climate change?

Mr Edwards: The probability projections would suggest that for 2°C you might want to have 450 parts per million CO₂ equivalent, and that suggests that you need tougher targets, both by 2020 or 2030 and by 2050. Whilst it is a good thing that the UK is showing leadership on this, it is pragmatic to suggest that the UK is not going to solve the climate problem on its own.

Q139 Patrick Hall: I want to pursue the 60% a bit more, because what is on the face of the Bill is absolutely crucial and the signal that is given, and certainly Professor Grubb’s position was, as others have said, this is a pragmatic first step to get the whole thing off the ground and start with something that is seen as credible by the public and particularly the industry, in other words do not frighten the horses and let us get going and then maybe adjust further down the track, but is that not really a political judgment, and that is what government is for? You are an independent trust, funded by government but not necessarily to do government’s bidding; surely it is the duty of an independent trust such as yourselves to be guided by the science first, not making the political judgments for government. Let government do that—should you not be saying that the science now looks as if we are plugging into the system requires a more ambitious target than 60%? Should you not be saying that and why are you not?

Mr Wilde: My initial reaction—

Q140 Patrick Hall: I was asking Professor Grubb because Professor Grubb was the one who was saying that we do not need to.

Professor Grubb: On the institutional position or responsibility of the Carbon Trust I was going to let James answer, but my job anyway is to say what I think irrespective of whether I am the Carbon Trust or other institutions.

Q141 Patrick Hall: Sorry, can I be clear then, are you not part of the Carbon Trust?

Professor Grubb: I work half time for the Carbon Trust as chief economist, I am half time as an academic. I actually do not wish to draw any
distinction, whichever hat you want me to wear when you ask the question, because you will get the same answer, which is that there is a lot that we still do not know in relation to both exactly how severe climate change is, about what is the capacity of this country and the willingness of this country to carry out a 50 year programme of major structural change in ways that are or are not contingent upon what the whole of the rest of the world may or may not be doing. Therefore, it is perfectly legitimate to say this is a really serious problem and we know we need deep reductions, but I do not think it is wise for us to cast in concrete for the next 50 years exactly where the end point should lie; it is highly rational to set out that we are confident we need to do at least this much, even if necessary unilaterally, because our position will make no sense otherwise because of the issue of leadership et cetera, but there should also be a recognition that the majority of scientists think actually we are probably going to end up needing to do more, it is not obvious yet that people fully know exactly what they need to do more; exactly the willingness of the British public, for example, to have the government stop them flying or other things that would be implied, for example, by an 80% target. I do not think, therefore, that there is any inconsistency in saying this is real, this is serious, it requires immediate action, we are going to need to get to at least 60%, that is already further than we actually really know how to deliver, but that is probably the guidance for the next few years because it might well need to be toughened up.

Q142 Mr Williams: Professor Grubb said that if we were to have annual targets you would have to have lots of bells and whistles attached to them; lots of statistics do have that and it has been suggested we could make adjustments for GDP, for weather, for energy prices. The real problem with a five-year budgetary period is that this Bill is addressed to encourage secretaries of state to make very tough political decisions to address what most of us believe is the most serious threat to this planet. The real problem is that the secretary of state at the beginning of a five-year period is almost certainly not going to be the secretary of state in place at the end of the five-year period and so the political pressure is not there if you have five-year budgetary periods. Would you like to just comment on that analysis?

Professor Grubb: I imagine either of us could but I am not sure that I would want to be a government going into the next election with it being blindingly obvious that we were trying to hand on to the successor government a failure to deliver on this budget, because it would generally be blindingly obvious by the time one approached the next election. I am not convinced that it is such a problem.

Q143 Lynne Jones: I just wanted to point out that we do know what needs to be done, but it is whether that leads to political acceptance of it that is important. Surely we have to start talking about what needs to be done to actually even begin to gain that political acceptance.

Professor Grubb: We are very actively talking about what needs to be done; it is a tremendous amount whether you are talking about 60 or 80%.

Q144 Mr Drew: Can I move on to the issue of sanctions, which I did press Rupert Edwards on before in the informal session. I am just concerned about this issue in terms of what happens if countries do not meet their obligations, and I know that this is a matter of European law but we have got other players in the marketplace and I raised before the issue of the ROCs and what happened there, where TXL went down the tube and there were difficulties persuading people to take on their ROCs. Just give me some clarity of what are the safety nets if—because there is a great deal of goodwill involved in this—things start to go wrong. Perhaps Mr Wilde will want to answer that or Professor Grubb?

Professor Grubb: Just to clarify, you said the sanctions for countries, are you talking about sanctions behind international commitments or some specific agreement?

Q145 Mr Drew: We have got international agreements and we have got, obviously, the fact that this is being played out by business and indeed other organisations, so there is something of a construct there anyway. What happens if individual industries blatantly ignore their corporate responsibilities in this area?

Professor Grubb: I am probably best equipped to answer the international one and James perhaps on the corporate. Let me just say a few words about the international one. There is a long and complicated essay that people will give you, international relations scholars, about compliance with international law and then they will point to a statistic to say that nearly all countries observe nearly all international law nearly all the time, and then go into a long explanation of why. The basic underpinning of international specific commitments is not that there is a big enforcer that is going to throw presidents or prime ministers into jail, it is that countries are obliged not to ratify a treaty unless they fully intend to implement it, and that is why ratification is such a big and complicated step, that is the founding principle of international law in general and it is true that it is nearly always observed. When you then look interestingly at how things play out in the European context, you have 25 countries that have Kyoto targets and as part of the process of the European Commission, approving their plans for allocating emission allowances to companies, the European Commission has made an evaluation of whether these countries are on track to deliver their Kyoto targets, including whether they put enough money aside to purchase international credits that would help to bring them into compliance and so, again, compliance with international obligations, in effect, a criteria that the Commission has successfully enforced in its implementation of the European Emissions Trading Directive. The question then comes on to enforcement on the individual company.
Mr Wilde: In a sense that is a separate question to this Climate Change Bill because we are going down to the underlying policies that will drive the change. In each policy there is a set of enforcement criteria, so within the EU Emissions Trading Scheme if, at the end of a given year, a company does not surrender sufficient allowances to cover its verified emissions it will need to buy those allowances on the market and pay a penalty of €40 per tonne of CO₂ in the first phase, €100 per tonne of CO₂ in the second phase. Looking at other policies in the UK we have the Climate Change Agreements, energy efficiency targets where energy-intensive companies can get 80% rebate on the Climate Change Levy if they meet those targets; if they fail to meet those targets they have to pay the full Climate Change Levy so there is a financial incentive for them doing so. Building regulations is another key area where enforcement is absolutely key if we are going to get the action required to get to our 60 to 80% reduction by 2050, and enforcement of the regulations which are pretty tight at the moment and they are set to increase further with talk of zero carbon homes by 2016; enforcing those regulations is absolutely key and that is a big policy question.

Q146 Mr Drew: Can I just be clear then, what is the safety net if either business does not do what it is obliged to do or countries do not meet their obligations?

Mr Wilde: Within each policy there are set aside clear drivers for compliance, and at an international level within the Climate Change Bill it is quite clear that if the UK does not meet its five-year carbon budget it will need to potentially buy international credits exactly as Michael was saying, and it has a lot of political damage there.

Q147 Mr Drew: What about being tested in the courts?

Mr Wilde: Under judicial review, is that your question?

Q148 Mr Drew: Has that got any real teeth?

Mr Edwards: I will just repeat what I really said, I think, in the informal session which is the Commission’s trading scheme directive in European law is a tough piece of hard law with very demanding compliance legislation, and punitive targets for not meeting it, and I do not believe that there will be very many companies that fail to meet their obligations under the Emissions Trading Scheme other than by accident. International environmental law is a different thing, the Canadians have already acknowledged that they are not going to meet their Kyoto obligations but clearly, as Professor Grubb has said, international environmental law, like all international law, tends to rely on a reputation rather than some kind of compliance mechanism. There is a compliance mechanism within the Kyoto treaty that says if Canada, for example, does not meet its obligations under Kyoto and wants to participate in international emissions trading after 2012, it will have its assigned amount unit in the next phase of Kyoto multiplied by 1.3 as a punishment. That is the only mechanism.

Q149 Chairman: Target-setting in the way that you have both described is relevant, if you like, for those bits of your energy economy which can be affected by things like the Emissions Trading Scheme, but there are some bits which are missed out like the whole of the domestic sector at the level of the individual. The energy generators, yes, they are part of the scheme but, for example, the whole question of heat does not seem to figure, the transport sector does not really figure and one of the things that is interesting about the targets is that there is no attempt to assign responsibility, there is no sectoral breakdown. Do we need to be a bit more sophisticated with the target-setting and how far down do you go in allocating your share either at the level of the enterprise or the level of the individual that you are going to have to take to help the nation achieve its target?

Professor Grubb: The Bill starts in the right place, which is national total emissions, and from that certain consequences flow about the need to address the whole range of sectors and the fact that the Government is going to be held accountable if it does not do enough across all the various sectors. Again there is a question about how much should be pre-judged and pre-specified in the Bill, as opposed to the Bill setting out the goal and in a pretty heavyweight form, such that one is confident the government will deliver it and leave it up to subsequent individual policy processes around the energy sector, renewables, housing, heating, transport et cetera to make sure that the Government uses those levers in those sectors to best effect. These are big questions, a lot of sectors and an awful lot of policy instruments and I am not sure one could actually encapsulate that level of detail in a single Climate Change Bill and I do not know if we know exactly the right balance between the different sectors either at this precise stage.

Q150 Mr Cox: The question, Professor Grubb, that I thought you were being asked about—I may be wrong—was whether it is appropriate, as the Government contends in its consultation document, to make the courts in a judicial review application the whipping boy for failures in Government policy and whether the process of judicial review is an adequate mechanism for imposing upon Government accountability for failure to meet its legal duty under the Act.

Professor Grubb: I am not sure I am fully qualified to answer the best way for a Government to bind itself, it is actually quite a complicated question, but one approach is proposed in the Bill. In some areas there are other possible questions, the Government could, for example, at least based around price rather than quantity, enter into a contract in which it promises to pay certain investors certain amounts for low carbon investments. That is another way that
one could use contractual law to try and address some of these longer term questions. I do not feel qualified to answer the specific question.

**Q151 Mr Cox:** What about Mr Edwards?

**Mr Edwards:** On that specific question I do not feel qualified legally enough to answer it, but on the question that the Chairman posed, is it not going to be up to the Climate Committee to suggest to ministers with enabling powers that certain sectors should be covered by emissions trading and certain sectors in transport or domestically should be covered by regulation, and that it will then be up to the secretary of state to either propose a Bill or even use enabling powers to more speedily impose the goals of the Climate Committee.

**Q152 Mr Cox:** The defect in the judicial review that has been pointed out to us by Friends of the Earth is that judicial review is a very weak remedy in this area. You have a series of polycentric decisions, not ideally fitted for a judge to make a good judgment on, he is looking ahead over a period of years. Courts are notoriously reluctant in areas of policy to get involved, so Friends of the Earth suggest a pre-emptive approach where policies are announced and then subjected to a review and challenged at the stage where the policies, so to speak, are set out for the next five years, in advance of the policy’s implementation. Ministers then could be required to amend the policies if the view was taken that it probably would not meet the budget. What do you think about that?

**Mr Edwards:** Is it worth making the comparison to the Monetary Policy Committee which produces an inflation forecast, has to write a letter if the inflation target is breached, as it has been recently, and actually holds a lever on monetary policy? I do not think there is any suggestion that the Climate Committee is going to hold a lever, but there is a great deal of transparency in the approach of the inflation reporting of the Monetary Policy Committee and perhaps the Climate Committee looks a bit more like Kenneth Clarke’s seven wise men that was a precursor to it. Just by having a transparent process—the Bill talks about forecasting—the Committee doing forecasting and having a transparent process that is open to public scrutiny will then put pressure on the secretary of state a priori instead of waiting until the judicial review to worry about it afterwards.

**Q153 Mr Williams:** Professor Grubb said that the Bill is about total carbon emissions; in fact of course although there are five-year budgetary periods the main purpose is the 60% reduction in annual emissions by 2050. It has been argued to us that actually the most important thing is the total amount of carbon that is produced between now and 2050 and so it is important to get the steepest reductions earlier in that period if we are going to minimise the total carbon emissions and therefore mitigate climate change. Is there anything that could go in the Bill to encourage early large reductions?

**Professor Grubb:** I presume the interim target, the 2020 target, and presumably the setting of three budget periods ahead.

**Q154 Mr Williams:** Have you got any view on what sort of increased targets could be put in the Bill? It is argued to us that actually this will not keep temperature increases down to 2°C.

**Professor Grubb:** Some of these things are a matter of trade-offs between what seems possible and doable. Let us be honest, we are in a situation where the Government for several years has officially acknowledged, accepted, the severity of this problem et cetera, et cetera and still CO2 emissions are not going down. From that position a reduction of at least 26% by 2020 is already a very demanding, strong change from the current apparent ability or not to get these emissions under control, and 26 to 32% is a pretty steep change from what we seemed to have been able to do so far. If you are implying is that number not strong enough; that is probably a range that I would not find unreasonable.

**Q155 Chairman:** That is quite interesting. In a sense you are telling us that it is pragmatism that should rule in the first instance.

**Professor Grubb:** No, what I am telling you is I have seen a long history of governments setting targets and then going extremely quiet when they have not been met.

**Q156 Chairman:** Yes, but on this occasion they cannot, can they?

**Professor Grubb:** No, that is right, but in that case you had better make sure that the targets have implications that you have some idea how you are going to implement and understand.

**Q157 Chairman:** I want to briefly move back to Mr Edwards and I would be grateful if you would put on the record now some remarks you made when you were telling us about how Carbon Markets work, about the opportunities for the United Kingdom purchasing carbon credits from abroad, how robust those systems were and you were indicating to us that there were, within certain agreements, limits on how much you could purchase. One of the areas of sanction is that if you miss the target you have to buy your deficit from somewhere; would you like to say a little bit about how robust the purchasing systems are and is it something which, if you like, the Government should simply regard as a fallback position, or in your judgment is it something that is going to have to be used come what may?

**Mr Edwards:** First of all on the question of robustness and as far as we can see between now and 2012 the system for generating emission reduction credits from the Clean Development Mechanism and Joint Implementation is extremely robust and policed very effectively by the United Nations. Between now and 2012 the UK is going to be one of the few European Member States that does not need to rely on these mechanisms. Quite what international law will do to scale up the effectiveness of those mechanisms after 2012 is not clear and so it
is hard to say with certainty whether they will continue to be as robust if they are scaled up to cover entire sectors in developing countries, but I am pretty confident that they will be. In terms of the limits on the use of importing, effectively, offsets or credits from other countries it is an extremely useful way of transferring technology from north to south, of showing developing countries and economies in transition that we are serious about leadership. In terms of the supply of emission reduction credits it creates for the embryonic carbon market a safety valve in that there are lower costs generally for taking a tonne of CO2 out of the atmosphere in developing countries than there are in the industrialised world, but the principle of supplementarity that is currently enshrined in Kyoto and the Marrakesh Accords, whereby the use of such credits should only be supplemental to domestic emission reductions, must be carefully followed, and I know the Bill mentions this, but it would not be right for the UK’s 60% target to be 30% the UK and 30% somewhere else. I hesitate to use the word “additional” because that really does create some very demanding targets for the UK, but one of the things that the Climate Committee will want to scrutinise very carefully is the extent to which we are successfully creating a carbon price in Europe or the UK that encourages investment in low carbon technology and infrastructure and excessive importing of those credits could keep the carbon price down. It is important at the level of nation states that nation states do not rely totally on such credits, in so far as it is possible to do that in any case when demanding emission reductions are needed in the industrialised world.

Mr Edwards: We would encourage that, yes.

Q161 David Lepper: We have talked already about the role of the Committee on Climate Change and you, Mr Edwards, were suggesting a comparison with the Monetary Policy Committee; I just wonder if that is a very accurate comparison. The Chancellor sets the inflation target, the Monetary Policy Committee then decides what the interest rate will be in order to meet that inflation target, it makes that decision. That is not quite the same role for the Committee on Climate Change, is it, it is advisory; it is to make proposals to the Government.

Mr Edwards: I would not want to take the comparison too far but I think, going back perhaps to what Professor Grubb said about seeing targets set and not being met, and everybody going quiet about it, the Climate Committee will create a process of scrutiny and transparency that will put pressure on Government to meet the targets even if the exact mechanism and the levers are different.

Q162 David Lepper: I wonder if you have looked—and I address this to all three of you—at what is suggested in Schedule 1 of the Bill as to the kinds of people who will sit on the Committee on Climate Change and whether you feel that is adequate. Are all of those areas which need to be covered, are there any glaring gaps and what do you think of the fact that a knowledge of climate science comes sixth on the list of the areas of expertise to be included among the members of the Committee?

Professor Grubb: So long as they are still on there; I am not sure I remember where on the original list they were, but so long as they are on there.

Q163 David Lepper: You do not feel they should have been a little bit higher up than this; that does not matter so long as they are there.

Professor Grubb: Yes.

Mr Edwards: Without wanting to overdo the comparison—which you have already suggested is not wise—with the way monetary policy is conducted I do feel here, looking at the history of inflation targeting from Paul Volcker to the European Central Bank to the wise men of Kenneth Clarke, there is a strong sense in which this Bill is going to be very valuable in taking controversial decisions out, becoming less of a party political issue and more of an issue that is scrutinised publicly and dealt with in a less political way.

Professor Grubb: It was partly to the previous question, so I was just checking through the list. There is one thing that could also be considered in terms of the Committee composition. This is slightly ironic coming from an economist, in that whilst there are large parts of this problem that can be addressed through economics and technology and investment et cetera, there are other parts that involve public behaviour, involve public willingness to accept certain things like much higher prices,
constraints on road use or travel. Therefore, that socio-political dimension it might be wise to include, because the idea that a bunch of relatively technical and business people could declare that the Government needs to do various things, which then turn out to be actually politically extraordinarily controversial, or there is simply a failure to take account of what people are or are not willing to do in terms of behavioural change, is a useful thing to consider.

Q165 David Lepper: The Committee needs someone to handle spin.
Professor Grubb: No, not at all, the Committee’s job is nothing to do with public relations as I understand it, it is to do with advising governments on how, potentially, to get people to change to lower carbon lifestyles rather than pretending that everything comes down to price or investment, so I think that is an issue to consider. There are other areas perhaps that we do not have time to go into, but we touched in our memo on the question of the difficulty of business translating national targets to investment indicators.

Q166 Mr Cox: Is there enough in the Bill that creates that institutional independence which you, Mr Edwards, spoke of and which you, Professor Grubb, mentioned right at the beginning of your remarks as being the value of this Bill, namely creating this kind of institutional certainty for industry and the country? The CBI does not think so, the CBI seems to have got the idea that the idea of Defra is that it would provide advice to the Government in response to specific questions, like a jury being tasked with a judge to decide certain issues of fact. It does not seem explicit in the Bill that it will occupy even the role of the wise men, Mr Edwards, of which you spoke, it really is a very ill-defined institution indeed and if it is meant to have that type of independence that would give genuine political cover do you really think it is sufficiently explicitly set out in the Bill?
Mr Edwards: It would ideally be more explicitly set out and other things could be more explicitly set out. The Climate Committee will need to have more explicit guidance on whether it should take into account socio-political reality or international negotiations or trajectories, and I did notice that the Committee was going to have to take account of a 60% target, decide whether that target was realistic in the light of international negotiations and also take account of a number of other factors: economic, social and political and it will be a tough job to do without a little bit more explicit guidance that perhaps the trajectory is the number one priority.

Q167 Mr Cox: What about Professor Grubb?
Professor Grubb: I would agree with that. I am sure the independence could perhaps be more fully defined than it is currently laid out.

Q168 Mr Drew: If we look at the history of independent committees there is no better example of some of the tensions than CoRWM, which looked at nuclear waste. By the very nature of this body it was trying to be all-embracing to get the inherent tension within it so you could get different viewpoints represented in that body. The problem is the tensions were so great that there was a time when people were resigning with gay abandon as part of that body. Are we seriously suggesting that a committee could bring in all those different views and yet be a body that would take some tough decisions and tell Government about those tough decisions?
Professor Grubb: Again, it may not fully be my area of expertise but, first, I do not think you can expect to have every possible view represented on a relatively small committee and I agree, if you try and expand it to have every conceivable view then you could end up with the kind of problems you have indicated. My slight observation is that, given the right mandate, the success and impact of a body like this unfortunately to some degree does come down to two factors, one of which is the right choice of chair who can manage a process towards some consensus without losing all of the substance, and can pull out the things that really matter and argue and defend them potentially against a slightly hostile government and, secondly, I would suggest a secretariat that is adequately resourced so that the Committee can carry out its own analysis and, if necessary, challenge government analysis.

Q169 Chairman: What does it need in the way of resources?
Professor Grubb: It needs a secretariat that has some technical competence to do analysis.
Mr Drew: Can I just say, we have the Sustainable Development Commission which actually has probably done invaluable work because it has not tried to have a high profile in the sense of making lots of exotic statements, it has just got on and done a lot of good groundwork, and where the Government has been at fault it has criticised and where it feels the Government has done some good work it has been complimentary and it has gained status because it has not tried to get into the political framework. Why do we not just give it to the Sustainable Development Commission; there is nothing more sustainable than trying to keep the planet going, why are we inventing another body?

Q170 Chairman: Ask Mr Miliband that because he has drafted the Bill. Can we have a quick answer, yes or no, do we need another body?
Professor Grubb: I think the mandate of the SDC does not cover the mandate that is required for this Bill, for starters, and one might argue it requires different sets of expertise in some respects.
Chairman: Thank you very much, David.

Q171 David Lepper: The Energy Saving Trust, in talking about the resources that the Climate Change Committee might need, talks about a secretariat, as did you. The Energy Saving Trust talks about the
importance of the Office of Climate Change and the inter-departmental analysts group as being amongst those who might help to provide that support. From what you have seen so far of the work of the Office of Climate Change, for instance, or indeed the IAG, do you feel those are the right sorts of bodies to be providing that resource that is needed to the members?

Professor Grubb: I am not sure whether the Office of Climate Change has yet had much time to show what it can do in terms of analytical advice—at least, not that has gone into a more public domain as yet. You can tell me exactly how long it has been in existence, but it is not long to produce that kind of outlook.

Q172 David Lepper: Since about September last year, but quite what it has been doing is one of the questions that we have asked ourselves on occasions, but it is interesting that you ask yourselves the same question.

Professor Grubb: That is not quite what I said.

Chairman: Part of our concern is that when the NAO produced their report Emissions Projections in the 2006 climate change programme review they said, and I quote: “There is considerable inherent uncertainty in modelling the UK energy market and emissions projections” and here is this Committee that is going to have to give some pretty sound comment on all of these things against a background where there is still modelling uncertainty, and it is a question of what kind of kit they need to try and bring an element of certainty into a world of uncertainty. Maybe you have not got a definitive answer on that because I am going to move on to Lynne Jones.

Q173 Lynne Jones: Before I ask the questions I was supposed to ask could I just ask Mr Edwards, going back to the complementarity thing, you said 50%; what do you mean by that 50%?

Mr Edwards: That if an Annex 1 country under Kyoto has to reduce its emissions by 8% from 1990 that means that half of the emissions might have been, and then half of the gap between that and its target could be done. There are differing interpretations.

Q174 Lynne Jones: Are you saying that 30% of our CO2 reduction target—that is 50% of the 60% target—should be based on purchase of carbon credits?

Mr Edwards: Am I saying that they should be?

Q175 Lynne Jones: Yes.

Mr Edwards: No, I am saying that we should be careful that that is not the case.

Professor Grubb: There are, as Rupert said, different interpretations, which is one of the problems behind the concept. It has certainly also been used to say that it means that half of the effort required to achieve a given target must be done at home, and that has been otherwise defined by some others as saying you have to work out what the country's emissions might have been, and then half of the gap between that and its target could be done. There are differing interpretations.

Professor Grubb: I am not saying 50% so what would be a reasonable proportion?

Mr Edwards: I am probably not qualified to have a view on whether the target should be 60% or 80% or 450 parts per million but I sense, if you want a personal opinion, that 450 parts per million looks wise and that therefore 60% is a minimum, and that if you are going to do that as an industrialised country you cannot rely on achieving that through purchasing credits from overseas, but I still think that the flexible mechanisms of Kyoto are extremely valuable, for the reasons I said earlier.

Lynne Jones: Turning to the secondary legislation in the Bill which gives enabling powers to set up new trading schemes, are you generally supportive of such a proposal and what characteristics would such schemes need to have to ensure that there was high carbon investment rather than low carbon investment?

Q177 Chairman: Can you give us a for instance as to what one of these new schemes might look like?

Professor Grubb: James or I could because we have been somewhat involved in the early stages of one of them, which is what came to be known as the energy performance commitment. Some of the contributing analysis that we did on that was a suggestion for effectively a cap and trade scheme, but which would be fundamentally different from the European trading scheme which applies to big industrial high emitting facilities. This instead would be designed to set caps on the commercial sector and would operate through the company, not through the individual facilities so that, for example, a large supermarket chain would have to map its emissions right across the country and the Board would then be held accountable for the total emissions and would then have to buy credits in relation to that. That is an example and actually that would include some of the carbon emissions from the electricity that it consumes, which is not how the ETS works.

Q178 Chairman: Just to be certain I understand that, are you saying that somebody would set a cap on, for example, Tesco in terms of their emissions?

Professor Grubb: That was the suggestion, probably following a separate line of inquiry.

Q179 Chairman: Who would set the cap?

Mr Wilde: Within the scheme that is being proposed the Government would set an aggregate cap on participants within the scheme, so currently it is expected that about 5000 organisations responsible for around 15 million tonnes of carbon—10% of the UK’s emissions—would be within the scheme, and so the government would set an aggregate cap for all participants within the scheme rather than a cap for Tesco specifically.
Q180 Chairman: Just to understand, you said that a company would be accountable; how would it know what its share was?
Mr Wilde: It would measure its emissions each year and there would be an aggregate cap on emissions. They would need to buy allowances in an auction at the start of the year, so basically the Government would auction all 15 million tonnes of carbon—

Q181 Lynne Jones: The proposal in the Bill is that they should be distributed free; what do you feel about that?
Mr Wilde: The current proposal for the energy performance commitment is that they should be auctioned at the start of each year.
Chairman: That is not what the Bill says.

Q182 Lynne Jones: The current proposal for what?
Mr Wilde: For the energy performance commitment specific instrument—

Q183 Lynne Jones: But that does not apply to Tesco, we are talking about new schemes here.
Mr Wilde: This is a new scheme that the Government has just consulted on.

Q184 Patrick Hall: That you have been working on?
Mr Wilde: We worked on it about 18 months ago. It features as one option to incentivise emissions reduction in this particular sector. We sent a publication through as part of our evidence that explains the logic for this option. The Government subsequently put it in the climate change programme review as something they would like to investigate and in the energy review they made a commitment that they would introduce a new measure to reduce emissions from the large non-energy-intensive sectors by 1.2 million tonnes of carbon by 2020. This trading scheme is one of the options that they are looking at to get there. The enabling powers within the Climate Change Bill would enable the scheme that is being looked at to be put forward. The current proposal for that is that the allowances would not be distributed for free at the start of each year.

Q185 Lynne Jones: Do you think it is important that the Bill should make it clear that they would be auctioned?
Mr Wilde: You might have a different system for different schemes.

Q186 Lynne Jones: What sort of schemes would you envisage where it would be appropriate to give permits free?
Mr Wilde: I have not given it any thought. On the scheme that we have just been talking about, there is consensus for analysis that says you have a greater drive for change if there is some change of monies.
Professor Grubb: On the question that is troubling you, we analysed and suggested 18 months ago unambiguous recommendation for 100% auctioning in this sector and I have seen nothing that would change that view from ourselves ultimately.

Patrick Hall: What happens at the end of the year? You purchase credits at the beginning of the year. Where do you get something back?

Q187 Lynne Jones: You sell them to other people if you reduce your energy.
Mr Wilde: The logic would be at the start of the year I am sitting here as a major company. I predict what I am going to emit over the course of the year. I buy that many allowances in the auction at the start of the year. That gives me an incentive to reduce my emissions through the year and I will sell any surplus to someone else who does not manage to reduce. The suggestion that the government is currently looking at is that this needs to be financially neutral for firms. It is not necessarily about creating a new financial burden for them. The suggestion is that at the end of the year companies surrender allowances for an equivalent to what they have emitted and then the monies received through the auction will be recycled back to participants. It is revenue neutral.

Q188 Patrick Hall: Overall?
Professor Grubb: Correct.

Q189 Lynne Jones: Are there any other characteristics of such a scheme which will maximise the carbon savings that you would care to comment on?
Professor Grubb: I am not sure which scheme we are talking about here but some further attention to creating a bit more confidence about what the future cost of carbon might be under some of these schemes would help business investment in carbon technologies.

Q190 Chairman: Mr Edwards told us informally it is very difficult in quite a volatile market to make that kind of forward prediction.
Professor Grubb: We have made some suggestions as to how the government could consider ways of underpinning a minimum price level. That is not impossible.
Mr Edwards: That was a comment I made informally about perhaps having a floor price in auctions.

Q191 Chairman: These are more about the design of the scheme that the government might introduce because it has powers in the Bill so to do. Perhaps the message I am getting from you is that it is better to allow the scheme to be designed in the way that the scheme is rather than try and design it in the Bill.
Professor Grubb: Beyond a certain point that has to be the case. There is presumably a limit to the level of detail which a Bill has.

Q192 Chairman: For example, there is nothing in the Bill at the moment that says any scheme that is produced shall have in it a mechanism to put a floor price for carbon in.
Professor Grubb: It is an option.

Q193 Chairman: One of the questions that we asked was what was missing from this Bill. Some witnesses have chosen to give ideas and suggestions; some have ducked the issue. Is there a missing element in scheme design that ought to be there? Do not feel compelled to say yes; you might say no, just leave it to the scheme.

Professor Grubb: I do not feel compelled to say yes because in our own evidence we said yes, there are things potentially missing. The issue we just touched on is one that at some point should be considered, whether or not in this Bill or other issues. In our evidence we raised the point that it is very hard for business to translate from a national aggregate target to say, “What will that mean for my investment?” because price tends to be what a business can deal with in deciding whether it is worth investing in low carbon technology. It is very hard for a business to translate from a national target 15 years ahead to say, “What is that going to mean in terms of my investment?” Hence my reference to some kind of stronger confidence around carbon price in the sectors where that is the thing that matters.

Q194 Lynne Jones: Do we have the necessary mechanisms to ensure accounting for carbon emissions in these schemes and even in the totality in terms of the carbon offsetting process?

Professor Grubb: Certainly for fossil fuel carbon, yes. For some of the other gases, it may be more difficult. I am not sure about the exact status of monitorability in some of the sectors which are not core or fossil fuel related.

Q195 Lynne Jones: In terms of the enabling powers, is it appropriate that there is so much emphasis on emissions trading and market mechanisms rather than other policy instruments to reduce carbon?

Professor Grubb: For at least half of the economy things to do with emissions trading and carbon pricing are very important. There are other parts of the economy where they are missing the point. If you think you are going to solve buildings related emissions, or even personal transport, through a carbon price, I think you are making a big mistake.

Q196 Lynne Jones: Are there any other inclusions in the Bill? You have mentioned the idea of giving the Carbon Committee further terms of reference. Would that cover those concerns?

Mr Wilde: There is a portfolio of policy instruments required to overcome the barriers and neutralise the drivers for improved energy efficiency and adoption of low carbon technologies. Things like regulation, product standards, better information, support for innovation can happen outside the Bill. It says explicitly within the Bill that the UK has the power to set building regulations through EU product regulation standards. The Climate Change Bill is trying to accelerate their ability to put in—

Q197 Lynne Jones: For example on the code for sustainable homes, there is a view that the building industry has had a disproportionate influence on the government in terms of the standards, the rate at which higher standards are being brought in. Would it be appropriate for the Carbon Committee to take an independent viewpoint of some of these other developments?

Professor Grubb: I do not think so.

Q198 Lynne Jones: Earlier, Professor Grubb, you said that national total emissions is the right point to start. We are setting the 60% target on national emissions and excluding our share of international aviation and shipping. How do you feel about that? Should aviation and shipping be included in the Bill and what mechanisms could just include the emissions anyway, because we already understand about the amount of fuel that is consumed? There is already reporting on that. As a point of principle, should aviation be included? What mechanisms could be introduced to encourage a reduction in aviation emissions?

Professor Grubb: It is not really my area. Everyone talks about aviation but our own work at the Carbon Trust suggests that international marine transport is just as big an issue. Aviation needs to be included in the European Emissions Trading Scheme so it will fall under some kind of cap by 2011, when it is due to come in. It is unlikely to provide a whole solution to aviation. On the rest I would be reluctant to take a judgment because I do not know exactly how much is domestic versus international and the jurisdictional development, if you like, around international bunker fuels, to use the general term. We have to be absolutely sure it is not left out of the equation so if it is not in the national budget total I would want to know where it was accounted for.

Q199 Lynne Jones: If you do not include it we are set to increase our emissions for a number of years hence until at least 2011/12.

Professor Grubb: Absolutely.

Q200 Lynne Jones: Should it be included at least in the overall assessment of our total emissions before applying the 60% reduction target?

Professor Grubb: If you mean should the Committee’s remit exclude anything of international bunker fuels, I would not see any reason why it should, if that is a separate question from how the target is defined in instruments.

Q201 Patrick Hall: Do you mean it should not?

Professor Grubb: I would have thought the Committee has to consider any contribution that is making the climate change problem worse, which would obviously include international bunker fuels.

Q202 Lynne Jones: It does not at the moment. Only national aviation is included in our total carbon budget.
Professor Grubb: There may be reasons to define the carbon budget in terms of domestic emissions over which the UK has jurisdictional control. Irrespective of how the carbon budget is defined, the Committee surely should be allowed to comment on the state of international aviation and marine transport.

Q203 Lynne Jones: Would you care to comment, Mr Edwards?

Mr Edwards: I do not feel qualified to judge the complexities of how the Climate Committee’s remit would interact with international law on aviation issues.

Chairman: Thank you very much. You have given us a lot of very interesting perspectives both in your comments before the Committee this afternoon and in your written evidence. Mr Edwards, may we put on record our sincere appreciation for your heroic efforts to teach us something about how the price of carbon is determined and apologise that we may not have been the fastest learning students in the class. I think it is a subject that we may well return to but thank you very much for your contribution and efforts in that respect.

Memorandum submitted by the CBI (CCB 25)

RE: PRE-LEGISLATIVE SCRUTINY OF THE DRAFT CLIMATE CHANGE BILL

The CBI has a strong interest in your inquiry on the draft Climate Change Bill, which identifies the broad areas of interest of our members, notably:

— reasoning behind of the Government’s targets, in particular the interim target of a reduction in CO₂ emissions of 26–32% by 2020;
— five-year carbon budgets, including the facility to purchase carbon credits to meet domestic targets;
— the appointment, functioning and independence of the Committee on Climate Change;
— the adequacy and implications of the proposed enabling powers; and
— the validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post-2012.

We are still in the process of canvassing member views on the draft Bill and will be submitting our full views to the Joint Committee inquiry later this month. In the interim, we thought it might be useful to send you our emerging thoughts on some of the key issues for consideration by the EFRA Committee. We will send you our position, but if there are any areas on which you would like further clarification please do not hesitate to contact us.

The CBI welcomes the overall direction of the draft Climate Change Bill—in particular, the mix of longer-term targets and carbon budgets which better reflect business investment cycles and the requirement for the Committee on Climate Change to consider, amongst other things, economic circumstances (including competitiveness impacts), technological potential and international developments. This gives British business two things it really needs—long-term clarity on policy direction and flexibility in its delivery.

TARGETS

Business is particularly interested in the relationship between the proposed UK target of a 26–32% reduction in CO₂ emissions by 2020 and the recently agreed EU target of a reduction in greenhouse gas emissions by 20% by 2020. With the EU burden sharing agreement still to be determined, we are concerned that the UK’s target may not be expressed in terms that reflect the outcome of any EU negotiations. We understand from the Office of Climate Change that the proposed target of a 26–32% reduction in CO₂ emissions is in line with their expectations of what the UK’s burden sharing target would be if based on historical emissions. However, discussions on burden-sharing at the EU level are only just beginning and have not been limited to proposals to burden-share on the basis of historical emissions. Other options being considered in the context of the European Climate Change Programme’s Working Group on the future of the EU Emissions Trading Scheme (ETS) include a proposal to split the EU unilateral target into two parts:

— Reductions of CO₂ and other greenhouse gas emissions by sectors participating in the EU ETS, whereby the total emission reductions assigned to these sectors (eg electricity generation, refining, cement, iron and steel, paper and ceramics) would not be broken down by country. Instead, emissions reductions to be achieved by each of these sectors would be implemented on the basis of a sectoral methodology defined by the European Commission and applied uniformly across all the companies concerned in a given sector.
Reductions of CO₂ and other greenhouse gases to be made by economic sectors not covered by the EU ETS, by the public sector and by households, whereby this total volume of emissions reductions would be shared between Member States as a function of agreed criteria eg historical emissions, socio-economic position etc.

If such a proposal were to gain widespread support and be adopted by the EU, there would be a need to consider how the proposed UK target is able to reflect this split target, where only the non-EU ETS targets are the domain of the UK Government.

The consultation on the draft Bill proposes that targets and budgets are set in CO₂ terms on the grounds that the UK has already made good progress on other greenhouse gases and that further major effort on greenhouse gases would be disproportionately expensive. While the majority of future emissions reductions may be expected to be in CO₂, we are concerned that this will place an artificial constraint on the importation of credits through the Kyoto mechanisms (eg the Clean Development Mechanism) and even on the potential to trade in EU ETS allowances were the scope of the scheme extended to include non-CO₂ gases in future phases (as is currently being considered under the EU ETS review). Business believes that the UK should seek to ensure the compatibility between UK, EU and international targets to maximise interoperability and linkage between measures and to encourage the uptake of emissions reduction measures globally.

Carbon Budgeting

We welcome the proposal to set five-year carbon budgets on a rolling basis for 15 years. Business was concerned about earlier proposals for annual targets, which we see as being too rigid and unworkable, given investment lead times (on the one hand) and the natural variations in emissions year-on-year related to production, fuel prices and weather cycles (on the other). The proposed five-year budgets better reflect these natural short-term variations and business investment cycles, and when set out three budgets in advance helps to create the certainty required for longer term investment decisions, while putting the UK on a downward path to reduce emissions.

We welcome the proposals to set the carbon budgets by taking into account a range of factors, including scientific knowledge about climate change, technology relevant to climate change, economic circumstances (and in particular the likely impact of the decision on the economy and the competitiveness of particular sectors of the economy), fiscal circumstances, social circumstances, energy policy and international circumstances.

We welcome the proposal that the Bill allows emissions reductions achieved overseas but paid for by UK entities to be counted towards the targets and budgets. While we believe that the balance of effort needs to take place domestically, within the limits set by international law, the use of the Kyoto mechanisms and the EU ETS is an important way of achieving emissions reductions at lower cost, reducing the competitiveness impacts of UK unilateral action and encouraging other countries to follow our leadership.

Committee on Climate Change

The value of the Committee on Climate Change is its independence of the political process in setting and reviewing progress against carbon budgets on a technocratic basis. However, it is unclear from our discussions with DEFRA and the OCC as to the degree of independence of the Committee, which we understand to be viewed by DEFRA as providing advice to the government in response to specific questions posed by the department. This raise questions with regard to relative independence of the Committee on Climate Change. In particular, business would like clarity on how the Committee will be resourced to undertake analytical work to underpin its decisions ie to what degree it will rely on a secretariat within government and to what extent it draws on existing government staff.

Enabling Powers

With enabling powers specifically in the area of emissions trading, there is a risk that the Committee will be more likely to look for emissions reductions in the energy and industrial sectors to which trading already applies or to encourage the extension of emissions trading to other sectors of the economy regardless of whether trading is the right mechanism for the economic activity being considered. The measures adopted—whether trading, fiscal incentives, regulation, information or voluntary initiatives—must be the most cost-effective in achieving the necessary emissions reductions in each sector of the economy.

CBI
May 2007

Memorandum submitted by EEF, the Manufacturers’ Organisation (CCB 15)

Introduction

1. EEF is the representative voice of manufacturing, engineering and technology-based businesses with a membership of 6,000 companies employing around 800,000 people (see www.eef.org.uk for further information). Comprising 11 regional EEF Associations, the Engineering Construction Industries Association (ECIA) and UK Steel, EEF is one of the leading providers of business services in employment relations and employment law, health, safety and environment, manufacturing performance, education, training and skills.
2. This note is a submission to the House of Commons Environment, Food and Rural Affairs Committee's pre-legislative scrutiny of the draft Climate Change Bill.

EXECUTIVE SUMMARY

3. EEF welcomes the proposal to introduce a long-term framework for climate change policy. Greater certainty over future carbon constraints is vital for business planning and investment. A combination of long-range emission reduction targets and five-year “carbon budgets” (set three at a time so as to provide a fifteen year view of constraints) will go a long way to achieving this.

4. However, greater certainty over future carbon constraints will need to be tempered with sufficient flexibility to respond to changing circumstances and to allow emission reductions to occur when and where they are most cost effective. Therefore, it is crucial that the long-range targets can be reviewed on economic grounds and that the timing of emission reductions and how they are shared across the economic are key policy considerations.

TARGETS

(i) The validity of the Government’s domestic targets to

— reduce CO₂ emissions by 60% below 1990 baseline levels by 2050; and
— reduce CO₂ emissions by 26–32% below 1990 baseline levels by 2020.

5. EEF supports the introduction of a long-term framework for climate change policy. It is vital for business planning and investment that a greater degree of certainty exists over the future level of carbon constraints and the pace with which they are introduced. We therefore welcome the Government’s intention to establish statutory emission reduction targets for both 2020 and 2050.

6. The “validity” (ie the appropriateness) of the specific targets being proposed is difficult to assess given the complexities and timescales involved. An accurate understanding of the technical feasibility and economic viability of these long-range targets is not possible several decades ahead. Therefore, the targets must be flexible enough to adapt to changes in scientific, economic and political circumstances.

7. EEF welcomes the proposed “review clauses” (ie the provisions enabling the targets to be revised where there have been significant developments in scientific knowledge about climate change or international law or policy). However, EEF believes that the review clauses are deficient in one key respect—the lack of an economic “trigger”. Provision should be made for the targets to be reviewed, and where necessary amended, in the event of significant changes in the economics of climate change.

8. Government needs to retain control over the economic impact of climate change policy and be able to take advantage of any unexpected opportunities. Should it transpire that meeting a 60% target is significantly more costly and the economic impact significantly more adverse than anticipated, there needs to be a facility to revise the target downwards. For example, development and deployment of key low-carbon technologies may be slower than expected. Conversely, unexpected, economically viable, abatement opportunities may emerge. In which case, meeting a 60% target might be significantly less costly and the economic impacts more benign than anticipated. To take advantage of such opportunities, there needs to be a facility to revise the target upwards.

9. Reducing domestic carbon emissions by 60% will require a concerted effort across society and a major transformation of the economy (eg significant de-carbonisation and improved energy efficiency in electricity supply, transport, industry and residences). Pursued unilaterally, such an approach could have serious adverse economic impacts on carbon intensive industries. As a consequence, the 2050 target will be more economically viable within the context of an economy-wide and multilateral effort to mitigate climate change.

(ii) Why the carbon budget for the period including the year 2020 cannot exceed 32%

10. EEF believes that there are considerable advantages to phasing in emission constraints gradually over time. First, technological progress should lower the cost of existing abatement options and introduce new ones. Second, as the economy grows, society’s capacity to bear the cost of abatement and deliver emission reductions will increase (ie more resources will be available for abatement and abatement costs will represent a smaller proportion of GDP). Finally, policies can take time to have an effect. For example, policies designed to change the way in which individuals and households use energy have proven very challenging.

11. As a consequence, pacing emission constraints should result in a more cost-effective policy and limit any adverse impact on vulnerable sectors of the economy (eg the fuel poor and energy intensive industries). From this perspective, there is value in placing a limit on the speed at which emission constraints can be introduced up to 2020.
iii) The rationale for a five-year budgetary period

12. The rationale for five-year budgetary periods is strong (i.e., the provision of greater certainty for business, the management of yearly fluctuations in emissions drivers and compatibility with the timescales of existing international agreements).

13. Setting five-year carbon budgets, three at a time, will provide a 15 year view of the level of carbon constraint in the economy. The greater certainty provided by such a framework will help businesses to plan, manage their emissions and invest in abatement measures cost-effectively.

14. A five-year budgetary period will have sufficient flexibility to accommodate the inevitable fluctuations in emissions drivers (e.g., energy prices, weather and economic growth). Over a five year period, trends in such factors should be relatively stable. Yearly budgets, in contrast, would run the risk of being missed on account of unpredictable fluctuations (e.g., weather-related energy consumption).

15. The major, climate change related, international agreements currently in place (i.e., the United Nations Framework Convention on Climate Change and the EU Emissions Trading Scheme) operate on five-yearly cycles. Setting five-yearly budgets will enable developments in these agreements to be factored into UK policy more easily than would be the case with a different accounting period.

iv) Monitoring and early warning systems to ensure achievement of targets is on track

16. EEF welcomes the requirement in the Bill for government to provide annual progress reports against both the current carbon budget and the 2050 target. Regular and frequent monitoring is essential for effective climate change policy. It will provide early warning of the environmental effectiveness and cost of policy and, ultimately, the achievability of the long-range targets.

v) Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non compliance

17. The credibility of the proposed framework will rely on government being held effectively to account over climate change policy. EEF believes the accountability provisions proposed in the Bill will make this possible.

18. Under the Bill, government is directly accountable to Parliament for staying within the constraints of each five-yearly carbon budget and for meeting the 2050 target. A compliance report must be presented to Parliament after each budgetary period and after the 2050 target year. In addition, government is also indirectly accountable to the Committee on Climate Change (“the Committee”). The Secretary of State must take into account the Committee’s advice (e.g., on carbon budgets) and respond to the Committee’s annual assessments of progress delivered to Parliament.

Carbon Budgeting

vi) The facility—in any given budgetary period—to “borrow” emission rights from a subsequent period, or to “bank” any surplus emissions reductions for use in the next budgetary period

19. EEF supports the unlimited “banking” and limited “borrowing” facilities proposed in the Bill. Managing the costs of climate policy change requires flexibility over the timing of emission reductions.

20. Borrowing should not be restricted. There is no logical reason why any “surplus” emission reductions should be lost because the reductions required by a given budget have been exceeded.

21. Borrowing, however, should be limited to avoid the potential for constant deferral of emission reductions. Irresponsible borrowing could undermine the credibility of carbon budgeting and, in the worst case scenario, render the long-range emission reduction targets unachievable. The proposed 1% limit on borrowing would seem to offer a reasonable balance between flexible budgeting and credible budgeting.

vii) The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources

22. EEF believes that the option of meeting domestic targets through carbon credits derived from abatement overseas is essential. Emissions should be reduced where it is most cost-effective to do so. Therefore, there should be as few restrictions as possible over the quantity and sources of credits which can be used to meet carbon budgets. The only limitation on their use should be on quality grounds (i.e., assurances must exist that emission reductions associated with such credits are genuine, sustainable and fully verifiable).
(viii) The range and validity of changes in circumstances in which budgets can be subject to review and revision

23. Successful climate change policy will require an appropriate balance between certainty and flexibility. Whilst targets must be sufficiently flexible to cope with significant changes in circumstances over the decades, a degree of certainty will be essential for the development of a stable carbon price and a conducive environment for investment.

24. Under the Bill, the level of a carbon budget can only be changed where there have been significant changes to the factors upon which it was established and where the advice of the Committee has been sought. Therefore, the circumstances under which a carbon budget can be revised, as currently written, are open to significant interpretation and would need to be exercised with caution and consistency. As a consequence, EEF recommends that guidance be established as to what would constitute “significant changes” in this instance.

(ix) The reporting procedure and Parliamentary accountability

25. EEF welcomes the proposed introduction of regular progress reports on emission levels to Parliament. However, EEF questions the length of the proposed delay in the reporting process (ie under the Bill, the Secretary of State must provide an annual progress report no later than 17 months after the year in question). The shorter the delay, the more effective the reporting will be as a monitoring tool and early warning system. Therefore, consideration should be given as to whether the time lag could be shortened.

ADAPTATION

(x) Whether adequate provision is made within the Bill to address adaptation to climate change

26. EEF welcomes the proposed introduction of a requirement on government to report regularly to Parliament on the risks and impacts associated with climate change and the policy response to them. However, the Bill should contain an explicit requirement for government to seek the advice of the Committee on each such report.

COMMITTEE ON CLIMATE CHANGE

(xi) Its composition and appointment, including length tenure and degree of independence

27. EEF welcomes the general philosophy behind the composition and appointment of the Committee (ie that it is composed of expert appointments rather than elected representatives of stakeholders). This is vital to ensure the Committee’s independence from capture by sectional interests.

28. There is no limit to the length of tenure of Committee members—it is entirely at the discretion of the Secretary of State. This being the case, the terms of appointment of each member must be transparent and a matter of public record.

29. The Bill empowers the Secretary of State to provide guidance and give directions to the Committee with which it must comply. To avoid the Committee being compromised, and the potential for its independence being questioned, any guidance or directions should, again, be transparent and a matter of public record.

(xii) Its function and responsibilities

30. To ensure its independence from government, we think it is appropriate that the Committee has an advisory rather than a policy making or proposing role. In particular, EEF welcomes the Committee’s extensive advisory role in relation to carbon budgeting (ie advising government on the level of budgets, the degree to which “credits” and “debits” should be used, and the respective contributions of sectors covered by trading schemes and those which are not).

31. However, EEF believes that that the Committee should also be charged with advising government on the respective contributions towards meeting a carbon budget which each sector of the economy should make. Ensuring that all sectors of the economy play a full part in reducing emissions will be essential to ensuring that environmental objectives are achievable and met as cost-effectively as possible.
(xiii) Its powers in determining carbon budgets and the provisions within each budget

32. The advisory, rather than policy making, role proposed in the Bill is appropriate.

(xiv) The adequacy of its range of functions in overseeing targets

33. As part of its annual progress report, the Committee should be explicitly charged with indicating whether or not it believes that the 2020 and 2050 targets remain appropriate and, if not, on what grounds.

34. The fundamental rationale for the Committee is the need for a body with sufficient independence and expertise to advise government on how best to achieve its climate change objectives and measure progress towards their achievement. As such, it would be remiss if one of its primary responsibilities was not to inform government if it thinks the targets themselves are no longer appropriate.

(xv) The resources available to the Committee

35. Access to sufficient modelling and forecasting resource will be essential if the Committee is to effectively scrutinise government emission forecasts, progress reports and carbon budget proposals from an informed position.

ENABLING POWERS

(xvi) The adequacy and implications of the proposed enabling powers allowing the Secretary of State to establish greenhouse gas emission trading schemes by means of secondary legislation

36. The implications of the proposed “enabling powers” are significant—empowerment of the Secretary of State to introduce an unlimited number of trading schemes, at virtually any level of the economy, through secondary legislation. As a consequence, such powers would need to be exercised with extreme caution and maintaining the requirement for parliamentary approval (via “affirmative resolution”) is essential.

37. EEF welcomes the limitation on the proposed enabling powers whereby only schemes in which allowances are allocated free of charge can be introduced via this route. Trading schemes in which allowances are not allocated free of charge could have significant financial consequences for participants and should be subject to the higher level of scrutiny associated with primary legislation.

38. The introduction of the proposed enabling powers should not result in a presumption in favour of emissions trading as the policy tool of choice for addressing climate change. A range of policy measures—including taxation and regulation, as well as emissions trading—will be required. Different measures will be appropriate for different activities or areas of the economy. For example, the administrative burden associated with emissions trading may render such an approach counterproductive in relation to emissions from individuals, households and small businesses.

INTERNATIONAL IMPLICATIONS

(xvii) The validity of the government’s view that the Bill will act as an effective example to drive international climate change policy post-2012

39. The Bill must be used as an opportunity to demonstrate that the UK has a measured, as well as progressive, approach to climate change and that robust economic analysis lies at the heart of this approach.

40. Ultimately, the value of the Bill in driving forward international policy will depend on how effectively it is implemented. The UK will need to prove that it can implement a policy framework which delivers both economically sustainable emission reductions and energy security in order to act as an attractive example to the rest of the international community.

41. Government will need to do more than publish, and even implement, a Bill to catalyse international climate change policy post-2012. Support for energy-related R&D, engaging with the businesses that will ultimately deliver the low carbon products and services which allow emission reductions to be achieved and demonstrating flexibility when dealing with rapidly developing economies will also be vital.

GENERAL

(xviii) Whether there are other domestic climate change issues which it would be appropriate to include in the Bill

42. No further comment.

EEF

May 2007
Witnesses: Mr Michael Roberts, Director of Business Environment, and Ms Gillian Simmonds, Senior Policy Adviser, Business Environment, Confederation of British Industry; Mr Gareth Stace, Head of Environmental Affairs, and Mr Roger Salomone, Energy Adviser, EEF, the Manufacturers’ Association, gave evidence.

Q204 Chairman: We welcome to the Committee our second set of witnesses. For the record, representing the Confederation of British Industries, we have Mr Michael Roberts, the Director of Business Environment, and Gillian Simmonds, Senior Policy Adviser of Business Environment. From EEF, we have Gareth Stace, who is the Head of Environmental Affairs and Roger Salomone, who is their Energy Adviser. You might have gathered from our line of questioning with our previous witnesses that we were interested at the outset in establishing what your thoughts were on the validity of the target of greenhouse gas reduction which the government wishes to build into the Bill, how realistic it is, particularly from a business point of view, and whether we need a Bill as a mechanism to achieve it. Is it something that you support? Mr Roberts, do you want to kick off for the CBI on that?

Mr Roberts: That is a rich question with a lot of angles to it. Starting from the last part of your question, we support the initiative to bring forward the Bill and to create a degree of certainty for the business community, both over the long term and the medium term, with regard to the pace and direction of travel in carbon reduction because that helps businesses make rational investment decisions in low carbon options. With regard to the nature of the targets, a number of issues from our perspective need to be resolved. First, the way in which the emissions are categorised. You suggested in your introductory remarks that it was aimed at reducing greenhouse gas emissions. It is specifically CO₂ related. In our judgment that potentially could cause some difficulties. For example, some of the international commitments are expressed in greenhouse gas emission terms. There is a potential issue of lack of synergy between what we do here in the UK and what we do on the international stage. The second issue is with regard to the scale of the targets, however they are expressed. We have supported for some time the government’s ambition to move towards a 60% reduction in CO₂ by 2050. We recognise the need to move at a pace in the medium term. We have supported the idea of an interim target. Our observation that the proposed target expresses a range of 26 to 32% by 2020 is an extremely challenging one and would require measures beyond those which are currently envisaged in the government’s climate change programme and indeed in the measures which are envisaged under the current energy policy review. Whilst we welcome the need to move quickly in the period up to 2020, we believe that the target as currently set will be challenging for business and for society as a whole.

Q205 Chairman: In your evidence you express the concern that there might be some lack of fit between the domestic agenda and the European Union target of a reduction of greenhouse gases of 20% by 2020.

Is that a pitch for having it at 20% as an interim target or simply saying, “I accept we have to do better but it is still challenging”? Mr Roberts: We do not necessarily suggest that the UK target has to be 20% as well. The issue of fit is first round whether it is greenhouse gases or CO₂ that we are talking about. The second is that the EU’s target of a 20% reduction by 2020 in some way has to be distributed or shared as a responsibility both between Member States and between sectors of the European economy. How that burden sharing, to use the term of art, relates to what goes on in the UK and then within the UK between different sectors of the economy in the UK is the bit that is very unclear. Given that uncertainty, we naturally have some concerns, for example, that the UK may be committing itself to a degree of effort which is laudable but in excess of what perhaps some of our European partners are committed to. We would like to see them meeting the same degree of commitment that we would be committing to in the UK.

Q206 Chairman: Mr Stace, do you want to comment?

Mr Stace: We would agree with the CBI in terms of welcoming the Bill, in terms of certainty for our members, in terms of what will be required of them over the long term. We welcome the certainty of having a long term target of 60% by 2050. We also welcome the 15 year certainty of three budgetary periods set in one go. A five year budgetary period is also welcomed by our members. In terms of the target of 60%, we see it as something that needs to be achieved. However, we believe that the target could be 70%, 80% or even 50% in terms of what we will learn in the future of what is required and what can be achieved without significantly damaging the UK economy. You have a 60% target and, yes, that should be aimed at but in terms of long term forecasting and understanding what will happen in 2030 a 60% target becomes more of an aspiration because in 2030 we will have a much better idea of what we really need to do, what we really can do and what has been done. In my mind the 60% is not absolutely set in stone.

Q207 Chairman: In paragraph eight of your evidence you mention the need to perhaps review it.¹ The Committee has a role in reviewing these matters. Is that not a question of how successful you might be in lobbying them about the world as you see it, as to whether they recommend targets to go up or down? The Committee suspended from 5.10pm to 5.26pm for a division in the House

Mr Salomone: We refer to something called an economic trigger, the idea that you can potentially review and revise targets based on the economic outturn of events. The reason for that goes back to the target. We very much welcome having a statutory target. Business and society in general do

¹ Ev 59.
need some kind of long term framework within which to plan our emissions reductions. That is good progress. However, in terms of the validity of the 60%, to be brutally honest, we do not feel that we are in a position to say whether 60 or 65 or 55% is the correct target. There is a lot of uncertainty over what is going to be technically feasible or economically viable over 40 or 45 years. 60% would seem reasonable. It is grounded in quite a well received report, the Royal Commission on Environmental Pollution Report, and it would represent a huge transformation of our economy to reduce emissions by 60%, especially probably a growing economy. Hopefully, there will be some kind of economic growth between now and then. I do not think we should underestimate the magnitude of the change to 60%.

Q208 Chairman: 60 is a big number but one is a smaller number. It represents a 1% reduction each year for effectively 50 years.

Mr Salomone: It represents a very significant decarbonisation, for example, of electricity supply. There is not a single country in the world that has 75% of its energy supplied by non-carbon sources. We are talking about major changes to the economy over that time.

Q209 Chairman: I would not dispute that.

Mr Salomone: Investment cycles you cannot do on a year to year basis either. Investing in industrial plants or power stations you cannot do on a year to year basis. Given we think it is a reasonable target, it might transpire that 60% is not challenging or too challenging, so we very much welcome the flexibility provided by these review clauses, so we can open up the validity of this target based on changes in international policy. You can imagine the kind of framework where there is a successor to it or not or changes in climate science. We also think, if you are going to retain control over the costs of climate change policy or indeed if you are going to realise that it transpires that climate change policy is a lot easier than we thought, the costs are a lot lower, you might want to exploit some opportunities and make the target more challenging. There should be some way of opening up the targets on economic grounds so that if the economics of climate change change substantially there is sufficient flexibility to allow the Secretary of State to review those.

Q210 Sir Peter Soulsby: Does it not rather blow the credibility of the whole thing if you say at the outset, “Yes, these are targets but they are not really targets; they are just aspirations”? I think that was the phrase used earlier on. They could be reviewed in all sorts of different circumstances.

Mr Salomone: I do not think we are talking about all sorts of circumstances but maybe just three circumstances on economic grounds, on science grounds and on developments in policy. You obviously want it drafted quite tightly and it would still be something exercised by the Secretary of State and then go to Parliament to get a vote. I do not think it would be a trivial exercise. On the other hand, I do not think we should necessarily be fixing the pace for 50 years where we do not know the costs. We do not know whether it is going to be substantially easy to achieve 55 to 60%. We need flexibility in there.

Q211 Sir Peter Soulsby: Are you suggesting that it is possible to define quite clearly what the triggers would be to permit such a revision of the targets?

Mr Salomone: There could be one in there on economic circumstances that would be comparable to the ones in there already on, say, climate change science, so a significant change or development in the economics of climate change.

Q212 Mr Rogerson: You said there were three issues you had looked at but they are all pretty broad in the sense of economic grounds. Economic grounds could cover all sorts of things. Are you talking about a crisis for the economy and industry going into huge decline?

Mr Salomone: Bear in mind two of them are already in there and drafted reasonably broadly, as you mentioned. You are not going to be able to draft something that is going to be so specific it will cover every single eventuality. For example, an obvious one is that technological development is either a lot faster and a lot more successful, so abatement opportunities are much broader and much cheaper than you thought, or the converse. We hear a lot about carbon capture and storage. Whether that comes on stream and is commercially deployed in the next 10 or 15 years or it might be that it is not for the next 20 or 30 years. It is really those areas where the costs of climate change and abatement turn out to be substantially different than we think they are now.

Mr Stace: Both higher and lower, so you could increase the target or reduce the target. I am not just talking about relaxing the target here.

Q213 Patrick Hall: The science now seems, as it has been described to us, is that 60% is not ambitious enough but you are building into your approach to this—certainly EEF right from the start—that 60 may be over-ambitious. Therefore, one may end up looking to achieve less and that does not seem to fit in at all with the reality as it is unfolding. You may be reflecting your members’ concerns here, which is fair enough but this goes beyond that. Could I park that and ask both of you: in terms of cost, of course there is a cost of dealing with climate change but there is a cost of not dealing with climate change. That is what Stern makes absolutely clear. If you are going to talk about the cost to your members or to industry of taking measures, surely you have to put that in the context of some sensible analysis of the costs of not doing anything here and then you look at the balance there? I think your evidence from EEF does not seem to do that.

Mr Stace: In terms of what we are saying, in terms of the economic trigger, the economic trigger may not change the 2050 target. It may change the interim targets in between that. If you assume the cost of abatement now as being very high but you could see
by 2020 that the cost of abatement drops and you can make huge savings there in terms of CO₂ reductions, and you can see that the current targets are hurting the economy significantly, you might want to change that target at the beginning to allow for further reductions later on, where they can be made more cheaply.

Q214 Patrick Hall: That may well end up being the case for pragmatic reasons. However, what has been made clear to us thus far is that a lump of carbon in the atmosphere lasts for 100 years or so before it is washed out. The more you delay tackling it, the more it is going to be around and the more the temperature will rise, which will then trigger further costs. It is not an easy equation but to suggest that it is very difficult now; therefore let’s put it off—I am not saying you are necessarily advocating that but you are saying that might be a possibility—for another 10, 15, 20 years and it might somehow be cheaper because of technological change, it is not as simple as that because the more you have carbon hanging around the more there is going to be consequential effects and costs. Is that not a fair point?

Mr Stace: What we are also saying is that you might have sectors of the economy that have very limited abatement opportunities, almost at whatever cost other than buying in credits. In terms of technological breakthroughs, that is what you could almost be waiting for in order to achieve those targets for certain sectors.

Q215 Patrick Hall: You are more likely to achieve these breakthroughs if there is some pressure to work on it now rather than saying that it may be okay and something will be delivered in 20 years' time. Surely we need to have the political will now?

Mr Salomone: For me, you used a very good example earlier about why we might need an economic trigger in terms of the flip side where you realise that the economic consequences of climate change and the damage it can do to the economy are a lot higher and more significant. There may be a case to revise the target upwards. We are trying to say it would be something that would work both ways. We are not omniscient and we do not know necessarily what is going to happen over the next 45 years and we need something to be exercised with caution by the Secretary of State and something that would go to a parliamentary vote.

Chairman: It is an interesting observation, it is not, that for example somebody who is in the electricity generating business has by definition, because of the lifetime of the asset, to make a 30 or 40 year decision? It is not incompatible with the kinds of timescales that are being discussed in terms of target setting.

Q216 Lynne Jones: I thought you wanted some certainty that if you invested in carbon abatement measures you would reap the benefits. Surely if you have it so flexible that certainty is not there. It does worry me that British industry seems to be looking entirely negatively at this rather than at climate change being an opportunity to encourage the development of these technologies which we do need. The longer you put that off, as Patrick has said, the less likely you will get that investment. What kind of scenario are you painting? What economic trigger are you thinking of?

Mr Salomone: I have mentioned a couple. One is the pace and effectiveness of technology change. I probably would not feel competent to say exactly how costly and effective carbon capture and storage is now or 15 years ahead. It is still in development, let alone deployed commercially. There need to be some grounds to reopen the targets in those kinds of areas.

Q217 Lynne Jones: We now have 50,000 people employed in the photovoltaic industry as a result of the measures that the government has taken. If we are ahead on environmental technology, it would be to the benefit of our economy, not the reverse.

Mr Salomone: We would agree with you. A lot of our members are at the high technology end of manufacturing engineering. There are all sorts of opportunities for climate change but the main issue we see is that we want to retain some kind of control. We do not see review clauses being used in a trivial manner frequently but if there are major developments that we miss or if the pace technology progresses is faster than we thought, if the impacts of climate change are potentially worse or maybe not as bad as we thought, there should be grounds to review those targets.

Q218 Lynne Jones: We have to take serious measures on this issue and we are going to need a hell of an amount of political will. If at the very start you are saying we could relax these targets, I would suggest to you that that political will will not be delivered.

Mr Roberts: Can I pick up on your point about business being negative?

Q219 Chairman: You have had a business change task force, have you not?

Mr Roberts: Climate change. To pick up on your point, as I mentioned before, we have supported the 60% target and the need for an interim target with some bite to it for a couple of years now. You would be hard pressed to find many other national business organisations in other countries committing to the scale of change that the UK business community is committing to. Pretty much every week you are seeing major companies in this country, not just in the retail sector but in other parts of the business community, committing to make carbon reductions which they are not required to do under the law. Certainly there is a variability of view within the business community and there are going to be some players, particularly but not exclusively energy intensive users, who face real challenges in delivering the sort of cuts that are needed. Frankly, it is not accurate to say the business community in this country is unable to deal with this. If anything, we have to have some sophisticated views compared with the global business community on this agenda.
Q220 Chairman: Tell us about your climate change task force. For example, have they come to any views about the trajectory towards achieving the target that is stated in the Bill? You might, in answering that, just give us your views. The government has set a series of three five year targets within the Bill. Are you content with that?

Mr Roberts: The task force we set up in January is still in the middle of its work. We are not due to report until later in the year. Our focus is not purely and simply the issue of the targets that are in the Bill or indeed how we meet them. To try and answer your question, we take as a starting point the Stern report and that gives a pretty strong indication about the scale and pace of change that we need to achieve, not just in the longer term but in particular Stern says the next 10 to 20 years for the global community are absolutely fundamental and that applies to the UK as well. As a task force, we are particularly focused on what it is that the British business community can do within that timescale to put us onto the longer term trajectory. The initial findings are that there are significant opportunities in the UK economy to deliver substantial carbon reductions, some which are at no net cost—it is about improving energy efficiency in the home and at business—some of it does come at a cost and the issue is how do we make sure that that cost is as manageable as possible. We will not be reporting on our findings until later on in the year.

Q221 Chairman: You cannot give us a view about the five yearly budget target that the government has set? Is that a good thing or a bad thing?

Mr Roberts: First of all, in terms of the interim target which the five year budgets are taking us towards, we have said that whilst we need a challenging target this is a particularly challenging target, the one that is specified. At the moment, it is not obvious that this is a particularly challenging target, the one that we need to achieve, not just in the longer term but in particular Stern says the next 10 to 20 years for the global community are absolutely fundamental and that applies to the UK as well. As a task force, we are particularly focused on what it is that the British business community can do within that timescale to put us onto the longer term trajectory. The initial findings are that there are significant opportunities in the UK economy to deliver substantial carbon reductions, some which are at no net cost—it is about improving energy efficiency in the home and at business—some of it does come at a cost and the issue is how do we make sure that that cost is as manageable as possible. We will not be reporting on our findings until later on in the year.

Q222 Chairman: Is 26 to 32 the right target?

Ms Simmonds: We think it is a challenging target. As we have said in our submission, the issue is about how that fits into the European framework. It is about making sure that the target is expressed in terms which enable us to use measures that are at our disposal within the European context—and recognising that many of the emissions reduction measures applied to UK business come from Europe. We need that certainty as to how we are going to fit in with that broader picture. That is of key concern to us. In terms of whether it is 26 or 32%, there is some concern that we might be showing our hand a little too soon in terms of the negotiations that are taking place in Europe and in terms of how we fit in within that structure.

Q223 Patrick Hall: Is there not a danger that we end up allowing the slowest to set the pace? We are almost saying that we gold plate everything in Britain and we are better than everybody else in the European Union at doing things. There is a danger of adopting that position with regard to this issue that we are discussing. Surely we must not allow the slowest country or sector to set the pace. One of the benefits of this proposed legislation is that Britain is at least saying, “Yes, we are going to do what we think is necessary to fulfil our share, irrespective of what others do. We hope the others will do it, especially in the European Union”, but do I detect that you are saying that we cannot deliver our share unless others do it first or do it at the same time?

Mr Roberts: Our position is a little bit different to what you have suggested. Our view is that certainly there is an opportunity by indicating our degree of ambition to bring others to share that ambition. That is what we are trying to achieve. What we are not trying to achieve is to say that, simply because we do not know yet what the others are going to do, there should somehow be a race to the bottom by us rowing back. The idea is that, precisely by showing that we want to be ambitious, we get others to meet that ambition too. The experience of the second phase of allocation under the Emissions Trading Scheme has indicated that that can work as an approach. The UK was one of the first to come out with its ambitions. Other Member States were less ambitious. The Commission said to other Member States, “You have to raise your game.” The end result was a not unreasonable one. It is however a risky strategy because that does not always work and experience in the first national allocation plan process was an example of where that sort of approach did not work. By all means let us be ambitious in what we want to achieve, but let us use that as an opportunity to lever the others to come to the table with the same ambition.

Q224 Chairman: That is a sort of first mover advantage, is it?

Mr Roberts: I am not sure the phrase quite operates in this sense but I understand the idea. It is really about saying that as a country, as a business community, we understand the seriousness of the issue. We need to act. We need to act now and we need to act with some pace. This is what we believe is reasonable. We need to see that sort of commitment being matched in other countries.

Q225 Chairman: In your evidence you are talking about the interaction between the European Union proposals and the UK proposal and you said that emissions reductions to be achieved by each of these sectors will be implemented on the basis of a sectoral methodology defined by the European Commission and applied uniformly across all companies concerned in a given sector. Do you have reservations about that approach?
Ms Simmonds: About it being a sectoral approach?

Q226 Chairman: Yes.
Ms Simmonds: No. There is an emerging consensus within the business community that a sectoral approach is possibly a positive way of addressing competitiveness concerns for industry. Obviously there are always risks associated with potentially the way it is phrased in our submission, which is highlighting that there is a proposal on the table, but is not necessarily endorsing it in its entirety from the point of view of the CBI. There are some risks obviously associated with it being a strategy where we may pass over to Europe the control around setting sectoral targets. There are also other ways in which we could look at it, where that control is shared between Europe and the nation states. As to the sectoral approach itself, I think it is something that the business community is very interested in pursuing.

Q227 Chairman: The United Kingdom government has powers in the Bill to introduce trading schemes. I suppose there must be an interaction between what happens in Europe and what gets left out of that, as to where the government might apply its own trading schemes.
Ms Simmonds: I think that is one of the areas in terms of the interim targets that we are concerned about. We have interest in seeing that it is taken up within the Bill or within the considerations surrounding the drafting of the final Bill. If part of the target is not within the UK’s remit, the UK’s target is able to reflect that in terms of what the European Emissions Trading Scheme might affect.

Q228 Chairman: What I am driving at is: does the Bill have to be modified in some way to take into account any possible misfits between what might happen at a European level and what might happen at a national level? I think I get the sense that, from the CBI standpoint, within Europe you would like everybody to be travelling by the same route to achieve the European position. It might be that we in the United Kingdom go a bit further. In the methodology you want an equivalent so that we are not left behind in competitive terms. Have I understood that correctly?
Mr Roberts: We have a situation which is evolving but as of today we have a European wide scheme, an emissions trading scheme which covers process industries and power generation, that across Europe and within the UK covers installations that are responsible for approximately half of the emissions from the economy. To the extent that a European scheme continues—and we do want to see European wide and in the future global trading schemes—and operates at a pan-national level we think there may be scope for looking, for example, at a sector based approach to establishing the allocation of carbon to certain parts of the economy. For those bits that are not covered by pan-national schemes, there may be opportunity for a national approach. In the previous session of evidence you had a discussion about the energy performance commitment, which is a nationally originated idea and which will apply not to energy intensive sectors but to energy extensive sectors such as the retail community. In principle, we do not have a problem with the operation of both the pan-European and the national sets of approaches. Where we have a concern—and it was expressed in our evidence—is that in providing enabling powers to the government which are focused on trading our feeling is that inevitably that will encourage the government to look at measures that will apply particularly to the business community in delivering UK emission reductions, since trading tends to work well with businesses rather than the individual consumer. What we would like to ensure is that that does not skew the balance of effort unfairly away from the whole of society in delivering emissions reduction and put it unfairly on one part of society which is the business community.

Q229 Chairman: Try and give us a steer. I too have grappled with how you share out the target over these periods. How do I know what Mr Jack has to do to make his contribution towards it, or is it all going to be done for me by those who provide my energy? I am in a bit of a dilemma in that respect. I think you are saying that you do not want all the eggs to be put into the business basket in terms of achieving these targets. Is that right?
Mr Roberts: We would argue that it is not economically the most efficient way of doing it.

Q230 Chairman: What would you argue is the most economically efficient way of doing it?
Mr Roberts: If you look across the economy at the range of opportunities which exists, there will certainly be many things that the business community can and should do and in fact has been doing under the Emissions Trading Scheme; but there are things that individual consumers can do in the way that they exercise their choice to travel, in the way that they heat and light their homes and the appliances they use. Some of these areas also carry with them a role for the business community. I am sure you will have heard discussions about the potential for energy service companies to provide a different offering to consumers which is not about kilowatt hours of energy but the end outcome of that energy which is heat and light, which could lead to a much more efficient way of people meeting their needs for comfort in the home. There is a whole range of opportunities and they rest not just with business but with individuals as well. The way through this ultimately is the way in which the government designs an overall programme of activity to deliver carbon reduction. Some of that will rest with measures which will rely on business but the programme—as indeed it already does—has actions which are focused on transport and the domestic consumer. From our point of view, there is a risk in trying to, in some way, set targets for each of these component parts of the economy because there is a risk that you then lose the flexibility, particularly as you go from five year budget to five year budget to five year budget, to put more emphasis on one set of measures than the other. We
think a programme which indicates the broad scale of effort that it is intended to deliver from either business, the consumer or the transport user is the way in which we will start to provide you with a bit more granularity about who is going to be responsible for delivering what.

Q231 Mr Rogerson: Do you think it is legitimate for government to say, “These are particular areas of industry we do not necessarily want to incentivise within the economy in order to meet our targets”, rather than just saying that there are blanket targets for the whole of society to meet or for the whole of the business sector to meet? It is difficult because they all interact anyway but the government may come to the conclusion that these are very energy intensive industries and we want to see the UK economy concentrating in other areas. How do you cope with that sort of thing?

Mr Roberts: From our point of view, we would be keen to ensure that the government, in looking at the contribution that can be made from each sector of the economy, takes as its starting point the principle that we should be looking for the most economically efficient basket of measures. The most economically efficient set of measures in the first instance is around energy efficiency because it is a net positive benefit to the economy. There are opportunities certainly within the business community, both the service sector and indeed in manufacturing, but there are also significant opportunities amongst domestic consumers to be much more efficient in the way that they use energy in the home. I am using this as an example to make the point about the principle, which is: look across the range of opportunities out there, focus in the first instance on the most economically efficient and work your way through towards the end point. That would suggest a particular emphasis on business, whether it is industry, manufacturing, services or whatever, and indeed on other parts which are non-business. In doing all of that, the other thing the government should be looking for is to try and make sure that, in perhaps looking to heavy industry to deliver a certain amount, it does not adopt measures which impose too great a cost which is not imposed upon their overseas rivals. It is not just an economic issue; there is an environmental reason for it because you do not want to export the industrial activity from the UK where there is a reasonably strong enforcement regime to parts of the world where perhaps the enforcement regime or the commitments on business are less stringent, so you end up with an environmentally less beneficial option.

Q232 Chairman: The only sanction that so far has been suggested to the Committee as a workable way in which the government could be disciplined externally for not achieving its target is judicial review. I am wondering what your own thoughts might be on sanctions if the government does not hit its targets.

Mr Stace: In terms of sanctions and the judicial review, they come a long time after the time when the targets have not been met currently within the Bill.

In terms of the Secretary of State being called to account, there would be quite considerable pressure on the Secretary of State and on the Committee on Climate Change in terms of having to report annually to Parliament. There is a great deal of pressure there for the Secretary of State and if the Secretary of State does not meet the targets for whatever reason he would be fully exposed to that. We feel that we would not desperately want to see any further measures beyond judicial review within the Bill.

Mr Roberts: As with previous witnesses, this is not an area where we can claim particular expertise or knowledge.

Q233 Chairman: Let me put it this way: many of your members enter into binding performance contracts with their customers and if they do not achieve what the customer wants there can quite easily be a financial penalty clause. Their balance sheet feels the pain if the company does not perform in accordance with what it has agreed to. At the moment, the only thing that seems to be around is a rather large legal bill and governments take these things—I will not say every week—but they are not unused to being judicially reviewed. The Secretary of State wanders along to the House of Commons and says, “I am awfully sorry. We have missed the target this year and there were some extenuating circumstances. I hope everybody will understand and of course we will take what the Climate Change Committee says about changing the targets and adjusting things in the future. We did our very best. Sorry about that.” Is that sufficient or should the government be compelled to make up the deficit by purchasing credits abroad, for example, or doing something that causes a bit of pain?

Mr Roberts: To underline your point, there is an asymmetry in the sanction regime in that, whilst there is a proposal for government to be subject to judicial review in the event of non-compliance with the target, in the case of one of the current flagship policies to deliver on the target—the Emissions Trading Scheme which applies to business—there are real financial penalties in the event of non-compliance. In the case of the government however it is difficult to see how exactly the government would impose upon itself some sort of financial penalty. I suppose in addition to judicial review, at the end of the day, there is the political pressure that will come upon government through, for example, the annual process of reporting. To the extent that government is not compliant, I am sure you and your colleagues will do a sterling job in calling government to account. Particularly for the government that has brought forward this Bill, which sets its store by leadership in this agenda, to be shown to be failing in some way through its programme of measures to deliver on the target will be a pretty strong sanction—admittedly not a direct, financial one but a very strong political one.

Q234 Lynne Jones: You said earlier that the programme was not in place to achieve the interim targets. Already, unless the government brings
Mr Michael Roberts, Ms Gillian Simmonds, Mr Gareth Stace and Mr Roger Salomone

forward further policy instruments, they are destined to fail. Are you happy that, once the Bill is passed, they will suddenly come up with all these new policy instruments? Should there not be some process whereby the Committee can point out that they are not going to meet their targets in advance if they do not have the necessary policy instruments, a judicially reviewable prior to the event rather than after the event?

Mr Roberts: The Climate Change Committee will have an early job to do in highlighting the extent to which the existing programme of measures will take us towards whatever the interim target is on the face of the Bill. I would point out one of our earlier concerns about what the consequence might be of a process which indicates that somehow we are not going to be on track. Inevitably, government will look to the things that might bring it back on track. As I suggested before, the fact that the Bill has enabling powers around trading brings with it a potential risk—it may not materialise—that the government will look to pull levers to get it back on track which the Bill explicitly pulls it in the direction of: for example, trading, and that would tend to mean a bigger focus on the business community rather than the rest of society. It is important that early clarity is secured in terms of how we deliver on our target but in saying that we put in a caveat that that should not be done in a way which in some way imbalances the degree of effort across the economy in the way that I was talking about earlier.

Q235 Lynne Jones: You heard the discussion earlier about the use of carbon credits. EEF has argued that there should be unlimited use so long as they are used and have quality. So long as they pass certain quality specifications, there should be unlimited application. How do you justify that and does the CBI agree with that position?

Mr Stace: As we said in our submission, the most important thing here is that we independently verify those emissions, that they really have taken out CO2 from the atmosphere or stopped CO2 getting into the atmosphere. That verification needs to be approved by the Clean Development Mechanism executive board. In terms of unlimited use of credits to meet the targets, what we are looking for here is to meet those targets, to reduce emissions, at reasonable cost. We have CO2, a global gas, global warming, a global issue. We seek global solutions for a global problem so wherever the emissions reductions are made within the world they are still contributing to tackling the problem. If those reductions can be made more cheaply elsewhere and they are quantifiable and can be verified, then those are the reductions that we should be looking to use in addition to the domestic reductions that we and our members are making. In terms of looking at reductions, from 1990 to 2005 we have seen a reduction in terms of industrial emissions but we have seen an increase in domestic and transport emissions. Since 2001, many of our members have been part of climate change agreements where they have been subject to targets which are, in Defra’s words, “all cost effective saving measures.” Reductions are being made domestically but—

Q236 Lynne Jones: With the threat of the Climate Change Levy though.

Mr Stace: If they do not meet those targets, they pay the full levy.

Q237 Lynne Jones: The Chancellor has not said you will not have to pay the Climate Change Levy if you invest overseas, has he?

Mr Salomone: I do not know whether this was misleading in our paper. In general, emission reductions should take place wherever they are most cost effective. In the Bill right now it is for the Committee on Climate Change to advise government on where the balance should lie between overseas and domestic emission reductions and that is something we very much support. We should not necessarily hard wire in a percentage so that that is the absolute limit on how much you can do overseas. Somewhere, judgment has to be exercised. If it emerges that there are much cheaper domestic options or vice versa, we should always be flexible to that. A decision will need to be taken by the government in consultation with the Climate Change Committee.

Q238 Lynne Jones: What do you think about the suggestion that there should be a floor on the price of carbon, because one of the consequences of allowing unlimited investment overseas is that the price can be much cheaper to do that, which means that we will not, in developing the technologies, be investing here. At the end of the day we need to reduce our CO2 emissions by UK plc and we need to reduce the increase in emissions associated with development overseas.

Mr Salomone: We are not saying there should not be any reductions by UK plc at all. There is a judgment to be made as to where it is done. I do not necessarily think that if there is a huge use of, say, clean development mechanisms there would be no cost to it because demand would go up and the price of the credits associated with those schemes would also potentially go up as well.

Mr Stace: It would be very short-sighted of businesses not to be continuing to reduce their emissions. One of our very largest members, a multinational company, this year has made a

Q239 Lynne Jones: They are the exception. There was an OECD report in The Financial Times this week. They surveyed business and by and large businesses are not taking these actions unless they are in some way forced to do so by government. That was a clear message. In some respects you are right. We are ahead of this because we have the Climate Change Levy and so on. Some may take these
measures voluntarily but the evidence is that they do not unless there is some mechanism for ensuring they do.

Mr Stace: We have seen a huge turn around, pre and post Stern, with business in the last six months with members in terms of their attitude to the measures they are or will be taking in the future in addition to the ones they have taken in the past.

Q240 Lynne Jones: What about the CBI's view on this?

Mr Roberts: On your point about purchasing international credits?

Q241 Lynne Jones: And the floor on the price of carbon.

Mr Roberts: On the point of buying overseas emission reductions, our view is fairly straightforward, which is that the approach in the UK should be consistent with the approach that is taken internationally. First of all, there is the principle of complementarity which applies here. In other words, the delivery against our own targets should not be exclusively through purchasing overseas credits. It has to be in addition to domestic action. There is a convention which has grown over time about what complementarity means. It means effectively domestic action up to at least 50% of the total effort. I do not think our view is that we should be looking to achieve our targets by unfettered purchasing of overseas credits. What we should do is adopt an approach which is internationally recognised.

Q242 Mr Rogerson: On this concept of flexibility, could we say that there is an argument that the whole point of this is to take it beyond the political debate and set in stone what we want to do, so that you are taking it away from political pressure and the only political pressure is on the government to deliver as opposed to all the other pressures on the government to back away from the targets that have been set? Would you not agree that allowing that flexibility means that there are not necessarily the organisations you represent but others as well in society who will be pressing to move away from those targets? In allowing us to do that, we are undermining the whole thing.

Mr Salomone: I see where you are coming from. We would not see having flexibility in there as an entirely bad thing. Having rigid targets is not a substitute for a sound judgment by an expert body that the Carbon Committee provides in government. There is a role there. We are not going to be able to set accurate targets for every single eventuality necessarily. That is our main point. There needs to be a balance between certainty and flexibility but that lies somewhere in the middle.

Q243 David Lepper: The role of the Committee on Climate Change is obviously going to be an important one. The government sees the role of that Committee as independently assessing how the UK can optimally achieve its emissions reductions goals. In EEF you talk about the Committee having mostly advisory rather than a policy making or proposing role and you see that advisory nature as central to its independence of government. Could you explain that, please?

Mr Salomone: What might be a problem for the Committee on Climate Change would be proposing what the budgets are, setting the budgets and then reviewing whether progress against those budgets was achieved. There could be a conflict of interest there. It is far better to have someone standing back objectively and making a recommendation that these are the levels of carbon constraints that look feasible or these are the levels we need to achieve our emission reductions targets. For government to set the targets and the Committee on Climate Change to review them. That might give it a degree of independence there.

Q244 David Lepper: It seems to me to weaken the role of that Committee.

Mr Salomone: In setting the targets?

Q245 David Lepper: You see it as a body that should be reviewing what has been achieved?

Mr Salomone: Advising on what should be done.

Q246 David Lepper: Advising and then reviewing rather than setting the targets?

Mr Salomone: That would be the responsibility of the Secretary of State.

Q247 David Lepper: The kinds of analogies that we heard earlier this afternoon and indeed from some of our witnesses on Monday with the Monetary Policy Committee are not the kinds of analogies that you feel would be appropriate to the role of this ---?

Mr Salomone: We would probably favour the model that is being put forward now.

Q248 David Lepper: Have you looked at what the Bill says about the range of expertise which should be represented on the Committee? I address this to all four. Does that seem adequate? I wonder if you have any views—as well as the individual members—on how those members should be resourced to carry out their work.

Mr Stace: The members of the Committee must be experts, not stakeholders. The list we see within the Bill sets out the expertise that is needed. In terms of resource, this Committee needs to be adequately resourced and, more importantly, to enable them to be an independent body its secretariat needs to be independent. There was some talk earlier that perhaps the secretariat should come from the Office of Climate Change. We would be thinking that they may recruit certain people who may be currently part of the Office of Climate Change but once they step out of that and step into the role of the secretariat for the Committee on Climate Change they would be independent of government and government departments.

Ms Simmonds: We would reflect those views. We would like to see a secretariat that is independent of government. Mindful of what was discussed earlier, that is of also not wanting it to be a conflicting
relationship between government and the Climate Change Committee. There is a need for that to be avoided. I do not think we necessarily want to see a Climate Change Committee that is criticising government through high profile public statements, but rather through a relationship that is about monitoring progress and providing recommendations in response to its progress.

Q249 David Lepper: So far as the resourcing goes, a clear distinction between government departments and those who are working on behalf of the Climate Change Committee?
Ms Simmonds: I think so. Without that you have potential to co-opt the Committee or to weaken the Committee.
Mr Roberts: Just as the draft Bill suggests the expertise that needs to be reflected in the Committee, one will want to see some sort of reflection of that type of expertise in the secretariat. That might suggest that the pool of the secretariat is not just from the classic Civil Service but from outside of it.

Q250 David Lepper: Industry perhaps?
Mr Roberts: The scientific community perhaps, for example.

Q251 Lynne Jones: I presume from the earlier comments that you are all comfortable with the idea of the enabling legislation to introduce new trading schemes? Do you want to make any comment on that?
Mr Roberts: In our evidence we did indicate that, whilst we are comfortable with the basic principle, we are concerned that that might lead government to pursue particular emphasis on a particular part of the economy. We want to watch out for that. In other words, by focusing particularly on the use of powers to introduce trading schemes, the natural inclination might be to focus unduly on additional effort that can be achieved through the business community rather than through other parts of the community.

Q252 Lynne Jones: One trading scheme could be personal carbon allowances. What is your view on that?
Mr Roberts: It is not one where we have developed an extensive view but personally I think it is an interesting idea. There are some significant issues to overcome, both practical issues and also some social equity issues. There will be parts of the community that are perhaps more at ease with the idea of trading on the back of a personal carbon quota and some parts of the community that might find that a bit more challenging.

Q253 Lynne Jones: You heard the discussion earlier about other policy instruments that could be introduced through enabling powers. Do you have any suggestions or concerns about this?
Mr Salomone: Our understanding of the rationale of the enabling powers is that there already are the means to introduce fiscal measures and regulation without recourse to primary legislation and that is the concept of bringing this into here so that there is the same opportunity for emissions trading schemes. We would echo a lot of the views of the CBI. It is quite a wide ranging power, hopefully one that will be exercised with caution and, in that respect, we are glad to see that the trading schemes that can be introduced through this route would have to involve free allocation because we think that there are potentially more serious financial consequences for emissions trading schemes with, say, auctioning and we think it would be appropriate for those to come forward via separate legislation.

Q254 Lynne Jones: Professor Grubb was suggesting that the Climate Change Committee should have some oversight of these areas of policy. What do you think? Should that be enshrined within the legislation or should that just be a general competency?
Mr Salomone: I think it is in the Bill that the Secretary of State would have to consult the Committee on Climate Change before using enabling powers. That would seem appropriate.

Q255 Lynne Jones: I do not mean enabling. I mean other measures, building regulations, social measures.
Mr Salomone: It would definitely be appropriate to look at what the appropriate burden across society is and what types of policy instruments are most appropriate in different sectors. Absolutely.
Mr Roberts: Yes, we would agree.

Q256 Mr Drew: Can I be sure what your response would be to a community that might want to go further than the government is currently suggesting? This notion of a carbon free community is very attractive but that obviously has an impact on your members. There is a real danger, if you saw communities being picked off because they have a lot of ambition but individual companies would say, “If you do those sorts of things, we are out of here”. How do you try and remedy that danger, or do you not see it as a danger? Do you see that we must go forward? Mr Stace, I saw your eyebrows raised. That is what we have learned from Germany, that there were states that have gone further and faster and have now gained by it but there was pain in the short run and there must have been some interesting discussions with industrialists.
Mr Stace: It is a very difficult question.

Q257 Mr Drew: It is a hypothetical one but it is one that could well arise.
Mr Stace: Just as an individual you might find it a doable thing to become carbon neutral but in terms of heavy industry, if you are producing steel, you are producing carbon at the same time currently. With carbon capture and storage and other measures, the steel industry currently is undertaking a European funded project to develop ultra-low carbon steel and also is looking to carbon capture and storage. Yes, in the future, we might see a significant reduction in the amount of carbon produced per tonne of steel. However, in terms of locally here within the UK
moving towards that, in terms of sectors that have very limited abatement technologies currently and more importantly are very exposed to international competition, such as steel, you have a very difficult problem there. Once you start to internalise the cost of carbon within your production and therefore increase your cost, can you pass that cost on to your customer? We believe there are certain sectors of the economy that can pass their costs on. One of the easiest ones is the electricity supply industry. At the other end of the scale is the steel sector that cannot pass its costs on and we see the issue of carbon leakage as being very significant for our sector and potentially very damaging for our sector. I do not know if that fully answers your question but for certain parts of the economy and society it will be much more easy.

**Q258 Lynne Jones:** This is for EEF. You have argued that carbon allowances should be distributed without charge, for free. Why should this be the case given that there is a lot of evidence that, when permits were allocated free of charge through the EU Trading Scheme, there has been excess profit in power generation sectors?

**Mr Stace:** What Roger was saying is, if it is secondary legislation with enabling powers, then free allowances. We are not saying that our trading schemes always have to allocate allowances free of charge; it is just with enabling powers.

**Q259 Lynne Jones:** That is the only way in which any new schemes would be set up so why should the allowances be distributed free?

**Mr Salomone:** I may have misunderstood but I thought what the Bill was doing was introducing a quicker route through secondary legislation whereby you could introduce certain types of emission trading schemes. One of the criteria for that would be that allocations have to get allocated free, but would there still be the route through primary legislation to introduce a different type of trading scheme. I do not think that would be precluded by this piece of legislation, unless I am wrong.

**Q260 Lynne Jones:** Secondary legislation is a way of doing it more quickly but why should the fact that you have introduced them on a shorter timescale make any difference to the rationale for allocating the permits?

**Mr Salomone:** There would probably be more opportunity to debate the issues and scrutinise them as they went through the course of primary legislation.

**Mr Stace:** We see the energy performance commitment potentially coming in and it is something that we respond to in consultation and support. That is not issuing free allowances.

**Q261 Lynne Jones:** There was a discussion about this whereby there would be an option initially but the money raised would be redistributed. Are you comfortable with that concept?

**Mr Stace:** Yes. From what I understand in terms of the energy performance commitment, the revenue being recycled is recycled proportionally more to the companies that reduce their emissions by the most. We would support that approach.

**Chairman:** Thank you very much indeed and thank you for your written evidence. If, as a result of this, there is anything further you would like to submit in writing to the Committee by way of additional thoughts or reflections, we are always very grateful to have it. Thank you very much for coming.
Monday 21 May 2007

Members present

Mr Michael Jack, in the Chair

Mr Geoffrey Cox
Mr James Gray
Patrick Hall

Mrs Madeline Moon
David Taylor
Mr Roger Williams

Memorandum submitted by William Wilson (CCB 39)

Background

I am very grateful to the Efra Committee for this opportunity to discuss the draft Climate Change Bill. I have specialised in environmental law for 17 years. For nearly 10 years I worked on environmental laws at the Solicitors Office of the DoE/DETR/Defra, for example as the legal manager of the Environment Act 1995 and the Water Industry Act 1993, undertook negotiations on the Water Framework Directive and gave advice on air quality, radioactive substances, water, waste, environmental regulation and other aspects of environmental law.

Since 2001 I have worked as a Barrister at the Environmental Law Unit at Burges Salmon LLP, Solicitors in Bristol on environmental and energy law; and have also been a Director of the environmental policy consultancy Cambrensis Ltd. At Cambrensis we advise companies and governments on issues of environmental policy and regulation, and have also held a series of workshops and seminars over the last four years on emerging environmental issues, for a mixed audience of representatives of industry, science, academia and government, including, in December 2006 one on “Communicating Climate Change”.

In 1996–97 I spent a year on secondment as a Harkness Fellow based in Portland, Oregon and visiting 25 US States while writing “Making Environmental Laws Work : Law and Policy in the UK and USA”, in which I tried to compare approaches which made environmental laws effective or ineffective, with examples from the UK, USA and EU.

Amongst my main conclusions were that building long-term public support for environmental legislation—by participation, explanation and response to real public concerns—was essential, and law making processes that got too far away from that idea (including the way that EU Directives were negotiated) risked the laws being not understood or defended by the public when they were challenged. I also admired the way in which those involved in making environmental laws in Oregon had to go out to discuss and explain them in town meetings across the State—something I never had to do when working on either UK or EU legislation. I would like to see the officials responsible for this Bill taking it out to public meetings in the regions across the UK.

Members of the Efra Committee will best know how much their constituents know about this Bill and the machinery that it will introduce, and will have their own ideas about how to ensure that the public understand and support the Bill’s objectives, rather than regarding it as something imposed upon them.

Comments on the Draft Climate Change Bill

I have the following short comments on this Bill, which I generally welcome as an unusual and determined attempt to address an extremely important issue—

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<th>Efra Committee Terms of Reference</th>
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<td>5</td>
<td>Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non-compliance.</td>
<td>There are some circumstances in which a court might intervene in a judicial review challenge; for example if the Secretary of State was acting wholly inconsistently with the targets and budgets, or (if there was a requirement written into the Bill for a more detailed action plan), by failing to take specific steps. But the real accountability and sanctions involved here are the risks of adverse public opinion, a bad press and Parliamentary pressure.</td>
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<td>Efra Committee Terms of Reference</td>
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<td>9</td>
<td>Reporting procedure and Parliamentary accountability</td>
<td>I suggest that the reporting procedure should, if possible, be more timely (rather than two years late), and should deliver much more up to date information on the EU and international aspects and negotiations, which will affect all the budgets and targets. It is artificial to describe national policy as if it was unaffected by what the Secretary of State may negotiate at the EU or international level, for example on the inclusion in the EU Emissions Trading Scheme of aviation and shipping emissions or different greenhouse gases.</td>
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<td>11, 12</td>
<td>Committee on Climate Change</td>
<td>I think the range of factors that this Committee is asked to take into account—see Clause 5(2), and Schedule 1 para 1(3)—is much too wide, and the risk is that it will get bogged down, or say that it needs a much bigger budget and many more staff. I suggest that what is needed is a really authoritative scientific advisory committee, focusing on the best available advice on the issue of climate change in the UK, in the EU and internationally, and on what can be done to address it. It should be for government to make the choices about competing priorities, rather than requiring them to be reconciled in the scientific advice.</td>
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<td>16</td>
<td>Enabling powers</td>
<td>These are very wide, but maybe a more effective form of Parliamentary accountability and transparency would be achieved by a requirement for Parliament to be informed and consulted, for example on new proposals to make new emissions trading schemes, rather than to have the affirmative resolution procedure, and a “Yes or No” vote without the opportunity to make constructive amendments.</td>
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*William Wilson*
Director, Cambrensis Ltd
Barrister, Environmental Law Unit, Burges Salmon LLP, Bristol

*May 2007*
Q262 Chairman: Gentlemen, you are most welcome, and particularly Mr Wilson, thank you very much for your written evidence. The Committee is under certain pressures of time today and I just want to advise you that I will be vacating the chair between five to five and five past five and Roger Williams will be taking over. Don’t imagine we stop, Mr Williams will take over the chair. Can I formally welcome William Wilson, Director of Cambrensis Limited, a barrister from the Environmental Law Unit of Burges Salmon; Mr Michael Woods, a partner with Stephenson Harwood and a Council Member of the UK Environmental Law Association and co-convenor of the UKELA’s Climate Change Working Party and, finally, Mr Tom Bainbridge, a partner from Nabarro and also the co-convenor of the UKELA’s Climate Change Working Party. Gentlemen, we are here to talk about the Climate Change Bill. Is it a well drafted, good piece of legislation? Mr Bainbridge, you look like a man who wants to give us an answer?

Mr Bainbridge: Yes, I think, as Michael said, with judicial review you are looking for a decision to challenge whereas what one would more likely be doing here is looking not for a decision but at a failure of policy that was meant to be delivering against the budget. One has great difficulty trying to identify the decision that was the wrong decision as Michael has said, again even if you find the decision, what can the court require the Secretary of State to do, other than go back and think again? As it is drafted, it does not provide a mechanism as the back up. I took the liberty of listening on the webcast to the evidence taken last week, and there was a discussion of a plan A and plan B approach. That struck me as being something where it could provide a mechanism which a court might find easier to work with. If there is then a failure of one set of policies to deliver on the objectives but there is also something very, very concrete that a court could turn to as an alternative, a decision is then of the Secretary of State not having moved to plan B, but in the absence of pre-determined measures pretty difficult to enforce. Mr Woods: Especially in 2050. How do you come up with some sort of remedy in 2050 which is going to take account of something which went wrong in 2025?

Q269 Chairman: One of our witnesses sent us about four pages of lists of regulations, principally of secondary legislation but some primary, making the point that if you added it altogether there was no need for this Bill at all. Do you think there really is a need for something like this to set these targets with some kind of legal underpinning because in the opinion column of the May 2007 edition of

Evidence from LEWIS—Global Public Relations (Ev 126).
Mr Woods: Perhaps to reflect the policy move towards increased transparency. For instance, the UN/ECE Aarhus Convention is pushing towards increased public access to environmental information and increased participation, so the Government by flagging up the opportunity to judicially review meets that goal, though it is perhaps easy to give, given the concerns you have just mentioned.

Q273 Mr Cox: Or is the real purpose of it, do you think, to pretend that it has some kind of legal underpinning or sanction to those who are perhaps not as able to determine its real use as you are and to pretend that it is in fact something with teeth when it is not?

Mr Wilson: I think that is a little bit hard. I also think that maybe the Bill which you have got in front of you at the moment is maybe a work in progress to this extent. It is going presumably to look quite different by the time it is introduced and also by the time it is enacted. I do not know what level of detail may get written into it by then, but it would be quite different in terms of enforceability and Judicial Review if more detailed stages along the way were incorporated in the Bill.

Q274 Mr Cox: That is an odd proposition to start from, that it may become something different later so what is in it now may become justified.

Mr Wilson: That is true but it is a draft Bill at the moment and policy is being made at quite a rate, as far as I can see from today’s papers in any event.

Q275 Chairman: Let me just ask this question, there is this question in the Government’s own consultation document where they talk about the reporting process to Parliament being part of the process of accountability but there is nothing in the Bill that specifically commits the Government, for example, to having an annual debate on the report on a substantive motion of the House which could put the Government at risk of losing that motion if it had failed to meet the target. Do you think it needs to go that far?

Mr Wilson: Yes, I do. I think it needs to go further in terms of the reporting to Parliament. I think it needs in particular two things. I think it needs to take much fuller account of what is happening at the EU and international level. There is a slight artificiality about saying “This is our national policy but we are not taking account of what we are separately negotiating at EU and international level” I think that should be reflected in the reports to Parliament. Also, I do suggest that having an affirmative resolution procedure may not be the most effective way of getting constructive input into the Bill and constructive scrutiny of new proposals.

Q276 David Taylor: Our two UKELA co-convenors seem to agree that the Bill was deficient, and I will paraphrase what I think they said, in being, in a sense, reactive rather than proactive and even the reaction that the Bill foresees Judicial Review, and things which might follow would be perhaps too

Parliamentary Brief it said, and I quote, “In the absence of a genuinely effective legal mechanism why have the Bill at all?”

Mr Wilson: I think the sanctions here are not really Judicial Review but adverse public opinion, bad press and having a hard time in Parliament, and those are the really effective sanctions as envisaged by this Bill. I think there are some limited circumstances in which a Judicial Review case might be brought, for example if the Secretary of State proposed a policy that you could show was completely inconsistent with meeting your targets on a particular date or if, for example, you write in to the Bill a more detailed action plan and it fails to meet a particular stage or particular specific point in that action plan, then there could be a Judicial Review brought. I think the real sanction is public opinion.

Q270 Mr Williams: If the real sanction is public opinion then why not just set targets rather than have a piece of legislation to do it? The Government sets plenty of targets.

Mr Bainbridge: I suppose, to start off with, it is a political question rather than a legal one, is it not? It is perhaps drawing attention to this issue. One can think of a number of alternative approaches which could be adopted.

Mr Woods: It is raising the profile of the targets, I suppose. It is saying “This is not simply an aspiration or something we will have a go at”, it is a statutory obligation, however difficult that is to enforce in practice.

Q271 Mr Williams: Within any five year budgetary period, the Secretary of State will be able to “bank” and “borrow” as well and, therefore, give huge amounts of flexibility. How can you pin him down or could we devise a better way within the Bill of pinning the Secretary of State down?

Mr Woods: Possibly. Can I draw the parallel with, it is a different later in terms of enforceability and Judicial Review?

Mr Wilson: It is going presumably to look quite different by the time it is introduced and also by the time it is enacted. I do not know what level of detail may get written into it by then, but it would be quite different in terms of enforceability and Judicial Review if more detailed stages along the way were incorporated in the Bill.

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Q276 David Taylor: Our two UKELA co-convenors seem to agree that the Bill was deficient, and I will paraphrase what I think they said, in being, in a sense, reactive rather than proactive and even the reaction that the Bill foresees Judicial Review, and things which might follow would be perhaps too
little too late. You may be interested, both of you, that Friends of the Earth seem to anticipate that type of approach and they argued in their evidence to us last week that “... while a Judicial Review may be relatively easy to win it is hard to see what it would change—it would already be too late”. They go on to argue a pre-emptive approach whereby legal action could be taken in advance if it is thought that a particular policy is failing to deliver or, in their words, which does not appear likely to meet, for instance, the budget. Are you attracted by that approach? Is it workable? Does it open up new areas of law?

Mr Woods: I am attracted but whether it is workable though, again I think what you are adding there is an extra layer of uncertainty. How do you prove in advance that something is going off the rails? I think that is almost harder than a retrospective approach.

Mr Bainbridge: Yes. If you are looking at a five year budgeting period you are saying that actually you are permitting enormous variation in emissions within that five year budget so long as overall it achieves the average emission level; how would you determine poor performance? On the other hand, if you had something which perhaps set some kind of limit on the variability from a trajectory within that period, then perhaps you have something against which you can measure failure. As it is currently drafted, I do not see how it would be workable.

Q277 David Taylor: They are not necessarily arguing, as it is currently framed, that such a concept of pre-emptive action would be possible but they are arguing that something like that ought to be incorporated into the Bill. In relation to Mr Woods’ point about whether or not it is possible to demonstrate clearly that something is likely to happen in the middle distance, are not English courts all the time discussing questions of probability and what the most likely outcome of particular events is, as well as looking back on the most likely reasons for certain things having happened. It is not the competence or capacity of courts, surely?

Mr Woods: Certainly not. The courts are certainly very interested in discussing causation, looking at causation, when they have an end result that they have to assess. But in terms of impacting, by way of their decision, on a political judgment, they are very reluctant to do so in terms of Judicial Review. I think they would tend to steer clear of that kind of approach and look for a specific decision that can be challenged before they would jump in.

Q278 David Taylor: You seem to be arguing that the legal establishment would wash its hands of anything which had a remote political dimension to it in this context?

Mr Woods: Separation of powers applies, I suppose. We see this at the EC level as well. The ECJ has certainly been more proactive on the environmental front than some people, including some politicians might like, and there has been a shift in the UK along similar lines but it is slow progress. It depends what you want your judiciary to do.

Q279 David Taylor: Could I put the question to Mr Wilson then. Are you as pessimistic as your colleagues today on the capacity of the legal system to perform the role that Friends of the Earth suggested might be possible, to look at policies, to see if it was likely that budgets were likely to be missed or other objectives were not to be hit, to take pre-emptive action within a legal context? Is that possibly impossible?

Mr Wilson: It is quite difficult for them in practice, not impossible, but I think it is quite difficult for them in practice on the evidence to judge that something is going not to meet a budget, say, or that certain actions will lead to a certain result. The courts will be ready to step in if there has been a breach of procedural rules so if you write in more procedure, more stages along the way, there is more that the courts can do to review it. On the principle they will be able to step in if there is a really wide divergence between where you are and where you need to get to. You are straying into the area of whether you can reasonably adopt one lot of policies if it is going to be completely inconsistent and mean that you do not meet your carbon budget, but it is quite a high level of evidence to reach and quite a high barrier to cross.

Q280 David Taylor: Are the three of you not united in wanting to have your legal cake and also wanting to eat it? You are saying, I think collectively, that any action which might be taken, in the certain knowledge of what the facts are, will tend to be too late to do any good but that any action that might be designed to anticipate what might be likely to happen and head it off will be too early for us to be sure about the facts. There is a huge void between those two areas into which you are trying to plot events, is there not?

Mr Bainbridge: I think the answer to that is that for the pre-emptive action to work, it requires a mechanism that is not there. It is not simply having a mechanism to allow a Judicial Review on a normal basis.

Q281 David Taylor: It is not there in the Bill or is it not there in the legal system?

Mr Bainbridge: Not there in the Bill.

Q282 Patrick Hall: The Committee on Climate Change is an independent statutory body, advising ministers on carbon budgets and looking at whether or not they should purchase some from abroad and reporting to Parliament every year. There are a number of issues which arise out of contemplating how that would work. I think in your evidence, Mr Wilson, you claimed a distinction between pure science, as it were, or giving pure advice from the point of view of scientific advice and advice which takes on the wider role in which these things work in the real world of society in the economy. I think you suggested that distinction is one which would not be
Q283 Patrick Hall: That is a point of view but it is still advisory.
Mr Wilson: Yes.

Q284 Patrick Hall: It is advisory whether it is purely scientific, it could be advisory but take on board the broader context because the reports to Parliament that this Committee will be making, if you have your way, as it were, will be purely about a scientific balance of opinion about the rate of change in carbon emissions, et cetera, and will be silent on the context of those occurrences and implications of what needs to be done about it. It will be presumably for the Government then to maybe report to Parliament as well. You think that is a clearer job, do you, that it is just on whatever the balance of opinion is the stuff of governments. I just wonder why you feel there is a need to make that distinction?
Mr Wilson: If I can give the example of the Expert Panel on Air Quality Standards. It gives the best possible scientific advice that it can on what level of a single pollutant is acceptable or tolerable or whatever, and then Government takes a decision about what actions it is going to take and how much it can afford to do in what order, and that is the sort of distinction I think that is not made here. I think the Committee on Climate Change has got enormously important functions, obviously, but the matters which it has to take into account before it considers its advice include scientific knowledge, technology, economic circumstances, fiscal circumstances, social circumstances including fuel poverty, energy policy and international circumstances. By the time it has done all that I wonder how many staff it is going to need and what sort of budget it is going to need in order to be able to do its job effectively. What I think needs a sharp focus in the Bill is what you really want this Committee to do. My suggestion is that it has got enough to do to be a fully authoritative scientific advisory committee, giving the best advice it can to Government on the issue of climate change and what could be done about it both at the UK, EU and international level, and that it should be for Government to take the difficult policy choices about what to do about things like fuel poverty.

Q285 Patrick Hall: But they have to be made, do they not?

Mr Wilson: They do have to be made.

Q286 Patrick Hall: And they should be open as well.
Mr Wilson: Absolutely.

Q287 Patrick Hall: When the Bill is published, this is a draft Bill, if the Bill makes it plain that it should be the way you suggest, would we not want to see that those other issues are taken on board in terms of the parliamentary debate and the public debate?
Mr Wilson: Certainly, yes, I agree with that.

Q288 Patrick Hall: Okay. It is still advisory though whether it is a hybrid or just deals with science. Do you think there is a case for the Committee to be more than advisory, to have some teeth to maybe make policy to seek to enforce some of the carbon targets?
Mr Wilson: Again, personally I think that is quite difficult because if it is supposed to be having a remit which covers all these factors in clause 5(2) then to give it a task, for example like the Monetary Policy Committee, and say, “Here is an area of public policy, you get on with it”, it is very difficult in terms of accountability.

Q289 Patrick Hall: Yes but what the Committee on Climate Change is dealing with is very complex indeed, is it not?
Mr Wilson: Yes, it is.

Q290 Patrick Hall: It is wide-ranging. There is a specific task that the Monetary Policy Committee has to deal with which is quite different from the Expert Panel on Air Quality Standard; it is quite different from that.
Mr Wilson: Yes, but because it is more wide-ranging and because it takes into account great aspects of these things like fuel poverty and social circumstances and so on, I am not sure whether you could successfully have a committee just delegated with the responsibility for deciding those things without a different structure of accountability.

Q291 Patrick Hall: If the Committee was to be dealing with the science only, and if it then had teeth to try and ensure that its recommendations were enforced, it would then be entering the area that you say it should not enter which is the technology, the social and economic impacts which earlier you said is the stuff of government, would it not? There would be a danger then, if it was more than purely advisory, and its remit was scientific only, it would then be saying if it had teeth, and I am not sure how this would work, that is why we are looking at these matters, it would then be trying to enforce or develop policy into areas—but only from a scientific starting point—which are more complex and which government is about.

Mr Wilson: I think where possible it helps if the scientific advice is kept separate from all the difficult political choices that have to be made as a result of it.

Q292 Patrick Hall: Where is the balance, do you think?

Mr Wilson: I think what you mean.
**Mr Wilson:** I think the balance is really if you go back to square one and ask what you want the Committee to do and whether you want it to be an independent committee with a ‘sub-contract’ to manage a whole issue for government, or whether you want it to give the best advice on a distinct area, but to focus on it quite sharply and to keep, for government, the choices about what you can do in what order and affected by things like expenditure. If you have to take those sorts of factors into account before you give scientific advice my point is that clouds the issue of the scientific advice that you may think it necessary to give.

Q293 **Patrick Hall:** I think that is helpful but whatever happens do you not think it would be assisted, whatever it does, that its advice is published?

**Mr Wilson:** Certainly, absolutely.

Q294 **Patrick Hall:** Not just its annual report?

**Mr Wilson:** No, I am all for that.

Q295 **Patrick Hall:** Does anyone else want to comment?

**Mr Woods:** I agree with William. I think the remit of the Committee needs to be clarified. Lawyers often talk when they are trying to come up with solutions about ‘what is the mischief?’; ie what is the Committee designed to do? Is it designed to cover climate change science or is it designed to provide a check on what the Government is doing or is it a hybrid—I do not think that is clear in the Bill at the moment. On the international front, if I can draw the parallel again, we have the IPCC, that is the Inter-Governmental Panel on Climate Change, which produces assessment reports, and has just produced a new one. It covers the science though also filtering in the social impacts, adaptation *et cetera*. It produces the figures that then the States are supposed to act on under the Kyoto Protocol. Perhaps that is a model that could be looked at. It is supposed to be more independent, although obviously it is still politically sensitive; that is one model. Another model is more like the Monetary Policy Committee, something that is driving the policy decisions rather than the scientific advice. As I say, I do not think it is clear, as yet, what the Government wants the Committee to do under the Bill.

Q296 **Mrs Moon:** I am just wondering, if we went down the route that you are describing, where the Committee gave the expert scientific advice and disregarded the social policy implications—and it is all in public, the scientific advice—whether we are setting ourselves up for a tension, where a minister has to take the social issues into consideration which may well have quite severe implications when reaching a decision in the setting of carbon budgets because the social policy issues may well be very dramatic. Are we then in a situation where if a minister ignores the advice of the Climate Change Committee that we could have scope for a legal challenge of the Government if that advice is not taken, and where does that leave us?

**Mr Woods:** One would be getting closer to that but it depends on how strong the advice from the Committee was and how unreasonable the minister was seen to be in ignoring that advice. If the minister can show that he took on board the advice, he took on board concerns about social impacts and then decided on a certain route, although a challenge might be raised, it should not be successful. The minister retains the ultimate political discretion.

Q297 **Mrs Moon:** Who does he have to show this to?

**Mr Woods:** Show? Sorry?

Q298 **Mrs Moon:** That he has taken into consideration and has looked at the advice from the Climate Change Committee but, because of the social policy implications, he has decided to override the advice in setting the budget, who is he going to have to demonstrate this to and how often? Are we going to constantly have Government facing, potentially, a legal challenge?

**Mr Woods:** It seems to be happening quite a lot. Almost every year one is finding a new energy review or Stern Report coming through I suppose that might be necessary. I suppose scrutiny would be undertaken not only over the road but also up the road at the High Court.

Q299 **Mr Cox:** So far we are not making good progress, are we? We have a policy of suggesting a Judicial Review, an appropriate legal sanction, that you have described as impractical and essentially unenforceable or pointless. We have a Committee, which is at the heart of the Bill which you have described as ill-defined, and the Bill not making up progress, are we? We have a policy of suggesting a Judicial Review, an appropriate legal sanction, that you have described as impractical and essentially unenforceable or pointless. We have a Committee, which is at the heart of the Bill which you have described as ill-defined, and the Bill not making up its mind as to precisely what it is. These are pretty core and fundamental provisions of this Bill. Where are we left with in your original analysis that this was a step forward? So far you have blown two holes in it, big ones.

**Mr Bainbridge:** I guess the question is how much the Bill is a *fait accompli* or a work in progress?

Q300 **Mr Cox:** That is a very odd proposition to start from. You should assume it is not going to be worked on at all, it might go through tomorrow.

**Mr Wilson:** Surely not.

**Mr Woods:** I agree with Mr Bainbridge.

**Mr Cox:** I was using poetic licence. Be candid with this Committee, gentlemen.

Q301 **Chairman:** You do not have to agree. If you feel deep down a sense of deep discomfort, this is not a sort of king is in his altogether situation, you can be the little boy who points the finger saying but.

**Mr Bainbridge:** I think the question is whether other aspects be built into the Bill which will fix these problems. For myself, I think we are saying these are not problems which cannot be fixed through some mechanism being built in explicitly but as we stand there are—
21 May 2007 Mr William Wilson, Mr Michael Woods and Mr Tom Bainbridge

Q302 Mr Cox: — major flaws.

Mr Woods: We like the Bill because it is cutting edge legislation. We do not like the Bill because it raises certain concerns. It could be better formulated than it is at present and we hope that will happen on the back of our comments and others comments.

Mr Wilson: I think, Chairman, if you want the Bill to be more effectively subject to Judicial Review in terms of the challenges to the various actions by the Secretary of State, then it would need to have more specific detailed action points to which a court could say, “This has or has not been met”, without doing what I think a court would be reluctant to do, which is micro-managing the carbon budgets of the UK.

Q303 Chairman: I think the sad thing, from the point of view of the parliamentary side of the table, is that we keep coming back to the fact that it is the courts who are supposed to be the mechanism by which the quality and effectiveness of the legislation is judged rather than Parliament. Parliament is there to hold the executive to account but I think we note the areas of reservation that you have as far as that is concerned. Let us move on to the Bill’s enabling powers because I was struck, Mr Wilson, in your memorandum when you said, “The draft Bill takes a remarkable number of powers for the Secretary of State to make regulations which will deliver the substance of whole new emissions trading schemes and many aspects of the proposed carbon budgets.” The Bill will go some way by saying that it should be by the affirmative resolution of the House but, as you will understand, apart from the resolution, the content of any order is not amendable and yet these could be very big, complex schemes which are brought in, simply through an order making power. Is that good? Is that the right way to do it? Right, Mr Wilson, what is the right way and how should the Bill be changed?

Mr Wilson: I do not think it is the right way, because I think the affirmative resolution procedure is quite a frustrating one, really, in that you get a chance to vote something through or vote it down, but the chances are you do not want to do either of those things, but you may have three or four constructive amendments to make to the trading scheme proposal. Why not have a requirement that Parliament be consulted? Why not have a requirement to put a proposed trading scheme to Parliament, to a Committee like this, and to take account of its comments?

Mr Wilson: If I could just add, Chairman, that is why I think it is necessary for these reports to Parliament to take better account of the detail of what is going on at international and EU level, and to be much more forthcoming about that, because otherwise there is a sense of artificiality, and we are dealing with national policy as if the same Secretary of State was not very actively engaged on very important negotiations which will make a great deal of difference to the substance of this Bill.

Mr Bainbridge: To second or third all of that, I think the distinction is between the budgets themselves and the reporting. Putting it in the budgets would create the market and legal complications whereas addressing it through the reporting does not.

Q304 Mr Wilson: To a Committee like this, and to take better account of what is going on at international and EU level, and to be more forthcoming about that, because otherwise there is a sense of artificiality, and we are dealing with national policy as if the same Secretary of State was not very actively engaged on very important negotiations which will make a great deal of difference to the substance of this Bill.

Mr Bainbridge: To second or third all of that, I think the distinction is between the budgets themselves and the reporting. Putting it in the budgets would create the market and legal complications whereas addressing it through the reporting does not.

Q305 Mr Williams: At the moment, within the Bill itself, no account is taken of emissions from international aviation or shipping. The ministers tell us that could be added, a formula was agreed which would indicate which of the amended emissions which Britain was responsible for. What would be the legal implications of including the UK’s share of the emissions from aviation and shipping before their inclusion within the EU Emissions Trading Scheme? Would there be any legal implications to that?

Mr Woods: There would be legal implications, I think there would be market implications, if you do not mind me saying so, as well. Of course, what you are doing is cutting across the EU regime which in itself is probably going to cut across the international regime. Yes, I think there could be big problems there.

Q306 Mr Williams: The minister, in saying that we have to hang on before we have an international agreement on it, he is right in saying that?

Mr Woods: It looks to me as if he is keeping his agreement on it, he is right in saying that?

Q307 Chairman: You wanted, Mr Wilson, to see some kind of website, did you not, about reporting what was going on?

Mr Wilson: Yes, I think the reporting is quite a long time after the event, which is quite frustrating in some circumstances. Parliamentary scrutiny of European negotiations seems to rely on memoranda submitted quite long after the negotiations themselves have moved on, and that must be quite frustrating for the parliamentarians, because they are always hearing something six or nine months late; in this case it will almost two years late. If possible, I would like it brought more up to date and,
if possible. I think we could just be more open about the positions being taken in international and EU negotiations so everyone is better informed.

Q308 David Taylor: We are now on the penultimate paragraph of your submission, are we not, Mr Wilson, and a very interesting suggestion about the website, and I do think that has great potential. You have just gone on to raise the point I wanted to put to you as a question. You suggest that such a website might contain within it “...all UK negotiating positions on all EU and international treaties, conventions and agreements on climate change.” Is any government likely to expose its negotiating stances and pitfalls to a wider public in the light of the sensitivity and difficulty of some of these negotiations?

Mr Wilson: I just wonder sometimes how much of this is really confidential or secret.

Q309 David Taylor: Sensitive rather than secret.

Mr Wilson: Certainly, but by the time the UK has taken a negotiating stance in international negotiations, within about three months those in the know seem to know about it, the key NGOs, other Member States, the thing is starting to become public. I just think more of it could become public in the first place and we would all be better informed.

Mr Woods: I think that was in a way demonstrated in relation to phase one, with the reporting there, the information coming through, as it were, prematurely which caused the market to crash. It was not well handled; it is going to be handled hopefully better next time around. As William says, if everybody who is on the inside in the market knows anyway then perhaps more of that information could be made available on the outside so there is better debate.

Q310 David Taylor: You have done international research on these sorts of things, have you not, particularly in the States, are you aware of any nation which has an approach similar to that which you are urging on the UK Government?

Mr Wilson: I would have to think about that more in order to give you chapter and verse on nation states. I just think of the work that I was doing and I just cannot think how much of it really was that confidential or that secret—or should have been. I do not think very much of it really. I cannot imagine taking a particular stance on international or EU negotiations on climate change issues that I was not prepared to pretty much relay to the public in that sense. I think it is a less confidential area than some.

Q311 David Taylor: Do you think that would somehow complete the cycle, an openness to the general public who would then presumably apply pressure—political pressure or other types of pressure—on the Government to take particular stances or change directions? Is that how you envisage it happening?

Mr Wilson: Yes, I am quite idealistic about the benefits of giving the public better access to information; I think it does have an effect. It is not evenly spread, you do not get every member of the public enthralled by the detail of this Bill, but I think it does have a real effect. I think it did in America, it does in America and it could do here.

Mr Woods: If this Bill is designed to apply emissions trading to the next layer down under the Energy Performance Commitment (or personal carbon trading even in a few years to come), then without engagement from the public we are not going to get the best outcomes. People need to know about it in advance and be able to influence the process.

Q312 David Taylor: In Mr Wilson’s evidence submitted to the Joint Committee you describe having contact with the state of Oregon where those involved in making environmental legislation had to go out and explain particular provisions in town meetings across the state. I am not sceptical about that, I think it might have some attractions and there have been great debates in this country on GMOs and things like that. I am not sure that they have necessarily advanced the legislation or changed it in ways that we would like but do you think that would roll over into a national forum, the sort of forums that you saw in one state within the USA, having an obligation to have this national debate in every corner of the land?

Mr Wilson: I do think—and it is a point that Michael has just made—that long-term the best way of making your environmental legislation effective is to have people understand and share the objectives that it has. If the public see this Bill as an enormous imposition on them by a group of policy makers, maybe in London, then I think they will not support it, but if, on the other hand, they really understand what it is trying to do, they understand what it is trying to get at, how they could be involved and how they could make it effective, then I think it stands a much better chance of staying the course.

David Taylor: I think we are trespassing on areas of our other inquiry: the citizen’s contribution to climate change, which in itself would be a hugely important document.

Q313 Chairman: It is interesting to hear what you have to say because a lot of this Bill is fairly remote at this stage from the public. I just wondered though, in legal terms, whether you felt that the order making powers that are in the Bill would be sufficient ultimately to enable the Secretary of State to introduce a personal carbon allowance scheme. Would that, at the level of the individual, still count as a trading scheme?

Mr Bainbridge: The powers are there, are they not, to introduce greenhouse gas emission trading?

Chairman: It says the Secretary of State may make provision by regulations for trading schemes relating to greenhouse gas emissions.

Q314 Mr Cox: It is likely to be affected by European framework legislation and to be perceived in that way.
Mr Wilson: I suppose he could add other greenhouse gases. I would need to think about it as to whether he could make the personal carbon trading scheme under that provision, maybe he can.

Chairman: It is cast in pretty general terms, the current clauses 28 and 29.

Mr Wilson: The European Directive defines a trading scheme.

Chairman: Only a European Union trading scheme.

Q315 Mr Cox: No, but this legislation may be perceived as European—
Mr Wilson: The European Emissions Trading Scheme would not cover personal carbon trading.

Q316 Chairman: The section of the Bill is designed to enable the Secretary of State to introduce trading schemes into areas where the European Union trading schemes do not currently operate. That is what it is there for.

Mr Bainbridge: Absolutely.

Q317 Mr Cox: I was going to ask you about that, is there a problem with introducing legislation that goes beyond the current European framework? I do not know, presumably there is a directive at the heart of this somewhere which sets out the European trading emissions.

Mr Woods: They are running in parallel, to my mind. There is certainly a problem, I think, for Government if it strays beyond a European approach and then finds that the two do not quite marry up.

Q318 Mr Cox: Is there a problem, as a matter of European law, I do not know what the directive says but does it permit individual Member States to go further than the current European framework?

Mr Woods: This is possible but there are certain constraints.

Q319 Mr Cox: In parallel there is a danger there, obviously, of coming up against the problem of conflict. I have not looked at the European legislation. I do not know if you know.

Mr Wilson: The issue would be whether it conflicted. If it conflicted with the UK’s obligations under the EU Emissions Trading Scheme then there would be a problem.

Q320 Mr Cox: Right.

Mr Bainbridge: I am not aware that it does conflict. The EU Emissions Trading Directive identifies particular types of installation, and deals with points source emissions from those classes of installation. In terms of how allocation is worked out, it is by reference to other climate change policy, which could include measures brought in under a Bill such as this. The difficulty, of course, is the fact that the EU Emissions Trading Scheme looks at direct emissions from specific installations whereas this could be looking at direct emissions or indirect emissions. Then you have the problem of the fungibility. The Bill has provisions which allow for the use of credits in the EU scheme to be used to offset obligations introduced under the Bill but they could not be interchangeable in the other direction; otherwise, for example, you could have double-counting. You could have double-counting anyway.

Mr Woods: Care will need to be taken to make sure that the two are complementary and I suppose that comes back to carving out at this stage aviation and shipping, and waiting to see what the EU does on that front.

Chairman: Gentlemen, thank you very much. Before you go, you indicated in the earlier exchanges that there might be areas where you would like to see the Bill developed or improved and some of those we have touched on but if, subsequently, when reflecting on what you have said, there are some further thoughts you would like to communicate to us in writing on that, in other words ways of polishing and improving or sign posting with greater clarity where the Secretary of State should do further work before the Bill emerges in its final form, we would be very grateful to hear from you. Thank you very much indeed.

Memorandum submitted by Tom Bainbridge & Michael Woods (CCB 41)

Tom Bainbridge, Partner at Nabarro, London and Co-Chair of the UK Environmental Law Association Climate Change Working Party

Michael Woods, Partner at Stephenson Harwood, London, Council Member of the UK Environmental Law Association and Co-Chair of the UK Environmental Law Association Climate Change Working Party

We believe that the draft Climate Change Bill could introduce a valuable framework for delivering vital reductions in GHG emissions. Our additional comments below highlight where we believe improvements could be made—or, indeed, are necessary for the Bill to be sufficiently effective.
### EFRA Committee Comments

#### Terms of Reference

5. Enforcement

The Bill imposes an unambiguous duty on Secretary of State to reduce emissions. Failure to meet the 2020 or 2050 targets or 5-yearly carbon budgets could lead to public or Parliamentary censure of Government through the reporting process.

Judicial Review might create further embarrassment for Government provided procedural irregularity could be identified. Failure of policy to deliver necessary reduction, however, would in itself be unlikely to give rise to a successful right of action, save for a declaration that the reduction had not been achieved. The Courts would not direct the Secretary of State to take action that would “fix” failed policy unless the fix itself had been provided for.

Therefore, the Bill provides a valuable framework but much depends on the detail of the measures to implement the targets. The Bill itself will be strongest if it contains a framework for the detail of those measures rather than this all being left to secondary legislation.

11/12 Climate Change Committee

The role of the Committee is unclear.

In our view, the Bill would be considerably strengthened if the Committee’s role was clarified and moved from (what appears to be) merely advisory, to a genuinely independent auditing and policing role.

This might include a power of veto and/or the ability to force a motion in Parliament if conflict arose on key decisions and the ability to source new evidence where necessary. The Secretary of State should also be obliged to provide explanation to the Committee for the reasons for any failure to stay within carbon budgets and planned “remedial” measures. Independence needs to be ensured in respect of:

- appointment of the Chair and all members of the Committee?
- budget and governance rules—perhaps set under an Order subject to Affirmative Resolution.

The Committee should be able to force review of budgets and 2020 and 2050 targets.

16. Enabling Powers

We note that the Secretary of State is given wide powers in relation to the introduction of emissions trading regimes but question whether other powers should also be included (provided suitable parameters are set for their exercise). We recognise though that powers exist under other legislation so the grant of additional powers may be unnecessary and/or properly reserved for full Parliamentary consideration.

However, if wider powers are not granted under the Bill, it should include an express obligation on the Secretary of State to consider the exercise of powers granted under other legislation to achieve required emission reductions, and might also require that powers exercised by the Government in respect of certain key areas (eg energy, transport, etc) take into account both the 2020–50 targets and potential impacts of decisions on the 5-yearly carbon budgets.

We would also highlight an inconsistency between emissions trading which may address the basket of six greenhouse gases and the 2020–50 targets and 5-yearly budgets which are set for carbon dioxide only. This implies that GHG targets for the UK would be more appropriate or else requires that the Bill ensures that robust accounting standards and tests of “additionality” are applied to all GHG units allowed into the UK carbon dioxide pool.
The UK Environmental Law Association aims to make the law work for a better environment and to improve understanding and awareness of environmental law. UKELA’s members are involved in the practice, study or formulation of Environmental Law in the UK and the European Union. It attracts both lawyers and non-lawyers and has a broad membership from the private and public sectors.

UKELA prepares advice to government with the help of its specialist working parties, covering a range of environmental law topics. This response has been prepared with the help of the climate change working party.

UKELA’s current priorities include:

— Informing and actively influencing the broad law and policy debate on climate change including the measures to reduce greenhouse gas emissions and manage their impacts at the international, EU and domestic level.
— Helping deliver more effective and efficient environmental regulation including enforcement at the EU and UK level, not lower standards nor less regulation unless the same or better outcomes will be achieved.

UKELA works on a UK basis and seeks to ensure that best legislation and practice are achieved across the devolved jurisdictions.

Tom Bainbridge and Michael Woods
June 2007

Memorandum submitted by the Fuel Poverty Advisory Group (CCB 10)

INTRODUCTION

This is the response to the consultation from the Fuel Poverty Advisory Group. The Group has some similarities to the proposed Climate Change Committee, although there are also differences. We are submitting evidence on two sets of issues. The first is the impact on fuel poverty of the proposed Climate Change Bill and the relationship between the two statutory targets—climate change budgets and targets and fuel poverty targets. The second issue is our experience of the fuel poverty statutory target. The Climate Change Bill is introducing targets for Climate Change. It seems sensible to draw on the lessons from the Government Fuel Poverty targets over the last six years.

Referring to the Committee’s terms of reference, this note thus deals with some of the implications of carbon budgets and targets, domestic climate change issues, monitoring, accountability, enforcement, sanctions, reporting procedures and the Climate Change Committee.

FUEL POVERTY ADVISORY GROUP (FPAG)

The Fuel Poverty Advisory Group is a Group consisting of representatives of external organisations, set up by the Government to provide advice on the practical measures needed to meet the Government’s targets of eradicating fuel poverty in England. The Group was established broadly at the same time as the statutory targets were put in place. A wide range of organisations is represented on the Group—from Energy Companies to fuel poverty NGOs and broader consumer and housing groups and experts. The membership and terms of reference of the Group are set out in Annex A.

CLIMATE CHANGE BILL AND FUEL POVERTY

We recognise the importance of combating climate change and hence of the Bill. We also appreciate that there are both important synergies and some tensions between the climate change and the fuel poverty targets. We have noted the clauses relating to social considerations and fuel poverty:

— In Clause 5, 2(e), Page 3 the Secretary of State and the Committee on Climate Change in coming to any decision and in considering advice must take into account, amongst a list of matters, “Social circumstances and in particular the likely impact of the decision on fuel poverty”.
— In Schedule 1, 1(3)(h) the Secretary of State in appointing the Climate Change Committee must have regard to the desirability of securing that the Committee has experience in, or knowledge of (among a list of things) “climate change policy and in particular the social impacts of such policy”.

It is, however, our view that:

— there are not enough safeguards in the Bill on fuel poverty; and
— the Government will have two separate sets of related Statutory Targets—Climate Change and Fuel Poverty—without recognising adequately the interaction between the two.
It there seems to us to be sensible that in Clause 5 discussed above there should be more explicit reference, not just to the impact on fuel poverty, but to the impact on the fuel poverty targets. Specifically the Secretary of State, in coming to a decision and the Climate Change Committee in considering its advice, should take account of the impact of the decision and advice on the ability to meet the statutory fuel poverty targets. There should also be a requirement for the Secretary of State and the Climate Change Committee to report explicitly on this. The Secretary of State and the Climate Change Committee might in doing this be asked to take account of the views of FPAG.

Similarly it does seem to us that consumer and low income group interests are likely to be under-represented on the Climate Change Committee. Experience and knowledge in these areas should be a separate requirement and should not be a subset of knowledge of climate change policy.

**Experience of the Fuel Poverty Targets and FPAG**

The Government has a statutory duty to end fuel poverty. The exact targets differ between the different administrations, but in England the duty is end fuel poverty for vulnerable households and non-vulnerable households living in social housing as far as reasonably practical by 2010 and to do the same for all households by 2016. The establishment of the Fuel Poverty Advisory Group for England was announced at around the same time as the Fuel Poverty Strategy to meet the targets, was published in November 2001, and the Group started its work in April 2002. Defra and DTI Ministers choose the organisations to be represented on the Group and appoint the Chair.

As noted, our job is to advise the Government on the practical measures needed to meet the targets. FPAG publishes an annual report and our 2006 report, published in April 2007, is attached as Annex 2. The Government also publishes an Annual Progress Report on Fuel Poverty.

There are some analogies to the proposals for the Climate Change Bill. There is a statutory target, annual reporting and an external group. There are also differences as there is no direct reporting to Parliament and the process is less formalised. The Fuel Poverty Advisory Group focuses on the measures needed while the Climate Change Committee’s main task relates to the carbon budgets.

Our views on the impact of the statutory fuel poverty target and of the Fuel Poverty Advisory Group are as follows:

— The statutory target has made a difference—there have been more resources for fuel poverty and more helpful measures than would have been the case in the absence of a target. The target has helped to provide focus and drive.

— However, the 2010 statutory target now looks extremely difficult to achieve and the shortfall could be considerable. Admittedly the circumstances have been difficult as a result of rising energy prices—but this still raises issues about the best way of securing effective targets, as there will always be difficult circumstances on the road to tough targets. It is not clear what the sanctions for failing to meet the targets are. It seems therefore likely that the targets and arrangements put in place will prove to have been insufficient to secure achievement of the targets.

— When the targets and strategy were established there were no estimates of the resources required to meet the target. FPAG has secured, with help from DTI and Defra Officials, that the costs have now been estimated and this has been helpful in securing extra resources for the Fuel Poverty Programmes.

— FPAG has made a large number of recommendations. As expected a number have been accepted and some have not. Defra and DTI have the main responsibility for the targets and they have to a degree focussed on the issues. Some other Government Departments have been helpful, especially in recent months, but in broad terms the existence of a statutory target has made a small, but not a major, difference to the actions of certain key departments. Similarly Ofgem has, on some issues, been helpful but the statutory target has not made as much difference to Ofgem’s activities as perhaps might have been expected. The issues of binding other Departments and Agencies across Government into the Climate Change targets will thus be an extremely important one.

In summary the target and the associated arrangements have been helpful and have unquestionably resulted in more progress than would have been made in their absence. But It is likely—sadly—that they will not be anything like adequate to secure the objective.

Finally FPAG would be very happy to provide further information and to give evidence in person.

1 Not printed.
FUEL POVERTY ADVISORY GROUP MEMBERS

Peter Lehmann Chair
John Chesshire Vice Chair
George Mayhew Director of Corporate Affairs National Grid
Jill Harrison Director of Energy Efficiency and Social Responsibility Centrica Plc
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Sarah Webb Director of Policy and Practice Chartered Institute of Housing
Dr Noel Olsen Public Health Physician Trustee National Heart Forum
Jerry Robson Chairman Association for the Conservation of Energy
Mervyn Kohler Head of Public Affairs Help the Aged
Adam Scorer Director of Policy and Research Energywatch
David Pickles Local Government Association Energy Agency Manager
John Clough Chief Executive Eaga Partnership Ltd
Teresa Perchard Director of Policy Citizens Advice
Eva Eisenschimmel Chief Operating Officer EDF Energy

TERMS OF REFERENCE

The Fuel Poverty Advisory Group is an Advisory Non-Departmental Public Body sponsored by Defra/DTI. Its primary task is to report on the progress of delivery of the Government’s Fuel Poverty Strategy and to propose and implement improvements to regional or local mechanisms for its delivery.

The role of the Group is:
— to consider and report on the effectiveness of current policies in delivering reductions in fuel poverty and the case for greater co-ordination;
— to identify barriers to the delivery of reductions in fuel poverty and to the development of effective partnerships, and propose solutions;
— to consider and report on any additional policies needed to deliver the Government’s targets;
— to enthuse, and encourage, key players to tackle fuel poverty; and
— to consider and report on the results of the work to monitor fuel poverty.

Fuel Poverty Advisory Group
May 2007

Witnesses: Mr Peter Lehmann, Chair and Mr John Chesshire, Vice Chair, Fuel Poverty Advisory Group, gave evidence.

Q321 Chairman: Gentlemen, thank you very much for coming to join us. We have before us the representatives of the Fuel Poverty Advisory Group, Mr Peter Lehmann, their Chairman, and Mr John Chesshire, their Vice Chair. Gentlemen, you are very welcome indeed.

Mr Lehmann: Thank you.

Q322 Chairman: You have a rather special role to play in terms of our inquiry in that you are already in the business of giving advice to Government on the range of responsibilities which your Committee has in terms of dealing with fuel poverty. You may have overheard some of the previous discussion we had about sanctions, in other words what happens if Government does not hit its targets and if one takes the field of fuel poverty, what sanctions do you think Government ought to bear in the case of them not meeting their targets in your specialist area?

Mr Lehmann: It is probably not for us to say what sanctions Government ought to bear. I think what we can say is that having a statutory target has been helpful, it has made a difference, it has given more focus, more resources, more drive but it has not on its own been enough because it is not quite clear to us what the sanctions are and they do not seem to be adequate to force the Government, in a difficult situation, to meet those targets. It looks extremely unlikely now, although this is not yet certain, that...
the Government will meet its interim 2010 target. The sanctions do not appear to be adequate to force the Government to observe the statutory target; the target has nevertheless been helpful. I think it is probably not for us to say what the sanctions ought to be.

Q323 Chairman: In the case of fuel poverty, do you think that what I call the court of public opinion is sufficiently vociferous that if a target was missed the Government would feel some political, practical pain?

Mr Lehmann: No question it would feel some practical pain and because of that it has made the Government much more proactive than it would have been, but that pain is not great enough to get them to meet the target in, admittedly, very difficult circumstances. It is highly unlikely it will meet the 2010 target.

Mr Chesshire: Could I add, Chairman, there is some wriggle room in the legislation and that is ‘as far as reasonably practicable’. I would imagine it would not take a great deal of craft for a Treasury official to say a 100% increase in gas prices and an 80% increase in electricity prices over a period of two years stretches the Government’s ability to meet a target.

Mr Lehmann: I am not sure they would be very comfortable in relying on that. Again, you would need to ask the lawyers but we think they have not done everything that was reasonably practicable. We are not in any sense criticising them but there is no question they could have done more: more money, more resources, more of a variety of things.

Q324 Chairman: Am I right to get the impression that your focus, if you like, is much more on the advice that you give to Government rather than concentrating on what happens if Government then does not implement the policies we suggest?

Mr Lehmann: No, I think probably not. We are much more proactive I think than people expected, not only in giving advice but in busting a gut to try and make sure that advice is met. We have been proactive. You said “We’ve been proactive”. You need to ask the lawyers but we think they have not done everything that was reasonably practicable. We are not in any sense criticising them but there is no question they could have done more: more money, more resources, more of a variety of things.

Q325 Mr Gray: Surely those are political things and surely the Government doing what is right in regard to fuel poverty or with regard to climate change is a matter for the electorate who judge the Government at subsequent general elections. You do not put that into law and require the Government to do those things, you merely hope and pressure the Government to do it so that they then do the right thing, is that not reasonable?

Mr Lehmann: That is not for us to say. There is a statutory target on fuel poverty. It is there in the legislation, in the Warm Homes and Energy Conservation Act. It is there, our job is to advise the Government how to meet it. I would say it has been helpful, we would not have achieved as much without that statutory target.

Q326 Chairman: Can we probe you a little bit about your role. I was interested in the way you have said “We have been proactive”. You said “We’ve been round to different departments almost drumming up the cash, saying ‘Come on, let’s have the resources to make the fuel poverty targets reality’”. The Bill, as it is currently drafted, in terms of the Climate Change Committee is very strong on advice and totally silent on anything else it ought to do. When you were established did you have any statutory requirements other than giving advice?

Mr Lehmann: No, we did not. We took it upon ourselves and we have been encouraged, I should say, to a degree but sometimes this is not comfortable for Government. But, all credit to them, they have encouraged us to try and get around and try and keep awareness of the issue, to engage. As you know, the prime responsibility for fuel poverty lies with the DTI and Defra but other departments are also involved. It is particularly with other departments where we have been saying, “There is this problem here; you need contribute.” It is not just money: it is sometimes other policies as well. Those with responsibility for the policy, DTI and Defra, have been quite keen that we have been...
supplementing their efforts with other departments but we have also said to Defra and DTI, “You are not doing enough” in some cases. We took it upon ourselves to do that because we did not see any point in just giving advice and disappearing into the ether and this approach has been encouraged.

Q327 Chairman: Have you come across examples where the Government has set off in a policy direction that is diametrically opposed to the one you think they ought to be going in? Could you give us a for instance and what you did about it?

Mr Lehmann: There are a number of examples. It is more where we have thought something needed to be done and they have not done it. The best example is the problem of the poor paying more. Low income customers generally pay more per unit for their gas and electricity than other customers. That has got worse. Customers with prepayment meters now pay a stunning £120 a year more than customers on direct debit, on average, for their gas and electricity. We have said that something has to be done about this. There are several possible solutions that lie between different departments and agencies, Ofgem primarily, the DTI, the Treasury, DWP. We have said this needs to be tackled and really not very much has been done. There are some small signs that things might be starting but not much.

Mr Chesshire: Another example would be extension of the gas network. I do not mean to every individual farmstead but certainly to well identified clusters of population, say, of 500 or 1,000 people or so, which the Design and Development Unit in the DTI reckons might well be cost effective on environmental and on fuel poverty grounds, but insufficient resources have been available from the Treasury. We have supported the case that the Design and Development Unit has made but money has not been forthcoming from the Treasury.

Mr Lehmann: It looks like there might be a bit of progress, not from the Treasury but via Ofgem. We have been banging our heads against a brick wall for a long time. It looks like there is a chink of light now.

Q328 Mr Gray: It is obviously regrettable from your standpoint and from the standpoint of the people you represent. Surely that is the nature of government? Government has to make difficult decisions between all sorts of competing different pressures and sometimes one interest group or the other will benefit from it. What we are talking about here with regard to climate change is removing that political dimension of whether or not one should do the right thing for global warming away from a political decision and making it statutory, making it a governmental, statutory requirement that they must achieve a 60% reduction by whenever it is. The pressing question in your area of responsibility is do you think that it would be possible to imagine something similar being done with regard to putting something on the statute book which would prevent the government from doing the wrong thing, as it were?

Mr Lehmann: That is a good point. It is there. This little Act did just that. It is a statutory target.

Q329 Mr Gray: You were just saying all these things you felt the Government was doing wrongly.

Mr Lehmann: Nevertheless, that is the whole dilemma. They have a statutory target but they may not meet it and they may not do the things needed. That is the important lesson. On its own, a statutory target is helpful but probably not enough.

Mr Chesshire: The reason we were keen to submit evidence to you was that we think there are some analogues. It is for you to decide quite how close they are. I have jotted down the Fuel Poverty Advisory Group and the Climate Change Committee. Both are non-departmental, public bodies. They are likely to be paid. We are unfortunately not paid. Is there a statutory target enshrined in legislation? Yes, for both cases. Both fuel poverty and climate change are two of the four key objectives of energy policy, the others being competition and security of supply. They are given equal weight in the White Paper, the energy review and so on. We have a PSA target for fuel poverty split between the DTI and Defra and trickle down responsibilities elsewhere across government so it is a joined up governmental approach. There is an Interdepartmental Ministerial Group for fuel poverty which draws in ministers across Whitehall, not just in Defra and the DTI. We produce an annual report and so will the Committee. Does the Government have to respond to it? Yes, it does. Do we have a budget? No, we do not have a budget but we are able to draw on Whitehall research resources and a number of members of the Committee belong to charities or research organisations that can fund research. In the Bill they are proposing a budget of £500,000 for research by the Committee itself. There is a small difference there. Are we appointed by ministers? The chair and I were interviewed by ministers but, as you probably know from our evidence, the member organisations of the Fuel Poverty Advisory Group are appointed by Ministers and they can choose the individual who represents them but normally it is at chief executive officer level. Do we meet ministers informally and formally? Yes, we do, both at dinners and away days or they come along to the Committee. There is an issue of transparency, looking at the proposals in the Bill. We are reasonably transparent. We have a high profile. We do not publish our minutes on a website. I am not quite sure what the Climate Change Committee is going to do there but they do emphasise the need for transparency in that area. I went down a whole check list and certainly in these two parallel areas of energy policy objectives there are close parallels. I would not want to over emphasise the fuel poverty level.

Q330 Mr Gray: All of those things you describe, with the sole exception of the statutory target, are things that are equal rather than, for example, the Local Government Association. In other words, they are normal, governmental decision making processes. The sole thing that you have is the statutory obligation and the question is whether or not that is a sensible or logical thing to do. Would it not be better to leave it as a normal process of
government and politics, to bring pressure to bear on the government to do the thing that is right? To what degree is the fact that you have a statutory obligation written down of particular benefit? Surely all those other things you describe—access to ministers and so on—are the things that make a difference?

Mr Lehmann: No, I do not think so. I am going to be very firm about that. There is no question in our minds that the statutory target has made a significant difference. Firstly, it has secured a great deal more resources for the Warm Front Programme than would have been the case. There is absolutely no doubt about that. We had to fight very hard. We had to also say that quite a lot more money is being made by the oil and gas companies offshore and the Chancellor might think about taking some of that money back and putting it into fuel poverty programmes. He did that. That would have been much harder without the target. Ofgem issued some guidance that enabled companies to introduce some tariffs for low income groups, not adequate necessarily, but that again would not have happened without that statutory target. The gas network extension proposals that are now coming through via Ofgem would not have happened without that statutory target. It looks as if there are going to be some more steps taken—we do not know the details yet—for the Department for Work and Pensions to share information on who might be eligible under the fuel poverty programmes. All those things come into conflict with some other government objectives or do require resources. Having that statutory target has helped to give an edge to the argument.

Q331 Chairman: Would you refresh my memory? Who set your target?
Mr Lehmann: The Government set it.

Q332 Chairman: Looking at the Bill, the difference here is that the Climate Change Committee are supposed to provide information to government about what the level of the carbon budget should be. In other words, they are in the target setting business which is rather different from yours.

Mr Lehmann: Absolutely. When there have been issues about definitions of targets, we have said, “We have done a bit on that but that is not our job. Here is the target. We have to see it is met.”

Mr Chesshire: I do not think the difference is that great. The Government has set a target of a 60% carbon reduction by 2050. You are right. The Committee can influence the glide path, as it were, and does have a role on some of the later, intermediate dates.

Q333 Chairman: The reason why I fix on that is that one of the areas that has become something of a controversy is the nature of the budgetary period and the nature of the target setting process within it. Over what period of time does the target you have over fuel poverty go?

Mr Lehmann: There are two. The final target that is in primary legislation is in 2016 but the Government was obliged to set an interim one for 2010 which it did and that is the one on which there has been all the focus from 2004 to 2010, so a six year horizon. That was a good horizon because it was far enough away for us to be able to influence and change but near enough that people could see it coming.

Q334 Chairman: When did the period start?

Mr Lehmann: About 2004/5.

Q335 Chairman: Effectively, you have a five year period?

Mr Lehmann: It may be six.

Q336 Chairman: As monitors of progress towards that target, are you satisfied that you have roughly speaking a five year period, because one of the tasks of the Committee, going back to this annual reporting process, is that yes, it has to produce a progress report. That inevitably is going to be some time after the end of the first year of the Committee, 2009, so being realistic it will be some time into 2010 before a report appears. A year—perhaps a year and a half—might have elapsed in a process where you have to get somewhere in five years. Therefore, how do you make any mid-course corrections? Have you had enough information en route to be able not only to monitor progress but also, if necessary, to be able to signal a need for change in policy?

Mr Lehmann: The answer is yes. The formal, detailed data comes out with a huge time lag but DTI officials have been willing to apply rules of thumb and give us an approximate estimate very quickly. There would be a difficulty if you come to 2010 and you might not be quite sure for a year or two. If you are nearly there but not quite, you might not be quite sure whether you have met the target. The changes have been quite dramatic. We have had enough to know what is going on and to know that we are either on course or off course reasonably quickly.

Q337 Mr Cox: I am having a hard time understanding, if you will forgive me, what it is you are for. Surely a committee like yours is really there to supply the political will that this seems implicitly to conceive is not in Government already? If Government sets itself a statutory target, why on earth is not the in-house, paid, professional civil servant setting up his own team within the department specifically to give it the priority that the Government has set it and driving it through with the appropriate political will if it is a genuine policy which it wants to see implemented? Why does it need a committee?

Mr Lehmann: We are a broad range of external organisations with a considerable degree of expertise. We have the energy companies; we have the fuel poverty NGOs; we have consumer groups, Help the Aged. There is expertise there and knowledge.

Q338 Mr Cox: The Government can always draw in experience from relevant bodies, companies, institutions, individuals. Why does it need to set up a statutory committee? You see what I am trying to tease out here? What is at the bottom of the need for
this kind of incubus on government, namely some advisory committee sitting on the outside? They do not pay you. They are effectively exploiting your voluntary goodwill. Why not simply establish a team inside the department: this is the government policy. I want to see this implemented and delivered with genuine political drive and conviction. Draw on a wide range of experience but you people should be working inside the department and properly paid, should you not?

*Mr Lehmann:* We are not exploited. We do it because we are happy to do it. That is not a problem. We have no brief for whether we are here or not. It does not really matter very much to us. We think we have played a useful role. We have mentioned some of the things that we have done. There is some value in having a group of people with very different views who get round a table regularly, get to know each other and forge sometimes a common view that they can put to government. That can help, with some practical, external knowledge.

*Mr Chesshire:* It is a fair point to pose: do we need to be a non-departmental, public body? Could there not be some informal, advisory group to Whitehall? One of the benefits of the membership of the group, amongst other things, is does it include all the principal delivery agents, all the energy supply companies and the company that delivers Warm Front, the big public expenditure programme. It also includes a large number of social partners and the major charities in the field and so on, so it is a combination of expertise. One of the difficulties of dealing with fuel poverty—I suspect this to be true of the Climate Change Committee as well—is it is very multidisciplinary in character. There is not a single set of disciplines. You cannot go to a Treasury person and say, “How would you do this?” They look at it in a rather econometric way. There are clearly other dimensions of technology, of social policy and so on which need to be brought together. Those sometimes are very difficult to harness within a single government department. In my experience of Whitehall over about 30 years. You are right. Ultimately, the added value of a non-departmental, public body over a departmental, advisory committee is probably slender. Peter and I have experience of sitting across a whole range of committees.

*Mr Gray:* It might not even be disadvantageous. Geoffrey’s point—an extremely good point—is that if there is public good that will be done, a government department should be doing that albeit there are all sorts of pressure groups out here trying to make you do it. Is there a risk that, by setting up an NDPB of the kind that you are and of the kind that the Climate Change Committee will be, the government tell the population that they are doing something useful; they are using it to camouflage the fact that they may not be? You have a statutory duty but in answer to the Chairman a moment ago you admitted that the government is directly against the things that you advise. Is there not a risk that in setting up the Climate Change Committee or indeed your own organisation it enables the government to escape from the political reality of the fact that they are not doing the thing as well as they might be?

Q339 *Mr Cox:* You know T S Eliot’s poem? The first thing to do is form the committees.

*Mr Lehmann:* No because we make life uncomfortable. When things are not going well we make it very clear. Look at the press release that came along with our annual report. We are staunchly independent.

Q340 *Mr Gray:* As the Local Government Association does when things go bad in local government but it does not mean to say that the Local Government Association have set up a statute.

*Mr Lehmann:* We have no brief either way.

*Mr Chesshire:* My experience of advisory committees in Whitehall is that they do not tend to issue annual reports independent of the departments. I am not saying that is the main thing but it does give us some profile certainly at periods of time when fuel poverty has risen very severely. There has been quite a reasonable amount of press attention added to the political pressure. The very fact that we appear before groups of MPs like this raises the profile of the subject.

Q341 *Chairman:* Do you think there will be a difference between how the Climate Change Committee will operate compared with yours, because yours is made up, as you rightly pointed out and was the case in the annex in your evidence, of a series of representative organisations, some of whom as you have rightly reminded us have a delivery responsibility in terms of the policy? Here, looking again at the schedule of the Bill, the Secretary of State in appointing the members of the Committee is looking more at their talents, their technical ability. It is not cast in terms of being a representative body. In other words, he is looking for technicians as opposed to advocates. Do you think there will be a difference in essence there, because you have a lot of campaigning bodies like Help the Aged, for example, people who are in there, banging the door down, who want to see progress; whereas these guys have a list of almost mechanical functions they have to perform, giving advice to the Secretary of State.

*Mr Lehmann:* The list of people is strange. It seems to be rather light, not on representatives but on anyone from the consumer side. Citizens generally seem to be not all that well represented. If I read it right—we are not experts on the Climate Change Bill—the Climate Change Committee does not seem to be advising on the measures that are needed. It seems to be giving advice about budgets and how the budget should be set rather than what the Government should do to meet those targets. Its role is a bit different, I think. In answer to your question, yes, it would be different. They might not be inclined to go as far as we do sometimes in trying to make sure that our advice is taken.

*Mr Chesshire:* I would not undermine the analytical capacity of the Fuel Poverty Advisory Group either. Fuel poverty is a broad enough subject. People are coming from very different dimensions of the debate, but at least we have a *lingua franca*. I really
lie awake at night and think: how does an economist have a scintillating, technical dialogue with a professor of climatology at Cambridge University? Trying to find a common language for these technical specialists to meet is a principal challenge in my experience of Whitehall committees.

Chairman: I am going to adjourn the Committee for five minutes. Many of our colleagues from the other side of the House are involved in some hustings meetings and this has proved a rather larger draw than discussing the Bill. One of our number has to depart for five minutes so may I prevail upon your patience to wait for a few moments?

The Committee suspended from 5.54pm to 6.05pm

Q342 Chairman: I was going to raise with Mr Chesshire, after thanking him for very kindly doing a comparison between the characteristics of the kind the Climate Change Committee and your own, the question of transparency. One of the issues is how much of the advice and information which the Climate Change Committee deals with ought, if at all, to be in the public domain. You were saying that you effectively do not publish that level of detail but, in the context of what the Climate Change Committee is going to do, which is going to be giving advice to the Secretary of State about what his targets are and therefore direction of travel towards those targets is going to be, do you think that information should be put into the public domain? Mr Chesshire: Some of it. I would make a very strong case for the research base to go into the public domain. Otherwise, people will be arguing from different bases. It helps peer review and wider knowledge. For example, if it comes to a debate on the Committee about the extent to which the effort should be generated within the United Kingdom or traded internationally or whatever, it might be the case that ministers would seek advice from the Committee in the run up to a renegotiation of the next phase of Kyoto, the one after the next one. There may well be issues where care would be needed. The analogue I can give you in my experience is the Government Energy Policy Advisory Board, which I am a member of, which does publish a minute but not always our discussions which might impinge on foreign states, foreign policy or defence matters or whatever. One has to be somewhat discreet as to what goes onto a public domain website.

Q343 Chairman: What about the question of resources? You were indicating that first of all people on your committee served on it because they wanted to and that it was the bodies from which the committee was formed who provided the resource to enable your work to go ahead, unless I have that wrong. Mr Lehmann: Not quite. There are some resources from the DTI and Defra which are provided. They are not always quite enough.

Q344 Chairman: Is that for a secretariat or for research?

Mr Lehmann: Both. There is nobody employed full time on our work but there is somebody who helps in a secretariat and people who do research. We get some help from the bodies who send representatives. That is fairly limited because they are all under huge amounts of pressure. Generally we manage. We have not asked for more because we did not think we ought to be taking money away from the measures for the fuel poor. There have been some times when we could have done with a few more resources to do particular pieces of work. I can give you examples if you would like. It has been a small but not very serious shortcoming.

Q345 Chairman: Do you have any advice to give the Committee about the resources which you think the Climate Change Committee should have, because clearly it is going to have a continuing role. It is going to have to be there in the first instance to provide 15 years’ worth of advice. It is going to be a statutory committee. It has a lot of quite technical things it is going to have to produce information for the benefit of the Secretary of State on. What kind of resource might it need? Mr Chesshire: I was rather struck when I read the partial regulatory impact assessment at page 49, table four. They are anticipating, as you probably know, the first year’s costs, including all the set-up costs, at £2.25 million and ongoing annual costs of just under two million, £820,000 for the secretariat, £460,000 for the Committee, though I do recognise it might appoint sub-committees and those sub-committee members might be paid, so you cannot divide £460,000 by eight or nine and get a fee. The research budget is £500,000. It does not buy a lot if you are exercising big models but particularly if you need to develop the models to answer these policy questions. There is a good deal of modelling activity under way within Whitehall, the interdepartmental analysts’ group and so on and also through the UK Energy Research Centre. I am sure your adviser would know more than me, but it seemed modest to me. I ran a research unit with a budget quite considerably bigger than that and without this ambition. To what extent they can draw on research under way elsewhere depends on the make-up of the Committee. If many of them are leading commentators and analysts in their own field, they will be well embedded in their own disciplines and their ongoing research agendas, but it did seem to me rather modest.

Q346 Chairman: Do you think that would inhibit the Committee from having its own in-house, analytical staff? One always gets the feel, looking at this, that what you could be doing is employing people who have some knowledge, pinching everybody else’s research and synthesising it as opposed to being able to have people who could do their own. Mr Chesshire: I have not followed this debate with any officials internally within Whitehall, in Defra, on this particular point but I was struck by how large the budget is for the secretariat. The Bill does say that the Committee can appoint a chief executive and other staff. If you anticipate by reading that
earlier section that there is a secretariat, I would not have assumed when it came to regulatory impact assessment that it was virtually 40% of the total budget, unless of course the assumption is that that secretariat comprises both the secretariat in a conventional sense and some minimum, in-house, core analytical capacity. That is not made clear in the Bill.

Q347 Chairman: That 500,000 or 750 in year one might be commissionable. Even so, you do not get much for that.

Mr Chesshire: The secretariat may well include research directors and so on, but the Bill does not make that clear.

Q348 Chairman: We have the Secretary of State before us on Wednesday so we will make certain that we probe him on those particular matters. When we were chatting informally, Mr Lehmann, you mentioned that you had one or two points specifically that you would like to put to the Committee.

Mr Lehmann: First, one of the key challenges, not the only one for us, is we need to bind in the other departments in Whitehall and other agencies like Ofgem, who are not centrally responsible for this. That is one of the challenges on climate change as well. One way of doing it is to have a business plan or some sort of agreement with the other departments about what they will contribute, but some way of tackling this for climate change will be needed, as for fuel poverty. The second point is the more specific one that we were rather worried that the Bill itself does not take enough account of fuel poverty and the fuel poverty targets. There are some synergies between meeting climate change and fuel poverty objectives but there are also some potential tensions. Some policies, for example, to combat climate change might raise prices; some might not. That would have an impact on fuel poverty so we think there should be some specific reference in the Committee’s terms of reference to take account of the impact on the fuel poverty targets. Similarly, we think there should be more consumer interest and someone more specifically involved with fuel poverty on the Climate Change Committee. Finally, you asked us a number of questions about what the impact of the targets has been and what the impact of the group has been. There are one or two other inquiries going on the Climate Change Bill and we did not have enough time for this one but we have now drawn up a one pager with four or five areas where we have made a difference and four or five areas where we have made very little difference. We would be very happy to send that to you if it would be helpful. It is ready, pretty well.

Chairman: That would be very helpful indeed. The message that comes out of both sets of evidence we have heard this afternoon is that this is still judged to be work in progress. Obviously, part of the fact that the Secretary of State quite wisely has asked for as widespread a consultation as possible is that when the finished Bill comes out it can be strengthened by taking on board some of the critical appraisal which has come to date. Can I thank you very much indeed and also for your written evidence. We look forward to your further one page summary. Thank you very much.

Supplementary memorandum submitted by the Fuel Poverty Advisory Group (CCB 10a)

Impact of the Fuel Poverty Advisory Group

Clearly there are a number of influences on policies. This note sets out a few key areas where FPAG made a difference although others have obviously played a role as well, and other areas where FPAG’s advice has not been followed.

Positive Impact of FPAG

— Significant increase in funding for the Fuel Poverty Programmes, especially Warm Front in the light particularly of the estimates provided by FPAG of resources required to meet the fuel poverty targets. Some of these increases were funded by increasing upstream taxation as proposed by FPAG.

— Helpful changes to Warm Front in April 2005.

— Introduction of Social Tariffs by a number of suppliers following positive guidance from Ofgem, which had been encouraged by FPAG.

— Incentives for Gas Network Extension likely (although not yet certain) in Ofgem’s Gas Distribution Price Control.

— DWP willing to share information to help in targeting fuel poor and generally positive approach from DWP.
FPAG Advice not Followed

— Very large and increasing gap between Direct Debit prices on the one hand and prepayment and other prices on the other. Ofgem (and DTI) have not been willing to act on this and there has been no drive to capitalise on new technologies, which could help to resolve the problem, and other possible schemes for cheaper payment arrangements to low income customers have not yet been pursued.

— Increase in energy prices generally and lack of transparency about the energy companies’ margins.

— Defra decision to reduce the share of low income groups in EEC—the Energy Suppliers’ Energy Efficiency Programmes.

— Inadequate energy efficiency part of the Decent Homes Standard that leaves some households in fuel poverty.

— Failure to engage CLG and its predecessors generally and also to persuade Ofgem on a number of key issues.

— It seems unlikely that the 2010 target will be met unless there are radical policy changes.

FPAG oral evidence to Efra Committee—correction

In my evidence I said that the fuel poverty target was put in place about five or six years before the date of the first target. In fact it was earlier than this. The 2010 target was set in early 2003, ie seven to eight years before the target date of 2010. On reflection this did result in rather less urgency in the early years.

Peter Lehmann
Fuel Poverty Advisory Group
May 2007
Wednesday 23 May 2007

Members present
Mr Michael Jack, in the Chair
Mr Geoffrey Cox Mr James Gray
Patrick Hall Lynne Jones
Daniel Kawczynski

Witnesses: Mr Jonathan Brealey, Director of the Office of Climate Change, and Mr Robin Mortimer, Head of the Climate Change Bill Team, Office of Climate Change, gave evidence.

Q349 Chairman: Good afternoon, ladies and gentlemen, and welcome to this further evidence session of the Committee’s inquiry into the draft Climate Change Bill. We welcome as our first set of witnesses from the Office of Climate Change Mr Jonathan Brealey, who is the Director of the Office, and Mr Robin Mortimer, who is the Head of the Climate Change Bill team. Gentlemen, you are very welcome indeed. How many others of you are there in the Office?

Mr Brealey: At any one time the staff in the Office of Climate Change ranges between about 25 and 35 people. At the moment we are closer to the 25 end because some of our members have been seconded into Defra to take forward the Climate Change Bill.

Q350 Chairman: So you are part of Defra even though you have this rather fine name?

Mr Brealey: We are a cross-cutting unit so we are owned and funded by six different departments. We report to six ministers plus the Treasury and our officials board, who govern our everyday work, is also spread across those departments, so we are a cross-cutting unit jointly owned by different departments rather than being simply part of Defra.

Q351 Chairman: According to Mr Miliband when he issued a press release on 22 September he said of you: “The Office of Climate Change will be a key resource to help us achieve the challenging targets we have set to reduce carbon dioxide emissions by 60%.” Given that you are the cross-cutting repository of all knowledge on these matters and have an impressive list of things you are supposed to do in providing advice to the Secretary of State, did you feel your nose had been put out of joint when you had to write a Bill that effectively wrote you out of the position of giving advice on targets and everything to do with the Climate Change Committee?

Mr Brealey: First of all, we were very pleased to develop the draft Climate Change Bill. There are two forms of advice that need to go to ministers, one of which is the independent advice of the Committee on Climate Change, who will advise ministers on what is possible and the trajectories to get to 2050. Alongside that, within government, not just within the Office of Climate Change, there will be a great deal of work to do to think through the policies that we need to get us there, and the policies that we need will change over time and will interact with a number of other things, including our international commitments, and therefore I still see a very fundamental role for the Office of Climate Change as part of that. I am also very pleased to see that there is going to be an independent and credible source of advice to government on what our targets should be to get us there.

Q352 Chairman: You talk about trajectories and you have currently proposed 60% as the target. Being very knowledgeable people, you will be aware that there is a great deal of debate as to whether 60 is the right number or whether a number greater than 60 ought to be the number bearing in mind the objective of keeping the global temperature rise at a maximum of two degrees centigrade, so why did you pick 60?

Mr Brealey: The source of the 60%, as you know, came from the Royal Commission on Environmental Pollution—

Q353 Chairman: I know where the source is but why did you decide that you wanted to associate yourself with the Royal Commission’s views, bearing in mind scientific developments which have occurred since that time?

Mr Mortimer: I have a couple of things to say on this. The first thing is that the 60% target is the one which has commanded most stakeholder support for the past few years being, as Jonathan said, a recommendation of the Royal Commission. There is no consensus around a different figure as yet. It is also consistent with the Stern Report which said that developed countries should do 60 to 90% in order to stay within 550 parts per million.

Q354 Chairman: 60 to 90 is quite a wide margin.

Mr Mortimer: It is indeed and that is why the Bill has a provision to enable the Government to amend the target if there are significant developments internationally or in climate science.

Q355 Chairman: How would we know whether those developments were significant or not? How are you going to adjudicate “significance”?

Mr Mortimer: I guess if there were a judicial review then there would be a test of significance. The Government would take a view given the facts at the time to say if there were a development in terms of a
new international agreement, for example, that would be on the face of it a significant development. I think ultimately the test of significance would be one for the courts.

Q356 Chairman: Tell me, are we establishing a new principle of government by judicial review because you have said in terms of possibly establishing whether some new scientific consensus had been arrived at that it might have to be subject to some form of judicial review and, as we shall question later about sanctions of the Bill, the Bill tiptoes around the edge of saying the only way forward if we miss the targets is to talk about judicial review.

Mr Mortimer: I did not mean to imply that. What I meant was the ultimate test of significance would be one which would be open for judicial review. That said, the Government would clearly need to make a judgment based on the facts at the time as to whether any development internationally or any scientific development in its view constituted a significant development.

Q357 Chairman: Let us focus for a moment on the word “significant”. Can you help us statistically in terms of evolving science. What I recognise as a significant change, can you numerically define what you would regard as a significant change?

Mr Brealey: I do not think you really can define numerically what a significant change is. Essentially, it is a matter of judgment and those judgments will change over time. As we all know, government is subject to a number of different lobbying groups who are pushing for different positions and the scientific consensus that is achieved internationally at the moment is a massive process which is hugely respected. I think that for us to try to predetermine in legislation what a significant event is would make the legislation too rigid and therefore too difficult.

Q358 Chairman: The reason I am probing this question is because you mentioned an interesting word in your introductory remarks and the word was “trajectory”, because at the moment there is no breakdown or no indication that the Government is going to provide, apart from three discrete five-year target periods, what the direction of travel is towards the end game, so at the moment the only assumption we have is that this is some form of linear direction. We already know, though, if it is linear then in terms of the range of targets there is a whole raft of targets by sector, by energy generation, all bubbling around underneath there, and it is very difficult to see how all of this is rationalised together to mean that the United Kingdom economy is on track to meet these targets. You must have done some work, I presume you did some work in looking at the trajectory to see whether 60% was still the right number. It might be the consensus end game but you have to make some recommendations that we were actually travelling somehow in a direction that would enable us to reach it because there are consequences if we do not. So let us wind back a bit, what has been the trajectory up to now which gives you confidence that we are going to end up meeting this target?

Mr Mortimer: The point about the target is to set a target which is consistent with our wider ambitions in terms of the EU’s two degree target. As I said earlier, the Stern Report does say that 60 to 90% is the recommendation for developed countries. I think the second thing would be to say that in devising the midpoint, the 26 to 32% point in 2020, we on the Bill team worked very closely with the team working on the Energy White Paper, which you will have seen today has the 26 to 32% range in it, and the projections in the Energy White Paper take us at the upper end to the 26 to 32% range.

Q359 Chairman: I am struggling a bit to understand how putting one number in the Bill is then going to enable that to be, if you like, distributed amongst all the emitters as to what their share of the action is going to be, because looking at the sort of range of targets there is a whole raft of targets by sector, by energy generation, all bubbling around underneath there, and it is very difficult to see how all of this is rationalised together to mean that the United Kingdom economy is on track to meet these targets. You have said in terms of possibly establishing sanctions of the Bill, the Bill tiptoes around the edge of saying the only way forward if we miss the targets is to talk about judicial review.

Mr Mortimer: If I can talk about the trajectory over the longer period to 2050, the primary duty of the Committee on Climate Change will be to define what it considers the optimum trajectory out to 2050 and then to work back from that in order to give advice on the budget, so it will not be possible to give advice on budgets for the first three periods up to 2022 unless it has a view on the longer term, that is its primary duty. In terms of a trajectory within the five-year periods, I do not think that is what the budgeting concept is really there for. The point of the budget really is to allow flexibility between years within the budget and there will not be a trajectory within the five-year period as such, or not one for which the Government is accountable during the period.

Q360 Chairman: Try and help me to understand, why did you pick 26 to 32 as the range? That is your number, that is not the international consensus, so if we take 30 years, which is the years, plum in the middle of that is 1% a year, so you are suggesting that it could be slightly less than 1% a year or slightly more, but what I am not quite clear of is whether we are travelling again in this linear direction because we know that we are already running behind that. I do not understand, you have plumped for this number, why did you decide that was going to be, if you like, this midpoint target?

Mr Mortimer: The range came originally from the 2003 Energy White Paper and the reason for the range is that it is both credible in terms of having policies in place to deliver it and, secondly, because it is consistent with a 60% long-term target. The economic analysis shows that.

Q361 Chairman: Sorry to interrupt, but you say it is consistent with policies to achieve it. If that is the current suite of policies up to and including what we have got at the moment, we are running behind time, are we not, because the only thing we can go on as lay observers of these things (and you are the
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experts) is that if you take a linear relationship between where you started and where you are going, the target is 1% a year, and we know from the Government’s own numbers that we are running behind that rate of reduction in emissions at 1%, we should be running at about 1.5%. If I am wrong tell me.

Mr Brealey: If you think about the way in which we will reduce emissions, a lot of the decisions that need to be made are big capital decisions and those decisions take time, and, absolutely, as you say, we may not be on a linear trajectory, we may be on a very different type of trajectory. I do not see the reason why one would assume the trajectory to 2020 or 2050 would necessarily be linear. If you look at the analysis that has been produced as part of the White Paper, that certainly is not the consensus view.

Chairman: What we want to understand is how achievable all of this is because this Bill kicks in in 2009 so you have then got 11 years’ running time. I have no idea whether these numbers are achievable because nobody has painted a sub picture as to what this trajectory of emissions reduction is going to look like because with all of the things that are for example in the Energy White Paper, are we talking about making up for lost time, catching up, or what?

Mr Mortimer: Currently we are at minus 11%, I think, against 1990 levels, taking account of the EU Emissions Trading Scheme. The 26 to 32% range is for two reasons, firstly, as I said it is a credible range, it is consistent with what we have in place in the Energy White Paper and therefore is achievable, and that is obviously important, and the second thing is that it is consistent with the longer-term ambition of 60% by 2050. The reason I say that is because the economic analysis shows that the trajectory could follow a number of different paths, it does not have to be a straight line.

Chairman: You have the advantage of seeing it and we humble parliamentarians are the last ones to see these things, so we have not had a chance to—

Mr Brealey: It is now on the DTI web site.

Chairman: Indeed, we have got copies of it but we have not had a chance, speed readers as we may be, to digest that. Right, one other way of replicating targets would be to start at the other end and talk about a carbon budget. Why did you reject that as an approach and simply talk about a percentage annual reduction target as opposed to talking about, if you like, the size of the UK’s carbon budget that we commit, in other words the total amount of emissions that we can have compatible with the 60% reduction, and talk about how you would then salami-slice that down to a lower amount? Why did you not express the target in those terms?

Mr Mortimer: There are two ways of doing it, you are right, in the sense you could build up the five-year carbon budgets either by taking a proportion of an aggregate amount over the 45-year period or saying (which is what the Bill is doing) that those carbon budgets have to be consistent with point in time reduction figures, in other words the 2020 and 2050 targets. We opted for the latter because in a sense the key thing is the accountability for the five-year budget period and it is the job for the Committee on Climate Change to advise on what the optimal numbers would be for those five-year budget periods, and as long as it does that consistent with the long-term targets then it has enough to guide it, in terms of advising on the five-year periods. If you had an aggregate amount you would not be in a better position—

Chairman: You rejected, for example, the Tyndall Centre who when they came to talk to us made it very clear that the UK’s carbon budget between 2000 and 2050, in their judgment, was anywhere between 5.5 and six gigatonnes of carbon and they were at pains to point out to us that you could get a very meaningful tracking of progress towards using that carbon budget by each year saying, “This is how much we have done this year and this is what is left to do.” I think, in their judgment, they felt that it gave a better indication of progress towards achieving the objective, but you have rejected that.

Mr Mortimer: You can work out exactly the same number by simply taking 60% of the 1990 baseline and that gives you a number for 2050, but it would be taking it one step further then to say this must be the aggregate amount over the period. What we are saying is that that aggregate amount would be determined by taking advice from the Committee on Climate Change and working it out from the basis of doing an economic and environmental impact analysis rather than starting out having prejudged that analysis by setting an aggregate number.

Chairman: Just before I hand over to Mr Taylor, once this Bill has been enacted, because presumably the Government will get it through, do you as the Office of Climate Change then disappear?
Sir Jonathan Brealey: In terms of our involvement with the draft Bill, on publication of the draft Bill we have transferred the work back to Defra, because Defra is the lead department taking it through. We are carrying out a number of different cross-cutting policy projects, for example on heat emissions, global carbon finance and the EU ETS, and we will continue to provide support for all departments of government to think through some of the big issues of climate change.

Q368 Chairman: In terms of the information you provide to government, you are not going to duplicate what the Climate Change Committee is going to do?

Mr Brealey: Absolutely not, no. Initially, before the Climate Change Committee is up and running, we will be carrying out some analysis that will help some of those judgments, but our role is not to duplicate what the Committee on Climate Change will do.

Q369 Chairman: Will you be at the Committee's disposal should they need you?

Mr Brealey: I would have thought so, yes.

Q370 David Taylor: The total amount of carbon emissions in the period to 2050 is the area under the curve, is it not, so there is no magic status to be associated with the 60%—it could be 55%—and it could produce a greater reduction in aggregate emissions if the early profile was steeper reductions for a longer period. The ski jump as opposed to the lower levels that you have seen in the past. The Chairman mentioned budgetary periods, presumably when you are considering options for the structure of the targets there would have been pros and cons to the five-year budgetary periods grouped in end-on triples as it were. What were the cons, as you saw it, although the Government has gone ahead with the five-year budget periods? What were the drawbacks so far as you were concerned?

Mr Mortimer: The cons would be I guess in terms of making sure that there is a sufficient period of time for accountability to be possible. The only con to a five-year period is that it is a longer period of accountability. The pros were quite overwhelming on the other side in the sense that the consistency with the international framework struck us as absolutely crucial, making sure that the periods are coterminous with the Kyoto framework but also with the EU Emissions Trading Scheme framework, and in a sense to deal with the accountability issue. That is why we then also have in the Bill this annual accountability cycle where the Committee holds the Government to account in Parliament and the Government responds. The accountability point is addressed through that second part of the Bill.

Q371 David Taylor: A fourth Labour term starts in about 2010 so that coincides nicely with the cycle, but the Government beyond that might well be about three years in and there could well be significant disputes as to whose responsibility it is for any failure to meet the targets because of the discontinuity between the political graph and the carbon graph.

Mr Mortimer: That is true of any length of period. A shorter period could also be—

Q372 David Taylor: Yes we are coming to that but only the Environment Agency was at all enthusiastic or supportive of the five-year budget period, was it not?

Mr Mortimer: The argument against annual targets to us were quite compelling in the sense that, firstly, there is this issue about normal variation in emissions between years, and being legally accountable for emissions which vary because of natural changes seemed a very strong reason not to go for that. The second would be the point I made about the relationship with the international framework and having exactly the same system in terms of periods as our international obligations makes a great deal of sense because we report to the UN on a five-year cycle and we report to the Commission in terms of the EU Emissions Trading Scheme on a five-year cycle so for the UK to be thinking in five-year terms makes a lot of policy sense.

Q373 David Taylor: You do have the power to bank or borrow emissions, is that right, and also to buy credits internationally?

Mr Mortimer: Yes.

Q374 David Taylor: Why do those two measures not collectively provide sufficient flexibility? Why do you believe there ought to be the power to adjust budgets once set, because a fair number of organisations are not convinced by the need for that, are they?

Mr Mortimer: I think the borrowing flexibility is really like end year flexibility in financial terms, so it is intended to deal with end of budget adjustments rather than anything more fundamental. The power to go back to Parliament and seek an amendment to the budget itself, having first taken advice from the Committee on Climate Change, is really to deal with more significant developments and the word “significant” appears again in relation to that clause as it does in relation to climate—

Q375 David Taylor: Might that be a significant political development? Might not one of the first acts of a newly elected Government where power has changed be to go back to Parliament and say, “Can we please revise the budget for the next five years?” That is a possibility, is it not?

Mr Brealey: I do not think it is. The political possibility of revising down the budget, which we are all most worried about, would be relatively high if the first thing you do as a government is say, “What we are going to do is reduce our ambition in tackling climate change.”

Q376 David Taylor: Do you envisage any constraints or caps on the powers of the Secretary of State to alter budgets or budgetary periods?
Mr Brealey: That has to be done on the advice of the Committee on Climate Change and the long-term targets are fixed.

Q377 David Taylor: Do you anticipate that that might be allowable at the point when the legislation was being designed, that there would be some restriction on the power of a future Secretary of State to seek any changes to budgetary periods or indeed to carbon budgets? 

Mr Mortimer: There are three. There is the requirement to seek advice from the Committee, and the Committee will no doubt want to look at the impact that any amendment of the budget would have on the longer-term trajectory and the likelihood of meeting the longer-term 2020 and 2050 targets. There is a requirement to meet the significance test, in other words for there to be a verifiable significant development and, thirdly, there is the parliamentary process and obviously ultimately the Government would have to get a resolution through both Houses.

Q378 David Taylor: You have been supplied with a copy of the Energy Saving Trust’s evidence, have you not? 

Mr Mortimer: Yes.

Q379 David Taylor: You will have seen their suggestion about the strengths of a rolling five-year average budget being a better monitor of progress. Do you spot any flaws in what they have to say? 

Mr Mortimer: I think there are some issues. I think the first point is that on our view there does not seem to be a whole lot of difference between this concept of rolling five-year budgets and annual targets, in the sense that it does not really get over the problem of the Government being held to account in any single year for emissions, which could fluctuate according to normal variations in the weather, for example. The second point is that there is a data lag issue so because we do not get the verified emissions data until 14 months after the end of the previous year, the Trust’s paper does not seem to deal with the fact there would be this time lag, so it assumes you could use historic data for the previous five whereas in fact—

Q380 David Taylor: --- It is half a cycle out or thereabouts? 

Mr Mortimer: Exactly.

Q381 David Taylor: So there is both a data lag and a cycle lag which will tend to depress the achievements of any Government? 

Mr Mortimer: Yes.

Q382 David Taylor: And that is your main concern? 

Mr Mortimer: Those are the two. 

Mr Brealey: The only thing I would add is that there is a question about whether this really fits with what we are being asked to do internationally. The one advantage of five-year budgets is it does fit very well with what we do on the EU ETS and what we do under the Kyoto Protocol. This system seems harder to fix within that system.

Q383 Chairman: Just refresh my memory, Kyoto finishes in? 

Mr Brealey: 2012.

Q384 Chairman: The Bill starts in 2009. 

Mr Brealey: Absolutely.

Q385 Chairman: So you reckon that 2014 is a good fit, is it, with something that ends in 2012? 

Mr Mortimer: No, the budgets will be set 2013 to 2017 and then 2018 to 2022?

Q386 Chairman: Assuming there is a successor to Kyoto? 

Mr Mortimer: Yes and the Bill has flexibility in it to allow the periods to be amended in the light of changes internationally, so if a successor to Kyoto were on a seven-year budgeting period then the Bill could be amended.

Q387 Chairman: If you are saying it could work at seven years we could go from five year targets to seven-year targets? 

Mr Mortimer: Or to three-year budgets.

Q388 Chairman: So in other words this idea of a synergy of five years is a bit of a myth, is it not? 

Mr Brealey: No, I am saying if the international situation changes then the UK may want to mirror that.

Q389 Chairman: In other words, the targets are still potentially malleable and flexible in their timing according to circumstance? 

Mr Brealey: With all of this we have to take into account what happens internationally and what is happening elsewhere in the world.

Q390 Chairman: I am not disagreeing that you might have to— 

Mr Brealey: --- Therefore the judgment the Government has got to make about how it manages its budgets may have to be changed in the light of that.

Q391 Chairman: But the justification that you said in the Bill for five-year targets is that they line up with existing commitments and the little discourse we have just had shows that those commitments in terms of their monitoring periods could change? 

Mr Brealey: Absolutely, but again that is one of the justifications for a five-year budget. The main reason we went for a period of five years was that on the one hand we have to have something that is rigid enough to ensure we are on the trajectory to meet our long-term goals but, on the other hand, is flexible enough so that government is not basically held to account for things that it cannot control for example changes in the weather. As the Kyoto Protocol and other
international agreements evolve, of course the Government will have to consider what it does in the light of that.

**Q392 Lynne Jones:** You have talked about the delay in the emissions data. I think we have had some evidence suggesting there were likely to be improvements in that. Is that right?

**Mr Mortimer:** Defra, which deals with the contract for data, certainly is always trying to get the data as early as possible, but I am not aware of the final verified data being brought forward. That is bound by an international timetable in the sense that we have to report to the EU 17 months after the end of the previous period.

**Q393 Lynne Jones:** Could we talk about what sanctions there are if the targets are missed. There is a five-year target, the Bill talks about the opportunity for judicial review if those targets are missed but, say, an NGO takes the Government to court and it is agreed that the targets have been missed, what sanctions are there?

**Mr Mortimer:** I think the first thing to say is that this is the very situation that the Bill is trying to avoid in the sense that by creating a legal framework it puts the onus on government both in political terms but also in legal terms in the sense that the government respects the rule of law to ensure that emissions do remain under the budget period, and that is the strength of having the system in legislation rather than as an administrative system.

**Q394 Lynne Jones:** But if there are no sanctions it is not much of a strength, is it? There could be a scenario whereby the Government is forced to purchase overseas credits to bring the targets into line or they could be required to set a tougher budget for the subsequent period. Do you envisage either of those as likely to happen or should they be enshrined within the legislation so that the Government has more incentive to meet its targets?

**Mr Mortimer:** It is unclear ultimately what the courts would do in the event of a judicial review. The first point, as I said earlier, is the sanctions are both political and legal in the sense that the Government would not want to be found in breach of the law and to have a declaration made to that effect, so that in itself would be a strong incentive.

**Q395 Lynne Jones:** It would be an embarrassment for a couple of days or a bit longer but it could then carry on in its own sweet way. Surely we need something tougher, particularly for example if there has been a general election and it is a new government. They could say, “It’s not our fault guy, it was the previous lot.”

**Mr Mortimer:** As I say, it is not clear ultimately what the courts would do in those circumstances. It is a fairly new type of duty, as the Chairman alluded to earlier, so the courts may indeed mandate particular action, although we could not predict that.

**Q396 Lynne Jones:** Would it be feasible to put it in the Bill that if the target is missed then it is compulsory to buy up credits from overseas because that would be if you like a fine, and if the Government knows that they could have spent that money on actually doing something here rather than relying on overseas credits maybe that would be a greater incentive. Should that be something that is in the Bill?

**Mr Mortimer:** It would be feasible. Clearly it is not infeasible. I think the point would be the judgment needs to be made on having that sort of mandatory system which then ties the Government into particular action in terms of purchasing credits rather than doing something different, such as preempting the risk of missing the budget by putting policies in place that deliver savings within the UK, and whether that is the right judgment; that is a judgment the Government would have to make. But yes, it would be feasible.

**Q397 Chairman:** It is a bit wishy-washy, is it not, at the end of the day because if the Government fails on a European Union agreed policy it gets fined by disallowance, so it knows that there is a financial penalty potentially there if it does not do what it has signed up to do, and it just seems odd that the Government is saying the only way we are going to be disciplined is by inviting us to be judicially reviewed?

**Mr Mortimer:** I would go back to the point that the fundamental point of the framework is to avoid that situation arising.

**Q398 Chairman:** You said that perhaps at the end of the period they might then put some new policies in but you are playing catch-up and in terms of the Bill, the Bill does allow for credits to be purchased abroad. Interestingly, there does not seem to be any limit to what that could be. Did you think about putting limits in there? It is a way of ultimately making certain that you stay on track. As you rightly pointed out, some of the measures that are associated with achieving these objectives are long term in nature. But if after you have done five years and you find you have missed it and somebody says, “We’ve got this new whizzo scheme to put in,” and you are at the end of the second period before you have done anything about it, at least by getting the credits in place then you could be back on track?

**Mr Mortimer:** Stepping back a bit, the point about setting the budget three periods ahead again is to avoid that situation, so by having a 15-year horizon if it is a policy that takes several years for the emissions savings to result, if it is major capital investment or something like that, then the point about having a 15-year horizon is to allow the Government to take policy measures in time to impact on the later period. Your question was about purchasing overseas. There are international obligations, as you all know, around supplementarity and the UK is effectively saying we will be bound by those, but we have not created any unilateral legal constraints on supplementarity.
Mr Brealey: The other point I would like to add on purchasing credits is that when you purchase those credits, in terms of the emissions that you are producing and therefore the budget that you are trying to meet next time, buying credits will still leave you in a position where you will have to catch up to your budget next time. There is going to have to be a balance of judgment when we get towards that about whether you purchase or whether you put in place policies which will help in the medium to long term. That is why by having one blanket measure of saying we will just purchase credits if we miss our targets you may not get the optimal solution and you may be spending money which may be better spent elsewhere on helping us reduce our emissions within the UK.

Q399 Chairman: Some people might argue it is cheaper to offset the lot elsewhere where you can buy credits cheaper than you can in policy terms in the United Kingdom.

Mr Mortimer: But there is an issue about short-term and long-term costs, is there not, and this is why we have said the Committee on Climate Change should look at this and say if it is economically rational, which it may be, to purchase credits in the short term at a cheaper rate but if that results in lack of incentive for policy and for UK investment which in the long term results in greater costs then it would not be economically rational, so it is about balancing those two things off.

Q400 Chairman: So you do not think there is a need in this Bill to have any upper limit on the amount of carbon credits that can be purchased by the United Kingdom at any one time?

Mr Mortimer: I think that should be something which is established under international law rather than under domestic law.

Q401 Mrs Moon: In all this discussion so far there has been very little on incentivising innovation. Surely that is the thing that we should be looking at, instead of opting into buying and trading in other countries, why is the incentive not on government to actually look at innovation and rolling out new policies and new initiatives and new technology in the UK, as they have in Germany, very successfully? Why are you taking this route?

Mr Brealey: I do not think the Climate Change Bill in itself defines for government the policies that we need to put in place to get to our medium and long-term goals, but I absolutely agree, part of our policy has to be thinking about innovation and thinking about technical change alongside other measures which a) may help us with energy efficiency or b) may involve purchasing credits, and it is that mix going forward that government needs to continue to make a judgment on. What we do not try and do in this Bill is pre-empt that judgment and say exactly how we think we are going to get to our long-term goals, but I absolutely agree, technological change has to be a big part of any strategy to get there.

Q402 Chairman: You say not to pre-empt that but, for example, the Energy White Paper commits the Government to a target for renewables. You could have put a target for that in the Bill because the Government are committing themselves publicly to that just like they publicly committed themselves to 60%. 60% is in the Bill, the renewable target is not; why not?

Mr Mortimer: The point of the legislation really is to set the overall framework and it does not deal with all sorts of underlying policy measures. Obviously it has within it the enabling powers to introduce new emissions trading schemes, but it does not attempt to cover the whole range of climate change policies that might be needed to achieve the 2050 target over the next 40 years or so. It is really there to create the targets framework and the institutional framework, not the underlying policy.

Q403 Chairman: You are saying the Secretary of State shall, if he so minds, have the powers to introduce further targets should that be necessary. In other words, he might want to enshrine into UK law something like “the Government supports a Commission proposal to save 20% of the European Union’s energy consumption through improved energy efficiency by 2020”. The Government might say it could do better than that and might want to give the force of law to that; why not?

Mr Mortimer: I guess it is something we would want to look at. The European Council 2020 target on renewables was published. I think, a few days before the Bill was published so it is certainly something that the Government might want to look at.

Q404 Chairman: Tell me, in this Bill there is a requirement that the Secretary of State report to Parliament on adaptation of the Bill, in fact, it is the Climate Change Committee that has to report on adaptation. When that report comes, can Parliament be guaranteed that a debate on the aforementioned report will be given in Government time on a substantive motion?

Mr Mortimer: I think that is a matter for business managers at the time rather than something to put in primary legislation.

Q405 Chairman: So we could be in a situation with all of the reports to Parliament that Parliament gets the report but never gets the debate, so how can we hold the Government to account?

Mr Mortimer: As I say, I think it is something that business managers from all parties would look at—

Q406 Chairman: If you are so keen to draft a Bill that talks about Parliament holding the Government to account, why not commit in the Bill to having an annual debate on the report? There is nothing to stop you doing that?

Mr Mortimer: But it might be rather fettering the discretion of Parliament at the time to decide how it wants to use its time.
Chairman: You know as well as I do it is the Government that controls what happens in parliamentary time. If Parliament is to exercise sanctions on either adaptation or the reports on the target achievements, it needs to know it is going to get the chance to do it because the Government could just say, “We have given the report to Parliament but we are not going to allow them to have a debate.”

Mr Mortimer: I think it is highly unlikely given the current political climate, but, no, you are right, the Bill does not mandate that.

Chairman: The last time we had a debate on agriculture was December 2002, so I leave you to draw your own conclusions.

Q407 Chairman: Will the advice be made public? Mr Mortimer: I think the Secretary of State when announcing the Bill said that the Committee would be transparent and open.

Q411 Lynne Jones: I know they have got to report to Parliament but they are also advising the Secretary of State, so will their reports to the Secretary of State be open as well as the reports to Parliament? Mr Mortimer: I do not think there is a specific clause on openness in the Bill. Under normal freedom of information arrangements then, yes, it would have to be open, but there is not a specific clause which deals with that in the Bill.

Lynne Jones: Would it be classed as policy advice, which is confidential?

Chairman: Why when you drafted this Bill did you not actually come to a conclusion about this? A freedom of information inquiry is like saying if it does not work take it to judicial review. Did you not sit down and talk about it when you drafted the Bill? Mr Mortimer: Indeed, the point is that the normal expectation of a body of this sort is it would have to make clear its analysis and its underpinning assumptions in publishing its recommendations. It would be extraordinary for it not to do so.

Q412 Chairman: What resources do you think the Committee will need to do its job effectively and how will it relate to your office? Mr Brealey: Shall I talk a bit about the Office of Climate Change and what we are doing now and perhaps Robin can talk a bit more about where we are now in terms of understanding the resources the Committee will actually need? The OCC is taking forward a piece of work now to look in a lot more detail at exactly the sort of resources that we may need to understand better our trajectory to 2050 and to define those first budgets. As part of that I think it will become clear the exact size of the Committee on Climate Change and the secretariat that is needed to support it. We had supplied some early estimates through the regulatory impact assessment but those to some extent, not massively but to some extent, will change as we carry out the more detailed scope of the exercise.

Chairman: You know as well as I do it is the Government that controls what happens in parliamentary time. If Parliament is to exercise sanctions on either adaptation or the reports on the target achievements, it needs to know it is going to get the chance to do it because the Government could just say, “We have given the report to Parliament but we are not going to allow them to have a debate.”

Mr Mortimer: I think it is highly unlikely given the current political climate, but, no, you are right, the Bill does not mandate that.

Chairman: The last time we had a debate on agriculture was December 2002, so I leave you to draw your own conclusions.

Q408 Lynne Jones: Can we talk about the Committee on Climate Change. This body seems to be only advisory. It was initially sold as being analogous to the Monetary Policy Committee but clearly it has not got any policy levers, it is just going to be advisory, so to what extent will the Secretary of State have to adhere to the advice given by the Committee?

Mr Mortimer: Ultimately it will be for the Secretary of State to set the budget, for example, and he or she will be free to set the budget as he or she chooses, but it is pretty clear that having set up an authoritative, independent body that the Government is going to want to take careful account of its findings. I think the analogy more closely is with the Low Pay Commission rather than the Monetary Policy Committee because it is a similar advisory body advising on a very specific measure, ie the minimum wage, and in a similar way this Committee will advise on a very specific number, ie, the carbon budget for three periods and in terms of the Low Pay Commission the Government has tended to follow its advice.

Mr Brealey: One of the distinctions between the Committee on Climate Change and the Monetary Policy Committee is the fact that to deliver those targets is going to require a suite of policy measures which is going to affect many different Government objectives and therefore the Government needs to understand what it can deliver given its other objectives as well as climate change.

Q409 Lynne Jones: Can you think of any circumstances under which the Secretary of State would not take the advice of the Committee? Mr Mortimer: I do not think I would want to speculate. The Secretary of State is going to want to take account of the whole range of factors that are set out in clause 5 of the Bill and so is the Committee. I think the point about the Committee is to have a body which is bringing the best evidence to bear, doing it in a very open and transparent way and bringing very much out into the light all that analysis which is needed to make those sorts of judgments. So I do not think I want to speculate on in what circumstances the Government would ignore its advice.

Q410 Lynne Jones: What scope will the Committee have to appoint its own staff and its own advisers? Will they be free to do that? Will they have a budget and will they be able to say, “This budget is insufficient and can we have more resources?”

Mr Mortimer: They will. As any NDPB would and does, so yes. The point Jonathan is making is given that the Committee clearly cannot be established in statutory form until after the passage of the Bill, the Office on Climate Change is getting on with some preliminary analysis that the Committee is almost bound to need in order to reach its judgments simply because the Committee is going to need to have a good body of evidence to issue its advice in the middle of next year, and therefore we need to get on with thinking about that as soon as possible.
Q415 Lynne Jones: What about the relationship with other departments? It is going to report to Parliament and it is going to advise the Secretary of State but a lot of the measures that will need to be implemented to meet the targets and the budgets will depend upon action by other departments, so what influence will the Committee have on those departments and will advice that concerns their influence will the Committee have on those departments and will advice that concerns their?

Mr Mortimer: The duty rests on the Secretary of State so therefore in legal terms it would be a particular Secretary of State, but I think, in practice, climate change policy will inevitably involve a whole range of departments and the Government almost certainly would reach a collective view in terms of responding to the Committee’s advice, although the legal duty is on a particular Secretary of State.

Q416 Lynne Jones: There has been some concern about the emissions forecasting model used by the DTI and it has been noted, for example, the delay in the publishing of the Climate Change Review, so to what extent is the current model adequate and are there any new developments in this area so that we can have confidence in their forecasts ahead of the 15-year budgetary period? I also notice that the NAO has done a report in this area and points out that the emissions are very sensitive to fossil fuel prices and they have gone up because the price of gas has gone up and therefore there has been more coal-fired generation, so are you satisfied that we have a robust enough model to allow us to ensure that we have got correct policy instruments in place?

Mr Mortimer: I think the Committee is going to want to look at that. It no doubt would want to use the Government’s model and use the DTI’s energy model. It will need to look for example at the transport model as well which the DfT operates, but I think it will also want to take account of other sorts of evidence out there, whether it is in the academic community or elsewhere, and reach a balanced judgment, and the Bill will not fetter its discretion to do that. It will want to use both government analyses and other analyses and the budget that is outlined in the regulatory impact assessment would allow it to do both.

Chairman: Madeleine wanted to come in just on that.

Q417 Mrs Moon: I wanted to come in on the Committee for Climate Change because I was very concerned when I saw the skills mix that was being concerned when I saw the skills mix that was being looked for. At the top of the list it started off with a) economic analysis and forecasting, it goes on to business competitiveness, financial management, and then it goes down a whole list, and it is not until you get to f) that climate science is mentioned and then emissions trading and then climate change policy. Is the focus then of this Committee on Climate Change going to be on managing the economy and taking an interest in climate science or should not the actual emphasis be the other way round, should not climate science and emissions trading and climate change policy come first rather than business? I was somewhat concerned about that.

Mr Brealey: The order does not reflect prioritisation so those two things will have equal priority.

Q418 Chairman: Can you clarify at least one point about the work of the Committee. It has got in clause 21 (2) of the Bill a lot of things to report on, but in terms of the advice that it gives to the Secretary of State, does it only give advice on the specific number as far as the carbon budget is concerned?

Mr Mortimer: No, if you look at clause 20 it breaks that down a bit, so as well as giving advice on the number it will also give advice on the extent to which action should be domestic or there should be use of overseas credit, and that is 20(1) (b), and also on the spread of effort across the economy, so the effort by sectors that are covered by cap and trade schemes or emissions trading schemes and the effort of other sectors.

Q419 Chairman: By definition, in justifying those positions will it have to give a policy commentary to explain, if you like, why things have gone wrong, why things have gone right, what might have to happen, in its judgment, in the future?

Mr Mortimer: I am not sure a policy commentary, no. It will certainly have to assess the impact of policy in order to arrive at a judgment about what it recommends in terms of a budget but not a commentary on policy.

Q420 Chairman: So it will not make a specific recommendation to the Secretary of State saying you need more work in this area, less in that area, in other words giving guidance?

Mr Mortimer: Not in specific policy terms, no.

Q421 Chairman: Is that what you are going to do in idle moments when the Bill is done and dusted?

Mr Brealey: That is part of what we hope we will be doing but also that is obviously work for the departments themselves.

Q422 Lynne Jones: Aviation and shipping are not included; why not, and does it not blast a big hole in all the calculations in terms of meeting the commitment which I think you mentioned at the beginning, Mr Mortimer, to try and reduce climate change to below two degrees?

Mr Mortimer: The reason it is not included is simply because there is no internationally agreed basis for allocating responsibility for emissions from international aviation and shipping and therefore the Government took the view that it was irrational for the UK to take on that legal responsibility unilaterally, as it were. It does not mean that we do not report on our international aviation and shipping emissions but to take legal responsibility for them ahead of an international agreement would seem odd. What the Bill does do is have a clause to allow those emissions to be added later at the point at which there is international agreement on the basis of allocating them.
Q423 Lynne Jones: As you rightly point out, we do report emissions. I can understand why that might be sensitive to future international negotiations if we just, as you say, take responsibility for it, but since it is not included should the Government not then have a much tougher target? It is already argued that 60% is heading us towards a four to five degrees increase in global warming, so if we are not going to include aviation emissions should we not have a much tougher target because we know that they are growing and they are not included, which could then be modified once we have allocated them? 

Mr Mortimer: I think the priority is to work more in the international context to try and make progress on the inclusion of international aviation and shipping emissions in the international framework, at which point the UK can then review its own legislation and review its own targets.

Mr Brealey: I think we ought to add that this does not preclude the Government from taking action in those areas, for example bringing aviation into the Emissions Trading Scheme, which is one thing which we are trying to do and is part of the action we will take to address those emissions.

Q424 Lynne Jones: That is not due until 2011. The carbon budget is a cumulative budget and we are already well ahead of where we need to be if we are going to take our share of responsibility for climate change, so to actually just delay these things where urgent action needs to be taken, surely either we should include a nominal amount based on our emissions or, if we are not including it in the total amount of emissions, at least have regard to it in determining the reduction we want to bring with that? Surely 60% is nowhere near what needs to be done? Germany is talking about 50% by 2030, I think. You have talked about consensus, the 60% was based on the figure that was produced in 2000, and since then there have been substantial developments. The substantial developments have already taken place that require us surely to review this 60% target, especially if we do not have aviation included?

Mr Mortimer: Just going back to the point at the start about the way that Stern approached things, Stern certainly showed that the recommended range was 60 to 90% for developed countries. We are in the range, albeit at the bottom end of that range. Nevertheless, the Bill has the provision to allow us to set a more stringent target in the light of development internationally or in current times.

Chairman: There, I fear, I am going to have to bring proceedings to a conclusion. Can I, first of all, in thanking you very much indeed for coming, say to members of the public and members of the Committee what is going to happen next. We hope that we can get through this division in about ten minutes and then, as per the previous instructions, the Committee will reconvene and, hopefully, we will aim to come back in here about half past four for our session with the Secretary of State. So the Committee stands adjourned until 4.30. The Committee suspended from 4.01 p.m. to 4.28 p.m. for a division in the House.

Witnesses: Rt Hon David Miliband MP, Secretary of State for Environment, Food and Rural Affairs and Mr Robin Mortimer, Head of the Climate Change Bill Team, Office of Climate Change, gave evidence.

Chairman: We will resume our hearing and welcome the Secretary of State for the Environment, Food and Rural Affairs, and he is supported by Mr Mortimer, who is a glutton for punishment, having been, I will not say the warm up act because that would slightly depreciate the excellent quality of your evidence, but now that the Secretary of State is there we are delighted that you are alongside him to help, Secretary of State, we would like to start our inquiries by looking at certain aspects of the targets on emissions which the Bill seeks to achieve, and I want to ask Lynne Jones if she would start our questioning.

Q425 Lynne Jones: Welcome to the Committee. The Government and the EU have signed up to limiting global climate change to two degrees centigrade. To what extent are the targets in the Climate Change Bill going to deliver on that commitment?

David Miliband: First of all, good afternoon, Chairman. I am delighted to be here and am very much looking forward, not particularly looking forward to the next hour but looking forward to the results of your deliberations and the help that you can give us in fashioning a strong bill that really does provide the sort of framework I think all of us are hoping to see. In respect of Lynne’s question, I think I would like to unpack it a bit. Two degrees centigrade is the EU’s definition of dangerous climate change. That is important because all countries in the 1992 Rio Summit (189 countries, including all of the non Kyoto signatories) signed up to take efforts to prevent dangerous climate change and, subsequent to that, the EU defined dangerous climate change as two degrees centigrade average change. The level of average change is obviously a consequence of the stock of carbon dioxide or its equivalent in the atmosphere and so, if you do not mind, I would like to trace back to the stock of carbon dioxide or its equivalent, which I think is important, because in a way that is the driver of global warming. I would say two things about that. First of all, in respect of the stock, we are in a dangerous place now. Maybe dangerous has a technical meaning, but I do not want to go there. We are in a place that carries dangers, at the moment 425 parts per million of CO2, or its equivalent, carries dangers and the scientists say that at 450 parts per million you have got a better than evens chance of breaching that two degrees. So, the first thing here is we are talking about probabilities of breaching what the EU, with the UK support, has defined as a dangerous level. Secondly, you ask: how does the Bill help meet the injunction or the commitment to stay within the two degrees centigrade?

Q426 Lynne Jones: Anything is going to help. A reduction is going to help, but whether it is going to achieve the actual 2%.
David Miliband: You rightly said: how is it going to contribute? It contributes that significant part of the UK's commitment to a problem that is preponderantly not a UK problem. Whether you believe it is 2% or 12% of global emissions that are constituted by UK activity, the vast majority clearly come from other countries. So, our contribution to the globe's effort to living within the two degrees is obviously limited, but in terms of our contribution, I think that the commitment to a 26–32% reduction by 2020 and then a 60% reduction, at least, by 2050 is significant.

Q427 Lynne Jones: It is significant but it is not going to achieve the 2% target.

David Miliband: The two degrees.

Q428 Lynne Jones: The two degrees target. We have our share, if you like, based on a per capita basis of the carbon emissions between now and 2050 when, based on the cap and limit proposal, by then everybody should be emitting at the same level, but the evidence we have received and the evidence from the intergovernmental panel is that, if everybody else achieves the level of change that we achieve, then we are heading for a four to five degrees increase in temperature, not two degrees. The Tyndall Centre has told us that we are heading for an 80% chance of a four to five degrees increase in temperature.

David Miliband: There is a lot in there I think that does need to be separated out.

Q429 Lynne Jones: I meant contraction and convergence.

David Miliband: I wanted to start with that. You said that, if everyone did what we do, we will all be emitting the same amount by 2050, and, of course, that is not right. That was the aim of the contraction and convergence model, but if everyone reduced by 60% that does not mean we will all be emitting equally. I take the point that you are referring mainly to the developed or, better put, industrialised countries. In that context I would say two things: (1) the trajectory is important. The 26–32% reduction by 2020 is almost as significant as the 2050 end point. I cannot remember if it was in this Committee hearing when I first became Secretary of State or in another meeting, I was challenged: “Is the Government seriously suggesting that we can pootle along to 2045 and then have a massive dip in the last five years?”, and the point I made in reply at that stage before the Climate Change Bill was published, so I was not able to say, “Look, you will have your 26–32% reduction on the face of the Bill”, but I can say at that stage. “It is the stock that counts. We are not just looking for the flow at a particular moment in time.” So, the first thing I would say to you is the trajectory to 2050 of all countries matters a lot. Secondly, the Bill is very open to scientific trajectory to 2050 of all countries matters a lot. Secondly, the Bill is very open to scientific

Q430 Lynne Jones: The independent advice is that we are not going to be on target to meet the two degrees aim, which is the crucial issue, not what percentage reduction we get to by 2050. You are quite right, it is the trajectory, but it is roughly a linear trajectory and even with that the experts are telling us we are not going to meet that crucial two degrees, or our share, our contribution to the two degrees. You have got Schwarzenegger in California, an economy of a similar size to ours, talking about 80% by 2050; Germany is talking about 40%. I think, by 2030, everybody is waking up to the fact that we have got to reduce, that the developed world has got to reduce our emissions far more rapidly than is proposed in this Bill?

David Miliband: No, I do not accept that on two grounds. First of all, precisely as you said, because it is the trajectory. Simply stating the end point is not the whole picture. So, the interrogation that you need to do, both in California and elsewhere, is the trajectory down to 2050. Secondly, our commitment is to reduce by at least 60% because, you are right, the science shows that 60% is towards the bottom end of the reductions that are required in advanced industrialised countries, but that is one reason why the Bill refers to “at least 60%” and why there is provision for the Climate Change Committee to advise the Government on another figure. What I would say, though, is first there is substantial consensus being established around the 60%, which I think is important—voluntary organisations, business representatives as well as government.

Q431 Lynne Jones: Which voluntary organisations?

David Miliband: I cannot think of a non-governmental organisation, an environmental organisation, that thinks that anything less than 60% would be right, so we are within the zone that they are—

Q432 Lynne Jones: They think it should be more than that?

David Miliband: Okay, that is fine, that is part of their job and part of our job, but what I am saying to you is for me to have a figure that was recommended by the Royal Commission on Environmental Pollution and to then substitute my own figure on the face of the Bill without further independent scientific advice would not be the right thing to do. Equally, if I published a bill without provision to raise the 60% figure, that would have been, I think, remiss, and we have made a very special effort to make sure it can be revised. We have also made the point, just to finish the point, as I am sure someone else will raise this, there are at least two other issues. First of all, 60% CO₂ is not 60% greenhouse gas; 60% CO₂ reduction represents 68, 70, 72% GHG reduction, so there is a question there, and some of the other results refer to a dealing in...
greenhouse gas, not just carbon dioxide. Secondly, there is the important question of aviation and shipping which we have made special provision to include in due course and, I would hope, sooner rather than later.

Q433 Lynne Jones: The advice you got from the Royal Commission was in 2000. Since then we have had more scientific advice which tells us that there have been substantial changes since 2000 which are not reflected in your targets. By excluding aviation and shipping, should you not have a larger than 60% target, even based on the Royal Commission’s report?

David Miliband: It does not do anyone any good to say we have excluded aviation and shipping when there is a whole clause devoted to their timely inclusion. We have got negotiations going on at the moment in respect of aviation which are dealing with the question of apportionment of aviation. If a plane is flying from A to B to whom do you assign the emission? We are now on the verge of European agreement to get aviation in by 2011 or 2012 when these questions of apportionment have to be addressed. We have got a clear route map to getting aviation in. So, it cannot be right to say they are excluded. There is a whole clause devoted towards their inclusion, rightly, in my view.

Q434 Lynne Jones: But 2011, 2012 is not timely. Will there be provision in this Bill if the EU is going to be that long in coming in to actually bring—

David Miliband: As soon as we get the apportionment and calculation questions done, we can bring it in, but remember you are fixing on the 60% by 2050.

Q435 Lynne Jones: I am not fixating on that, I am fixating on the two degrees target, which is the most important target, and the 400 to 450 PPM.

David Miliband: The thing I would say to you about the two degrees is that it is driven by the stock of CO₂ or its equivalent. The other thing is you are dealing in risk. It is not an on-off switch. We are already at a 35, 40% chance of a two degrees sea-change and I cannot and no-one else can unwind that. That is why I say we are in a place with dangers. At the moment I am not in the least bit complacent about the 60%. What I say is we have made provision to raise it, we have also got investment decisions being made now and I would submit that they are being made on the basis of the trajectory and what is going to be demanded in 2020, which is 13 years away. That 26–32% reduction is challenging, as was evident from the Energy Review today, but I think is double and gives business the right framework in which to make those decisions.

Q436 Chairman: You could argue that the process of target setting is, in essence, aspirational. You are trying to suggest a direction of travel to achieve a certain numerical objective that is informed as best is as possible by scientific evidence in this particular case. Some might argue that 60 is not a good enough target, that 80 might be a better number. The question is you might end up somewhere in between the two. Was 60 chosen because you thought the probability is that we will hit it and, therefore, the staging posts on the way are achievable?

David Miliband: I do not know how many times I can say this. First of all, it does not say 60, it says at least 60—one point. Point two: we have chosen that, not because I thought it sounded nice, but because the last independent Royal Commission on Environment Pollution suggested 60. So, that is the basis; we have not plucked it out of the air. Third, it is not aspirational, it is there to drive policy decisions. It has helped shape the path of the 26–32%. It is not just floating out there as a sort of desirable, it is there to drive policy.

Q437 Chairman: Let me follow up with a question about the word that you used, and, indeed, Mr Mortimer in his comments used, which is “trajectory”. In the Bill, in clause two, in the draft part of the Bill, you are required to set carbon budgets in five-yearly discrete chunks, and it talks about carbon budgets, and they could be interpreted in one of two ways. Could you explain whether the budget is going to be a five-yearly figure on the route towards the 60% at least target, or is it going to be a budget set in a quotient of carbon that should be saved during that five-yearly period?

David Miliband: I am surprised you used the word “or” between those two.

Q438 Chairman: The Bill does not define the method, the terminology and the measure that the budget is actually going to be cast in; it just says the Secretary of State at the beginning of the periods has got to set a carbon budget.

David Miliband: Then there is, to be fair, detailed voluminous explanation of what that is; how it is measured, how it relates to sinks, how it relates to overseas purchases. All of that is laid out in the Bill.

Q439 Chairman: Nobody is disputing that, Secretary of State, but it does not say in the Bill, in the bit that is the draft—

David Miliband: Which clause are you on?

Q440 Chairman: I am looking at clause two and it says that it is the duty of the Secretary of State to set, for each succeeding period of five years, an amount for the net UK carbon account. So, what are going to be the terms in which that budget is going to be set? Is it going to be so many tonnes of carbon?

David Miliband: Dioxide, yes.

Q441 Chairman: Or is that going to be a single number, or is there going to be a trajectory during those five years?

David Miliband: That is actually explained. It is an annualised figure over the five years. You have got to go from figure A in year one to figure B in year—

Q442 Chairman: The budget is going to be set in so many tonnes of carbon?
David Miliband: Yes.

Q443 Chairman: And it is going to be a linear extrapolation in each of the years and in each of the five-yearly periods?
David Miliband: Yes, as explained in this documentation that we have provided.

Q444 Chairman: Not as explained, I am talking about what is down here in the Draft Bill.
David Miliband: Yes, I am sorry, I am very happy to find it for you, but that is explained in this documentation—because it is over five years it is annualised across the period.

Q445 Chairman: The reason I am looking at this question of the direction of travel—the word you used was “trajectory”—we are at the moment in a situation where you cannot say that we have to run on a linear projection, because we are already running behind the targets as to where we should be?
David Miliband: Which targets are we running behind?

Q446 Chairman: At the moment, as I understand it, the Government should be saving, roughly speaking, 1% a year in terms of emissions. Is that right?
David Miliband: It depends what you are talking about. We are required under the Kyoto Protocol to reduce our—

Q447 Chairman: No, I am talking about your target that you agreed to. There is a 60% reductions target already in existence. Forget the Bill for a moment. The Government has indicated that it is running behind that target: yes or no?
David Miliband: No. We have got targets that we agreed to under the Kyoto Protocol for a 12.5% reduction in our greenhouse gas emissions by 2010 on a 1990 basis. You can translate that into a carbon dioxide reduction as well. On those figures, by 2010, we will over achieve on those.

Q448 Chairman: That again is Kyoto. We are not talking about Kyoto. Kyoto finishes in 2012 and there are not any Kyoto targets that exist after 2012 at this moment in time. The Bill focuses on a 60% target which was defined by the Royal Commission, and the Government signed up to that as an aspirational target before this Bill was drafted?
David Miliband: Yes.

Q449 Chairman: So, if we concentrate on the track so far from 1990, here we are in the year 2007. 17 years have elapsed since the beginning. How much have we saved over the 17 years?
David Miliband: From memory, we are on track to achieve an 8 or 9% reduction in our carbon dioxide by 2010.

Q450 Chairman: So eight or nine by 2010?
David Miliband: Let me finish the point and then you can tell me why I am wrong. Eight or nine per cent, if you do not include reductions achieved under the European Emissions Trading Scheme. If you include the reductions on the Emissions Trading Scheme you would add between 2 and 4% to that.

Q451 Chairman: So that could be between ten and 13. There seems to be a little bit of confusion. You do not want to phone a friend and get the answer?
David Miliband: In the interests of accuracy, I want to get it right. I do not want to mislead the Committee. The figures in my head are that we are on track to achieve an 8 or 9% reduction by 2010. That does not include the EU ETS. I am very happy to send you a note with all the details.

Q452 Chairman: So over a 20-year period, the maximum number, even counting the EU ETS, is 13%. That says to me that the trajectory is running less than a linear 1% a year?
David Miliband: All I would say to you is—

Q453 Chairman: Do you agree with that analysis?
David Miliband: Only if you are saying that the world stops in 2010.

Q454 Chairman: No, I am not.
David Miliband: You are talking about trajectory. Let me just make the point. The trajectory we have set does not stop in 2010. As the Energy Review made clear today, if we take all of the decisions on energy that have been set out in the Bill today, at a minimum, you will achieve a 26% reduction by 2020 with the policy decisions that are on the table already.

Q455 Chairman: I know those are where you want to be, but what I am trying to establish, because we have got to the stage where you very kindly confirmed—. I am not trying to trip you up in terms of achievement, but you are saying that the maximum we might do over 20 years is 13%.
David Miliband: No, that is wrong. I have been corrected, it is 16%.
Chairman: Even 16%. I do not want to trip you up on the numbers, but that is less than 1% a year is what I am saying.
Lynne Jones: Originally the target was 20% by 2010.

Q456 Chairman: What I am saying is, if you took a linear relationship from 1990 to 2050, that is 1% a year saving, and we are already dropping behind that rate of progress. You may well be right that all of the things that are coming are going to enable us to catch up and overtake the linear extrapolation, but the question that I want to know, coming back to these discrete five-year budgetary periods, are they going to be couched in terms where you could map them out on a graph that might show something like that against a linear trajectory?
David Miliband: Yes, is the short answer to that. You will be able to.
Q457 Chairman: We will?
David Miliband: Yes.

Q458 Chairman: Are they going to be broken down within those five-year periods on an annualised basis or are we looking at three discrete five year periods to map out the trajectory?
David Miliband: No. The five-year budget, as I said a few moments ago, will be broken down on an annualised basis. I did say that when I said there will be figure A and figure B, and then the difference between figure A and figure B will be chopped into five and then you will have an annual reduction.

Q459 Lynne Jones: The 26–32% by 2020, is that an upper target or are you looking to exceed that?
David Miliband: That is interesting. We obviously want to make a contribution that is consistent with the economic, social and environmental goals that we have set. It would clearly be a failure of policy if we ended up below the 26%. I would consider it much less of a failure of policy if we ended up above the 32%, but I think it is important for the sort of compact that we have tried to establish with investors in the business community that they know the ball park that we are aiming for, and, just in parentheses, the 26–32% is consistent with a significantly higher than 60% reduction by 2050.

Q460 Patrick Hall: Is there a danger in giving too much emphasis to the linear trajectory which you have emphasised and explained several times—
David Miliband: I have not emphasised it. The Chairman has emphasised it. Yes, there is a danger.

Q461 Patrick Hall: ---over in response to questions, which is what questioning is all about. But what I want to ask is, if there were to be a major advance in technological change, for example carbon capture and storage and that suddenly comes in, then you might get a step up, or down, whichever way you want to look at it, so you do not have to be totally wedded to the—
David Miliband: Completely. I would say to you that of course there are dangers in being wedded to a linear trajectory, and we are not certainly wedded to one. What we have been invited to answer is whether or not the trajectory that is suggested by the Committee on Climate Change and then decided on by the Government can be compared to a linear trajectory, which is what the Chairman asked me to which the answer is, “Yes”, but one should not believe that is the only way to do it. Equally, I would caution against—

David Miliband: It is a milestone on the road to 2050, is the way I would put it. It is a guide price, if you like, to help businesses, individuals, government departments in thinking through their policy strategies and helping them know whether they are on track or off track. Its origins are obviously the 2003 Energy White Paper which committed the Government to make real progress by 2020.

Q465 Sir Peter Soulsby: Can I ask you to go back briefly to the 26–32% by 2020 figure. Can you clarify how you see that 32%? Is it a limit, is it the full extent of aspiration for that date or is it, indeed, something that you would hope we might actually meet and exceed?
David Miliband: It is a milestone on the road to 2050, is the way I would put it. It is a guide price, if you like, to help businesses, individuals, government departments in thinking through their policy strategies and helping them know whether they are on track or off track. Its origins are obviously the 2003 Energy White Paper which committed the Government to make real progress by 2020.

Q464 Chairman: That could be one of them. There could be a target, for example, on renewables. There is a raft of targets which the Government is publicly signed up to but which at the moment you have chosen not to give the weight of law to underpin, but you might in the future want to do it.

David Miliband: My rather strong inclination is that the Bill should frame the outcomes that we are seeking to achieve, whether you measure them in terms of CO₂ or GHG. We then want maximum freedom within that the envelope to achieve reductions, whether from electricity, heat, transport, waste—the main sources of emissions. I was not very tempted to include a whole raft of other commitments in there because I think that there is benefit in the clarity that comes from an outcome focus in this Climate Change Bill.

Q466 Sir Peter Soulsby: But not in any sense a limit to progress?
David Miliband: No. I think that would suggest somehow I would feel I should be sent to the Tower if we ended up with 33%, which would not be a sensible position. We need a very strong partnership with the business community on this. They wanted an interim, I think I am right in saying, target on the face of the Bill to give them confidence about what range they had to be aiming for, and I think it is better to say 26-32 than just to say more than 26. I think it gives them a landing spot that is helpful.
Q467 Chairman: How do you know you are going to be so precise with your policies that you are not going to exceed the 32% limit? Because the Bill is quite explicit; it says not more than 32. What happens if you go over 32? Are you going to be judicially reviewed on that as well?

David Miliband: Que sera sera. I think it is a decent enough band for us to have. You can either say it is a milestone or a landing pad. I think it gives us the right sort of thing to aim for.

Q468 Chairman: “The right sort of thing to aim for.” Just fill me in on the underpinning. We have got now a target, we have got three five-year budgets, you have declined to put any other targets into the Bill, there is a range of other aspirational targets, therefore, that the Government has signed up to for renewables, for energy efficiency, and so on and so forth. Are you going to be updating and producing some form of more detailed sectoral breakdown as to how different parts of the economy and, indeed, individuals will be expected to take their share of these budgets as we move along, or are you just hoping that all the collective actions of everybody are going to add up to the sum total of where you want to be?

David Miliband: Surprisingly enough, we are neither sitting in Defra with a great Stalinist map of the country allocating different reductions to different sectors of the economy and society, nor are we saying: “Let us just see what happens.” We are taking a judicious, even middle, course. For example, half the economy is currently covered by the European Union Emissions Trading Scheme, half the economy’s greenhouse gas emissions. That requires us to make sectoral decisions, because the Government has taken the view that the greater the burden of emissions reduction should not be borne by internationally competitive sectors of the economy. So, we are already making decisions within that spectrum that you have laid out. When aviation goes into the EU ETS you are up to 36, 57% rising of greenhouse gas emissions, so de facto you are already, not for 100% of the economy but for substantial parts of the economy making sectoral decisions. I do not think we will be saying by 200X Mrs Jones on Fylde High Street has got to make the following reduction.

Q469 Chairman: But if we look at perhaps the weakest link in our reductions in emissions, which is the transport sector, you have mentioned that in due course aviation will become part of the EU Emissions Trading Schemes, but what about the rest?

David Miliband: If you take the Stern view, markets like the EU ETS are not the only way to achieve emissions reductions. If you think about cars, which are a significant contributor, cars and vans, 27% of emissions come from surface transport. We hold the prospect that you might include in due course surface transport in the Emissions Trading Scheme, but actually we have taken action directly by setting standards, by regulating the level of fuel efficiency, and the European Union has come forward with proposals in this area—currently 165, 168 milligrams per kilometre emissions. The EU is proposing to get that down to 130. The Chancellor has said we need a medium-term ambition of getting that down to 100. You are seeing action there, for the first time ever, to tighten mandatory fuel efficiency standards for cars. I think that is consistent with Stern and the right thing to do.

Q470 Chairman: Help us to understand. You have got advice from your Office of Climate Change and you are going to be getting advice from the Climate Change Committee that we will come on to talk about in a moment. Is the Office of Climate Change therefore going to be tasked with monitoring the sectoral progress and advising you as Secretary of State as to how we are doing?

David Miliband: No. I think you looked at this in another context. Decisions about the work programme of the OCC are a matter for a ministerial board and they can decide in the future. We tasked the OCC with helping us work on the Bill and set up the parameters of the Committee on Climate Change, but once the Committee is established that will then be the independent body doing the analysis. The Office of Climate Change can perform a range of tasks on behalf of ministers as to policy development, but I do not see---. They are handing on the baton.

Q471 Chairman: It says in your press release of the 22 September last year, the first item, “Higher level management and reporting of progress on existing commitments”?

David Miliband: That is right, and that is because there was no Office of Climate Change, there was no Committee on Climate Change, and there still is not a Committee on Climate Change.

Q472 Chairman: Can we ask you about the reporting side of this whole process to Parliament? There is a requirement for the Climate Change Committee to report annually to Parliament, but so do a lot of other people report annually to Parliament and there is no debate?

David Miliband: Like?

Q473 Chairman: Most of your statutory non-departmental public bodies. The Apple and Pear Development Commission, for example, to name one minor body, used to report.

David Miliband: I think in the interests of streamlining we have added them to the Cherries Marketing Board!

Q474 Chairman: I am delighted to the hear that, but nobody can accuse you of cherry-picking the reports to be put before Parliament for debate because none of them come for debate. So you have not put in the Bill an absolute requirement that there will be an annual parliamentary debate to debate this report on a substantive motion. Why not?
David Miliband: That is interesting. I think probably because in the end that is partly a matter for Parliament, or significantly a matter for Parliament, as to how it schedules—

Q475 Chairman: Secretary of State, you know as well as I do that is a wonderful piece of linguistics, because it is the Government of the day who decide on the use of Parliament’s time. Unless the Leader of the House’s revolutionary changes which he keeps trying to put through amount to the House determining its own business, then for the foreseeable future it is the Government who decides on the use of Parliamentary time. So, I put it to you, what guarantee is there that the report from this Committee is actually going to be debated in Parliament in a way that Parliament can give you an opinion as to how you are doing?
David Miliband: There is no guarantee.

Q476 Chairman: So it is really words, but the idea that Parliament can hold to it account—
David Miliband: No, you asked me: is there a guarantee of a debate on a substantive motion each year in respect of—. Unless I have missed something, there is not.

Q477 Chairman: No, you are quite right.
David Miliband: So, a straight answer to a straight question: there is not a guarantee. What we have guaranteed is that the Government must respond substantively to the report of the Independent Committee on Climate Change. I think it is an interesting idea about what the step after that is—whether it should come through a select committee, whether there should be a substantive debate, how that is organised. As I say, I think one might come to a conclusion on that but still not believe it is the job of government to proscribe that because, for obvious reasons and for correct reasons, parliamentarians are jealous of their desire to construct their own business, but I think it would be an interesting thing for you to offer some views on whether it is appropriate to have it on the face of the Bill.

Q478 Mr Gray: Secretary of State, if this thing is as important as you are saying it is, surely it would be helpful to parliamentarians, it would be useful if the Government were more than ready to submit themselves to an annual report, an annual debate and a substantive vote. If parliamentarians then in their wisdom chose not to do so, that would be a matter for us, but to somehow shield behind the fact that it is a matter for parliament seems to be a breach. It is like the estimates, for example. The estimates come before the House for debate every year and there are a number of things that do as well. If this is terribly important and you actually believe that it will work and will save the globe, why do you not say, “We, the Government, would like to see it come before Parliament once a year for a vote”?
David Miliband: I am very happy to say that. I have absolutely no fear of debating the response of the Government to the annual report of the Committee on Climate Change. In fact, I would relish it. We actually debate more than once a year climate change, which is obviously a good thing. I am very happy to think about that. As I say, I think, if my memory serves me right, that there are some issues about whether it is right for the Government to prescribe that. You might be able to inform me: the annual debate on the estimates—I cannot remember if that is a convention or actually written down anywhere.

Q479 Chairman: The estimates are a requirement, otherwise you do not get any money.
David Miliband: The estimates are a requirement, but I am not sure about the debate.

Q480 Mr Gray: There is a whole development of parliamentary procedure. Last week we agreed that Parliament would have a say on war-making, thank goodness, and we took the Royal Protocol away from the Government. Surely this is another area where Parliament usually say, “We are delighted that Parliament”—
David Miliband: I have absolutely no—. I would encourage you to give us your thoughts on that area. Whether you conclude it is right to do it via the Bill I think needs a bit of thought.

Q481 Mr Gray: Otherwise the risk would be that would this would just be a PR exercise. It is just the Government saying, “We are keen to do something.” We want to be seen to be doing something, it is frightfully important, but unless it is actually written into the parliamentary year, unless there were some real teeth in it and unless there was real muscle in it—
David Miliband: I cannot guarantee a debate, but I can guarantee it will not be a PR exercise because this is an issue where all three parties are now zealously wanting to debate this issue. I think the idea that this will go the way of the Apples and Pears Monitoring Board is not realistic. I think this will be a subject of a lot of interest. I do not think it will just go off down the sluice somewhere and not be debated, not just here but more widely, but I think that will be an interesting area for the Committee to come to a considered view about.

Q482 Lynne Jones: Could I ask you about sanctions?
David Miliband: Back to the Tower.
Lynne Jones: Yes.

Q483 Chairman: I do not think there are provisions in the Bill for the Secretary of State to be sent to the Tower?
David Miliband: Tempting though that is.

Q484 Chairman: It would be a novel procedure: “The Secretary of State shall volunteer to spend an amount of time in the Tower of London if he fails to achieve his targets”!
David Miliband: Inspecting the jewels.
Chairman: In the stocks on the green!
Q485 Lynne Jones: I am more interested in sanctions that might be effective. What might be they be? There is provision for judicial review. What happens if Friends of the Earth or Greenpeace or somebody else takes the Government to court for failing to reach their targets?

David Miliband: They are known for not being litigious organisations. I would be amazed if these things crossed their mind.

Q486 Lynne Jones: By that time the targets would have been missed, so it is too late. What sanctions can be applied? I put it to your colleagues a little earlier that one idea could be that the Government should be required to purchase overseas credits to meet the target, or there should be a provision to increase targets for subsequent budgetary periods. How can we make sure that future governments, future secretaries of state are going to be held to these targets given the five-year period, which has been quite controversial and has been criticised because there could be a new government in place?

David Miliband: They are required to live within the budgets, that is not an option, and they are not simply required to act reasonably, for example. I think that you are reaching for the sanctions, which I am very happy to talk about in detail, but what I would say to you is that the whole point of the system is that we can see progress before the end of the budgetary period—that is part of the reason for annual reporting, query, debating. There is a requirement on the Government to live within its budget. So, the whole bias of the system is towards correcting problems before it is too late rather than after. In respect of the sanctions themselves, you are right, you could (I think it was your word) be required to purchase credits, you could imagine a range of other sanctions, but in our system—

Q487 Lynne Jones: Tell us then: what are they?

David Miliband: I assume you were thinking of the Kyoto Protocol, which has provisions for higher targets in subsequent periods, which is what you referred to, but my judgment is that, in our system of judicial review, it is right for the courts to be able to use that range of “sanctions”. I think that is appropriate. Obviously, they would develop hopefully not too many cases where they would be able to develop practise in this area, but I think that the sanction of, first, public opinion, second, political pressure and, third, the law is pretty strong in trying to ensure that the country—because in the end it is the country that has to make the choices—lives within its carbon means.

Q488 Lynne Jones: If there was a change of government within the five-year period, who would be held accountable then?

David Miliband: The Secretary of State at the time, which is quite right.

Q489 Lynne Jones: But they would just say, “It was that previous lot”?

David Miliband: Then in the court of public opinion but also in the court itself they will have to argue that through. If you are saying to me that a Government gets elected four years and 11 months and 28 days into a budgetary period, is it going to receive all the opprobrium for not hitting a target, then, obviously, it will be a far different position than if it was elected after four days of a budgetary period; but we are a mature enough country. This is a political issue as well as a polity issue. People are mature enough to see their way through that.

Q490 Lynne Jones: Is there not a problem that the Secretary of State that is designated to be responsible for this legislation does not necessarily have the responsibilities or the policy instruments to achieve the targets, and it would be—

David Miliband: You are tempting me to build Defra’s empire to pull more policy levers from other departments.

Lynne Jones: There is further questioning perhaps of the role of the Carbon Committee, so I will stop there.

Q491 Mr Cox: Secretary of State, in an article entitled “I will vote for Gordon” in The Observer on 22 April you described the Bill as the world’s first eco-constitution. The judicial sanction of which you speak has been doubted by some very formidable experts. Professor Forsyth, who is the Director of the Centre for Public Law at Cambridge University, has regarded it as unthinkable that a court would enter into what are effectively policy decisions in a complex field before even you could determine with certainty that the trajectory would not meet the budget target for any particular period.

David Miliband: Before did you say?

Q492 Mr Cox: Yes?

David Miliband: So during a budgetary period?

Q493 Mr Cox: During a budgetary period, which is the only time it would be effective, because if you did it afterwards you would have already failed. But even if it were afterwards, the evidence that we have, not only from Professor Forsyth but also from many distinguished practitioners in the field, is that judicial review is a pretty implausible tool for the enforcement of this so-called eco-constitution. What I wanted to ask really was, I do not know what your advice has been, but are you really expecting the courts for the first time in the judicial review context to enter into a kind of dialogue with the Government over closing down this coal power station or “you will do this in order to achieve your target”, or do you see it as some kind of last resort entry to the courts?

David Miliband: I think it obviously is a last resort because it would represent failure of the system. Since the system is designed to pre-empt the missing of a target, there is provision for correction in the courts, there is provision for banking and borrowing, so there are a number of provisions to help avoid this situation, so it is very much a last resort. I do not expect “any particular” actions.
David Miliband: The whole point about deterrent something that, I suspect, is not a reality?

David Miliband: Are you jealous of that particular—

David Miliband: The whole point about deterrent theory is that you never get to see what the impact of the threat is because it does not need to be used. I think that in a Cabinet Committee a Secretary of State worth his salt, or her salt, who was involved in a policy debate in year two, three or four of a budgetary period, a Secretary of State with a sense of penury, maybe able to conjure up particularly gruesome prospects of intervention. It is a last resort sanction or a last sanction.

David Miliband: It is not a phantom, it is an instrument of this Bill.

David Miliband: With respect, we have said all along the whole point is not to have to get to that position. We are not putting it centre stage, we are saying that the Bill would be incomplete without it because it would allow you to say, perfectly legitimately, what is the last resort? I can say there is a last resort. The last resort is the courts. Should a government find itself in a position of not living within its budget, that would be a serious question. Should it not be able to live within its budget with the provisions for banking and borrowing and of course correction, that is a serious position. I would put it to you—you are a lawyer and I am not, so let me stick to the politics— I feel much more comfortable defending the Bill with this provision in it than I would without it in it. If it was not in it, you would perfectly legitimately be able to say there is a bloody great hole in the middle of this Bill and I think we are better off with the whole field admittedly in a way which has not been widely used for the sort of executive action that you take; but I would see the decisions and discussions— I think you mentioned power stations and other policy tools—as on-going during the course of the budgetary period.

Q494 Mr Cox: What I am really getting at is that to describe it as a first the world’s first eco-constitution—

Q495 Mr Cox: I think it is potentially misleading. Secretary of State. I think the real role of the courts is infinitesimally small in the enforcement of this Bill, if there is any role at all for them, and I think what has happened in the Bill with the imposition of the legal duty is that expectations are being ramped up of a kind of legal sanction when really it is almost non-existent, the serious legal sanction that could exist behind this Bill. Your language ‘‘eco-constitutions’’ tends to increase public expectation of something that, I suspect, is not a reality?

David Miliband: You tell me, but clause two is not vague at all: “It is the duty of the Secretary of State to set a budget for the period to ensure that the net UK carbon account does not exceed the budget.” That is not vague at all.

Q496 Mr Cox: It is an instrument to persuade your colleagues with, a judge over your shoulder, a sort of phantom?

Q497 Mr Cox: But it is not—that is what the evidence has been—a serious instrument, though it is being promoted by your consultation paper and by you as such.

David Miliband: It is not a phantom, it is an instrument of this Bill.

Q498 Mr Cox: The evidence we have had is that the problem with this for the purpose of legal sanctions is that it is wonderfully vague and, if it is to be genuinely susceptible to forensic inquiry in a court, it needs to be spelled out with more precision so that the courts can have benchmarks by which the Secretary of State’s actions are to be judged. It is from a legal point of view vague, in the sense that there are no precise handles or sign-posts by which a court can judge it, except for the general target?

David Miliband: You tell me, but clause two is not vague at all: “It is the duty of the Secretary of State to set a budget for the period to ensure that the net UK carbon account does not exceed the budget.”

Q499 Mr Cox: I fully accept that. The problem is when the Secretary of State sets his range of measures in order to achieve his target in the future, given that the amount of things the Committee is entitled to take into account and is obliged to— economic cycles, social factors and so on—a court is really at a loss in judging whether or not that is actually going to meet the target and what factors it has to take into account, social or economic, before it decides it is unreasonable.

David Miliband: As you yourself said, I do not think we are talking about in-budget period litigation, we are talking about ex post litigation in this case. You said in your very preliminary remarks, because it is ex post it is meaningless. I do not agree. Because it is ex post it can still have impact for subsequent budgetary periods. I do not think your worry about whether or not the courts are skilled enough at seeing a trajectory is really the key point, if I may say so.

Q500 Mr Gray: The key point is a much more fundamental constitutional one. The subject we are getting at is that, unless the judicial sanction has real meaning, then the targets that you describe in the Bill are no different to child poverty reduction targets or targets for a reduction in violent crime or millions of other targets such as unemployment reduction. All of these are perfectly legitimate government targets and there are political and public pressures to make sure the Government achieves those targets, and they are good targets, but there is no judicial sanction to make sure that child poverty is, indeed, abolished by 2050, or whenever it was that Gordon Brown claimed it would be, but you are bringing in a judicial sanction on this target. Therefore, if the judicial sanction, as no doubt the Bill is merely, as you describe it, a deterrent since we hope we will get there, then there is no point in having the Bill.

David Miliband: No, do not take my words out of context. The fact that something is a deterrent does not mean it does not exist. The fact that something is a last resort does not mean it does not exist. The fact that we have spent ten minutes talking about the role of the judiciary in this suggests it is a rather significant creation which focuses minds and plays
an important role, both in terms of its potential threat and, if ever it came to pass, being drawn into it.

Q501 Chairman: Can I be clear? I may have switched off for a moment, but the question of the Bill not having a sanction if you miss a target by X% of there being a requirement to purchase credits outside the United Kingdom, if you like, to bring us back on track, why was that not put in the Bill?
David Miliband: Lynne did not get time—

Q502 Chairman: She mentioned that?
David Miliband: Yes, she did not get a chance to probe, although she foreshadowed that she might. The reason is that there is a range of things that you might want to do. Lynne herself mentioned higher targets in subsequent periods. I think to pre-empt now that the only and right way to impose sanction is through budgetary credits is unnecessarily narrow.

Q503 Chairman: It might be narrow, but in the real world we hope, in a way, that bit is irrelevant because it would be nice to think that all the policy things you are doing will mean that this is just a very interesting theoretical quarter of an hour’s conversation, but we do need occasionally to concentrate governments’ minds on what they say they are going to do to make certain that their publicly stated targets actually do mean something, and if you found that you were drifting badly off course, then it may turn out that somebody says, “Look, Secretary of State”, 20 or 30 years down the road, “it is impossible to play catch up in terms of what we have got to do in the UK. If you are genuinely going to hit that end point, you have got to go and purchase some credits to get us back in terms of the total amount of carbon emissions that we can have—another way of expressing the budget—up to 2050 the 5.5%, or whatever it is, or some huge quotient. You might have to do it, but there is not anything in this Bill that says if you really do drift off by a certain amount, you have actually got to do something practical to bring us back on track again.
David Miliband: There is a legal duty on the Secretary of State to live within his budget, which is quite strong.

Q504 Chairman: Does that then mean that you would have to do something tangible?
David Miliband: Yes, but not necessarily purchasing credits overseas. I do not know if we are going to discuss this, but the whole point about purchasing credits overseas, given it is a global problem, is one I would defend, but I would defend overseas action on a supplementary basis to domestic action. I do not think it should substitute for domestic action, or wholly substitute, it should only be supplementary to domestic action. For the sake of clarity or for the sake of guidance, I would see overseas purchasing as being something that is more likely to be used in the interim but not used to buy yourself out by 2050.

Q505 Chairman: Do you think you should be limited on the amount of overseas credits you could use: because the Bill does not do that at the moment?
David Miliband: Just let me finish the point. By 2050 I and the Government want UK emissions to be at least 60% below 1990 levels. By 2050, for a very long time before 2050, and in 2050, you will want more countries to be taking on an emissions reduction commitment. In respect of limits, I think that it would not be right for us to buy 100% of our emissions reduction abroad. I think it is right that we have a combination of domestic and international action. I think the fact that there are international rules on supplementarity and there is scope for the Committee on Climate Change to give guidance on it is the right degree of flexibility.

Q506 Chairman: At the moment you would not welcome part of this Bill limiting the amount of overseas credits: because you made a very important point with which I personally sympathise, which is that we have got to put our own house in order.
David Miliband: No, I do not think it would be right. We have provision in here, I think that we say that the Government is going to seek the advice of the Carbon Committee in respect of how it interprets international supplementarity rules. At the moment around 8% of our emissions reduction can be bought overseas, two-thirds of effort.

Q507 Chairman: You used a very interesting piece of language there. You said, “The Carbon Committee”. It is actually the Climate Change Committee in the Bill. Do you want to rename it?
David Miliband: No, I just made a mistake; I am sorry.

Q508 Chairman: No. There are some who might say, because I think we have all dropped into the same linguistic shorthand, that it might actually help to add focus?
David Miliband: It might. The GHG Committee does not have quite the same ring to it. You are right to pick me up on it though, the Committee on Climate Change; I am sorry.

Q509 Chairman: I am going to ask Mr Hall to ask some questions, but I want to ask one technical one. We have just been talking about legal vulnerability. Did you as Secretary of State seek the law officer’s advice to ask as to where you thought you might be the vulnerable to judicial review?
David Miliband: I thought we did. We certainly looked legal advice about what the court might do in this respect, and they said you cannot really predict what they can do.
Mr Mortimer: We certainly did. The Bill Team certainly discussed it closely with Parliamentary Counsel. Absolutely; yes.

Q510 Chairman: So you explored the boundaries of vulnerability?
Mr Mortimer: Indeed.
Chairman: Patrick.
Q511 Patrick Hall: Could I go back to something that I think we may have missed, although we have mentioned it in passing, which is greenhouse gases. The Bill sets down in statute carbon emissions budgets. Why does it not do so with regard to the other greenhouse gases?

David Miliband: We looked at this, because I think it is a perfectly legitimate point to make, that you may want to move on to a GHG basis rather than a carbon basis. You end up with a bill that is impossible to understand if you are dealing in different currencies. We would have ended with a bill that was incomprehensible if we had not got a single currency. I do not know if you want to say more on the drafting problems that existed in that respect.

Mr Mortimer: Yes, clause 22(2)(c) allows the Committee to give advice specifically on the question of whether we should have legislation to include other greenhouse gases later, but to pre-empt that and trying to do that through secondary legislation would be complicated, in our view.

Q512 Patrick Hall: The Committee could enter the realms of becoming too complicated later?

David Miliband: No. What you would do, if the Committee recommended and the Government agreed, you would switch the whole thing over on to a GHG basis.

Q513 Patrick Hall: Which would be logical in terms of the temperature change?

David Miliband: Yes. I talked earlier in answer to Lynne about carbon dioxide equivalents. Given that we have got the 60% CO₂ target, to have had the 60% CO₂ target but also a greenhouse gas currency in this would just become incompatible.

Q514 Patrick Hall: On to the Committee on Climate Change, which is what is called at the moment.

David Miliband: Yes, sorry.

Q515 Patrick Hall: At the evidence session that we had last Monday I questioned William Wilson, who is an environmental lawyer, about the nature of the Committee, and he said (I think he said this in his written evidence as well) that he thought it should give scientific advice only and that it would, therefore, be more like the Expert Panel on Air Quality Standards, that the Government would hear the advice and then decide what to do. Do you think that having a much wider range of people on this Committee dealing with the economy, social issues, technology issues might confuse the message to government, because does not government want to have clear, if you like, pure “advice” on the numbers?

David Miliband: I do not think it will corrupt the Committee’s advice to have people who are scientists but also people who are coming from other walks of life, and it certainly will not corrupt the independence of the monitoring and other reporting that they are doing. I think it adds to it. It is scientists plus. So, you get the benefit of the independent scientists but you have got other expertise as well. Obviously, I do not agree with the professor.

Q516 Patrick Hall: I think the point he made, and I think it is a fair one to explore, is that the presence of other people on the Committee, as outlined in the Bill, the Committee itself might say, “What is being proposed by the climate scientists there is impractical or too costly and too ambitious”, and all that sort of thing, so it will kind of censor itself. The Government will make those decisions in the wider sphere, of course. Is not the message for government though to be one that is really on whether or not these targets and budgets are achievable and how they should be changed?

David Miliband: Given that the budgets are down here, I think it makes sense to have scientists and others who are able to come forward with independent advice. If there was no interim or final target on the face of the Bill, I think your point or the point of the professor would have greater strength, but since that is not the case and since the Government will have to make the decisions whatever the advice of the Committee, or on the basis of the advice of the Committee, I think that does not quite follow.

Q517 Patrick Hall: The Committee will be making recommendations to government in the wider context, in the context that government itself is there to do. I think that is the point that is being made. I am just seeking to explore that, and you have answered it to an extent. I think there is some merit and narrow logic in what he said. I am not necessarily advocating it myself. You do understand the point. The Expert Panel on Air Quality gives advice just on that and government responds in terms of the wider policy context, and it is an issue that is worthy of consideration.

David Miliband: I would say that the Royal Commission on Environmental Pollution is not just scientists.

Q518 Chairman: Out of curiosity, on the list of competences I notice that biodiversity is not spelled out specifically. Is there a reason for that?

David Miliband: No, not in particular.

Q519 Chairman: Given the impact of climate change on biodiversity, I thought you might have wanted some advice from somebody with that expertise?

David Miliband: Interesting.

Q520 Patrick Hall: I think Mr Mortimer is bursting to say something.

Mr Mortimer: There was a judgment about the number of different areas of expertise that you would want to have covered, and the risk of creating a huge list that covers everything. I think that climate change policy, which is the last point here, can cover all sorts of things. We have picked out in particular social impacts, obviously thinking of fuel poverty in particular, but that is not the only one. I think that can cover all manner of things.

Q521 Chairman: A good defensive line, Mr Mortimer. You are supporting your Secretary of State well there.
Mr Mortimer: That was the view of the advice really. On the point about the trajectory, surely the question is not merely a scientific one in relation to what is the optimal pathway to a long-term budget or towards a long-term target. The target itself might be primarily decided through looking at the science but actually the optimum trajectory towards that is an economic question, it is a question about social impacts. I think that is the rationale for dealing with all those factors.

Q522 Patrick Hall: Indeed, which suggests that the Committee is also going to be dealing with the stuff of policy, is it not? Is the advice from the Committee going to suggest policy change in order to achieve the targets?

David Miliband: Maybe we have not made this clear enough, Patrick, but it is pretty clear that this is not a policy committee. There is provision for the Government to ask the Committee for policy advice, but the remit of the Committee is to recommend budgets, that is the fundamental thing, and secondly to monitor progress. It does not say to the Committee: “Tell us what you think our policy on cavity wall insulation should be vis-à-vis solar panels?” We can ask them for that sort of advice, but that is not the starting point. Its role is to recommend budgets and to monitor progress.

Q523 Patrick Hall: And look at sectoral achievement?

David Miliband: Yes.

Q524 Patrick Hall: Which all has policy implications, does it not?

David Miliband: It may have implications, because you may find that one sector is lagging far behind another sector in the progress that it is making and it would point that out to government, but, unless requested, the Committee would not come forward and say, “Therefore we think that in respect of buildings you should do X, Y and Z.” It might say, “We note that office buildings of a certain size or public sector buildings or private sector buildings or small businesses are not making as much of a contribution as other parts of the economy”, but, unless asked, they would not then say, “We think you should change the Energy Efficiency Commitment in the following way.”

Q525 Patrick Hall: No, in order to do its job properly, the members of the Committee are going to have to be aware of the policy context and there is a range of expertise, apart from biodiversity, which you might give consideration to, I hope I detected?

David Miliband: Yes.

Q526 Patrick Hall: These people may well not be able to help thinking in terms of policy, and it may be very useful for all of us, including government, that they do so. Could I just ask how you are going to make these appointments?

David Miliband: I am not sure I can make them. I think they are done, first of all, through the usual Nolan procedures and then nominations will come to me—I suppose—I am not going to interview them—they would then come to be signed off by me.

Q527 Patrick Hall: When they are in place, I am sure this Committee and may be others would be delighted to meet them?

David Miliband: I am sure they will not be shy, retiring violets.

Q528 Chairman: It says here you do appoint them. Schedule one: “In appointing a member the Secretary of State must have regard to”—

David Miliband: I misunderstood Patrick’s point. I will not be interviewing them, as I said, but the recommendations of the independent panel which does public appointments would come to me to be signed off.

Q529 Chairman: How long are they going to be there for?

David Miliband: We said five years, I think.

Q530 Chairman: Where does it say that?

David Miliband: We did not specify.

Q531 Chairman: So it might be five years, but you have not specified it?

Mr Mortimer: The clause at the moment simply says that the term of appointment will be in the letter of appointment. So, the Government has not yet decided how long each term of appointment should be.

Q532 Chairman: The reason we asked that question is that, if you like, one of the strengths of the Monetary Policy Committee, which is often being quoted as a parallel type of body, has been that nobody regards it as their personal fiefdom because they are only there for three years, there is a rotating cast list, and obviously there has been a fair amount of importance attached to the “independence” of this body. Is that something which is still malleable?

David Miliband: I think I am right in saying, correct me if I am wrong, that there are two bodies that are parallel to this, one is the Monetary Policy Committee which, as you say, has three earlier appointments, there is the Low Pay Commission, I do not think there is a term limit for the Chairman, maybe a bit like a select committee, I do not know.

Q533 Chairman: I am time-limited.

David Miliband: Are you?

Q534 Chairman: Yes, two parliaments and out—brutal—a bit like being a secretary of state.

David Miliband: We certainly do not have time limits, but our problem is the opposite of being here too long. I can see some arguments for fixed term appointments for ministers; it might give us a bit of job security! We have left some flexibility, but I take your point that the three-year model has worked well on the Committee.
Q535 Chairman: Just to come back to this question of the nature of the advice and the transparency of the information that reaches you, if we look at the terms in which the Bill discusses the report to Parliament, it talks about a report—

David Miliband: Which page are you looking at?

Q536 Chairman: I am looking in the Bill now on page ten. I am looking in clause 21(1) where it says: “It is the duty of the Committee to lay before Parliament each year, beginning with year 2009, a report setting out the Committee’s views on the progress made towards meeting the carbon budgets.” If you are going to have a word like “views”, it has got to just be more than a series of numbers. It will express an opinion. I suppose inevitably, will it not be the case, that the Chair of this Committee is going to get drawn when he gets on to the Today Programme for his first report and Mr Humphreys says, “Well, you said so and so. Why do you think that the Government have done so well or so badly compared with the target?” and he goes, “Oh, well, I cannot really tell you that actually.” He is bound to have an opinion.

David Miliband: No. I think from what I have said it would be obvious what he would say. He would say in the transport sector they have done particularly well. However, in the area of home heating there is a real problem because the gas price has gone up and there has been increased coal burn. This poses difficult questions and they are going to have to think about it.

Q537 Chairman: I think what we are getting at is we can imagine the reverse situation being true when the information comes to you in terms of the advice on carbon. You are a man with a strongly inquiring mind. You might say: “Why have they come to this conclusion?” I cannot believe that the document will not contain some form of reasoning as to why they have come to that conclusion?

David Miliband: Do you not think, if I can ask you—because this is a pre-legislative scrutiny—that there is a dividing line between a group of people coming to a view about those parts of the economy that are playing their full part in this carbon reduction bill and those parts that are not. There is a division between that and then getting into detailed policy questions about, for the sake of argument, to go back to the example I gave, within the question of home/office heating the particular policy instrument that is required then to make a difference?

Q538 Chairman: If they came to you and said, “You ought to change your policy and go for more of this type of boiler and this is the policy”, I would not expect to get into that, but what I would say is that if, as people who have an expertise, they were watching the trends and they said to you, “Look, this sector is causing some problems, The Secretary of State should consider taking action in this area”, that is the kind of advice—

David Miliband: That is fine though. I think that is helpful.

Q539 Chairman: In paragraph 5.4(5) on page 35 of your document, under question nine, it says that you want to have a transparent reporting framework. Does that mean that any kind of advice that comes along with the targets will be put into the public domain?

David Miliband: You use the word “advice”. The report, which is what we talked about, I presume it would be public.

Q540 Chairman: No, it is the bit before hand.

David Miliband: I think it will all be in the report. What is before hand? I do not understand.

Q541 Chairman: Before hand is the budget. The report is how we have done.

David Miliband: No, there is annual report on progress.

Q542 Chairman: But when the thing starts off in 2009 the first act of the Climate Change Committee is to present you with some recommendations for your budget. Nothing has happened yet. They are not going to write a report until something has happened. What we are saying is, given this agreement or this indication of transparency, is that—

David Miliband: The first thing they do is they recommend the budgets. That is not about views, that is about their recommendations for the budgets for the periods up to 2022. If you are asking me will their recommended budgets be in the public domain, the answer is yes.

Q543 Chairman: Together with any reasons underpinning why they have come to that conclusion?

David Miliband: Yes. You have got a point here about views, which is in respect of a word that you have picked up about their reports on progress. It will be for the Committee to decide how much or how little reasoning they want to put forward, but my working basis is that their recommendations would be in the public domain and their views on progress would be in the public domain.

Chairman: Mr Hall, I apologise.

Q544 Patrick Hall: That was going to be my question which you snatched from me! Can I just make the point. The Secretary of State has agreed that there should be maximum publication so that people are well informed?

David Miliband: What I have said is that their reports should be put into the public domain.

Q545 Patrick Hall: No, not just the annual report to Parliament?

David Miliband: And their recommendations on budgets.

Q546 Patrick Hall: That is all right: because that would be more productive, would it not, than what we were talking about earlier on the judicial review?
If Parliament and the public, possibly through the media, who knows, are well informed, then that is the sanction?

David Miliband: Of course.

Q547 Patrick Hall: And that is what we should be concentrating on?

David Miliband: When I was answering Geoffrey Cox I did make the point that you have got the public opinion, politics and the law, and of course that is right. If I was sitting here saying we have got this secret process; no one is going to know how we are doing until the end of five or 15 years and then, boom, you could end up in the courts, you would say is that not a rather stupid way of organising it? Should we not be able to track how the population, different parts of society know how we are doing, and the answer is, “Yes”.

Q548 Mr Cox: Can I follow up on one thing. Would you envisage, if the Committee strongly disagreed with an action taken by the Government, that it might publish a report setting out the basis of its disagreement?

David Miliband: I think that the provisions for the Committee are three-fold in respect of that: (1) they have their recommended budgets, (2) they have their reports on progress, (3) they can do work as requested by the Secretary of State.

Q549 Mr Cox: Can I stop you there. The duty under clause 21 is a duty to lay before Parliament each year a report, but it does not suggest that they could not produce interim reports or produce bulletins on that report?

David Miliband: It certainly does not.

Q550 Mr Cox: Thus, if they disagreed with the specific action of the government that they thought was going to take the matter out of the carbon budget at any particular time, they might produce a bit more?

David Miliband: You might think that I would say this, but to put it another way, if you said to me: is it impossible for the Independent Committee to issue a laudatory proclamation about a piece of government initiative that they think is spectacularly effective and would it be appropriate for them to do so three weeks before a general election that might be tightly fought on the issue of climate change, I might hesitate, you might hesitate before thinking that was a good thing, but neither laudatory proclamations nor stinging indictments are precluded on the face of the Bill. I think any committee would think very, very carefully before it allowed itself to be dragged into what might be perceived to be party political lobbying or activity.

Q551 Mr Cox: Of course one does not mean party political. If one is comparing this to a committee like the Monetary Committee or something like that, one means something—. I understood part of the role of this Committee was to take it out of politics to some extent and achieve some kind of consensus, scientific or otherwise. If the Committee perceives that the policy is taking a wrong turning, it would have, would it not, a duty to say so?

David Miliband: It does not have a duty, or at least it does not have a duty as per the legislation that we have proposed and that we are discussing.

Q552 Mr Cox: Report on progress?

David Miliband: Would it be sensible for the Government to preclude that in legislation? No, I do not think so, because I think that the Government should treat committees like adults. Equally, the strength of, for example, the Monetary Policy Committee comes from the regular rhythm of reports that it does. It does not come from the uncertainty that they might pop out with a report on an ad hoc basis. They have their inflation report and they do that in the appropriate way. I think the strength of the Committee would be to come from the maturity of adhering to that. As I say, that would be for the Committee to decide.

Q553 Lynne Jones: You said earlier that the Committee might be asked to advise the Government on specific issues. What would be the status of that advice? Would it be made public or would it have the same status as advice from civil servants, for example. The Monetary Policy Committee produces minutes of its meetings. Should there not be that kind of openness and transparency in terms of the workings of this Committee?

David Miliband: I think the matter of its minutes is a matter for the Committee to think about. I think that if it produces a report on a specific issue, then my presumption would be that that would go into the public domain. To continue the earlier example that we had, if the Committee was asked: “What should you do about boilers in small houses?”—it is does not seem to me to be a likely example, but you get the point—

Q554 Lynne Jones: Surely your presumption is not sufficient. It should be clear from the start what openness there is going to be about the workings of this Committee. It may be that you as the Secretary of State would be perfectly happy for advice to be published, but you may not be in that position for ever and surely it should be laid out exactly the level of openness that is going to appear, and to what extent the Committee will be able to, for example, identify specific government policies that may be counter-productive in terms of achieving its targets?

David Miliband: I think it is important to emphasise, this has been set up not as a policy-making committee, and there are two aspects of that that are important, but one is the most important. It has been set up to set carbon budgets. In other words it is focused on outcomes. It has also been set up to monitor progress towards the achievement of those outcomes. That is why I say it has not been set up as a policy-making body. There is provision, it does not say exceptional, but there is provision for a Secretary of State to ask for specific advice about a policy matter, but I think, consistent with my answer to one of the earlier questions about why have we not got
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all manner of different targets about fuel poverty or anything else on the face of the Bill, because this is concerned with the overall level of carbon emissions (greenhouse gases), that is their locus, that is their USP.

David Miliband: It has got to be a mix, has it not?

Q560 Chairman: In coming to a figure of 750,000 or 500,000, half a million, in the next year, you must have been informed by something. Perhaps Mr Mortimer might enlighten us.

David Miliband: I am glad you have understood that the difficult questions get passed to my left.

Q561 Chairman: Absolutely I know you were terrified by the thought of page 49! Mr Mortimer, what was the thought in your mind when £500,000 in year two was selected as the number for research. What kind of research are they going to do?

Mr Mortimer: It is always an element of judgment.

David Miliband: Certainly not. As you know from Defra’s expert financial management, we run an extremely tight ship and we are certainly not expecting you to come along and bid up these figures.

Q563 Chairman: Sensible provisioning between expectations of a low and high figure is good budgetary practice?

David Miliband: We do not do gaming in Defra; what you see is what you get.

Q564 Chairman: You do not do gaming. There is a very interesting thing in this document about game theory, so it forms part of your—

David Miliband: Gaming is different from game theory.

Q565 Chairman: There is a lovely bit here. I am going to ask you lots of questions about game theory, if I can find it, to understand what this was all about in terms of targets. Here we are. Page 14, paragraph 4.17. It says here: “Game theory can form part of your—

Q555 Sir Peter Soulsby: The credibility of this Committee is going to depend crucially on its independence and its resources. How are you going to resource it and how are you going to ensure its independence?

David Miliband: I do think the independence comes from the role of the Nolan independent appointment procedures. You ought to make sure that is done, we will want to make sure that is done in an appropriate way that guarantees their independence. In terms of their resources, we have done this modelling of how much they might cost. I do not know if you think it is too much or too little.

Mr Mortimer: Two million a year.

David Miliband: I was trying to find the page.

Q556 Chairman: Forty-nine might be helpful. That says how much it will be.

David Miliband: I do not know, what is your thinking, Peter.

Q557 Sir Peter Soulsby: I think certainly they would need to ensure that they had enough to conduct their own analytical work without having to rely unduly on the resources of the department, that they could be seen to be commissioning what was necessary to come to their own conclusions?

David Miliband: I would not want them to have to duplicate work that was done in the department, but, equally, making use of departmental statistics does not seem to me to be undue in its reliance.

Q558 Sir Peter Soulsby: But being serviced by departmental staff in the extreme would seek to undermine your perception—

David Miliband: They have got a research budget of three-quarters of a million quid in the first year. That seems quite substantial. I do not know what the going rate for brilliant academics is these days, but that seems to me to give them something to be going on. I do not know, is the Committee’s view that the costs are too high or too low?

Q559 Chairman: I think the difficulty in answering that question is to know precisely what kind of a work programme the Committee might think that it needs to do on its own. Obviously, there is a vast army, that I think our line of questioning has indicated and, for example, the witnesses who have come before us indicate that there is no shortage of advice, expertise and knowledge. It is a question of distilling it out for the purpose you have intended. I do not know, for example, whether in year one £750,000 for research is about analysing the literature, if you like, that is already out there or doing their own individual research to be truly independently coming to their conclusions.

David Miliband: It has got to be a mix, has it not?
David Miliband: And _ergo_?

Q566 Chairman: I just found it intriguing that you have just denied that game theory was part of it and here it is—
David Miliband: I said I was not gaming about the budgets.
Chairman: I see.

Q567 Mr Cox: I do not want to interrupt, but if I could ask the Secretary of State a question. I realise it is probably late in the evening. I wanted to clarify, if I may, Secretary of State, this question of what the Committee can do. You say, and rightly obviously, on the Bill that it must concentrate on outcomes, and I appreciate that, but does that mean it is not going to be able to say anything about the levers of policy adopted by the Government? Is that your view?
David Miliband: No, of course not.

Q568 Mr Cox: I am just trying to find the boundaries of this Committee?
David Miliband: I did answer the Committee, clearly. I said I was not in the business of precluding what they can do, the whole prescribing or the proscribing of what they can do, because that would not be to treat them as adults. Equally, they will want to stick to their remit because that is clear, and I indicated to the Chairman that I think there is a division, or a space, between examining which sectors of the economy are under performing on the national emissions reduction, there is a division between that and then saying in the home heating sector you have got to change the regulations on boilers. We have focused them on interrogating the data to produce the right carbon budgets and then on monitoring. That seems to me to be the right thing to do. Can I therefore say exactly what territory the Chairman or his members or our members or the Committee as a whole are going to venture into and what they are not going to? No, I cannot, and I think it would be to treat them as adults to start writing that down now, but they do have specific duties and I want them to stick to their duties.

Q569 Lynne Jones: One of the reports that the Committee might want to do is a report about their own resources. Would such a report be published openly if that was a report to government?
David Miliband: I have not got the foggiest idea. “Report about their resources.” What do you mean?

Q570 Lynne Jones: We were talking about how we identify what they need to carry out their work, and one of the things they might decide after they have been working is that the budget is inadequate and they might want to make a submission as to why it should be increased. Would such advice, in a way to government, be published?
David Miliband: First of all, I do not think they would set out to do a report with the same status as their annual report on emissions reduction asking for an extra three academics to help them on a particular issue. What they might report at the end of the year, and they would report. I am sure, was how big their staff was and how much they were spending. They might note that they had either increased or decreased the amount that they were spending. _In extremis_ they might say, “We have become so infuriated with the Government’s penny pinching that we are issuing a public report saying we want three more people to come and help us with X, Y and Z”, but I do not think that is the way government works really.

Q571 Chairman: Let us move towards our conclusion. The Bill has in part three a range of enabling powers currently focused on your ability, Secretary of State, to introduce various forms of emissions trading schemes within the United Kingdom for those sectors of the economy that are outwith current arrangements. Some people have suggested to us by way of evidence that they were surprised that perhaps other policy instruments had not been included in the armoury of ways of reducing emissions that effectively the Bill focuses on trading schemes. What was the thinking behind that?
David Miliband: I think the thinking was that fundamentally for 150 years we have emitted pollution without recognising its carbon price, and we are now in a position where, just shaming, the majority of the economy’s greenhouse gases are covered by the EU scheme. It is not appropriate to think that the whole of the economy would be covered by the EU scheme because it is targeted at large emitters. Today, as it happens, we have announced the creation of effectively a trading scheme for medium emitters in the public and private sector, and so therefore we are moving forward the amount of emissions that are covered and it is a primary way of reducing emissions, because cap and trade scheme, I think, have got increasing relevance across the economy.

Q572 Chairman: The question I asked was: did you consider taking legal powers to reduce emissions by other mechanisms than trading?
David Miliband: What sort of thing would you be thinking of?

Q573 Chairman: I do not know. It is for you to tell me and answer the question.
David Miliband: Since this is a prelegislative hearing, I thought it would be appropriate to be able ask a question as well as answer them.

Q574 Chairman: You can, but I must admit I would be struggling.
David Miliband: You can take a Henry the Eighth power to do whatever you liked, but beyond taking a power to do whatever I liked, I do not think that would be right. If you are thinking about regulation—for example, we have got established mechanisms for regulating, we have also got a regulatory reform order which allows to us cut through some of the difficulties in that area, in other areas you have got an annual budgetary cycle—I do
not think it would be right to take in this Bill fiscal powers, so I think trading schemes is the missing gap.

Q575 Chairman: For example, in another piece of work we are doing we have been looking at the question of feed-in tariffs. You might have the thought, “I want to have something to say that by regulation. I could introduce something if the electricity companies in my judgment were not paying sufficient for feed-in from renewable electricity at the domestic level.” You might, for example, take some fairly Draconian powers to say, “I will now set a tariff, I will now interfere”, something like that, for example?
David Miliband: I am not going to try and pin you to it, but would it not be rather difficult to start setting policy for feed-in tariffs separate from the whole regulatory regime for the electricity industry?

Q576 Chairman: All I am saying is that if you found that certain sectors of the economy were not responding to the existing array of policies and you said, “If we did that, we might get a better response”, there is not anything in this Bill that allows you currently to come along afterwards.
David Miliband: Trading schemes are different from every other policy measure in one way, are they not? They start from the reduction in emissions that you are determined to see and they then create space for different players in that sector to live within those means or not, and if they do not live within those means they have to pay for it. So they are a unique instrument in that sense: because they start by capping emissions. Every other instrument, if you like, starts with a policy instrument rather than starting with the end point. Since this is a bill about outcomes and since cap and trade schemes are about caps, it seems to me that trading schemes are a rather different genus.

Q577 Chairman: You might, for example, with the public sector, local authorities, want to impose limitations or obligations on them through a bill like this?
David Miliband: You might want to. You could impose obligations to cap emissions through a trading scheme.

Q578 Chairman: But you could cap them anyway without having a trading scheme?
David Miliband: No. How?

Q579 Chairman: For example, you might say: local authorities shall emit no more emissions in 2030 than they did in whatever?
David Miliband: That is a cap and trade scheme.

Q580 Chairman: It is cap not the trade.
David Miliband: If you do not trade, then what is the cap?

Q581 Chairman: I am just looking from a hypothetical point of view of saying that the enabling powers have focused really on trading schemes and asking the question as to whether there needed to be a provision in the Bill that enabled you to do other thing if in the future—
David Miliband: The answer I would give you is (1) they are a distinctive method, (2) there is nowhere else that allows you to cap and trade. So it is filling a gap in the market. I think those would be the two main reasons to give a straight answer to your question.

Q582 Patrick Hall: In terms of other instruments, if as a result of the workings of the Committee and the Government’s response or consideration of what the Committee is going to be saying over a period of years, it is thought that the planning system should be further changed, presumably that might be the recommendation from yourself or your successor, but then it is up to others in government to decide whether or not to move on that. So there would be possibly resistance or a time lag, would there not? The only direct thing that this Bill seems to be able to deliver on in terms of achieving outcomes is trading?
David Miliband: Let me put it this way. If you have 100% of the economy’s greenhouse gas emissions covered by trading schemes, then you would guarantee that you would live within your means.

Q583 Patrick Hall: Is that a goal?
David Miliband: I think “goal” is too strong, but I think it is quite an interesting thought experiment.

Q584 Patrick Hall: It is going to be more than that soon.
David Miliband: It is already more than that. It is already 50% of the economy. It is going to be 50% plus 6 or 7% if you include aviation. Once you have got the Carbon Reduction Commitment in, you have got another few per cent. So it is growing. You could say it is a vision rather than a goal.

Q585 Patrick Hall: Once you get into personal allowances, that is massive leap into people’s perceptions of how they are tied into that.
David Miliband: Correct.

Q586 Patrick Hall: I think there may be some fears of that?
David Miliband: I think there is a lot of excitement about it.

Q587 Patrick Hall: Excitement amongst some lobbyists; I am not sure about the public.
David Miliband: Lobbyists; I do not know about that.

Q588 Patrick Hall: The public may not be quite so keen.
David Miliband: You mean that the public would not be keen on the idea that if they were environmentally thrifty they should be rewarded for it?
Patrick Hall: How do you handle that, yes?

Q589 Mr Cox: They might not be keen on the intrusion that would be needed to monitor it.
David Miliband: That is a different point, one which I have advertised myself. Equally, ten years ago, if you had said that millions of people would have supermarket loyalty cards, they might have been worried about that.

Q590 Mr Cox: That is voluntary.
David Miliband: It is voluntary. None of that is a significant degree of information held about people.

Q591 Mr Cox: No carbon allowance scheme is going to be voluntary, but, as you say, it is a compelling thought, is it not?
David Miliband: Actually there are some voluntary carbon allowance schemes now. There are companies setting up their own schemes.
Mr Cox: We are not talking about that, we are talking about a government imposed scheme?

Q592 Chairman: Can we be clear that under the powers of this section you could introduce by secondary legislation personal carbon allowances?
David Miliband: I think it is tricky. I think that that is on the edge.

Q593 Chairman: So, not ruled out. We could do with a spot of clarification?
David Miliband: It is on the edge is probably what I would say. We are clear we are really talking about things like the Carbon Reduction Commitment about heat. You can make the case that you wanted to get it in through this mechanism, but I think if you wanted to do the personal carbon card, you want to do it with a big song and dance and coverage of its own.

Q594 Patrick Hall: I can hear The Daily Mail screaming about this already?
David Miliband: I think if you wanted to do a carbon credit card, you would want to do that with full debate and engagement. You would not want to do it by the back door.

Q595 Chairman: In the Bill you talk about allowances under your trading schemes in Schedule Two. It says: "The regulations must provide for the allowances to be allocated free of charge.” In terms of the announced carbon reduction commitment, the message there is that that would be achieved by a simple fixed price sale of allowances.
David Miliband: Give me the reference?

Q596 Chairman: We are on page 24 in Schedule II of the Bill, clause 5(3)(a) says: “The regulations must provide for the allowances to be allocated free of charge.” How is that compatible with the announced carbon reduction commitment proposal which says that there will be a simple fixed price sale of allowances?
David Miliband: This is a good point. I think you know from other investigations that the Government is enthusiastic about auctioning of allowances, and we have made provision for 7% of EU ETS allowances to be auctioned, but it is done through the Finance Bill, not done through this Bill.

Q597 Chairman: Would you say that again?
David Miliband: It will be done through the Finance Bill rather than through this Bill.

Q598 Chairman: But it sort of sets a precedent, does it not, that there is a scheme where you are going to sell something, and you have just enunciated the enthusiasm of the Government for selling, but the Bill says, in terms of these allowances, they are going to be allocated free of charge. There seems to be a policy incompatibility?
Mr Mortimer: I think it is simply saying that this is not the legislative vehicle for doing auctioning, that the Finance Bill would be the appropriate solution for that, exactly as it has been used already for the EU ETS auctioning.

Q599 Patrick Hall: The Finance Bill would do it?
David Miliband: This Bill provides for all other aspects of setting up a scheme, but if it comes to a money issue or auctioning, that would be taken through the Finance Bill.
Mr Gray: When it says “free of charge” it does not mean free of charge, it means somebody else will do it instead?

Q600 Chairman: When it says “the allowances”, I am presuming these are allowances under the trading scheme to emit?
David Miliband: I am sorry, if I can clarify, all this is saying is that we could not use these powers to do auctioning with a charge being made. These powers could only be used if there were not auctioning with charges being made. If we wanted to do auctioning, we would use the Finance Bill.

Q601 Mr Gray: It is entirely misleading; it is not free of charge. What you are saying is that under this Bill we could not do it, but we are confident that our honourable friend the Chancellor of the Exchequer will do so.
David Miliband: Before you accuse a civil servant of misleading you, which I think is—
Mr Gray: I was not accusing a civil servant at all, I was accusing the Bill.
Chairman: Can we seek clarification, because there is a policy direction mapped out here with a very interesting idea that you can introduce into certain sectors of the economy not currently covered by EU trading, national trading schemes, and the suggestion here in these words is that the allowances within such a scheme would, in the first instance, be allocated “free of charge”?
Patrick Hall: The CBI and others have picked up on that in evidence to us and welcomed it, because it says “free”.

Q602 Chairman: Yet in the Carbon Reduction Commitment the proposal is to effectively auction those off, and you have said that the government has an enthusiasm for auctioning which does not seem to be replicated in the words used for whatever schemes you propose to bring in under this section of the Bill.
David Miliband: This is a helpful session in that context and in other contexts as well, because the argument we have put for these enabling powers is that it would allow us to get on with setting up trading schemes in an effective way. It is not a mechanism to get round the established precedent that fiscal issues are dealt with through a finance bill. That is clear.

Patrick Hall: The message out there with industry really does need to be investigated as soon as possible?

Q603 Chairman: I think we will accept your helpful comment that it is useful. We have teased out something that needs to be perhaps further refined.

David Miliband: We are legislating now for auctioning in the Finance Bill.

Chairman: Yes, but I think in terms of the wider policy issue, it is something which in due course need to be refined.

Q604 Lynne Jones: Is there any point in having these powers given the evidence that in the past schemes have been set up where the allocations have been given freely and there has been inappropriate profiteering and double-counting?

David Miliband: Yes, it is helpful to have these powers because it would be odd to set up a whole trading scheme through the Finance Bill. What you can do is the auctioning provisions through a finance bill and you could use this Bill for establishing the scheme. The auctioning is one part of the scheme.

Q605 Lynne Jones: Do we need this comment then that the allowances should allocated free of charge?

David Miliband: It makes clear that this not a bill for getting into fiscal issues. That is done through the Finance Bill.

Mr Mortimer: It is merely to clarify that there is an exclusion in relation to auctioning in these powers.

Mr Cox: This enables you to introduce it under this, but you could do it via a finance bill?

Chairman: Normally, if you are going to have expenditure, monies, you have a money resolution, or if you are trying to deal with something financial, it is the Finance Bill, but the Finance Bill tends to deal with things like taxation. I think it is an area that needs some clarification.

Q606 Lynne Jones: The CBI and the engineers last week said that there were some other policy instruments which were more useful in reducing carbon emissions, and they mentioned things like building regulations and planning regulations, which, of course, are not the direct responsibility of you as Secretary of State, which brings me back to the point about how other ministers can be engaged in this process. One area is the role of the Climate Change Committee, but in that regard, in terms of the role of other secretaries of state, I notice in the Energy White Paper today it states, “and energy demand will grow over time, despite increased energy efficiency, as the economy expands”. Are you comfortable with that given the kind of targets that we need to meet if we are going to prevent dangerous global climate change?

David Miliband: It is a statement of fact. What is most important is how we satisfy that demand. That is the key.

Q607 Lynne Jones: In here, for example, it says that all new social housing will be built to Level Three in the Code for Sustainable Housing. You could have a policy which says it should be at Level Six?

David Miliband: Hang on, we have said that all new housing, social and private, will be zero carbon by 2016.

Q608 Lynne Jones: What about in between now and 2016?

David Miliband: We will ratchet up the building regs year by year, point by point, so that by 2016 it is all zero carbon and they are exporting as much from the grid as they are importing.

Q609 Lynne Jones: In view of the amount of reductions, going right back to the beginning, is this slow progress sufficient when we have dangerous climate change upon us?

David Miliband: Let us have a separate session on zero carbon housing, if necessary with the housing minister here as well, but given that we are the first country in the world to be moving to institutionalise, to require all new homes to be zero carbon, that the building regs are ratcheted up year by year, that the current level of energy efficiency is currently 40% higher than that of four years ago should not be dismissed.

Q610 Lynne Jones: Compared with other countries we are way behind.

David Miliband: We are way behind on?

Q611 Lynne Jones: Setting the same kind of targets as they do in Europe?

David Miliband: Let us define our terms. We are behind on the existing stock. We are not behind for the requirements on new housing. Show me another country that is going to have a requirement that all new homes are zero carbon? I do not recognise any other countries somehow.

Q612 Lynne Jones: Some would say whether that is a meaningful target is one thing; is it what we are achieving now and how we actually meet the standards that are already being achieved in other places.

David Miliband: Who has said it is not a meaningful target?

Q613 Lynne Jones: It is not what we do in 2016?

David Miliband: I have not heard anyone say anywhere this is not a meaningful target; someone else referred to aspirational targets. This is a legal requirement in regulation. I will be fascinated to see, Swedes or others, saying that somehow it is not meaningful.
Q614 Lynne Jones: But you accept that we are going to allow for energy demand to grow.

David Miliband: There is a famous book, *Factor Four: doubling wealth, halving resource use*, and we have got to have a radical change in the way in which we supply energy. That is the most important thing we can do. We have also got to have radical change, which I applaud in the Energy White Paper. The starting point in the Energy White Paper is how do we reduce energy demand, and it has very ambitious plans for energy efficiency, everything from stand-by switches to house building, and that is a good thing because the accusation is always at the start.

Lynne Jones: It is a good thing, but to say it is ambitious is another thing.

Q615 Chairman: Secretary of State, I am going draw stumps at that particular point. When we come to produce our Climate Change: Citizen’s Agenda Report, you will have an opportunity to pick up on some of the points that concluded our discussions. May I thank you and Mr Mortimer for your patience and forbearance in being here and answering our questions and, where possible, taking part in what I hope was a helpful discussion on the Bill. We in due course will be producing our report. We obviously look forward to your response to it. I am going to ask the Committee members if they would be kind enough to remain behind for a moment or two once the public and our witnesses have left. Thank you very much for your contribution.

David Miliband: Thank you very much. When do you conclude your report?

Q616 Chairman: This is it; you represent the final act.

David Miliband: When will your report—

Q617 Chairman: To use your famous word “soon”.

David Miliband: Good. Before 27 June or afterwards?

Q618 Chairman: We will hope we will do it as quickly as we can.

David Miliband: Very good.
Written evidence

Memorandum submitted by Richard Shirres (CCB 01)

What does sustainability imply?

What is a sustainable level of Global Impact and, on a more personal level, what is the required level of reduction in pollution per unit of consumption?

Total Global Environmental Impact ($I$) from consumption by the World’s population can be expressed:

$$I = P \times A \times T$$

where:

$P$ = World Population
$A$ = Average level of consumption ie Afluen ce
$T$ = Environmental impact per (average) unit of consumption, ie a measure of how efficiently economy uses natural resources and produces waste

The above formula can be used to indicate an order of magnitude of improvement needed for the next half century.

Sustainability

The Inter-Governmental Panel on Climate Change (IPCC) has suggested we need to reduce greenhouse gas emissions by around 50% at least by 2050 for the expectation of stabilising global warming effects by the 22nd century. The effects of global warming are very long term.

It is clearly very difficult to estimate global environmental impact (waste) produced due to our technological civilisation. However, it is reasonable to consider that a positive correlation exists between current production and associated greenhouse gases production. Therefore, consistent with IPCC, let us assume that Global Impact ($I$) has to be halved by 2050 to achieve sustainable consumption, ie $I_{yr2050} = 0.5 \times I_{yr2000}$

Required Reduction in Impact for an Average Unit of Consumption

World Population is forecast to increase over the next 50 years from 6 billion to, at least, 9 billion, ie $P_{yr2050} = 1.5 \times P_{yr2000}$

Let us assume that the world economy continues to grow on average by 2.5% per annum over the next 50 years. This implies more than a tripling of consumption per average person, ie $A_{yr2050}/A_{yr2000} = 1.025^{30}$, approx = 3.5. That is: $A_{yr2050} = 3.5 \times A_{yr2000}$

Thus, starting with:

$$I_{yr2050} = P_{yr2050} \times A_{yr2050} \times T_{yr2050}$$

What is the required ratio of $T_{yr2050}/T_{yr2000}$ for the equation to balance?

$$0.5 = 1.5 \times 3.5 \times (T_{yr2050}/T_{yr2000})$$

The Answer

Globally, the average per capita unit of consumption for the year 2050, in order just to maintain the status quo globally will need to be somewhere around a 10th of present day levels. By way of examples what could this mean for people in developed countries who already consume way above the average, say twice, per capita unit of consumption?

Can you imagine having a car that does 800 miles to the gallon?

Could you—everyone—make do with a wheelie bin less than one 20th its current size?

Sustainability requires a paradigm shift: a radical change in thinking.

Richard Shirres
April 2007
Memorandum submitted by the Inland Waterways Association (CCB 02)

BACKGROUND ON IWA

The Inland Waterways Association is a registered charity formed in 1946 by individuals who wished to turn our inland waterways from the abandoned ditches many had become into the widely-used and much-loved amenity that they are today. The Association, through its national membership and local waterway societies, campaigns to convince government, local authorities and the public of the need for canals and river navigations, and through its Waterway Recovery Group has helped restore hundreds of miles of waterways for use by boaters, walkers and anglers.

IWA has been active and often the driving force in waterway restoration the length and breadth of the country.

IWA has over 18,000 individual members, and 289 affiliated non-profit-making waterway organisations. More than 25,000 volunteer hours are annually donated through our Waterway Recovery Group.

THE DRAFT CLIMATE CHANGE BILL

1. IWA warmly welcomes this Bill which, the Association believes, is an important start in the battle to tackle climate change. While IWA is not a scientific organisation it is clear to the Association that Britain’s waterways are seeing the affects of climate change. One reason for the decline of freight traffic on our waterways post World War II was the hard winters that froze the canals making transit impossible for weeks on end. Similarly, the Thames, an important and critical artery in our nations transport system, regularly froze in Victorian times—something that rarely now happens due to the canalisation of the river and our warmer winters.

2. As an Association, however, IWA struggles to understand the thinking that drives EFRA Ministers and the Department. The Secretary of State David Miliband has made it clear his own department and all government departments have to do more in their own buildings and areas to tackle climate change.

3. David Miliband has stated that DEFRA also must develop more policies itself to tackle climate change and yet, in his own department, he has failed to implement policies that would make a significant impact now, let alone in 2020, when the Bill calls for a 26–32% reduction in greenhouse gases.

4. This is evidenced by the closure of the Freight Department of British Waterways, which the Committee heard evidence about in a recent Inquiry. It seems to IWA that there is little point in the grandiose scheme if you have not tackled small but significant areas that are in your remit and do not require legislation. An immediate action would be to reinstate the funding required for the Freight Division of British Waterways to re-open.

5. In its recent Inquiry into British Waterways the Committee heard evidence that waterborne freight is six times more environmentally friendly than road borne freight and yet all the recent actions of DEFRA have led to more lorry movements rather than more waterborne movements.

6. IWA would recommend that the Secretary of State could add that waterborne freight should be included as a requirement in all planning applications requiring significant quantities of materials to be transported to sites where there is a suitable canal or river. Similarly, materials needing to be removed could also be removed by water. A contribution to the extra dredging and other costs incurred by British Waterways could be via a Section 106 requirement.

7. Anything that makes UK holidays more attractive to UK residents helps to reduce carbon emissions from air travel. Government support for waterways, therefore, helps to tackle climate change.

8. Towing paths can offer safe and flat paths for walking or cycling. Such facilities can reduce carbon emissions from car travel.

9. Adaptation to climate change must counter the threat of incursions from the sea into inland waterways such as the Norfolk and Suffolk Broads. There should be a strict presumption against development on the flood plain regardless of the benefits for the social and economic well-being of the area except for building related to navigation and water-based recreation.

10. In conclusion IWA believes it is for DEFRA to show its commitment to new ways of working before it can responsibly ask others to change their actions.

Inland Waterways Association

April 2007
Memorandum submitted by the Electric Heating and Ventilation Association (CCB 03)

INTRODUCTION

The Electric Heating and Ventilation Association (TEHVA) welcomes the opportunity to submit evidence to the Environment, Food and Rural Affairs Committee inquiry into the Draft Climate Change Bill. TEHVA is the trade association with responsibility for promoting electric heating, hot water and mechanical ventilation products and systems, and was launched in 2004 in recognition of the wide consumer and political demands to reduce energy consumption and associated carbon emissions.

This submission focuses specifically on question 18 of the Committee’s inquiry which asks whether there are other domestic climate change issues which it would be appropriate to include in the Draft Bill.

The way we heat our homes and buildings in future will have to change due to the increased pressure to reduce carbon emissions and the need to reduce energy costs. Modern electric heating and hot water products are positive steps in this direction. TEHVA believes there is a clear need for government defined carbon milestones to be included in the Draft Bill, in order to effectively forecast the carbon intensity of grid electricity which will in turn aid planners and housebuilders to design long-term low/zero carbon housing.

We believe that over the long-term these milestones would demonstrate that electric heating (using de-carbonised grid electricity) will reduce the carbon footprint of a business or domestic dwelling more effectively than other energy sources. This would for example enable zero carbon houses, a key tool in tackling Climate Change, to become a reality.

LOW CARBON MILESTONES

The Electric Heating & Ventilation Association (TEHVA) believes there is a key policy gap in recent Government announcements on zero carbon housing that will significantly reduce their impact and therefore the extent to which we can address climate change. Our concern is that none of the announcements include any consideration of the lifetime carbon footprint of a dwelling based on the projected carbon content of grid electricity. The key point to note is that over a 50 year period the carbon impact of electricity will be less than that for gas and other energy sources, therefore making, in the long term, electricity a more favourable low carbon energy source. A fact that has so far not been fully acknowledged and appreciated by government. It is quite clear that carbon trajectories will not be valid or a useful planning aid unless forward grid electricity carbon content levels are known.

As members of the EFRA Select Committee will be aware, electricity is the only central energy source that can be de-carbonised. Grid electricity must be de-carbonised in order for government to reach its carbon reduction targets of 60% by 2050. This is given some credence by renewed government interest in new nuclear plant and a push for wide scale take up of carbon capture and storage technology. Projected figures suggest that the carbon content of grid electricity will be less than half the 2007 content by 2020 ie moving from 0.43kg CO2/kWh to 0.20kg CO2/kWh (nearly at parity with gas which is a constant 0.19kg CO2/kWh). Without a set of forward thinking carbon milestones—say to 2050—it is impossible to plan carbon trends or to consider what the true lifetime carbon mitigation programme for energy sources should be.

PRACTICAL EXAMPLE—NEW BUILD HOUSING

Consider a notional yet conceivable scenario and compare the CO2 that can be emitted from a dwelling over a 60 year lifetime to that using 2007 figures.

Table 1

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<th>NOTIONAL DWELLING CONSUMPTION AND CARBON FIGURES</th>
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Assuming the CO2 for electricity stabilises at 0.20kg post 2020, the lifetime 60-year electricity CO2 emissions for the dwelling would be 55,600 kg CO2 or an average of 927kg CO2 per annum. This is compared with a 60-year lifetime of 103,200 kg CO2 or an average of 1,720 kg CO2 per annum based on 2007 figures. This clearly demonstrates the better carbon impact of electricity within 20 years.
The challenge for the housebuilder is to specify building services and de-centralised energy systems that can mitigate the annual average CO2 over the lifetime. With low electricity CO2, the housebuilder may decide to pursue a strategy of heat pumps (turning each kWh or electricity into 3 or 4 kWh of useful heating and hot water service) or electric heating and hot water systems with mitigation from local electricity generation sized according to the average needs.

This puts the focus firmly on carbon and gives strategic flexibility to house builders in design. It also pushes the housebuilder towards utilising sustainable energy sources either locally or centrally to tackle the CO2 challenge and not necessarily rely on gas, which could well be a high priced energy option linked to secure supply problems into the future.

**How Carbon Milestones Can Work in Practice**

At the building regulations application stage, a housebuilder will complete a Target and Design Emission Rating calculation using the government Standard Assessment Procedure (SAP). The calculation considers the heat loss parameters of a dwelling and the overall energy consumption and carbon footprint based on real time figures (in fact they are three year averages for energy prices and carbon figures). The results are however determined by carbon today rather than lifetime averages.

A practical method of using carbon milestones is to add a feature that enables the housebuilder to calculate a five year period carbon emission figure using data from a set of published carbon milestones/projections. The carbon milestones could be built into the software and adjusted forwards every five years in line with the 5 year periodicity of changing SAP, determined and managed by DEFRA.

The planning application would then include a 60-year lifetime carbon projection and SAP could then calculate whether the overall target will be met by the lifetime design characteristics specified.

This simple policy step would bring housing and energy strategies close together for the first time and will really enable a more flexible and cost effective opportunity for housebuilders and builder service equipment suppliers to meet the challenge (ie the right services, for the whole lifetime using the right energy to provide a zero carbon footprint).

**Conclusion**

TEHVA’s submission focuses specifically on further elements the Draft Climate Change Bill should consider, mentioned in question 18 of the consultation document. As highlighted above, the Association believes there is a key policy gap in the climate change arena that the Draft Climate Change Bill could address.

TEHVA would like to see the Government recognize the long term carbon reducing advantages of electricity over other energy sources and to publish a set of forward-thinking milestones—say to 2050—to demonstrate this and enable carbon trends to be planned. This can then give energy use planners, house builders for example, the opportunity of considering what the true lifetime carbon mitigation programme for a new build dwelling should be. At its most basic, this may mean that they will consider the use of electric heating over other energy sources as in the long term, electric heating is going to be more carbon efficient.

This would enable zero carbon houses to become a reality and bolster our ability to tackle climate change.

TEHVA

April 2007

**Memorandum submitted by LEWIS—Global Public Relations (CCB 05)**

1. Businesses in England already have to comply with Environmental Acts or Statutory Instruments under the aegis of eight different government Departments and official regulators.

2. Notwithstanding the compliance to the Companies Act 2006, employment laws and Health and Safety legislation which Chambers of Commerce, Professional Associations, Business Links and organisations such as the CBI rightly guide their member businesses to successful compliance a plethora of specialist advisers has sprung up to sustain companies’ compliance with an increasing volume of environmentally-focused legislation.

3. The provisions of the Climate Change Bill are already legislated for in existing Acts. As a mechanism for changing the behaviour of businesses and individuals’ awareness of global warming, it is an inappropriate device.

4. LEWIS, a public relations consultancy headquartered in Westminster, and employing 250 people typical of over a million small to medium-sized enterprises (SMEs), has the following environmental legislation to be compliant to:
AIR LEGISLATION

- Clean Air (Emission of Dark Smoke) (Exemption) Regulations 1969 SI 1263
- Climate Change Agreements (Energy-intensive Installations) Regulations 2006 SI 59
- Climate Change Agreements (Eligible Facilities) Regulations 2006 SI 60
- Climate Change Agreements (Miscellaneous Amendments) Regulations 2006 SI 1848
- Climate Change Agreements (Eligible Facilities) (Amendment) Regulations 2006 SI 1931
- Climate Change Levy (Fuel Use and Recycling Processes) Regulations 2005, SI 1715
- Climate Change Levy (General) Regulations 2001, SI 838
- Climate Change Levy (General) (Amendment) Regulations 2003 SI 604
- Climate Change Levy (Miscellaneous Amendments) Regulations 2005, SI 954
- Environmental Protection Act 1990
- Pollution Prevention and Control Act 1999
- Crop Residues (Burning) Regulations 1993 SI 1366
- Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2002 SI 528
- EU Regulation on Substances that Deplete the Ozone Layer 2037/2000
- EU Regulation on Persistent Organic Pollutants 850/2004
- Greenhouse Gas Emissions Trading Scheme (Amendment) and National Emissions Inventory Regulations 2005, SI 2903
- Greenhouse Gas Emissions Trading Scheme (Amendment) Regulations 2006 SI 737
- Greenhouse Gas Emissions Trading Scheme Regulations 2005 SI 925
- Non-Road Mobile Machinery (Emissions of Gaseous and Particulate Pollutants) Regulations 1999, SI 1053
- Non-Road Mobile Machinery (Emission of Gaseous and Particulate Pollutants) (Amendment) Regulations 2004 SI 2034
- Non-Road Mobile Machinery (Emission of Gaseous and Particulate Pollutants) (Amendment) Regulations 2006, SI 29
- Notification of Cooling Towers and Evaporative Condensers Regulations 1992 SI 2225
- Ozone Depleting Substances (Qualifications) Regulations 2006 SI 1510
- Smoke Control Areas (Exempted Fireplaces) (England) Order 2003, SI 2328
- Smoke Control Areas (Authorised Fuels) (England) Regulations 2001, SI 3745
- Smoke Control Areas (Authorised Fuels) (England) (Amendment) Regulations 2005 SI 289
- Smoke Control Areas (Authorised Fuels) (England) (Amendment) Regulations 2006 SI 1869
- Smoke Control Areas (Exempted Fireplaces) (England) Order 2005, SI 2304
- Smoke Control Areas (Exempted Fireplaces) (England) Order 2006 SI 1152
- Solvent Emissions (England and Wales) Regulations 2004 SI 107
- Waste Management (Miscellaneous Provisions) (England and Wales) Regulations 2007 SI 1156

CHEMICALS LEGISLATION

- Batteries and Accumulators (Containing Dangerous Substances) Regulations 1994, SI 232
- Batteries and Accumulators (Containing Dangerous Substances) (Amendment) Regulations 2000, SI 3097
- Batteries and Accumulators (Containing Dangerous Substances) (Amendment) Regulations 2001, SI 2551
- Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004 SI 568
- Carriage of Dangerous Goods by Rail Regulations 1996 SI 2089
- Carriage of Dangerous Goods by Road Regulations 1996 SI 2095
- Chemicals (Hazard Information and Packaging for Supply) Regulations 2002, SI 1689
— Chemicals (Hazard Information and Packaging for Supply) (Amendment) Regulations 2005 SI 2571
— Control Of Major Accident Hazards Regulations 1999, SI 743
— Control of Major Accident Hazards (Amendment) Regulations 2005, SI 1088
— Control of Asbestos Regulations 2006 SI 2739
— Controls on Dangerous Substances and Preparations Regulations 2006 SI 3311
— Detergents Regulations 2005, SI 2469
— EU Regulation Concerning the Export and Import of Dangerous Chemicals 304/2003
— EU Regulation on Detergents 648/2004
— Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) Regulations 2000, SI 1043
— Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) (Amendment) Regulations 2000, SI 3359
— Notification of Installations Handling Dangerous Substances Regulations 1982, SI 1357
— Notification of Installations Handling Hazardous Substances (Amendment) Regulations 2002, SI 2979
— Planning (Hazardous Substances) Regulations 1992, SI 656
— Notification of New Substances Regulations 1993 SI 3050
— Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2006 (RoHS) SI 1463
— Sulphur Content of Liquid Fuels (England and Wales) Regulations 2000 SI 1460
— Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007 SI 79

Conservation Legislation
— Wildlife and Countryside Act 1981
— Wildlife and Countryside (Amendment) Act 1985
— Wildlife and Countryside (Amendment) Act 1991
— Environment Act 1995
— Countryside and Rights of Way Act 2000
— Natural Environment and Rural Communities Act 2006
— EU Regulation on the Protection of Species of Wild Fauna and Flora by Regulating Trade 338/1997
— Conservation (Natural Habitats etc) Regulations 1994 SI 2716
— Conservation (Natural Habitats &c) (Amendment) (England) Regulations 2000 SI 192

Energy Legislation
— Buildings Regulations 2000, SI 2531
— Energy Efficiency (Refrigerators and Freezers) Regulations 1997 SI 1941
— Energy Information (Combined Washer-Driers) Regulations 1997 SI 1624
— Energy Information (Dishwashers) Regulations 1999 SI 1676
— Energy Information (Household Electric Ovens) Regulations 2003 SI 751
— Energy Information (Household Refrigerators and Freezers) Regulations 2004 SI 1468
— Energy Information (Lamps) Regulations 1999 SI 1517
— Energy Information (Tumble Driers) Regulations 1996 SI 601
— Energy Information (Washing Machines) Regulations 1996 SI 600
— Energy Information (Washing Machines) (Amendment) Regulations 1997 SI 803
— Energy Information and Energy Efficiency (Miscellaneous Amendments) Regulations 2001 SI 3142
— Energy Information (Household Air Conditioners) (No 2) Regulations 2005 SI 1726
— Energy Performance of Buildings (Certificates and Inspections) (Eng and Wales) Regulations 2007 SI 991
— EU Regulation on a Revised Community Eco-Label Award Scheme 1980/2000
LAND LEGISLATION

— Agricultural Land (Removal of Surface Soil) Act 1953 (not available online)
— Countryside and Rights of Way Act 2000
— Environmental Protection Act 1990
— Environment Act 1995
— Natural Environment and Rural Communities Act 2006
— Wildlife and Countryside (Amendment) Act 1985
— Wildlife and Countryside (Amendment) Act 1991
— Contaminated Land (England) Regulations 2006 SI 1380
— Environmental Impact Assessment (Uncultivated Land and Semi-natural Areas) (Amendment) Regulations 2005, SI 1430
— Environmental Impact Assessment (Forestry) (England and Wales) (Amendment) Regulations 2006 SI 3106
— Farm Waste Grant (Nitrate Vulnerable Zones) (England) Scheme 2003 SI 562
— Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006 SI 1379
— Sludge (Use in Agriculture) Regulations 1989 SI 1263
— Sludge (Use in Agriculture) (Amendment) Regulations 1990, SI 880

NOISE AND STATUTORY NUISANCE LEGISLATION

— Anti-social Behaviour Act 2003
— Civil Aviation Act 1982 (not available online)
— Control of Pollution Act 1974 (not available online)
— Clean Neighbourhoods and Environment Act 2005
— Environmental Protection Act 1990
— Local Government (Miscellaneous Provisions) Act 1982 (not available online)
— Control of Noise (Codes of Practice for Construction and Open Sites) (England) Order 2002, SI 461
— Environmental Noise (England) Regulations 2006, SI 2238
— Household Appliances (Noise Emission) Regulations 1990 SI 161
— Household Appliances (Noise Emission) (Amendment) Regulations 1994 SI 1386
— Noise Emission in the Environment by Equipment for Use Outdoors Regulations 2001 SI 1701
— Statutory Nuisance (Appeals) Regulations 1995 SI 2644
— Statutory Nuisances (Artificial Lighting) (Designation of Relevant Sports) (England) Order 2006 SI 781
— Statutory Nuisance (Appeals) (Amendment) (England) Regulations 2006, SI 771

PLANT PROTECTION LEGISLATION

— Food and Environment Protection Act 1985
— Pesticides Act 1998
— Plant Health Act 1967 (not available online)
— Biocidal Products Regulations 2001 SI 880
— Biocidal Products (Amendment) Regulations 2003 SI 429
— Biocidal Products (Amendment) Regulations 2005 SI 2451
— Biocidal Products (Amendment) Regulations 2007 SI 293
— Control of Pesticides Regulations 1986 SI 1510 (not available online)
— Control of Pesticides (Amendment) Regulations 1997 SI 188
— Plant Health (England) Order 2005 SI 2530
— Plant Protection Products (Basic Conditions) Regulations 1997 SI 189
— Plant Protection Products (Amendment) Regulations 2005 SI 3197
— Plant Protection Products (Amendment) (No 2) Regulations 2006 SI 2933
— Plant Protection Products (Amendment) Regulations 2007 SI 636
— Plant Protection Products Regulations 2005 SI 1435
— Plant Protection Products (Amendment) Regulations 2006 SI 1295

POLLUTION PREVENTION & CONTROL (PPC) LEGISLATION (INCLUDING IPC)
— Control of Pollution Act 1974 (not available online)
— Controls on Dangerous Substances and Preparations Regulations 2006 SI 3311
— Creosote (Prohibition on Use and Marketing) (No 2) Regulations 2003 SI 1511
— Creosote (Prohibition on Use and Marketing) (No 2) (Amendment) Regulations 2003 SI 2650
— Environment Act 1995
— Environmental Protection Act 1990
— Pollution Prevention and Control Act 1999
— Environmental Licences (Suspension and Revocation) Regulations 1996 SI 508
— Environmental Protection (Applications, Appeals and Registers) Regulations 1991, SI 507
— Environmental Protection (Applications, Appeals and Registers) (Amendment) Regulations 1996, SI 667
— Environmental Protection (Applications, Appeals and Registers) (Amendment No 2) Regulations 1996, SI 979
— Environmental Protection (Authorisation of Processes) (Determination Periods) Order 1991, SI 513
— Environmental Protection (Authorisation of Processes) (Determination Periods) (Amendment) Order 1994, SI 2847
— Environmental Protection (Prescribed Processes and Substances) Regulations 1991, SI 472
— Environmental Protection (Prescribed Processes and Substances) (Amendment) Regulations 1992, SI 614
— Environmental Protection (Prescribed Processes and Substances) (Amendment) Regulations 1993, SI 1749
— Environmental Protection (Prescribed Processes and Substances) (Amendment) (No 2) Regulations 1993, SI 2405
— Environmental Protection (Prescribed Processes and Substances Etc) (Amendment) Regulations 1994, SI 1271
— Environmental Protection (Prescribed Processes and Substances Etc) (Amendment) (No 2) Regulations 1994, SI 1329
— Environmental Protection (Prescribed Processes and Substances) (Amendment) Regulations 1995, SI 3247
— Environmental Protection (Prescribed Processes and Substances) (Amendment) (Hazardous Waste Incineration) Regulations 1998, SI 767
— Environmental Protection (Prescribed Processes and Substances Etc) (Amendment) (Petrol Vapour Recovery) Regulations 1996, SI 267
— EU Regulation allowing voluntary participation by organisations in a community eco-management and audit scheme (EMAS) 761/2001
— Pollution Prevention and Control (England and Wales) Regulations 2000, SI 1973
— Pollution Prevention and Control (England and Wales) (Amendment) Regulations 2001, SI 503
— Pollution Prevention and Control (England and Wales) (Amendment) Regulations 2002, SI 275
— Pollution Prevention and Control (England and Wales) (Amendment) (No 2) Regulations 2002, SI 1702
— Pollution Prevention and Control (England and Wales) (Amendment) Regulations 2003, SI 1699
— Pollution Prevention and Control (England and Wales) (Amendment) (No 2) Regulations 2003, SI 3296
— Pollution Prevention and Control (England and Wales) (Amendment) and Connected Provisions Regulations 2004 SI 3276
— Pollution Prevention and Control (Unauthorised Part B Processes) (England and Wales) Regulations 2004, SI 434
— Pollution Prevention and Control (England and Wales) (Amendment) (England) Regulations 2006, SI 2311
— Pollution Prevention and Control (Public Participation) (England and Wales) Regulations 2005 SI 1448
— Pollution Prevention and Control (England and Wales) (Amendment) Regulations 2007 SI 713

Waste Legislation
— Control of Pollution (Amendment) Act 1989
— Clean Neighbourhoods and Environment Act 2005
— Environment Act 1995
— Environmental Protection Act 1990
— Controlled Waste Regulations 1992 SI 588
— Controlled Waste (Amendment) Regulations 1993 SI 566
— Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991 SI 1624
— Controlled Waste (Registration of Carriers and Seizure of Vehicles) (Amendment) Regulations 1998, SI 605
— End of Life Vehicles Regulations 2003, SI 2635
— End-of-Life Vehicles (Producer Responsibility) Regulations 2005 SI 263
— Environmental Protection (Duty of Care) Regulations 1991 SI 2839
— Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003 SI 63
— EU Regulation on the Supervision and Control of Shipments of Waste 259/1993
— EU Regulation laying down Health Rules concerning Animal By-Products not intended for Human Consumption 1774/2002
— Hazardous Waste (England and Wales) Regulations 2005, SI 894
— Landfill (England and Wales) Regulations 2002 SI 1559
— Landfill (England and Wales) (Amendment) Regulations 2004 SI 1375
— Landfill (England and Wales) (Amendment) Regulations 2005 SI 1640
— List of Wastes (England) (Amendment) Regulations 2005 SI 1673
— List of Wastes (England) Regulations 2005 SI 895
— Packaging (Essential Requirements) Regulations 2003 SI 1941
— Packaging (Essential Requirements) (Amendment) Regulations 2004 SI 1188
— Packaging (Essential Requirements) (Amendment) Regulations 2006 SI 1492
— Producer Responsibility Obligations (Packaging Waste) Regulations 2007 SI 871
— Transfrontier Shipment of Radioactive Waste Regulations 1993, SI 3031
— Transfrontier Shipment of Waste Regulations 1994 SI 1137
— Transfrontier Shipment of Waste (Amendment) Regulations 2005 SI 187
— Waste Electrical and Electronic Equipment Regulations 2006 SI 3289
— Waste Electrical and Electronic Equipment (Waste Management Licensing) (England and Wales) Regulations 2006 SI 3315
— Waste Electrical and Electronic Equipment (Waste Management Licensing) (England and Wales) (Amendment) Regulations 2007 SI 1085
— Waste Incineration (England and Wales) Regulations 2002, SI 2980
— Waste Management (England and Wales) Regulations 2006 SI 937
— Waste Management Licences (Consultation and Compensation) Regulations 1999, SI 481
— Waste Management Licensing Regulations 1994 SI 1056
— Waste Management Licensing (Amendment) Regulations 1995, SI 288
— Waste Management Licensing (Amendment No 2) Regulations 1995 SI 1950
Conclusion

5. At a meeting held at the LEWIS Media Centre on 9 May, (see Appendix A) 70 business delegates listened to a speaker panel of prominent thought leaders on the issues of sustainable technology. We concluded legislation to change businesses’ behaviour on the issues of Climate Change will be redundant before it receives the Royal Assent. Publicly-quoted companies already have a statutory obligation to report on their environmental impact. “Carbon footprint calculators” are already available, free and online for companies http://www.btplc.com/ClimateChange/ (BT) or individuals http://www.channel4.com/news/climate–change?cntsrc=rss–news–3105 (Channel Four).

6. For this legislation to have a positive response on the issues of climate change consolidation of the 249 pieces of legislation would be a worthy enterprise. Failure to do so will merely duplicate, and in some cases contradict, existing environmental legislation.

7. The worthy intention of taking a global lead and passing the first Climate Change Bill will be nothing more than “greenwash” if the Bill as it stands is not future-proofed. It is out-of-date already, as it stands.

LEWIS—Global Public Relations

May 2007

APPENDIX A

Link to LEWIS Industry Forum 9 May 2007:
http://files.lewispr.com/mailer/industryforum07/indextwo.html
INTRODUCTION

The Society of Motor Manufacturers and Traders (SMMT) is the leading trade association for the UK automotive industry, providing expert advice and information to its members as well as to external organisations. It represents more than 500 member companies ranging from vehicle manufacturers, component and material suppliers to power train providers and design engineers. The motor industry is a crucial sector of the UK economy, generating a manufacturing turnover of £47 billion, contributing well over 10% of the UK’s total exports and supporting around 800,000 jobs.

SMMT welcomes the opportunity to contribute to the pre-legislative scrutiny process for the Draft Climate Change Bill. The UK automotive industry recognises its role in addressing carbon dioxide (CO2) reduction across the life-cycle of its products. The objective of this Draft Bill is primarily the reduction of CO2 emissions and should remain so despite the lack of clarity and detail in some parts of the Bill and accompanying documents. SMMT has formulated this response through consultation with its membership and has endeavoured to keep its comments brief; however we are disappointed with the very short deadline for submissions. Should further information be required please do not hesitate to contact us on the details provided at the end of this submission.

COMMENTS ON TERMS OF REFERENCE

Targets

1. Multilateral carbon targets are preferable to unilateral targets, as climate change is a global issue. Both European and global carbon reduction targets must be considered in relation to the UK domestic targets outlined in the Draft Bill. However, the 2050 long-term objective target is a useful focus and approach to tackling this issue. The UK automotive sector considers the medium and long-range targets as ambitious; the sector needs long lead times for: technological development, planning processes, market transformation as well as consumer awareness and acceptability. All of these issues need to be developed in parallel to achieve these targets. The transport sector is recognised as being one of the most challenging sectors to de-carbonise; due to high technology costs and integration with fuel and power infrastructure.

2. We need to understand international objectives beyond 2012, prior to establishing potentially very ambitious medium range UK targets. The 26 to 32% range provides the essential flexibility.

3. Five-year budgetary period alignment with European Union Emissions Trading Scheme (EU ETS) is a rational approach, but it should be noted that starting a five-year period in 2008 would not give a clear message in 2020. Also, automotive sector investment cycles can be longer than five years. A system which does not recognise this will create investment uncertainty, and may jeopardise confidence in investing in carbon reduction technology, the investment in which is longer term.

4. Industry understands and is well placed to respond and recognise the concept of targets and monitoring. Applying this principle to non-business sectors will be difficult, as determining roles and responsibilities for targets and responding to market failure may be complex. From our experience, CO2 reduction strategy develops, not in a linear way, but early gains can be maintained, needing greater investment and resources over time.

Consumer confidence in targets, an understanding of them, long-term fiscal policy, incentives all need to be aligned to ensure targets are achieved. In our sector liquid petroleum gas (LPG) and Powershift grant system failed to achieve these objectives.

5. We need greater clarity and transparency with regard to the accountability and enforcement mechanisms, particularly on how they might apply and to whom, for an overall UK target.

Carbon Budgeting

6. Options to borrow or bank in carbon budgets would seem to give flexibility and recognise longer term investment cycles. However, it does reduce certainty for target achievement. We need greater clarity on how these budgetary options will work, be budgeted and any restraints on volumes to be carried back or forwards. Many potential achievements in CO2 reductions are based on patterns of consumption. This is difficult to predict with certainty as consumption habits will be influenced by externalities such as fiscal policy.

7. The business impact goes beyond the UK. A mechanism for recognising and rewarding CO2 reduction outside the UK appears logical, as climate change is a global issue. However, establishing boundaries and ensuring quality carbon reduction projects are considered will make the scheme more complicated. The Government’s 2000 Climate Change Programme said JI/CDM credits would count towards a national CO2 target and SMMT supports this approach due to the liquidity it gives the market, however appropriate standards of monitoring, reporting and verification of the mechanism is essential.
8. As previously mentioned, a range of externalities need to be considered when looking at budgets. We agree with the list of factors in the Draft Climate Change Bill (part 1, page 5, clause 5, and subsection 2). However, consumer acceptance of new technology should be added. In our experience this is fundamental to market transformation to reduce carbon emissions.

9. We support a clear, timely reporting procedure. Any measures to ensure this process should be discussed openly and transparently. Responsible government through parliamentary accountability is essential for a bill which impacts on a broad range of stakeholders and is a global issue.

Adaptation

10. Adaptation to climate change is fundamental and often overlooked. The UK automotive sectors involvement with UKCIP has highlighted issues such as working conditions and supply chain interruption as being vital to maintaining a competitive progressive industry in the UK. The bill does not appear to pay due regard to these issues and the need for strategies on coastal protection as an example.

Committee on Climate Change

11. We agree with the configuration of the Committee as outlined in the Draft Bill—it should be a tightly focused and lean group. It is unclear from the Draft Bill how long tenure will be for individual Committee members, but whilst a limit may be inappropriate, it is important that there are robust mechanisms in place to assess the work of each member. The Committee should consist of experts working with sound scientific and economic evidence, be independent, and avoid being politicised.

12. The Committee’s function should be an advisory one—and not be overburdened with bureaucracy. It must be able to advise the relevant Secretary of State, other Ministers and officials in an efficient and effective manner about the progress of reducing carbons and any changes that need to be made to improve the rate of reduction. The Draft Bill includes clauses on sub-committees, more detail on their purpose and relationship with the main Committee is essential. The remit and composition of these Committees must be decided in a transparent and clear manner.

13. The advisory duties in connection with carbon budgets of the Committee, as outlined in Part 2 of the Bill, are appropriate. Specifically regarding the contributions of individual sectors of the economy to carbon budgets, there should be clear representation of expertise in different sectors on the Committee.

14. The functions of the Committee outlined in the Draft Bill are specific, however the “duty to provide advice or other assistance on request” and supplementary provisions seem to give some flexibility to the Committee’s functions. It is difficult to assess adequacy until the composition and representative nature of the Committee is known.

15. We have no comment on the Committee’s resources.

Enabling powers

16. We do not support UK unilateral domestic trading schemes. This has the danger of breaching the principles of the EU common market.

International implications

17. It is widely recognised that there is a need for international action on climate change. There is a need for determined leadership on climate change; however this must be supported internationally not to disadvantage the competitiveness of UK business. Stern recognises the need for the success of global market mechanism to ensure climate change is addressed in a cost-effective way.

The Society of Motor Manufacturers and Traders (SMMT)

May 2007

Memorandum submitted by the Environment Agency (CCB 07)

INTRODUCTION

Background and Environment Agency role in climate change

The Environment Agency is the leading public body for protecting and improving the environment in England and Wales. It is our job to make sure that air, land, and water is looked after by everyone in today’s society, so that tomorrow’s generations inherit a cleaner, healthier world. Climate change is one of the nine priority themes in our Corporate Strategy. We play a major role in managing climate change, and regulate
around 45% of greenhouse gas emissions in England and Wales. We are the main competent authority for the EU Emissions Trading Scheme and have roles promoting the use of renewable energy. On adaptation, we are in the frontline with statutory responsibilities for the protection of air, land, water resources and quality, and biodiversity. Climate change has the capacity to undermine improvements that have been made in environmental protection, for example in water quality, fisheries and air quality. One of the major impacts of climate change is flooding, and we manage flood risk.

Overall response to the draft Bill

The Environment Agency has warmly welcomed the Bill and supports the four main pillars, including the targets and carbon budgeting, establishment of the Committee on Climate Change, independent carbon reporting and enabling powers for trading schemes.

We are currently developing a detailed response to the Government’s consultation, which will focus on two areas where the Agency has greatest expertise: compliance and adaptation. Given the timing of this inquiry, this evidence seeks to highlight areas where we feel Parliamentary scrutiny of the Bill would be most valuable, rather than setting out detailed policy positions.

Compliance with carbon budgets and targets

The Government is proposing two legally binding CO₂ reduction targets in the Bill itself, accompanied by a commitment to adopt a five-year carbon budget, based on the recommendations of the Committee on Climate Change. This Committee would recommend the next three sets of carbon budgets, every five years, so future Governments would have carbon budgets to meet in 2008–12, 2013–17, 2018–22 etc. We support this approach, including the targets suggested.

Most other statutory environmental targets in the UK are based on Directives agreed with other European Union Member States. If the UK misses these targets then the Government can be taken to the European Court and ultimately an infraction fine can be imposed. This is a sanction all EU Member States face and have agreed. It is well established and understood. We know that it does act as an effective tool to ensure implementation of targets. As the Climate Change Bill targets are unilateral, such a sanction cannot be applied in the same way. The question that should be addressed by Parliament is whether an equivalent enforcement mechanism is defined at a national level, so that the statutory carbon targets have at least the same legal weight as other EU agreed statutory environmental targets.

The consultation paper states that if the Government fails to meet either its statutory target in 2020 or its five-year carbon budget, then it will be open to Judicial Review. However, it is not yet clear what action any Government might face as a result of such a Review, and it would be useful for the Committee to explore what the options may be. At what point could a court declare that any given Secretary of State had not complied with their legal duty? There is also a very important role for Parliament itself to play in holding the Government to account on carbon targets.

It is clear in the consultation that the Government would have the ability to deliver part of its targets through the use of international carbon credits, such as Clean Development Mechanism (CDM), joint Implementation (JI), or other international emissions trading schemes. If the Government were likely to miss a carbon budget, one option would be to simply meet the shortfall by purchasing more international carbon credits. Such a decision would have to be taken only after the Committee on Climate Change had been consulted. This is a legitimate way of reducing carbon emissions, but relying too heavily on this mechanism, could undermine any international leadership created by setting unilateral targets in the first place. Again, a detailed debate on this issue would be a valuable piece of parliamentary scrutiny.

Flexibility in reviewing carbon budgets

The Government has proposed a number of flexibilities to be built into the carbon budgeting system. We support the idea of limited banking and borrowing, as Government could only use these facilities after seeking, and taking into account, the advice of the Committee on Climate Change.

Carbon budgets could also be reviewed if there were significant changes in circumstances. The consultation provides two examples of changes that might trigger a review, if aviation were included in the EU ETS, or a significant shift in fuel prices that changed the basis for emissions forecasts that were initially set. Such changes could only be made on the advice of the Committee on Climate Change and approval of Parliament by the affirmative resolution procedure.

The issue for Parliament to scrutinise is exactly what type of changes would be regarded as significant. There is a proposal, backed by the UK, for aviation to come into the EU ETS in 2011, so in the timescale of the first carbon budget. What constitutes a significant change in energy prices? Would, for example, the recent increases in gas price, have been regarded as a trigger to review a carbon budget? Could the Judicial Review mechanism be used by interest groups, either large emitters or campaigning NGOs, go to the courts to argue that the carbon budget should be reviewed?
Adaptation

The Bill pledges a five yearly review of adaptation policy with a statutory report to Parliament. This will strengthen the developing Adaptation Policy Framework and we have warmly welcomed the inclusion of adaptation into the Bill.

Our response to the Government consultation will go into some of the detail of how this review should be conducted and how it links to the current governance of the Adaptation Policy Framework. We do not believe further powers are required, but some thought should be given to the timing of the review publication in relation to Committee on Climate Change recommendations for future five-year carbon budgets. Having a major Government report on the impacts and adaptation to climate change coming out in advance of a public debate and Government decision on future carbon budgets, should help focus minds on the urgency of carbon reduction.

Enabling powers for trading

The Bill proposes allowing the Government to take enabling powers to set up carbon trading schemes, which have so far been established using primary legislation. This would speed up the establishment of future trading schemes, such as the Energy Performance Commitment, whilst making no presumption that such an instrument would actually be introduced. The powers would allow most functions of a trading scheme to be established through secondary legislation, with the exception of revenue raising allocations, like auctioning, which are traditionally provided through the annual Finance Bill. We welcome all of these powers as they will make implementation simpler.

The consultation states that the role of devolved administrations in the proposed new powers would need further consideration. This is a good area for further Parliamentary scrutiny.

Environment Agency

May 2007

Memorandum submitted by the Aviation Environment Federation (CCB 08)

The Aviation Environment Federation (AEF) welcomes the opportunity to respond to the EFRA Committee enquiry scrutinising the Draft Climate Change Bill. AEF is the UK’s only national NGO working exclusively on controlling and reducing the environmental impacts of aviation, and as such we will confine our response to one of the Committee’s questions which is relevant to the sector.

Executive Summary

The Committee has asked for comment on “the validity of the Government’s domestic targets to reduce CO2 emissions by 60% below 1990 baseline levels by 2050” (Question 1). We have two points to make in relation to the 60% target.

Firstly, the headline target of a 60% cut in carbon emissions should be strengthened to an 80% cut in accordance with the latest recommendations of climate scientists.

Secondly, both 2020 and 2050 targets should include emissions from international aviation and shipping from the outset. These should be calculated according to IPCC guidelines for reporting emissions from international bunker fuels—something the UK already does, since it is obliged under the Kyoto Protocol to report these emissions as a Memo Item to its national Greenhouse Gas Inventory.

1. In common with over 50 environment, development and faith groups that form the Stop Climate Chaos coalition, we are calling on the Government to adopt a target of at least an 80% cut in CO2 emissions below the 1990 baseline.

1.1 This would represent the UK’s equitable share towards stabilisation of atmospheric CO2 at 450 ppmv, which the latest climate science indicates is necessary to yield a reasonable chance of limiting global surface temperature rise to 2°C—the declared objective of the UK, the EU and the UN. The target should be subject to review by the Committee on Climate Change as the science develops.

1.2 We will not labour this point as we anticipate that other environmental groups will deal with it in much greater detail.

2. Whatever cut is adopted in the Bill, it cannot be regarded as valid if it excludes emissions from international aviation and shipping.¹

¹ As a specialist aviation organisation, our comments will focus on this sector. Our NGO colleagues with an interest in maritime environmental issues report that emissions from international shipping, could and should, be treated in the same way.
2.1 The scale of the problem

2.1.1 Aviation is the fastest-growing source of greenhouse gas emissions in the UK. Without action to tackle emissions, the sector is on course to use up a significant fraction of the UK’s entire carbon budget. Even the Department for Transport’s own projections show that aviation will emit 17.4 million tonnes of carbon (MtC) in 2050, equivalent to 26% of the UK total carbon allowance under a 60% cut. Two other projections, by the Tyndall Centre for Climate Change Research and by Owen and Lee for Defra put the figures rather higher. (Under an 80% cut, each of these percentages would of course be doubled.)

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<th>60% cut</th>
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<tr>
<td>DfT</td>
<td>26%</td>
<td>52%</td>
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<tr>
<td>Owen and Lee</td>
<td>44%</td>
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<td>Tyndall</td>
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Aviation’s share of overall UK emissions under a range of scenarios

(The lower estimates of Owen and Lee have been used; furthermore their figures are for scheduled traffic only and therefore under estimates.)

2.1.2 Self-evidently, no target can be regarded as valid if it ignores such a significant source of emissions.

2.2 The Bill as it stands

2.2.1 The Draft Climate Change Bill excludes emissions from international aviation and shipping from the 2020 and 2050 targets, on the grounds that there is no international agreement on how to allocate these emissions to individual states.

2.2.2 Section 15 Clause (3) makes provision for including these emissions “if there is a change in international carbon reporting practice”. In the Consultation Document accompanying the Draft Bill, this is enlarged upon: “for example, if emissions from international aviation and/or shipping are included in emissions reductions targets in the future.”

2.2.3 Furthermore, Section 15 Clauses (4) and (5) make provision for including such emissions using a different base year and “provide for the emissions in that year . . . to be taken into account as if part of the 1990 baseline.”

2.2.4 In other words, it is envisaged that as and when international agreement is reached on aviation and/or shipping emissions, the overall target will be relaxed in order to accommodate them.

2.3 Problems with this approach

2.3.1 In AEF’s opinion reaching an agreement is a distant prospect: both methodological and highly sensitive political issues remain to be resolved, and while Europe continues to press for the resumption of talks at the UNFCCC’s Subsidiary Body for Scientific and Technical Advice (SBSTA), certain states (notably Saudi Arabia), remain uncooperative. Without consensus, international progress in this forum is effectively blocked.

2.3.2 Nor would aviation’s inclusion within the EU ETS necessarily constitute “a change in international carbon reporting practice”, for the following reasons:

— the proposed scheme would cover all flights arriving and departing the UK—not an allocation option proposed by SBSTA, nor one that any government would accept for its own targets, since if it were adopted globally there would be double counting;

— the European Commission will only work out Member States’ emissions for the purposes of allocating permits, ie their emissions in the baseline year (currently an average of 2004–06 is proposed). Emissions for years when the scheme is operating will be reported by individual airlines, the entities required to surrender permits. With centralised allocation there will be no equivalent of a state-level NAP and emissions will not necessarily be aggregated at Member State level;

— emissions may well only be reported over five-year trading periods, rather than for each calendar year.

2

3 These figures take no account of the non-CO₂ effects of aviation, which increase its total impact on the climate by between two and four times, according to the IPCCs 1999 report Aviation and the Global Atmosphere. Some uncertainty remains over the exact quantification of these effects, and so far as long as the Bill in general only accounts for CO₂ and not other Kyoto gases, for consistency we accept the rationale for the non-CO₂ effects of aviation to be excluded. These effects do, however, significantly increase the urgency of bringing aviation within a framework for tackling climate change.

4 Note 29 to para 5.23.
2.3.3 So the inclusion of international aviation emissions within the UKs targets cannot be regarded as “just around the corner”. International agreement could well be a decade away. International aviation already accounts for 5.9% of the UK’s carbon emissions and the industry is growing rapidly; the later emissions are included, the greater the shock to the system; or, the more the target will have to be diluted to accommodate them.

2.3.4 The emissions pathways set out in the Climate Change Bill are calculated to achieve a given CO₂ stabilisation target. Just as the stabilisation aim cannot be achieved with one source of emissions excluded, it cannot be achieved with that source included on a different, laxer basis. The crucial factor in tackling climate change is not simply arriving at a given reduction target but the cumulative stock of greenhouse gases in the atmosphere. The Bill’s proposed trajectory would therefore be invalidated if aviation emissions were incorporated into the 2020 and 2050 targets at a higher level than emissions from other sectors.

2.3.5 Alterations to the UK’s climate targets also undermine the certainty that investors require when taking long-term decisions; this is particularly the case in an industry such as aviation where capital stock is expensive and long-lived.

2.4 An alternative approach

2.4.1 Although there is little prospect of international consensus on allocation for the purposes of binding targets in the short-term, the Intergovernmental Panel on Climate Change publishes internationally-accepted guidelines to States on how to report emissions from international bunker fuels. The UK is required to submit this information as a memo item to UNFCCC along with our annual GHG inventory, and accordingly the Government has for several years compiled and reported official figures for emissions from international aviation.5

2.4.2 The official Netcen figures go back to 1990 and so could be used to include aviation emissions on the same basis as other sectors from the moment the Bill becomes law.

2.4.1 It could be argued that the practices set out in these guidelines do already constitute “international carbon reporting practice”. The term is defined in Section 38 of the Draft Bill as “accepted practice in relation to reporting for the purposes of the protocols to the United Nations Framework Convention on Climate Change”, and one such purpose is “the limitation or reduction of emissions of greenhouse gases . . . from aviation and marine bunker fuels”.6 In this case, emissions from international bunker fuels do not constitute a special case at all, and the whole of section 15 of the Draft Bill could be deleted. Targets could then be modified to accommodate changes in international policy under the provisions set out for other sectors in Section 3 Clauses (3) and (4).

2.4.4 Alternatively, it could be argued that for the purposes of a domestic target, the UK does not need international consensus. In this case, Section 15 should be amended, requiring the Secretary of State to make special provisions for aviation and shipping straightaway, in accordance with IPCC guidelines. Any flexibility as to the baseline year should be removed, but some flexibility should be retained to alter these provisions should international policy change.

2.4.5 Whichever method is adopted, the recalculation of targets and realignment of emissions pathways necessary when international consensus is finally reached is likely to be an order of magnitude smaller than if aviation were then included for the first time. In addition to the obvious environmental advantages, there would be greater certainty for businesses and investors, who are less likely to over-invest in carbon-intensive infrastructure if clear long-term signals are given from the outset.

Aviation Environment Federation

May 2007

Memorandum submitted by E.ON UK (CCB 12)

KEY POINTS

— E.ON UK supports the proposed CO₂ reduction targets, although it would be helpful if the Government clarified the basis for the proposed 2020 target. These statutory targets will help the development of a stable, long-term policy framework for low carbon investment and strengthen the UK’s leadership position on climate change. The Government must put in place the right long term policies to deliver the targets.

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5 Historical emissions back to 1990 are reported by Netcen for the UK GHG inventory on the basis of fuel uplifted in the UK. Since 2006, IPCC guidelines have offered states the possibility of estimating emissions on a route-by-route basis, the so-called Tier 3 methodology. It is as yet unclear whether Defra has instructed Netcen to use this method. The DfT accepts emissions calculated from fuel sales as a good approximation for emissions from all flights departing the UK, treating the historical data and its own forecasts (based on all departing flights) as a seamless whole.

6 Kyoto Protocol to the United Nations Framework Convention on Climate Change, Article 2.2.
Sufficient flexibility in target setting is required to take account of both natural and economic variables and to avoid disruptive short term Government interventions which might be required to deliver more rigid targets. However, excessive flexibility could adversely affect environmental integrity and regulatory certainty. We believe the proposed five-year budgets and associated rules for banking and borrowing provide broadly the right balance.

The legal duty to meet the UK targets and the consequent threat of Judicial Review, combined with enhanced monitoring and analysis provided by the Climate Change Committee, should provide an appropriate incentive for the Government to comply.

The burden of carbon reductions should be spread equitably across the economy. There needs to be clarification and transparency concerning the effort expected from both the traded (ie those activities covered by the EU emissions trading scheme (EU ETS)) and the non-traded sectors.

Some overseas emissions reductions should be permitted to contribute toward the UK targets, given that climate change is a global problem and emission reductions may be achievable more cost-effectively outside the UK. This would also help ensure consistency with the EU ETS which is a primary mechanism for driving emission reductions.

If unnecessary instability within the EU ETS is to be avoided, the Government should signal the extent to which they intend to use overseas emissions reduction to deliver national targets and purchases must be made in a predictable manner.

We support the Government’s consideration of broad ranging traded mechanisms and the commitment to consult fully on any measures to be introduced under new “enabling” powers.

INTRODUCTION

1. E.ON UK is the UK’s second largest retailer of electricity and gas, selling to residential and small business customers as Powergen and to larger industrial and commercial customers as E.ON Energy. We are also one of the UK’s largest electricity generators by output and operate Central Networks, the distribution business covering the East and West Midlands. We are also a leading developer of renewable plant, including biomass generation. By 2012 we aim to achieve a 10% reduction in carbon intensity—the amount of carbon emitted per unit of electricity we produce—compared to 2005 levels.

2. We welcome the opportunity to contribute to this Committee inquiry. E.ON UK firmly believes that by establishing a legal framework to ensure the delivery of the UKs’ greenhouse gas reduction targets, the draft Climate Change Bill is a necessary, timely and highly significant piece of legislation.

TARGETS

(i) The validity of the Government’s domestic targets to:

- reduce CO₂ emissions by 60% below 1990 baseline levels by 2050, and
- reduce CO₂ emissions by 26–32% below 1990 baseline levels by 2020.

3. E.ON UK supports the Government’s proposed CO₂ reduction targets. These statutory targets will facilitate the development of a stable and long term policy framework to support the necessary investment. It would be helpful if the Government clarified the basis for the proposed 2020 target but it is clear that reductions of this order will be required if the 2050 target is to be met. The adequacy of these targets needs to be kept under review in the light of changes in scientific evidence and the level of international co-operation.

4. The adoption of robust targets will also strengthen the UK’s leadership position on climate change. The ongoing international negotiations to develop an enduring and global greenhouse gas reduction agreement are crucial if the worst effects of climate change are to be avoided. In addition, if the UK economy is to deliver the necessary CO₂ emissions reductions efficiently, it is vital that the Government has the right long-term policies in place to deliver the targets. This means:

- effective and equitable burden sharing across all sectors in the UK;
- a robust EU Emissions Trading Scheme (EU ETS) which delivers a substantive carbon price from 2012, with a more harmonised approach across the EU;
- incorporation of new trading schemes (where compatible with efficiency and environmental integrity of the EU ETS);
- continued co-operation with and technology transfer to developing nations;
- the development of new policy measures to achieve energy efficiency improvements;
- ensuring the availability of a wide range of low carbon investment to the UK power sector; and
- a planning framework which supports timely and efficient investment while allowing proper public scrutiny.
(ii) Why the carbon budget for the period including the year 2020 cannot exceed 32%

5. Whilst the draft Bill does not permit the carbon budget containing the year 2020 to exceed CO₂ emissions reductions of more than 32%, this is not to suggest that actual emissions reductions across the economy will not be able to go beyond this level. The current proposals allow for an over achievement to be taken into consideration through the banking arrangements, enabling excess emissions rights to be carried forward to future years.

6. In addition the ability for the statutory targets to be reviewed and revised with Parliamentary approval, subject to new scientific knowledge or international law and policy, provides sufficient flexibility to create a new 2020 target should specific circumstances demand such a change.

(iii) The rationale for a five year budgetary period

7. It is not the CO₂ emissions from a specific year that will determine the effects of climate change, but rather the level of emissions over time. With this in mind, we believe that the carbon budgetary periods strike the right balance between ensuring progress towards the reduction goal and measuring the effectiveness of long-term Government policies to achieve CO₂ emission reductions, whilst permitting reasonable flexibility in delivery.

8. The flexibility provided by banking and borrowing provisions within budgetary periods along with limited banking and borrowing between budgetary periods will ensure that variables such as weather, global fuel prices and other global economic factors can be taken into account and will avoid the need for short-term disruptive intervention to achieve more rigid targets.

9. We consider a methodology incorporating carbon budgetary periods to be superior to one which adopts annual targets.

(iv) Monitoring and early warning systems to ensure achievement of targets is on track

10. We support the proposed approach. A five year carbon budget provides a meaningful measure of the UK’s progress towards the statutory emissions reduction targets without incurring the bureaucracy or costly short term policy interventions which could result from an annual carbon target.

(v) Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non-compliance

11. The legal duty to meet the UK targets and the subsequent threat of Judicial Review, combined with enhanced monitoring and analysis provided by the Climate Change Committee, should provide an appropriate incentive for the Government to comply.

CARBON BUDGETING

(vi) The facility—in any given budgetary period—to “borrow” emissions rights from a subsequent period, or to “bank” any “surplus” emissions reductions for use in the next budgetary period

12. E.ON UK supports this approach. In order to reach the desired CO₂ reduction target in the most economically efficient manner we believe it to be sensible to permit the banking of emissions rights both within and between budgetary periods. We recognize that the ability to bank emissions rights may exacerbate a situation where an unnecessarily high budget has been set in an early period, thus smearing an over allocation across a number of years or carbon periods. However, as the Government have proposed the revision of the budgets in the event that there is a significant change of circumstances, we do not believe that this is a major concern. We would therefore support unlimited banking within and between carbon budget periods.

13. We also believe that borrowing within budgetary periods should be permitted provided that this is limited. Future years within a period must not be left so depleted as to make the need for further borrowing a certainty. As for borrowing from future budgetary periods, this concept requires a great deal of caution. If the approach is to retain environmental integrity, it is essential that the interim budgets are seen to deliver progress en route to meeting the statutory CO₂ emission reductions.

14. Nevertheless we can foresee a circumstance where an unexpected occurrence, such as unusually cold weather, could result in the release of excess CO₂ emissions in the final year of a budget period. We therefore consider that a limited level of borrowing should be permitted between periods.
The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources

15. As a developed nation wishing to show leadership in tackling climate change, it is important that a high proportion of emissions reductions take place within the UK. This is a moral obligation as well as a reflection of the global reduction effort which is required to mitigate the worst effects of climate change. We do agree, however, that some overseas emissions reductions should be permitted to count against the UK targets. This provides additional flexibility to ensure that overall global reductions are achieved in the most efficient manner possible, whilst contributing a fair share to the reduction effort. The use of Kyoto’s flexible mechanisms would also be consistent with the EU ETS and should encourage technology transfer to developing nations.

16. There needs to be recognition that the purchase by Government of project credits to deliver the targets specified in the Climate Change Bill could have a significant impact on the stability of the carbon market and could affect its reliability as a trading mechanism. We therefore believe that the decision to purchase project credits should be transparent and signalled well in advance. In addition, to avoid the creation of instability within the EU ETS, the purchase of overseas reductions must be undertaken in a predictable manner.

The range and validity of changes in circumstances in which budgets can be subject to review and revision

17. A robust and stable regulatory framework is essential. On this basis we are pleased that the carbon trajectory will be set for 15 years into the future. Otherwise the regulatory framework could be significantly undermined by repeated revisions to the carbon budgets. Conversely it would be inappropriate to commit the UK to an unchangeable set of targets prior to the conclusion of international negotiations aimed at reaching a climate change agreement. It therefore seems sensible to leave a level of flexibility in the interim period by enabling a revision of the carbon budgets “should significant developments in relevant circumstances” arise.

18. The requirement for advice from the Committee on Climate Change along with the agreement of Parliament prior to amending carbon budgets, should ensure that revisions are only undertaken where clearly necessary.

The reporting procedure and Parliamentary accountability

19. We note the inclusion of the Committee on Climate Change in the annual reporting process (subsequent to the Climate Change and Sustainable Energy Act 2006) and believe that this arrangement should improve the annual report on progress. The independent nature of the Committee should enhance confidence in the findings and the recommendations of the assessment.

20. The annual report and the five yearly Compliance Statement by the Government, should serve not only to provide business with an updated carbon trajectory, but also to increase the public profile of the UK’s carbon budget.

Adaptation

Whether adequate provision is made within the Bill to address adaptation to climate change

21. Given that CO2 can persist in the earth’s atmosphere for hundreds of years, some effects from higher CO2 emissions are inevitable. On this basis, it is important that the UK Government supports co-ordinated and prioritised investment in adaptation measures. The proposal in the Draft Bill will provide a discipline on Government to report on action it has taken and we are not aware of any further legal measures which are required.

Committee on Climate Change

Its composition and appointment, including length of tenure and degree of independence

22. The appointment of a Non-Departmental Public Body to consider and advise the UK Government on the appropriate carbon trajectory is an important development. The Climate Change Committee will need to provide a coherent, comprehensive and independent analysis of the UK’s approach and progress towards meeting its targets.

23. The ability of the Committee to deliver successfully the stated functions will be dependent upon the composition of the panel. A balance of practical and academic experience is required, covering economics, business management, environmental and social science.
24. We understand that the Committee will be required to advise the Government on the level of reduction effort to be achieved by overseas emission reductions, the traded sector and the non-traded sector. We very much support the clarity that this would provide for each sector. The challenge of climate change necessitates equitable burden sharing across all sectors of the economy.

25. We believe that the proposed technical advisory role will enable the Committee to inform Government policy sufficiently and that it is for Government to determine actual carbon budgets as this is fundamentally a political decision involving a number of trade offs. The CO$_2$ emissions trajectory, as developed by the Committee, should be used by Government to create a long term carbon policy framework to facilitate emissions reductions in the most economically efficient fashion.

26. We agree with the range of functions ascribed to the Committee which will focus the Committee on the most important issue, that of the carbon trajectory.

27. We have no comments on the resources available to the Committee.

28. Market based mechanisms offer the most efficient methodology for reducing greenhouse gases in that they deliver the required outcomes while providing flexibility of delivery and encouraging innovation. We support the proposed enabling powers to facilitate the creation of new greenhouse gas emission or related trading schemes on the basis that they are likely to have common design features. However there must be full public consultation on the design of schemes the Government wishes to propose and continued Parliamentary oversight of this process.

29. The Draft Bill seeks to establish the first national legal framework to deliver specific reductions in CO$_2$ emissions. On this basis, the Bill should help the UK demonstrate leadership and have some positive effect on the UK’s ability to influence international climate change policy post 2012. However, the ability of the UK to drive international climate change policy will be dependent in the longer term on its ability to demonstrate that it can deliver the targets while maintaining economic growth and a competitive economy.

30. We do not think so.
Memorandum submitted by the Commercial Boat Operators Association (CCB 13)

1. Who We Are and What We Do

1.1 The Commercial Boat Operators Association (CBOA) is a trade association representing firms which carry cargo and provide engineering services on Britain’s inland waterways. We have 175 members, including associates.

1.2 Department for Transport statistics showed that 48.7 million metric tonnes were carried on the waterways in 2005 including the inland part of major estuaries.

1.3 Cargoes carried include aggregates, fuel oil, grain, rice, steel industry materials and products, residual domestic waste, abnormal indivisible loads (such as power station generators) and bagged domestic coal.

1.4 Many operators’ craft can carry 500 tonnes or more—taking the equivalent of 25 20-tonne capacity lorries off the road.

1.5 Water transport can play an important role in reducing lorry traffic. It is far more environmentally friendly:
   - Emits 80% less CO2 per tonne kilometre than road haulage.
   - Is a far better user of energy resources

1.6 Road congestion is an increasing problem for industry, regardless of pollution aspects. In congested urban areas in the conurbations and elsewhere, water transport can help to relieve congestion.

2. The CBOA’s Evidence

2.1 As an Association we struggle to understand the thinking that drives EFRA Ministers. The Secretary of State has made it clear his own department and all government departments have to do more to tackle climate change.

2.2 David Miliband has stated that DEFRA must to develop more policies itself to tackle climate change and yet, in his own department, he has failed to implement policies that would make a significant impact now.

2.3 DEFRA has Departmental responsibility for British Waterways who manage some 2,000 miles of navigations. These include 340 miles designated for commercial use and which link to the major estuaries. They also include long lock free sections going through congested urban areas, such as London, Birmingham and the Black Country, Liverpool and Coventry.

2.4 West Midlands officials put the cost of road congestion at up to £2.3 million a year. As a result, they have commissioned a study on how goods can be put back onto water.

2.5 However, DEFRA has done nothing to encourage British Waterways to get more goods off the roads.

2.6 This is evidenced by the closure of British Waterways central Freight Development Department, which the Committee heard evidence about in a recent Inquiry into British Waterways and the impact on them of cuts in their grant from DEFRA.

2.7 At a meeting between CBOA and British Waterways’ senior management earlier this year, it was made clear that the DEFRA cuts had made British Waterways close down their central freight development activities; devolving to the regions where no-one has freight use promotion as their sole job is no replacement.

2.8 British Waterways’ senior management made it clear that unless the Government provided the money, they could not provide the services.

2.9 It seems to the CBOA that there is little point in the grandiose flagship schemes if you have not tackled small but significant areas that are in your remit and do not require legislation. An immediate action would be to reinstate the funding required for the reinstatement of the freight marketing team at British Waterways; this has been costed at only £150,000.

2.10 In its recent Inquiry into British Waterways the EFRA sub committee heard evidence that waterborne freight is six times more environmentally friendly than road borne freight and yet the recent actions of DEFRA have led to more lorry movements rather than more waterborne movements.

2.11 DEFRA must take a lead by incentivising the Navigation Authorities and the private sector to use the inland waterway network as a means to carry freight.

2.12 There is significant scope to increase the amount of freight carried on UK inland waterways, much of which would lead to an actual reduction in lorry journeys. Many of these would be taken off our already congested city centres or motorways.

2.13 In addition, it appears to us that the Climate Change Bill does not consider how to reduce pollution from the transport sector. This is surprising in view of David Miliband’s comments early in March 2007 that:

(a) transport emissions account for 24% of CO2 emissions;
Environment, Food and Rural Affairs Committee: Evidence

(b) transport emissions are rising faster than any other industry, rising 10% between 1990 and 2004;
(c) rising emissions from road transport are the main reason why the UK will fall short of its 2010
target to get CO2 from 1990 levels; and
(d) rail and road transport should be included in the EU emissions trading scheme after 2012.

3. IN CONCLUSION

3.1 The CBOA supports much of what is being proposed within the Climate Change Bill. However, we
do believe that DEFRA should get its own house in order by taking some small but significant steps within
its own area of influence, such as taking the lead before it starts agitating for others to change their actions.

3.2 The CBOA would like to see the Bill focus more on covering how transport emissions can be reduced
through investment in the use of water transport.

Commercial Boat Operators Association
May 2007

Memorandum submitted by Drax Power Limited (CCB 14)

EXECUTIVE SUMMARY

1. The Draft Bill addresses a number of the key requirements necessary to deliver certainty, predictability
and long term focus to the energy policy framework. Drax has long advocated that these requirements of
the policy framework are essential to secure the confidence to allow major investment decisions to be taken
and to enable market players in the energy sector to address the environmental challenge and to make a
meaningful contribution to moving the UK towards a low carbon economy.

2. Full and careful consideration needs to be afforded to the interaction between EU-driven and domestic
targets for emissions reduction. A well thought out and coherent policy delivering change throughout the
economic spectrum, cognisant of technological and market constraints and opportunities should be the aim.

3. The EU ETS has a critical role to play and should form the mainstay of the policy mechanism to deliver
against targets. As an over-riding principle, the Draft Bill’s targets and policy framework should not conflict
with the EU ETS policy mechanism.

4. Regulatory certainty is critical to sectors that are characterised by major, long term investment. The
scope of the enabling powers should carefully balance the downside of reducing regulatory certainty with
the upside of allowing timely change.

INTRODUCTION

5. Drax Power Limited ("Drax") is the owner and operator of Drax Power Station, the largest, cleanest
and most efficient coal-fired power station in the UK. Drax trades its electricity in the wholesale electricity
market and at current output levels it supplies some 7% of the UKs electricity needs.

6. Drax is pleased to have the opportunity to participate in the Committee’s inquiry, as a major emitter
of carbon as well being a company with ambitious plans for lowering its emissions, we consider that we are
well placed to comment on some aspects of the Draft Climate Change Bill (the “Draft Bill”).

COAL-FIRED GENERATION AND CLIMATE CHANGE

7. The challenge for coal-fired generation is environmental and the major constraint is carbon. As the
country moves towards a low carbon economy the focus must be on reducing emissions of carbon dioxide
("CO2"). There is considerable scope for improving the environmental performance of coal-fired plants,
which means that the security of supply benefits of coal-fired generation need not be enjoyed at the expense
of the environment.

8. In order to achieve this potential there are certain barriers to overcome. Above all, a stable and
predictable long-term energy policy framework is essential to provide investors with the confidence to make
the significant investments that are necessary to address the environmental challenge. Critical to achieving
such a framework is clarity and certainty in the EU ETS beyond 2012.

9. Equally important is that energy and environmental policies, in their widest sense, should be fully
integrated and consistent, and targets and objectives clearly stated; the market should then decide and
deliver efficient solutions.

10. Drax, therefore, welcomes much of the Draft Bill in that it provides a framework and clear targets
for CO2 reduction. The following gives comments on specific aspects of the Draft Bill.
TARGETS

11. The Draft Bill sets targets and a long term framework which together have the potential to move Government policy from its current short term outlook to a programme providing a clear framework for CO2 reduction into the long term, well beyond 2012.

12. Carbon targets need to be agreed into the long term, sufficiently far ahead to provide confidence in investment decisions. A 15 year time horizon should be sufficient to complement the investment cycles typical of the electricity industry and also complement the EU ETS.

13. There is a concern that sectors covered by EU driven legislation, such as the EU ETS, run the risk of double jeopardy through the introduction of statutory targets enshrined in UK legislation. UK companies should not be faced with managing CO2 reductions through both EU and UK market instruments and controls. This would be over burdensome, in terms of the administrative practicalities, and potentially serve to confuse.

14. It is not clear how setting legally binding domestic targets will work alongside EU-driven schemes unless domestic targets have a clear linkage to EU targets. This has implications for the use of allowances or project credits from overseas as this would create a false picture of action within the UK.

15. It is critical that the EU ETS forms the mainstay of the policy mechanism to deliver against targets. As an over-riding principle, the Draft Bill’s targets and policy framework should not conflict with the EU ETS policy mechanism.

16. Through the provision of a framework, the Draft Bill should signpost and assess the effectiveness of mechanisms which together deliver a well thought out and coherent policy delivering change throughout the economic spectrum, cognisant of technological and market constraints and opportunities.

17. Market factors and influences should not be overlooked. Taking the energy sector as an example, there are huge uncertainties over the availability of gas and the capability of the UK to develop renewables and nuclear power, which alongside the need for reliable and secure energy supplies are all to be worked out within a competitive market place.

CARBON BUDGETING

18. Given the above it is, therefore, sensible to set five-year carbon budgets. The five year periods provide a sufficient period of certainty—five year business plans are not uncommon to industry—within a longer term framework, and allow time for practical experience to inform longer term aspirations and subsequent budget periods.

19. Setting three budgets ahead (covering 15 years) fits well with energy sector investment cycles. Carbon reduction targets need to be stable and realistic. Long term, stable basic rules for target setting and policy review are essential if the objectives of the Draft Bill are to be achieved.

20. Flexibility should be built into the overall process. Markets can change and well-meaning intentions can fail due to changes in these markets—as discovered through projections that the aspirational target of a 20% reduction by 2010 will not be met.

21. The corollary of the above is that the enforcement mechanisms within the Draft Bill need to be changes to policy mechanisms and regulatory frameworks rather than financial penalties on individual sites or companies. We note the example of the EU ETS which does not set limits on individual plant but provides an EU-wide cap with allocations and trading systems which allow companies to emit CO2 whilst ensuring that costs are integrated into business decisions.

COMMITTEE ON CLIMATE CHANGE

22. The establishment of a dedicated Committee, that is independent of the Government, to advise on the specifics of policies to reduce CO2 emissions is sensible.

23. Reporting will be a key requirement of the committee and necessary to allow communication of the performance against targets and importantly to signal any changes required to deal with market “shocks” or underperformance.

ENABLING POWERS

24. Regulatory certainty is critical to sectors that are characterised by major, long term investment. The ability to effect change with relative ease may serve to undermine the certainty established through the long term focus of the Draft Bill. However, the ability to effect change in a timely manner through secondary legislation does have merit, provided full consultation and regulatory impact assessments accompany the use of these powers.
INTERNATIONAL IMPLICATIONS

25. The Government is sending a clear signal of the importance it attaches to recognising and tackling climate change and in so doing demonstrating clear leadership.

26. Whilst demonstrating international leadership through fully embracing targets to tackle climate change, it is essential that harmonisation of effort throughout the EU is achieved if the EU ETS is to succeed and CO\textsubscript{2} reduction targets are to be met.

27. In the absence of any leadership it is questioned whether the necessary international agreements will be made to address what is a global issue.

CONCLUSIONS

28. The following conclusions are drawn:

(i) The Draft Bill addresses a number of the key requirements necessary to deliver certainty, predictability and long term focus to the energy policy framework. Drax has long advocated that these requirements of the policy framework are essential to secure the confidence to allow major investment decisions to be taken and to enable market players in the energy sector to address the environmental challenge and to make a meaningful contribution to moving the UK towards a low carbon economy.

(ii) The potential for conflict between EU driven and domestic targets needs full consideration. Imposing unnecessary burdens on certain sectors must be avoided.

(iii) The EU ETS has a critical role to play and should form the mainstay of the policy mechanism to deliver against targets.

(iv) The scope of the enabling powers should carefully balance the downside of reducing regulatory certainty with the upside of allowing timely change.

Drax Power Limited

May 2007

Memorandum submitted by the British Cement Association (CCB 16)

EXECUTIVE SUMMARY

1. Long-term greenhouse gas (not just CO\textsubscript{2}) targets are needed to address climate change and give all aspects of the economy certainty over policy goals.

2. The Climate Change Bill targets should include aviation and shipping to ensure that all sectors contribute to climate change mitigation.

3. Significant carbon dioxide reduction has already been delivered in the UK cement industry and with its carbon strategy the UK cement industry is aiming for further savings. Short to medium term CO\textsubscript{2} reductions will be relatively small. Larger savings could only be achieved through CCS (carbon capture and storage) and this would be dependant on a pipeline infrastructure being put in place by Government and the ability to pass the additional cost of capture through customers. These can only be made with the correct regulatory and market frameworks where new investment is not penalised or hampered.

4. Carbon budgeting is an appropriate approach and budget periods should provide clear detail of sectoral contribution for budget periods and detail should be released providing at least 15-year horizons.

5. Industries should not be expected to reduce emissions beyond their abatement potential. Additionally, product life cycles and whole building performance should be taken into account when designing schemes and setting targets.

6. International clean development mechanisms could be supplemented using domestic project mechanisms. There should not be a limit on the use of flexible mechanism credits, either in the EU ETS traded sector or for use against the national target; there should be equivalence between the two systems.

7. Banking is essential in order to manage any budget correctly. It will also encourage early action and provide a “buffer” in the following target period. Although, BCA agree that borrowing should be limited to 1%.

8. The inclusion of enabling powers could lead to further trading schemes. This could add more complexities in an already complex legislative framework. In order that the UK is a model for other Member States the overlapping climate change policy measures need to be reviewed and rationalised.
9. The UK should also take a lead in developing a global trading scheme. International agreement to ensure that UK industry is not unduly affected by the European regional or national approach is therefore necessary for industries that are subject to international competition such as cement. A global CO₂ market will ensure that there is a level playing field and ensure all citizens contribute to address a global problem. Transitional arrangements could be put in place in the interim toward a global trading system.

CLIMATE CHANGE POLICY AND THE UK CEMENT INDUSTRY

1. The UK Cement Industry. The British Cement Association is the trade and research organisation that represents the interests of the United Kingdom’s cement industry in its relations with Her Majesty’s Government, the European Union and relevant organisations in the United Kingdom. The members of the BCA (Castle Cement, Lafarge Cement UK, CEMEX UK Cement and Tarmac, Buxton Lime and Cement) are the major domestic manufacturers of Portland Cement producing over 90% of the cement sold in the UK. Additionally, BCA supplies services concerning climate change issues to Quinn Cement.

2. Energy represents an increasing proportion of the variable costs of cement manufacture (> 35%) and it is therefore a primary concern of the industry to take all cost effective measures to improve energy efficiency and thereby reduce its emissions of carbon dioxide.

3. The cement industry supports the principle of emissions trading. Through their parent companies, Lafarge Cement UK, Castle Cement, and CEMEX are committed to carbon reductions through the World Business Council for Sustainable Development Cement Sustainability Initiative, (WBCSD CSI). In addition, Tarmac, Buxton Lime and Cement has undertaken to adopt the commitments within the WBCSD CSI.

4. SPECIFIC INQUIRY ISSUES

4.1 Targets

4.2 Importantly, recently published emissions projections recognise that the UK is well on target to meet its Kyoto commitment and as such does not need to take drastic measures in order to show leadership on climate change. However, long-term climate change targets are necessary in order to address the most important environmental issue facing society. Unilateral action by the UK Government will damage the UK economy in the long term and as such multilateral long-term action is required so that all contributors to climate change form part of its mitigation. Government should commit to regular review of its “go it alone” policy on climate change targets to ensure that UK businesses, which operate in internationally competitive markets, are not unduly affected by UK climate change policy.

4.3 Although the UK contribution to global GHG reduction is important, it is also critical for business certainty that long term targets are established with interim goals. However, care should be taken not to damage the UK economy in the short term. Ironically, the UK could achieve many of its climate change targets by displacing manufacturing industry to non-carbon constrained economies. For example third party imports of cement have been steadily increasing over recent years; Cembureau (European Cement Association) has calculated that the transport of cement imported into Europe can add 10% additional carbon dioxide to one tonne of cement. These additional emissions would not appear in the UK National Greenhouse Gas Inventory showing domestic targets are being met but the environment as a whole would be worse.

4.4 The Government proposed targets are ambitious and will need action from all sectors of UK society. For this reason it does not follow that aviation and shipping emissions should be excluded from the targets in the draft Climate Change Bill because “limited action” will only result in “limited success.

4.5 It is also important to point out that emissions from the UK Cement Industry are already more than 28% below the 1990 level and that in accordance with the CCA agreements the industry has already committed to meeting targets on fuel efficiency and waste derived fuel use, demonstrating the cement industry’s commitment to climate change and waste recovery targets. This early action should be noted when the consideration is given to the areas of the economy that can potentially contribute to the savings needed by 2020 and 2050.

4.6 Global warming is a function of all greenhouse gases. Critically, the UK should not only focus its attention on CO₂ because there is the danger of ignoring other, more damaging, gases. The conversion of GHG (greenhouse gas) releases into CO₂e (CO₂equivalent) is well understood and as such the Government should base its climate change targets on all GHGs. The draft climate change bill should be amended to consider all GHGs.
4.7 Carbon budgeting

4.8 Five-year carbon budgets are useful for management purposes, but for industrial certainty longer term planning is needed. In an industry such as cement five years is very short, where it takes around seven years to design, build and gain the necessary permits for a kiln that will then operate for around 30 years. Consequently three budget periods of five years each should be the minimum horizon for the climate change bill.

4.9 For effective carbon budgeting and to provide sufficient certainty for industry and other sectors of the economy, the carbon budgets should not just exist as a national cap/target, rather they should include a breakdown of where the emissions reductions are expected to come from ie it is important to know the contribution by the traded (EU ETS)/non-traded sectors in sufficient detail that industrial sectors such as steel, cement, glass etc can effectively plan.

4.10 Consequently the climate change bill should place a requirement on Government to update annually projections/targets for the emissions from all sectors of the economy, through to the 2020 and 2050 time horizons.

4.11 However, flexibility in the system is essential in order to adapt to an environmental issue that will demand significant adaptation in future years. As such the budgets should be subject to regular review and adjustment.

4.12 Climate change is a global issue and the use of flexible mechanisms will allow the climate change challenge to be addressed in the most cost effective areas. There should not be a limit on the use of flexible mechanism credits, either in the EU ETS traded sector or for use against the national target; there should be equivalence between the two systems.

4.13 However, domestic action is also necessary and domestic projects should be promoted. In the cement sector the climate change agreements promote the use of alternative waste derived fuels, but the CCAs have a limited life and new systems are needed to promote alternative fuel use. Domestic projects could be one way of helping to shift the use away from fossil fuels toward alternatives. In doing so, the emissions from landfill sites and incinerators, which are not part of the EU ETS, will be avoided.

4.14 Banking is essential in order to manage any budget correctly. It will also encourage early action and provide a “buffer” in the following target period. Although, BCA agree that borrowing should be limited to 1%. This will ensure that the budget cannot be exploited for party political reasons and allow time for policy adjustment.

4.15 Adaptation

4.16 All countries and all industries will need to adapt to climate change. The cement industry has good potential for the development of low carbon technologies but will need Governmental assistance. There is a role for government in supporting research to accelerate the development of new carbon abatement technologies, whether in research institutions or private industry. The cement industry is committed to a clear path of carbon dioxide reduction7 and has begun to investigate the opportunity for Carbon Capture and Storage (CCS). At present research into CCS is dominated by the Electricity Supply Industry (ESI) and oil companies. As one of the largest single point emitters of carbon dioxide with a higher carbon dioxide concentration in the exhaust gasses than other industries the cement industry provides an ideal opportunity for CCS research. Government should do more collaborative research to investigate CCS options for industrial emitters such as the cement industry and not concentrate its research funding on the ESI and oil sectors. The value of this work would be to ensure that the UK becomes a world leader in CCS. This would allow the export of technologies and knowledge to assist developing countries adapt to climate change.

4.17 In addition to encouraging the use of novel technologies such as CCS and promoting a greater use of renewable and waste derived energy sources, there is still plenty of scope for the Government to capitalise on energy saving improvements in buildings, especially in the field of thermal mass. Thermal mass is a term used to describe the ability of a material to absorb and retain heat. It can be used to good effect in the fabric of a building by allowing it to absorb excess heat gains during the day and subsequently releasing them at night with the aid of natural or mechanical ventilation, this is particularly relevant in a warming climate. This process has the effect of moderating the temperature swing within the building and lowering the peak temperatures experienced during the summer by approximately 3°C.8 The use of thermal mass techniques can mitigate the use of energy consuming techniques such as air conditioning.

4.18 Traditional masonry built houses and larger buildings incorporating concrete elements provide a high a level of thermal mass and perform particularly well. For example, the energy consumption of a

7 Working Towards Sustainability—a report from the UK cement industry on its progress towards sustainability.
naturally ventilated high thermal mass office is typically about half that associated with a modern, good practice air conditioned office such as Building Type Three described in Econ 19.9 This is particularly important given the recent findings of research undertaken by Arup and commissioned by DTI, which highlights the key role that thermal mass is set to play in minimising overheating and helping avoid air conditioning as climate change drives up temperatures. Predicted changes in the UK climate, indicate that average annual temperatures are likely to increase by 2°C to 3.5°C this century.10 This will result in warmer summers and increase the demand for energy intensive air conditioning systems. To counter this, the exploitation of thermal mass in building design could make a useful contribution in preventing growth in this area. As the operation of buildings account for a large proportion of UK energy use, even a small improvement in this sector will translate into significant savings in both energy and CO2 emissions.

4.19. As the largest procurer of construction industry services, Government is in a privileged position to set the benchmark for sustainable construction projects for schools, hospitals, other public buildings, as well as transport infrastructure projects. Setting benchmarks in the built environment that can be exported to developing nations will signal the UK as a leader in climate change issues. These too should not be short term solutions, but look to the longer term and be based on whole life performance not just initial or lowest cost. The same principles should be extended to local government. The climate change bill could include measures for Government to address the whole life performance of buildings.

4.20 Committee on climate change

4.21 BCA agrees that an independent body should be set up to oversee the carbon budget. The independent committee on climate change should include a range of representatives of stakeholder groups and experts. Industry should be well represented because industry experts will be able to provide crucial information on abatement potential of industrial sectors that will be contributing significantly to the reduction targets.

4.22 To ensure that the Committee can function effectively its tenure must last at least one or two budget periods five to 10 years. This will make sure that a level of consistency is delivered within the longer term target horizons.

4.23 In devising emission reduction targets the Committee will need to consider the balance of effort carefully. Industry has made significant advances in the area of CO2 reduction and as such greater emphasis now needs to be placed upon the domestic and transport sectors.

4.24 Enabling powers

4.25 The enabling powers that allow the Secretary of State to establish greenhouse gas emission trading schemes by means of secondary legislation should be used with caution. At present the CCA and EU ETS are directed towards the same goals and provide a clear example of the “double banking”, contrary to the EU and UK aim of “Better Regulation”. This was highlighted by BCA in its response to the Hampton and Davison enquiries. These two trading schemes are incompatible, place burden on industry, and generate carbon credits that require unnecessary double accounting arrangements. The advent of additional GHG trading schemes, such as the proposed Energy Performance Commitment could further add complexities in an already complex legislative framework. It is particularly important that the proposed EPC, that is intended to capture emissions from non-energy intensive commercial uses, does actually target them specifically and avoids capture of energy intensives already contributing significantly to climate change mitigation. In order that the UK is a model for other Member States the overlapping climate change policy measures need to be reviewed and rationalised.

4.26 International implications

4.27 The UK should also take a lead in developing a global trading scheme. International agreement is necessary to ensure that UK industry is not unduly affected by the European regional approach particularly for industries that are subject to international competition such as cement. A global CO2 market will ensure that there is a level playing field and ensure all citizens contribute to address a global problem.

4.28 Until the arrival of a global scheme the UK should protect the interests of the UK economy by advocating EU border tax adjustments on products arriving from non-carbon constrained economies. Border tax adjustment will propagate the transition to a global trading system more quickly in a field of the environment where speed of action is vitally important. Border tax adjustment will also minimise the amount of “carbon leakage” due to production shifts from the UK to other countries.

4.29 The UK cement industry is mainly owned by large multinational companies and key investment decisions in the cement industry are generally taken outside of the UK. If the supply of cement from developing countries is not subject to the same pressures to address climate change as the UK then investment (and emissions) will be displaced. This is one example counter to the validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post–2012.

British Cement Association

May 2007

Memorandum submitted by the World Development Movement (CCB 17)

SUMMARY

1. The World Development Movement (WDM) campaigns to tackle the root causes of poverty. With our partners around the world, we win positive change for the world’s poorest people. We believe that charity is not enough. We lobby governments and companies to change policies that keep people poor. WDM is a democratic membership organisation of individuals and local groups.

2. Climate change is a justice issue. It has overwhelmingly been caused by the richest countries and people in the world, yet it is the poorest who will suffer soonest and most from its effects. WDM thanks the Environment, Food and Rural Affairs Committee (EFRA) for initiating this inquiry on the Government’s draft Climate Bill and for the opportunity to submit written evidence. Below we respond to some of the specific questions of the inquiry. We address issues which are most important in ensuring that the draft Climate Bill effectively limits climate change to prevent the most catastrophic consequences for the world’s poor.

3. The key points we make in this submission are that the Climate Bill should:
   — Ensure that the UK takes the necessary action to keep the average global temperature increase to 2°C. Current science implies this means a 40% cut in UK emissions by 2020, and 80–90% by 2050.
   — Include the UK’s share of international aviation and shipping CO₂ emissions, and the non-CO₂ emissions of aviation.
   — Include three- rather than five-year budget periods, with annual milestones to ensure there is an emissions reduction trajectory.
   — Ensure an 80–90% emission reduction is achieved through actual emission cuts in the UK, not through “buying” emission cuts elsewhere in the world. Funds for low carbon development in developing countries should be provided in addition to cuts in UK emissions, not instead of cuts in UK emissions.
   — Include an expert on the impacts of climate change on poor people in developing countries on the Committee on Climate Change.

TARGETS

(i) The validity of the Government’s domestic targets to
   — reduce CO₂ emissions by 60% below 1990 baseline levels by 2050, and
   — reduce CO₂ emissions by 26–32% below 1990 baseline levels by 2020.

4. The Government is right to set unilateral targets for reducing UK emissions. While it is true that climate change cannot be solved by UK action alone and that action by other countries is required, it is also true that the UK has historically been a significant cause of the problem and thus has a moral obligation to take the lead in reducing emissions.

5. There is a further political imperative for unilateral action which is the need to secure an international agreement on greenhouse gas emissions reductions. Such an accord needs to include more advanced developing countries (eg China) who will be reluctant to sign-up unless they see those principally responsible for the problem in the industrialised world demonstrating a willingness and ability to take action.

TARGET 60% BY 2050 AND A FURTHER INTERIM LEGAL TARGET FOR 2020 OF 26–32%

6. The UK Government has rightly stated that its goal must be to prevent what has become known as “dangerous climate change”: in other words preventing average global temperatures from rising more than 2°C on pre-industrial levels. This 2°C threshold is widely regarded as a point beyond which the impacts of climate change, particularly on the poorest people in the world, will become truly catastrophic.

7. The objective of staying within the 2°C threshold should be clearly stated and made a central part of the bill. The rest of the bill should be constructed as the framework for making the UK’s contribution to achieving this overarching objective. Therefore the size of the cuts needs to be in line with the latest science relating to what action is required from industrialised countries like the UK in order to keep global temperatures from rising more than 2°C.

8. While supporting the concept of setting both long-term and interim legal targets, WDM is concerned that the actual targets included in the draft Bill are already out of date. Beyond political expediency, it is hard to find a justification for the “26–32% by 2020 and 60% by 2050” formula.

9. The May 2007 IPCC summary report on mitigation outlined that for the average global temperature increase to be kept to 2.0°C-2.4°C requires stabilisation at 445-490 ppm of CO₂eq in the atmosphere. This in turn requires global yearly emissions to be reduced by 50–85% by 2050. Because the UK emits more than double the worldwide average CO₂ per person, the UK has to reduce emissions by between 80–90% by 2050, on current levels. This translates into a 40% cut by 2020.

10. There is a powerful rationale for ensuring that the Bill includes a more realistic, science-based, target from the outset. It is likely that once the Bill is passed, and the first five-year budget set, there will be a high degree of political inertia when it comes to amending it. If the political will then exists to revise the target after the first period, this will create the need for much steeper cuts during the second and third budget periods. For all stakeholders concerned (including political parties) it makes better sense to include a more accurate target in the bill from the beginning.

**Targets do not cover all CO₂ or non-CO₂ emissions**

11. The draft Climate Bill does not cover all UK contributors to climate change. The draft Bill excludes CO₂ emissions from international aviation and shipping, based on the premise that these emissions are not part of the existing Kyoto Protocol, and that disagreement exists internationally over whether and how to account for and reduce these emissions. Provision is made in the bill to include these emissions at some future date if such an international deal can be struck.

12. The draft Climate Bill also excludes non-CO₂ contributors to climate change, such as emissions of nitric oxide, nitrogen dioxide and water vapour by aviation at altitude. These emissions cause aviation to make a greater contribution to climate change than CO₂ alone. The Treasury’s pre-budget report in 2006 stated that aviation makes a contribution to climate change 2 to 4 times greater than CO₂ emissions alone. The Department for Transport uses a figure of 2.5 times more warming from UK aviation than CO₂ alone.

13. In the attached report “Emissions invisible: The impact of excluding international aviation from the Climate Bill” we show that:

   — Aviation is already a large part of the UK’s contribution to climate change:
   — Aviation currently accounts for 12.4% of the UK’s contribution to climate change,
   — This is more than cars (9.3%), home heating (11.1%) or manufacturing and construction (11.3%).

   — The Climate Bill will only result in a small reduction in the UKs contribution to climate change:
   — The Climate Bill targets a reduction in UK CO₂ emissions of 60% by 2050 on 1990 levels. This does not include most aviation emissions,
   — The UK Government is currently supporting a massive expansion in UK aviation,
   — By 2050, the Climate Bill as currently drafted will only result in a 17% reduction in the UK’s contribution to climate change on 2005 levels (24% reduction on 1990 levels).

   — The Climate Bill expects reductions in emissions from all other sectors of the UK economy, but allows aviation to continue increasing its emissions:
   — Aviation will account for almost half the UK’s contribution to climate change by 2050,
   — Aviation’s contribution to climate change will have increased by 213% by 2050,
   — Road transport’s contribution to climate change will have decreased by 56% by 2050,
   — The richest 18% of the UK population are responsible for 54% of flights. It is unjust to exclude aviation from being required to cut emissions while requiring emissions reductions in other sectors.

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— Excluding aviation from the Climate Bill does not make scientific, economic, social or political sense:
  — Scientific evidence points towards the urgency of reducing emissions in the next decade so planning to increase aviation emissions is foolish,
  — There is no economic justification for requiring other sectors to reduce emissions while encouraging an increase in aviation emissions,
  — Aviation is used predominantly by more wealthy people in the UK. Curbing the increase in aviation emissions could be more socially progressive than other actions,
  — Delaying action until the aviation sector is larger and employs more people will only make future political decisions harder.

14. All of the UKs CO2 and non-CO2 greenhouse gas emissions must be included within the scope of the Bill from the outset. The Government must take action to curb the growth in these emissions rather than postponing full inclusion of aviation until some future date when a possible international accord might have been reached and UK aviation emissions are significantly larger and need to be cut.

(iii) The rationale for a five-year budgetary period

15. WDM supports the idea of budget periods in order to provide a degree of certainty relating to government action on climate change. However, we are concerned that the proposal for a five-year carbon budget cycle has several flaws.

16. The first is that the UK’s mitigation effort is more likely to be effective if public interest and political momentum can be maintained. WDM is concerned that five-year budget periods could result in difficult decisions being postponed. With the budget period spanning the electoral cycle there is some potential for buck-passing from one administration to another. Also, in terms of accountability, changes of Minister, Secretary of State or even Prime Minister can be important and five-year budget periods increase the likelihood of what could effectively be buck-passing between individuals within government.

17. A second flaw is that five year budget periods make it more difficult to quickly incorporate the evolving science of climate change into decision-making. Although the bill rightly creates a review mechanism, once a five-year budget has been set there is likely to be a degree of political inertia in changing it. This would probably mean that responses to enhanced scientific evidence (if that evidence points to the need for deeper emissions cuts) are delayed until the next five-year budget period.

18. This also relates to the third flaw (see Figure 1). The proposed five-year budget period, with a target to achieve lower average emissions over that period, results in an odd emissions reduction trajectory. After every five years a sudden and significant emissions cut is needed. Creating a system that requires such large steps in emission reduction seems unnecessary and unrealistic.

Figure 1

TYPOLOGY OF FIVE-YEAR CARBON BUDGET PERIODS (BASED ON THE GOVERNMENT’S CONSULTATION DOCUMENT)15

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19. As a way to ameliorate these three flaws, WDM argues that a more sensible route to pursue would involve three year budget periods and a requirement to set annual milestones that produce a trajectory of emissions reduction.

15 The “E” under the date refers to a likely election year.
Figure 2

TYPOLOGY OF A PROPOSED THREE-YEAR CARBON BUDGET PERIODS WITH AN EMISSIONS REDUCTION TRAJECTORY SET THROUGH ANNUAL MILESTONES

20. The type of budget system suggested above would be more likely than a five-year budget system to mean that:

— The same government will see through at least one full budget period.
— Within a government, the same individuals (Minister, Secretary of State, Chancellor, Prime Minister) see through one or two budget periods.
— The emissions reduction trajectory and future budgets can be more easily modified to suit the evolving science.
— The emissions reduction trajectory is smoother.

CARBON BUDGETING

7. The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources

21. The draft Climate Bill proposes that the UK could purchase carbon credits from abroad in line with the limits set out under international law. The “limits” set out under international law are that the UK could purchase up to 50% of its greenhouse gas reduction effort from overseas. Therefore, within the proposed framework of the Bill (which we argue needs to change) the UK should reduce its CO2 emissions from 556.2 million tonnes to 235.7 million tonnes by 2050. But up to half of this effort (160.25 million tonnes) could be purchased from abroad.

22. The argument that it is cheaper, easier and thus more efficient to buy CO2 emissions reductions in developing countries and that this is legitimate because it makes no difference where emissions reductions are made sounds fine in theory but in practice is riddled with problems.

23. It is notoriously difficult to monitor and verify emissions reductions in the developing world. Under the Kyoto protocol’s Clean Development Mechanism (CDM) the largest number of carbon credits have been generated by projects claiming to reduce the gas HFC-23, rather than CO2. One study has found that the value of credits given to HFC-23 projects at current carbon prices is €4.7 billion. However, an estimate of the cost of technology needed to capture and destroy the same amount of HFC-23 is €100 million.16 Around €4.6 billion has been generated in profit by HFC-23 generating plants, which could then further expand their operations with the reinvestment of this profit.17

24. One Indian chemical company, SRF, made €87 million from the sale of carbon credits in 2006–07. Ashish Bharat Ram, managing director of SRF, claimed “Strong income from carbon trading strengthened us financially, and now we are expanding into areas related to our core strength of chemical and technical textiles business.”18

17 Smith, K (2007). Pollute and profit: So when will Brussels admit that its emissions trading scheme is not only not working, but has proved a disaster?
18 Smith, K (2007). Pollute and profit: So when will Brussels admit that its emissions trading scheme is not only not working, but has proved a disaster?
25. Mandatory regulations should exist stating that companies have to capture and destroy HFC-23, especially given the low cost of doing so. However, if such regulations exist in a country, then a company cannot claim carbon credits as they would not be viewed as “additional”. The existence of the carbon market creates a perverse incentive for governments not to regulate HFC-23, so that companies can make a windfall profit by selling credits.

26. Such problems mean that incorporating “purchasing overseas effort” within the Bill is creating a major loophole that could render the Bill ineffective in addressing the UK’s contribution to climate change.

27. WDM is also concerned that, if towards the end of a budget period, the Government is off-track, this loophole will enable it to divert a portion of the aid budget into schemes overseas. This creates a political “get out” clause that enables Ministers to delay or even avoid completely the decisions necessary for the UK’s transition to a low-carbon economy.

28. WDM argues that the UK needs to make reductions in UK emissions of up to 90%. The UK’s historical contribution to climate change means that this country has a moral responsibility to reduce its own emissions. On top of, rather than instead of, this emissions reduction it is vital that the UK plays its part in creating the conditions for low carbon development in developing countries, including through technology and financial transfers.

COMMITTEE ON CLIMATE CHANGE

11. Its composition and appointment, including length of tenure and degree of independence

29. WDM believes that the Committee should comprise experts from different fields and that no particular area of expertise, especially those unrelated to the science of climate change (eg, economics), should be over-represented. The key to a successfully functioning Committee will be achieving the right balance of expertise to achieve the objective of advising the Government on emissions reductions targets, budgets and pathways based on the science of climate change.

30. WDM thinks it would be unwise to create seats on the Committee for representatives of particular interest groups (eg, business representatives, unions or NGOs). This would potentially detract from the focus of the Committee. It is up to government to weigh up different points of view and then act in the broader public interest when it comes to implementing policies to achieve the necessary emissions reductions.

31. Climate change is a global issue and, while people in the UK and other European countries will certainly be affected, the imperative for mitigating climate change is much greater and more urgent when considering the potential impacts on poor people in developing countries.

32. WDM suggests that the Committee on Climate Change should include an expert on the impacts of climate change on poor people in developing countries. We believe this would go some way to ensuring that the latest evidence on climate change impacts in the global south would be reflected in the Committee’s deliberations and conclusions.

33. Also, WDM is concerned that the focus of the draft Bill leans heavily towards the use of emissions trading schemes. Not only could this make reporting on actual emissions reductions very complex and confusing (due to the inclusion of credits purchased overseas in some emissions trading schemes), it could undermine the achievement of the Bill’s targets given the poor performance of emissions trading in delivering greenhouse gas reductions to date.

34. This focus on emissions trading is reflected in the fact that an emissions trading expert is proposed for inclusion on the Committee while experts in other areas of climate mitigation policy are not. In addition to an expert on emissions trading, WDM would like to see included on the Committee an expert on environmental taxation, an expert on environmental regulation and an expert on the use of subsidies/incentives.

ENABLING POWERS

16. The adequacy and implications of the proposed enabling powers allowing the Secretary of State to establish greenhouse gas emission trading schemes by means of secondary legislation

35. As already mentioned, WDM is concerned that the Government does not become overly reliant on emissions trading schemes whether domestic, pan-European or international. Current experience suggests that, while seemingly attractive in theory, the European emissions trading scheme has to date been ineffective at actually reducing emissions.19

36. It is important to recognise up-front that the “market” as it is currently constructed will not deliver the greenhouse gas reductions needed to avert dangerous climate change. The Government therefore needs to use all potential mechanisms available—including taxation, subsidies and regulation—to correct what

the Stern report rightly called the world’s biggest market failure. Critically, the government needs to be responsive to measures that are not working or inadvertently create perverse incentives. If a policy is not achieving greenhouse gas emissions reductions that help the UK contribute to the 2°C target it should be changed or scrapped. Becoming too attached to single solutions or perceived “silver bullets” is potentially risky considering the urgent need to mitigate climate change.

INTERNATIONAL IMPLICATIONS

17. The validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post-2012

37. Effective international climate policy requires rich countries to take a lead in reducing emissions. The unilateral action which the draft climate bill commits the UK to can help secure international agreement on emission controls and reductions.

38. As already outlined, there are a number of ways in which the bill needs to change in order to be an effective example:

— It must include all international transport emissions, and the non-CO2 impacts of aviation on global warming.
— It must put the need to keep to 2°C at the forefront of policy, and base reduction targets on what is required for the UK to do its fair share in meeting global emission reduction targets. On the basis of current science, this means a target of an 80-90% reduction by 2050.
— It must set-out an accountable budgeting system and a trajectory for emissions reduction. A three-year budgeting system and annual milestones would enable this to happen.

World Development Movement

May 2007

Joint memorandum submitted by the Institution of Civil Engineers and the Institution of Mechanical Engineers (CCB 18)

EXECUTIVE SUMMARY

Institution of Civil Engineers

1. The Institution of Civil Engineers (ICE) is a UK-based international organisation with over 80,000 members ranging from professional civil engineers to students. It is an educational and qualifying body and has charitable status under UK law. Founded in 1818, the ICE has become recognised worldwide for its excellence as a centre of learning, as a qualifying body and as a public voice for the profession.

The Institution of Mechanical Engineers

2. The Institution of Mechanical Engineers (IMechE) is the leading professional body for mechanical engineers in the UK, and the third largest mechanical engineering institution in the world. Today IMechE’s membership comprises over 78,000 engineers in more than 120 countries. In addition, IMechE is the UK’s qualifying body, under licence from the Engineering Council (UK), for Chartered and Incorporated mechanical engineers and is a UK registered charity, number 206882.

Opening comments

Any long-term commitment by the Government to reducing carbon emissions must acknowledge that it cannot be addressed in isolation from wider development issues. True “development” will not only help face the challenge of climate change but also provide a sustainable long-term future; in order for it to be established the following must be taken into account, not just by engineers but also by government as a key driver of public opinions and behaviour:

— understand why we need to become more sustainable;
— engender real ownership through proper training to energise and enthuse—with ownership, people deliver;
— provide guidance which is simple to follow, so we know what to do and how to do it;
— show leadership, to motivate others; and

— demonstrate and celebrate success. Celebrating success will help convince citizens and relevant stakeholders that the sustainable way is the only way.

TARGETS

The validity of the Government’s domestic targets to:
— reduce CO₂ emissions by 60% below 1990 baseline levels by 2050, and
— reduce CO₂ emissions by 26–32% below 1990 baseline levels by 2020.

3. These targets are laudable, and ICE and the IMechE support Government’s commitment to them. However, the institutions are aware that research suggests UK greenhouse gas emissions, which this Government has pledged to cut considerably, are still rising. Carbon emissions from power stations, motor vehicles and homes, amounted to 560.6 million tonnes last year—6.4 million tonnes higher than the 2005 figure. The increase of 1.15% means that Britain’s emissions are now at the highest level in ten years, or since this Government came to power.

This, in addition to Government’s admission that it has abandoned its long-standing pledge of a 20% cut by 2010, are clear cause for concern that these new targets will be exceedingly difficult to meet. They highlight the need to achieve short-term, immediate savings while demonstrating the vision needed for successful long-term achievements.

Why the carbon budget for the period including the year 2020 cannot exceed 32%

4. ICE and IMechE believe 32% is both positive and attainable, but it could have been set as high as 35%. As the recent Intergovernmental Panel on Climate Change (IPCC) report demonstrated, the technologies and measures to achieve cuts of this scale already exist, but need strong political will and action to be achieved.

The rationale for a five-year budgetary period

5. The rationale is sound, with budgets set initially to achieve an annual equivalent reduction of 3% per year. With appropriate measures, this is readily achievable and would put the UK “ahead of the curve” in terms of its 60% by 2050 target. It would also demonstrate strong international leadership and provide flexibility to achieve a more stringent target (eg 80% by 2050) should the scientific and/or moral case for such deep cuts become even more compelling than it is already.

We understand and appreciate the five-year period, but believe it could have been shorter. Three years would not be unreasonable.

Monitoring and early warning systems to ensure achievement of targets is on track

6. ICE and IMechE urge the publication of climate change/emissions data on a much quicker turnaround — it seems unreasonable to not know what the 2007 emission levels will be until 2009, for instance. Moreover, this time lag may have a negative impact on public commitment to the value of measures to reduce emissions.

Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non-compliance

7. Sanctions can serve as an effective incentive to meet emission standards, but only if they are enforced. If the Government, for example, misses its targets, what steps will be taken? What recourse, if any, will be in place to ensure that these targets are achievable goals, driving policy development rather than mere numbers?

CARBON BUDGETING

The facility—in any given budgetary period—to “borrow” emissions rights from a subsequent period, or to “bank” any “surplus” emissions reductions for use in the next budgetary period

8. ICE and IMechE accept that this may be unavoidable, especially in the early days of so-called carbon “budgeting”. However, the institutions urge Government to limit the practice of borrowing as time passes, as its continued use sends the message that polluting is acceptable as long as it is offset by balancing a long-term budget. This does not adequately reflect the longevity of carbon emissions in the atmosphere, such that saving emissions today will have a more beneficial overall effect than achieving the same volume of savings some time into the future.
The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources

9. This proposed facility is frankly baffling. Why allow people to enjoy credit for supposedly reducing their domestic emissions when all they have really done is ensure that they will continue polluting, at the expense of likely less-developed nations?

ICE and IMechE wish to express concern that outside-UK cuts are simply a short-term “escape hatch” that allow for the UK’s targets to be met without taking serious action against specific areas of infrastructure, such as transportation.

The range and validity of changes in circumstances in which budgets can be subject to review and revision

10. These are acceptable.

The reporting procedure and Parliamentary accountability

11. Again, acceptable.

Adaptation

Whether adequate provision is made within the Bill to address adaptation to climate change

12. ICE and IMechE have in the past acknowledged that a combination of mitigation and adaptation are necessary for an effective climate change strategy. That said, however, we feel that this legislation misses the opportunity to affect a crucial cultural and intellectual shift in our understanding of this balance.

The two institutions believe that urgent decisions are now required, and yet there appears to be no real debate on the feasibility of any proposed actions. The role of the engineering profession is to support that decision-making process, in particular to comment on the timescale, the maximum impact and the lowest abatement life-cycle cost of different solutions. The challenge is the upgrading and widespread deployment of technologies that are already available, and this is a problem for engineers rather than scientists. As a profession, we have a key role in working out “how to do it”. Large scale or “at scale” demonstration projects are required, and these will need to include public engagement programmes to understand the pinch points within society.

Cultural issues have an important part to play as well, with education as an integral part of these. For example, in California it is clear that public perception favours technological solutions, but in the UK it is clear that people believe that technology continues to be part of the problem. What is missing is a real understanding of the feasibility of what can be achieved in the short term, and we stand ready to assist in that evaluation.

Committee on Climate Change

Its composition and appointment, including length of tenure and degree of independence

13. In view of the central role of engineering delivering solutions to climate change and evaluating the feasibility of current technologies, the two institutions would strongly urge the Committee to include representation from the engineering professions, wherever possible independent of specific commercial interests. Whilst we acknowledge that “technology” as a theme has been identified, and this may yet accommodate an engineer, we believe a more specific inclination towards the profession necessary, especially as relates to sustainability within the “built environment” and technological adaptation, availability and market readiness.

Overall, the composition of the list is good. ICE and IMechE have concerns, however, that it is somewhat biased towards supply-side solutions, so expertise in public engagement on energy conservation and efficiency would be a useful addition.

Its function and responsibilities

14. The two institutions believe the Carbon Committee should enjoy a similar level of independence and authority as the Bank of England’s Monetary Policy Committee (MPC). In the same way as the MPC uses interest rates to control inflation, the Carbon Committee would apply its own measures to ensure (as far as practicable) delivery of the carbon budgets and targets.
Its powers in determining carbon budgets and the provisions within each budget

15. The Committee should have an advisory role in the setting of budgets and on the powers it should have to achieve them.

The adequacy of its range of functions in overseeing the targets

16. The Committee should have more timely access to current emissions data than is currently envisaged, to allow decisions to be modelled, implemented and have time to succeed, before budget periods are completed.

The resources available to the Committee

17. The Committee must have access to sufficient expertise and sources of information.

Enabling Powers

The adequacy and implications of the proposed enabling powers allowing the Secretary of State to establish greenhouse gas emission trading schemes by means of secondary legislation

18. These are acceptable.

International Implications

The validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post–2012

19. The Government is right to attempt to lead by example, and right to suggest that any potential policy breakthroughs they achieve may indeed influence other nations’ future choices as regards climate change.

However, while the UK is right to assume responsibility for its contributions to climate change, we have no guarantee that emerging economies such as China and India will follow our example. Addressing the rising emissions from rapidly developing nations will remain a crucial problem to be overcome.

General

Whether there are other domestic climate change issues which it would be appropriate to include in the Bill

20. None apparent at this stage.

Submitted on behalf of the Institution of Civil Engineers and the Institution of Mechanical Engineers.

May 2007

Memorandum submitted by Operation Noah (CCB 19)

Executive Summary

Operation Noah is the churches’ climate change campaign, based at Churches Together in Britain and Ireland (CTBI). It is a project of the Environmental Issues Network of CTBI and Christian Ecology Link.

The leaders and campaigners of Operation Noah welcome the Government’s recognition of climate change as one of the greatest challenges facing the world. However, we believe that the proposals contained in the draft Bill do not go far enough to provide credible and meaningful leadership domestically or internationally on this most urgent of issues.

Our main points of concern are as follows:
— the binding targets for emissions reduction should be bold in order to reflect the latest scientific evidence, and should not be subject to revision except in the light of the evolving science;
— there appear to be contradictions between government departments on policy approaches to climate change. The Bill should be clear about the commitment of all government departments to the targets; and policy across government must be consistent with reducing CO2 emissions across the economy, in order to be effective, fair and transparent;
— the UK has a moral responsibility to reduce emissions within the UK itself and should not pay others abroad to compensate for our environmentally expensive lifestyles and inaction at home; and
— both those factors for consideration in setting the carbon budgets, and the composition of the Committee on Climate Change should place the greatest emphasis on climate change science and policy above the economic imperative for British industries to remain internationally competitive.

Operation Noah places the sustainability of the British economy and the environment above the need for British industry to remain internationally competitive. We believe that there is a contradiction between serious efforts to tackle climate change and the current growth-driven economic paradigm. We are calling for a recognition that the world’s economic subsystem is limited by the fixed, finite and closed ecosystem, which is easily disrupted as the economic subsystem grows relative to the total ecosystem.

As a recognition of these limits, Operation Noah is calling for a reduction in individual emissions in the UK from around 9.5 tonnes a year at present, to 1.2 tonnes a year. We are considering calling for this reduction to be achieved by 2020.

TARGETS

1. The Government’s target of a 60% reduction in CO₂ emissions by 2050 is too weak and does not reflect current scientific understanding. The respected Tyndall Centre for Climate Change Research has found that the UK would need to cut its emissions by 90% by 2050 to have even a 30% chance of keeping the global temperature rise to within 2°C.²¹ Tyndall’s analysis found that the Government’s Draft Bill, rather than supporting a 2°C warming, was at best in keeping with a 50% chance of exceeding 4°C warming.

2. Even with a more realistic target for emissions reduction by 2050, action to curb emissions needs to start now. This is partly so that there is a greater chance of achieving the long-term target and so avoiding more dangerous temperature rises, and partly in order to give economic, social and political systems the maximum adjustment time, within a framework of certainty. The interim target is therefore crucial. Providing a reduction range rather than a specified target is unhelpful because it effectively sets the bar at the lower end of the range, when we should be aiming for the highest possible reduction.

3. The draft Bill fixes a ceiling on the amount of emissions reductions by 2020 of 32% on 1990 levels. There is no explanation for why this is included, but there should clearly be no statutory limit on emissions reductions given the risk of catastrophic damage if too little is achieved, too late.

4. The draft Bill allows for interim and long-term targets to be revised in the light of scientific knowledge and international law. Operation Noah believes that arrangements enshrined in international law could allow the UK targets to be weakened. We believe that UK Government should stand firm and only revise targets in the light of scientific developments.

5. One of the biggest flaws of the draft Bill is that it excludes the aviation and shipping sectors from the target reductions in CO₂ emissions. Aviation is the fastest growing source of emissions and is identified by scientists as a key driver of emissions in the future. It is therefore disingenuous to exclude it, even if it is not included in international agreements.

CARBON BUDGETING

6. Operation Noah believes that the UK has a moral imperative to reduce its own emissions rather than use its relative wealth to pay others to achieve its targets. The business of limitless consumption in countries like the UK cannot proceed as usual if we are to solve the global problem of climate change. It is time to recognise that the Earth’s natural resources and its capacity to absorb and process wastes such as CO₂ are finite. If our way of life and our institutions are not sensitive to this understanding then for the sake of today’s fleeting consumption, we compromise the very survival of future generations.

7. Government’s proactive support for expanding UK air and road travel capacity are examples of how policies are inconsistent with emissions reduction efforts. Operation Noah believes that the Climate Change Bill should include wording which expresses a commitment to achieving policy consistency across all areas of government with respect to emissions reductions, and that this commitment should be such that the Government can be held to account on this point.

8. Consideration of each of the seven factors to be taken into account in setting the carbon budgets could lead to a conflict of priorities. For example, evolving scientific knowledge could indicate the need for stringent action on emissions in a particular sector which could compromise Britain’s competitiveness. The Government’s proposals do not explain how such conflicts of interest would be resolved. It is clear to Operation Noah, however, that with the overarching threat from global warming, scientific knowledge should take precedence.

²¹ Tyndall Briefing Note 17, March 2007, by Dr K Anderson and Dr A Bowes. A response to the draft Climate Change Bill’s carbon reduction targets. http://tyndall.webapp1.uea.ac.uk/publications/briefing_notes/bn17.pdf
Committee on Climate Change

9. In the proposed composition of the Committee on Climate Change, the disciplines of climate change science and policy are subordinated to economic analysis, business competitiveness and financial investment. Action on climate change has to be principally determined by well-grounded, defensible scientific evidence, not by economic or financial interests, otherwise the long-term environmental, economic and social costs are likely to be catastrophic—including for those with overarching economic and financial interests.

International Implications

10. Operation Noah believes that the Climate Change Bill can act as an effective example to lead and inform international policy, but only if the opportunity is seized to make the Bill meaningful and credible, by setting scientifically realistic targets across the whole sphere of policy and the economy.

Operation Noah

May 2007

Memorandum submitted by the Renewable Energy Association (CCB 20)

General

1. The Bill provides an overall framework for addressing carbon emissions reductions. The reductions themselves will be achieved by myriad actions, driven by a large number of policy mechanisms such as, for example, the Renewables Obligation.

2. We believe, however, that there is often insufficient connection between the policies and the overall objectives or coordination between these individual measures. We are also concerned that once such policies are implemented the “box is ticked”.

Targets

3. Further to the general comments in the introduction, we believe there is often insufficient monitoring of the progress of the policies towards their respective targets, and that lack of progress is not rectified.

4. Whilst The Bill clearly has overall progress towards significant carbon emissions reductions as its key objective, we fear there may be a discontinuity between this “top down” measure, and “bottom up” policies such as the Renewables Obligation.

5. A quick examination of renewables targets over the last 20 years illustrates how each has been missed, only to be superseded by something much more ambitious often measured on a different basis. Future policies should be monitored much more closely and bolder decisions taken to ensure they achieve their targets.

6. The Non Fossil Fuel Obligation, introduced in 1990, had a target of 1,500MW_{dnc} of renewables capacity being commissioned by 2000. This target was missed, and even to date only 1,200MW_{dnc} of the NFFO capacity has been developed. This target was superseded by a target of 5% of the UKs electricity to come from renewables by 2003.

7. This 5% target was also missed. By 2003, the UK had achieved a share of only 2.67% renewables electricity and indeed we still have not reached a 5% share.

8. A target of 10% by 2010 superseded the 5% by 2003 target. The policy mechanism to achieve this was the Renewables Obligation, introduced in 2002. A 10% share is unlikely to be achieved, and it is clear that the two main barriers—planning and grid access—have not been addressed quickly and robustly enough.

9. We now have plans for a 20% target, which is likely to be insufficient following 9 March decision by the Council of Energy Ministers to adopt a binding EU target 20% energy (not electricity) by 2020.

10. This pattern must not continue. We would like to see progress against targets clearly plotted through the duration of the policy, and actions taken to overcome barriers within an acceptable time frame. Had this been done for the 10% target, for example, it would have indicated a rapid move from the “invest and connect” model for renewable project grid connections, towards the “connect and manage” approach. This move is in our opinion, long overdue. An explanation of these approaches is given in an endnote.
Carbon Budgeting

11. Borrowing emissions allowances from subsequent periods is a recipe for missing targets. Borrowing will also compete against the purchasing emissions from other countries. The draft Bill in any case proposes to restrict borrowing to no more than 1% of the budget borrowed from. It seems hardly worth complicating the Bill with this provision.

12. Similarly the banking of emissions will compete against selling emission surpluses to other countries. It seems unlikely that the UK will achieve sufficient reductions for this to be an option. It seems therefore that banking too could be dropped from the Bill without impact on its efficacy.

Committee on Climate Change

13. We support the concept of independent monitoring and oversight of climate change measures. However we are not convinced that there is a need for each new policy measure to spawn yet another agency. We would urge you to consider whether existing regulators and agencies in this sector, including for example the Carbon Trust and the Energy Saving Trust, might more efficiently be consolidated.

International Implications

14. It is important that the actual achievements in the UK match the policy objectives, before they are offered as templates for others to follow.

15. In renewable energy for example, the goals proposed in successive white papers have been visionary and ambitious. In practice though our renewable energy generation as a proportion of total energy is just 2%—the lowest in Europe but for Luxemburg—and a factor of three below the European average.

The “Invest and Connect” Approach Explained

At the moment, thousands of megawatts of renewable capacity is seeking connection to the network, but cannot get access, as there is insufficient capacity in many parts of the grid to accommodate the maximum output of all these prospective generators. As a result many projects are being held in a waiting list. Their position in the list can mean they have to wait over 10 years for connection.

Most of the new generation which cannot connect is renewable, and most of the existing generation, which is continuing to generate on an unconstrained basis, is fossil fuel fired.

Under the present approach, connections will only be made when there is sufficient grid capacity to accommodate the full level of output from the prospective new generation. “Sufficient” grid capacity in this context means enough to accommodate all the generation that the new generator wants to export to the grid without there being a restriction on the output of existing generation (i.e. unconstrained generation).

The “Connect and Manage” Approach Explained

An alternative policy would be to connect all capacity that wishes to connect, and where necessary constrain the generation delivered to the network to the level which it can accommodate. This is referred to as a “connect and manage” approach. If this approach were adopted, the connection of renewable generation would not have to wait until after the entire required infrastructure had been built.

We believe this would be more economically efficient in the longer term as there is no risk of excess transmission capacity being built. Much of the capacity seeking connection may well not materialise in practice, but it is hard to judge which projects will be delivered and which will not. The transmission owner has to anticipate that all will progress, and build the infrastructure to accommodate it. In practice some of the existing fossil fired and nuclear plant will come off the system, making space for renewables to use the vacated capacity. However, the system operator cannot plan on this basis under the invest and connect approach.

Renewable Energy Association

May 2007
Memorandum submitted by the Association of British Insurers (CCB 21)

**Summary**

1. The Association of British Insurers welcomes the international leadership and strategic vision embodied in the draft Climate Change Bill which sets out a coherent and robust structure for the quantification of emissions reduction targets and assessment of performance against these. This approach should make a significant contribution to reducing the risk of irreversible climate change after the middle of this century, both directly and through the lead given to others. We wish to see some strengthening of the proposals, in particular reduction in the uncertainties introduced by target revision, banking and borrowing, but are broadly content with the approach proposed.

2. However, the draft Bill does not address adequately the climate risks that are already emerging, and which will continue to increase over the next 30–40 years irrespective of how successfully emissions are reduced. Adaptation measures are the only possible response to these escalating risks, and will continue to play an important role in reducing further climate change impacts resulting from today’s emissions. The UK’s strategy for adaptation, therefore, needs to be given equal weighting within the Bill and should be integral to all the processes outlined. The draft Bill is significantly flawed in its failure to treat climate impacts and adaptation measures as intrinsic to all climate change policies.

3. The costs of mitigation need to be assessed alongside those of adaptation measures consequent on a failure to reduce emissions. As a result, short-term budgetary pressures will be less likely to stand in the way of long-term sustainable solutions. Some mitigation choices may reduce the scope for adaptation or even lead to greater vulnerability to damage. It is essential that these impacts are considered as part of a single process, with the aim of improving the resilience of the UK economy and the wellbeing of society, both now and in the period up to 2050.

4. The current approach could give rise to unsustainable solutions, unnecessary costs and reduced competitiveness by failing to take a holistic view.

5. The Committee on Climate Change should consider and make recommendations on all aspects of climate change policy, including climate impacts and adaptation needs. Its composition and resourcing should reflect this. It should have independent, expert advisory status with the expectation that the Government will, in all but exceptional circumstances, accept its advice.

**Introduction**

6. The Association of British Insurers (ABI) is the trade association for Britain’s insurance industry. Our 400 member companies provide over 94% of insurance business in the UK. We represent insurance companies to Government, regulatory and other institutions and are an influential voice on public policy and financial service issues. ABI member companies hold, on behalf of savers and pensioners, around one fifth of all the investments traded on the London Stock Exchange.

7. The insurance industry has played a major role in recent years in promoting understanding and debate about the effects of climate change in the UK and across the world. We support the consensus that tough targets should be set to reduce carbon emissions. We want to see further action to encourage businesses and every individual to play a more active role in tackling this threat. But we also know that some climate change is inevitable: it is already built into our world. Action is needed now to adapt and prepare for its impact.

8. We are concerned that adaptation measures, essential to tackle the already evident impacts of climate change, are not given sufficient prominence in the Government’s programme on climate change or in international discussions. Mitigation and adaptation are two sides of the same coin and cannot be considered separately. Neither are they substitutes for one another. The draft Climate Change Bill is a world-leading initiative with the potential to generate concerted international action to tackle the causes and consequences of climate change. It will only achieve this potential if it couples the identification and monitoring of targets for emissions reduction with similar activity on risk reduction.

9. This evidence is structured as a direct response to the issues set out in the Select Committee’s call for evidence. We would draw the Select Committee’s particular attention to the section on Adaptation as the issue requiring significant changes to the Bill. We broadly support the Government’s approach in many other areas.

**Targets**

10. It is important to make early progress towards realistic targets for emissions reductions. These targets should reflect the contributions to climate change made by all greenhouse gases (GHGs), not solely CO2, and the need to address these, with targets for 2020 and 2050. Technological advances may offer opportunities that are unforeseeable at present. It will be important to give equal emphasis to short-term and long-term objectives, in order to encourage innovation and investment necessary to deliver continuous improvement. This balance has not been achieved adequately in the draft Bill.
11. Some of the more recent science suggests that a 60% reduction of CO2 by 2050 does not go far enough but there is provision in the Bill to revise this target should new scientific knowledge establish the need to do so. We believe it is important to make a start as soon as possible towards this, already ambitious, target and to make any further adjustments with sufficient long term signals to enable new technologies and investments to deliver the revised reduction.

12. The proposed target of 26–32% of CO2 emissions by 2020 is broadly consistent with discussions in the EU and as such will enable the UK to remain competitive with our closest trading partners, whilst making real progress on reducing climate impacts. This close alignment should be maintained.

13. Budgeting over five year periods allows realistic management of implementation, particularly since performance against targets in any one year will be subject to external shocks and since some flexibility will be needed around the overall trajectory of reducing emissions. However, these periods should not be seen as stepped changes in emissions targets but periods over which there is a single target for the average level of emissions against an indicative trajectory for individual years. Monitoring annual performance against this trajectory would give an early warning of failure to meet the five-year target. Enforcement and sanctions would need to be built into the mechanisms adopted to deliver the targets, including those applying to the public estate.

14. Long-term targets are particularly valuable in offering certainty to investors and encouraging technological innovation. The opportunities to revise targets should, therefore, be limited, available only in clearly defined circumstances, well signalled, and exercised sparingly. Clearly some flexibility is essential, but the proposed approaches re-introduce too many uncertainties. A simple, transparent approach should provide the necessary safety valve without undermining the statutory targets.

**Carbon Budgeting**

15. The ability to “bank” reductions beyond the target for a single year will encourage early action and so should be available to individuals and businesses within the delivery mechanisms. Cap and trade mechanisms allow business to realise benefits from this approach. The ability to “borrow” against future periods should be limited to excessive emissions caused by external shocks (such as severe weather). Banking and borrowing should be limited to a rolling five-year period with the year in question as the central point. This would enable smoothing where there is genuine need, without opening up the danger of constant deferment but encouraging investment and early action in anticipation of subsequent shocks.

16. As emphasised in the Stern Review, wider and deeper carbon markets will deliver the greatest benefits at least cost. It is, therefore, essential to encourage the trading of carbon credits internationally and cross-sectorally. It should be noted, however, that this could result in the net export of credits and not just open up the possibility of imports of credits.

17. The Bill sets out seven factors which should be taken into account when setting carbon budgets. We support the inclusion of the scientific knowledge of climate change, likely impact and availability of technological advances including non-carbon sources of energy, social and economic circumstances, and international circumstances as factors that the independent Committee on Climate Change will need to take into account. The Committee should also consider the scientific knowledge of climate change impacts, their social and economic costs and the availability of technology and other responses to reduce these risks.

18. However, we do not consider that the Committee should take account of fiscal or public spending pressures in setting targets. These are issues that the Government must consider in making its response to the Committee’s recommendations, ie on how the targets are to be implemented, and for which the Government should be accountable to Parliament in annual responses and quinquennial reports.

**Adaptation**

19. We welcome the recognition within the draft Bill of the need to assess the risks of climate change and to monitor progress in ensuring that the UK is better able to adapt to these risks. However, the approach taken is wholly inadequate.

20. Understanding climate risks and the consequent investment in adaptation should not be a separate activity but should be integral to the consideration and delivery of emissions reductions. The cost of impacts and adaptation measures will soar in the second half of the century if inadequate action is taken to reduce emissions now. The two strands are complementary and additive—only rarely substitutable.

21. At the same time, some measures to reduce emissions could actually increase the effect of climate impacts in the immediate future and reduce the scope for adaptation. For example, the more compact towns and high density developments needed to reduce transport and housing emissions lead to higher risk of flash
flooding and heat island effects. Cavity wall insulation to improve energy efficiency results in much more costly and lengthy flood repairs. Solutions, which will often entail the same policy and regulatory instruments, need to find synergies between mitigation and adaptation measures, avoiding conflicts.

22. Failure to address impacts and adaptation needs as a central part of the Government’s climate change programme also risks the credibility of emissions reduction activity over the medium-term, with the potential for losing public support. Climate risk, in particular the frequency and severity of extreme weather events, will continue to increase over the next 30–40 years, irrespective of action to reduce emissions. This inevitable climate change results from historic emissions and could only be reversed by taking carbon back out of the atmosphere and oceans. However, the current generation has justifiable expectations that the effects they are already experiencing and will increasingly experience from inevitable climate change should be reduced even while they are bearing the costs of avoiding further climate change that will affect future generations.

23. The climate change targets should include reduction in climate impacts through adaptation measures as well as reductions in emissions. The nature of the delivery mechanisms should be left to government (central and local) to decide and reported to Parliament alongside annual progress on emissions, informing fiscal and other measures to encourage individual action by households and business. Periodic reviews of impacts and adaptation should occur on a cycle compatible with the Government’s spending reviews, providing an evidence base for decisions on departmental programmes and spending needs, rather than a fixed five-year cycle.

24. The adaptation measures that should be adopted now and over the medium term include:

- Risk avoidance—moving people and assets out of areas likely to suffer heavy climate impacts through strategic, risk-based land use policies including those on housing, regeneration and critical infrastructure;
- Risk reduction—addressing vulnerabilities to weather damage and heat effects by strengthening building codes, flood and coastal defences, infrastructure performance, technological resilience and healthcare regimes;
- Risk management—taking pro-active measures to ensure the most vulnerable people and social and economic functions are given additional protection, and providing more assured responses to events by improving contingency planning by government, business and communities for floods, heat-waves and storms.

COMMITTEE ON CLIMATE CHANGE

25. We support the establishment of an independent, credible, expert body to assess the level of future targets and progress on their delivery. The remit of this Committee should be extended to cover climate impacts and adaptation issues and its composition should reflect this. Its status should be similar to certain expert committees advising Government on health issues, commissioning research as needed to support its analytical work, publishing reports independent of ministers and adopting a transparent approach in its deliberations. The Committee should have independent advisory status, ensuring democratic accountability through the usual means, with the expectation that Government will adopt its recommendations on national targets unaltered, in all but exceptional circumstances, and take account of its analysis of sectoral impacts and capacity to respond. Parliament will have an important role in ensuring the Committee on Climate Change does not become a toothless quango whose advice is regularly put aside.

26. We consider that the Committee should be composed of experts in climate science and climate change impacts, climate change policy and its economic and social impacts, economic analysis and forecasting, business competitiveness and key economic sectors including energy, technology development and diffusion, financial investment and market based emissions reduction and adaptation measures. These experts should be drawn from a wide range of backgrounds, not solely academic. This expertise should be supplemented by an independent secretariat able to undertake the necessary analytical work, together with a requirement to seek and consider evidence from stakeholders including those representing environmental, economic and social interests.

27. The Committee should comment on all policy areas affecting the achievement of its recommended targets. There are clear linkages between the targets and technology, regeneration and agricultural policies, for example, as well as the obvious links to energy and environmental policies.
Enabling Powers

28. We agree that the proposed Bill should take enabling powers so that future needs can be met by secondary legislation.

International Implications

29. We consider that the initiative taken by the Government in bringing forward this proposed legislation shows considerable leadership, whilst balancing social and economic concerns. As such the Bill will maximise its impact if replicated elsewhere, in particular in addressing the urgent need and limited capacity to address climate change risks through adaptation measures in many developing countries. The Government should seek to achieve this wider impact through its foreign and development aid policies.

Association of British Insurers

May 2007

Memorandum submitted by the Association for the Conservation of Energy (CCB 23)

Introduction to ACE

The Association for the Conservation of Energy is a lobbying, campaigning and policy research organisation, and has worked in the field of energy efficiency since 1981. Our lobbying and campaigning work represents the interests of our membership: major manufacturers and distributors of energy saving equipment in the United Kingdom. Our policy research is funded independently, and is focused on four key themes: policies and programmes to encourage increased energy efficiency; the environmental benefits of increased energy efficiency; the social impacts of energy use and of investment in energy efficiency measures; and organisational roles in the process of implementing energy efficiency policy.

Summary

ACE believes that the overarching target in the Bill to reduce CO₂ emissions by 60% below 1990 baseline levels by 2050 is inadequate. The 2050 target should reflect current scientific opinion as to the cuts necessary to keep the UK within its “fair share” of global emissions compatible with keeping temperature rises below 2 degrees Celsius. This means that the 2050 target should be for at least an 80% reduction in CO₂ emissions. This would set an exceptionally vigorous example to the rest of the world.

ACE believes strongly in the effectiveness of statutory targets, with the sanction of Judicial Review. These will not only give direction to Government—statutory targets are vital to give business the certainty it needs to make the appropriate investment decisions. For building materials (including energy efficiency materials), the investment required to increase production is immense, and local workforces must be trained up and retained. This is not a business where imports can be relied upon to make good a shortfall in UK production—imports are more expensive because of the bulky nature of the materials. For this reason and several others, ACE supports sectoral targets, as set out in the proposed amendment to the draft Climate Change Bill (see Appendix).

ACE Response to Committee Questions

The Committee Terms of Reference are considered in general in the roman numeral numbered text and appendix below and individual committee questions are referenced in brackets at the end of certain paragraphs for ease of reference:

1. The validity of the Government’s domestic targets to:
   — reduce CO₂ emissions by 60% below 1990 baseline levels by 2050, and
   — reduce CO₂ emissions by 26–32% below 1990 baseline levels by 2020.

3. The rationale for a five-year budgetary period.

4. Monitoring and early warning systems to ensure achievement of targets is on track.

5. Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non-compliance.
17. The validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post-2012.

18. Whether there are other domestic climate change issues which it would be appropriate to include in the Bill.

THE ACE VIEW ON TARGETS

I. ACE believes that the overarching target in the Bill to reduce CO₂ emissions by 60% below 1990 baseline levels by 2050 is inadequate (Question 1). The 2050 target should reflect current scientific opinion as to the cuts necessary to keep the UK within its “fair share” of global emissions compatible with keeping temperature rises below 2 degrees Celsius. This means that the 2050 target should be for at least an 80% reduction in CO₂ emissions. In light of this, the 2020 target to cut CO₂ emissions by 26–32% should be recalculated upwards to ensure sufficient early progress towards an 80% cut by 2050. Domestic action is fundamental to making international action possible and the UK should set a strong example to the rest of the world on our commitment and ability to achieve real carbon reductions (Question 17).

II. ACE believes strongly in the effectiveness of binding targets on organisations. In the case of Government, this means a statutory target. A promise can be broken but a failure to achieve a statutory target can end up in court, and fear of Judicial Review does seem to concentrate ministers’ minds wonderfully. This means that the deadline for a target must be reasonably close for Judicial Review to be possible (Question 5).

III. The Climate Change Bill as drafted provides for five year budgetary periods—and places on Government a duty to ensure that the net UK carbon account for any budgetary period does not exceed the carbon budget laid down. This five-year budget system allows for some flexibility to take account of short-term fluctuations in weather, fuel costs, etc. However, without modification, the system is not sufficiently robust to ensure that every Government is held to account and cannot pass the buck to a future Government (or blame a previous one). Without such modification, a Government could leave a successor Government to meet the target. That successor Government, in turn, could claim that its predecessor had made the inherited target impossible to achieve, because not enough resources or care in design had been devoted to it. Like an argument between an architect and a builder over a poorly constructed building, it is in the professional interests of both parties to blame each other.

IV. Therefore ACE believes that every Government responsible for part of a five year budgetary period should state clearly what they expect emissions to be in each year (an “annual milestone”). The Committee on Climate Change, through its annual reports on progress, would then be able to make informed judgments about progress against these annual milestones (Question 3 & 4).

V. It is always in the interest of Governments to maximise their room to manoeuvre on issues but it is vital for business to have certainty to enable it to make the appropriate investment decisions by reducing risk. For building materials (including energy efficiency materials), building technologies (such as micro-renewables) and construction industries, the capital investment required to increase production is immense, and workforces must be trained up and retained to manufacture and install these materials. Building materials is one of the few examples of commerce where it is not cheaper or easier to import from abroad, as many of the materials have either a high weight or a large bulk that makes transportation undesirable in carbon emissions and costly in financial terms (Question 18).

VI. For these above reasons, ACE supports the inclusion of sectoral targets on the face of the Bill, as set out in the proposed amendment to the draft Climate Change Bill (see Appendix). ACE is proposing:

(a) By 2020 the general level of energy efficiency of residential accommodation has been increased by at least 20% compared with the general level of such energy efficiency in 2010.

(b) By the end of 2010 the general level of energy usage in the commercial and public services sectors has reduced by at least 10% compared with the general level of such energy usage in 2005 and by the end of 2020 by at least 10% compared with the general level of such energy usage in 2010.

(c) 10% of electricity shall be generated from renewable sources by 2010 and 20% by 2020.

(d) 10 Giga-Watt of combined heat and power shall be generated by 2010.

VII. All of the above are targets to which the Government has committed itself. Currently, these targets are non-binding, but by including them in the Bill they would of course become binding on both current and future Governments. The role of the Committee on Climate Change should then be expanded to require it to advise on the setting of further sectoral targets as appropriate (as per the amendment in the Appendix).

VIII. Finally, it would be useful for the Committee on Climate Change to have more of a road map, set out with widespread agreement of MPs of all parties in Parliament. Certainly, it would help prevent a future Government from saying that to get to the destination of reduction of CO₂ emissions by such a date, it would not have started from here (Question 5).
APPENDIX

PROPOSED AMENDMENT TO THE DRAFT CLIMATE CHANGE BILL

AFTER CLAUSE 1 ADD

2. Sectoral Targets

(1) For the purpose of assisting with the achievement of the target specified in section 1(1) the Secretary of State shall take all reasonable steps to ensure that the following sectoral targets are achieved, namely that:

(a) by 2020 the general level of energy efficiency of residential accommodation has increased by at least 20% compared with the general level of such energy efficiency in 2010.

(b) By the end of 2010 the general level of energy usage in the commercial and public services sector has reduced by at least 10% compared with the general level of such energy usage in 2005 and by the end of 2020 by at least 10% compared with the general level of such energy usage in 2010.

(c) 10% of electricity shall be generated from renewable sources by 2010 and 20% by 2020.

(d) 10 GW of combined heat and power shall be generated by 2010.

(2) In this section “the commercial and public services sector” means:

(a) commercial and business premises, excluding industry;

(b) retail premises, including warehousing;

(c) . . . hotels and restaurants;

(d) premises used for the provision of any service or function by or on behalf of a public body.

CLAUSE 20 (1) (C) (ADVICE IN CONNECTION WITH CARBON BUDGETS)

After “contributions” add “or further contributions as the case may be”.

Association for the Conservation of Energy

May 2007

Memorandum submitted by EDF Energy (CCB 24)

EXECUTIVE SUMMARY

1. EDF Energy is one of the UK’s largest energy companies with activities throughout the energy chain. Our interests include coal and gas-fired electricity generation, combined heat and power plants, electricity networks and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including both residential and business users.

2. Currently there is no long-term certainty for any sector on the level of carbon abatement required from it. This is a barrier preventing major investment in low carbon technology. The framework introduced by the Bill should create greater certainty for UK businesses on the level of effort required. EDF Energy therefore supports the introduction of the Climate Change Bill. We do however have a number of concerns. These include:

— the ability to adjust targets and budgets creates a risk that investments in low carbon technology will be stranded if the targets are not defined robustly or if they are relaxed—additional safeguards are required to minimise this risk;

— it is unclear that a 15 year time horizon (three five—year budget periods) provides sufficient visibility of future carbon constraints when many assets will have lives of 25–60 years and may take up to 10 years to develop;

— to deliver the required investments from UK businesses the framework must deliver clarity on the balance between domestic emissions reduction in the UK and emissions reductions purchased from within Europe (eg via the EU ETS) and internationally;

— It is difficult to visualise how conflicting advice from the Committee on Climate Change and from the European Commission, particularly with respect to the EU ETS, will be resolved. For example, if the European Commission using a harmonised approach across Europe dictates a different level of abatement than that proposed by the Committee from UK industries within EU ETS traded sectors.
3. The Bill creates enabling powers to introduce trading schemes. The scope of these powers must be sufficiently broad to allow the introduction of schemes to auction carbon reduction contracts. EDF Energy has developed detailed proposals for a “carbon hedge” mechanism (please see Appendix A) that could be used to bring forward early investment in low carbon technologies and we believe that provisions in the Bill to enable the implementation of such instruments are fundamental to the UK successfully achieving its aspirations for a low carbon economy. We consider these instruments to be essential to mitigate risks associated with the still developing EU ETS and those identified above in the Climate Change Bill framework. They provide a way of enabling investment in low carbon technologies to happen now. The apparent intent to limit the scope to cap and trade schemes and obligations appears to pre-judge the outcome of the first report from the Committee for Climate Change on the most appropriate policy instruments to deliver the UK emission reduction pathway.

4. The real test of the effectiveness of the framework created by the Bill will be the first report by the Committee on Climate Change and the Government’s response. If as a result there is little change from the status quo, ie uncertainty remains for sectors on the level of abatement required from them, the Bill will have been ineffective.

TARG INTO

Validity of the targets

5. DEFRA recently reported 2005 CO₂ emissions as 11% below the 1990 baseline (6.4% excluding the effect of the EU ETS) and projected emissions of below 16.2% (11%) for 2010. This has been delivered primarily by physical abatement in the electricity generation sector and a policy of under allocation to the electricity generation industry in the EU ETS UK NAP. A further reduction to 26–32% below the 1990 baseline in 13 years is an extremely challenging target. It is necessary to ensure the burden of making further reductions is shared across all sectors and not just placed on electricity generators. Meeting this target in such a short timeframe is likely to require the UK Government to purchase international emissions credits.

6. The 2050 60% CO₂ emissions reduction target may need to be made more stretching as confidence in the outputs of climate models increase and international burden sharing agreements are negotiated. It is sufficient at this stage that a 60% target, in itself extremely stretching, has been established. The Bill provides for revision of the 2050 target if necessary—something that we support provided sufficient notice is given for the change.

Rationale for a five-year budget period

7. We support the Government’s proposed system of five-year carbon budgets established for several periods ahead. Five-year budget periods are robust to short term emissions volatility and smooth annual variations arising from weather, fuel price movements, etc. They are also consistent with the current international agreements (ie the Kyoto compliance periods), EU ETS timeframes and European targets.

8. We are strongly opposed to annual CO₂ targets and believe they will create an environment in which Government and stakeholders focus on short-term reduction objectives rather than on long term drivers that will deliver a low carbon economy. A short-term, reactive approach will create investor uncertainty and potentially increase the costs of mitigation.

9. A 15 year time horizon (three five-year budget periods) provides insufficient visibility of future carbon constraints when many assets will have lives of 25–60 years and may take up to 10 years to develop. We believe that visibility of five, five-year budget periods giving 25 years visibility is necessary.

Accountability and enforcement mechanisms

10. The Government should have a legal duty to comply with its carbon budgets and stay within the limits imposed by them. However, we do not agree that imposing this legal duty means that a government which fails to meet its targets or stay within budget would be open to judicial review, as suggested by the DEFRA consultation document.

11. Judicial review is essentially a mechanism by which the courts supervise the exercise of public administrative law functions. It enables the decisions of public authorities, including government departments, to be reviewed and overturned if the decision in question took irrelevant factors into account, or failed to take account of relevant factors, or did not comply with relevant procedural requirements, or was a decision that no reasonable authority could, in all the circumstances, have made.

12. It is difficult to see how this supervisory jurisdiction of the courts could ever be applied to a failure by the Government to stay within the limits of its carbon budgets. A continuing and transparent framework of accountability to the public and Parliament for actions and activities undertaken with the aim of meeting targets and keeping to budget is the appropriate weapon for ensuring that the Government stays on course under the climate change legislation.
**Carbon Budgeting**

*Borrowing and banking*

13. We support the use of (limited) banking and borrowing. Banking has the potential to reduce volatility between budget periods and smooth the CO₂ emissions reduction trajectory. It also incentivises early reduction in emissions. Given the stretching nature of the 2020 and 2050 targets we consider it unlikely that a large volume of early emission reduction will be carried forwards. Limited borrowing protects against short-term fluctuations and volatility in emissions, e.g., arising from a cold winter, fuel prices, in particular where the volatility occurs in the final year of a five-year budget period. The partial RIA justifies a borrowing limit of 1% based on the calculation of an acceptable probability that Government will stay within its budget. We consider that the only factor that should be used to calculate the borrowing limit is the physical volatility of CO₂ emissions, e.g., due to GDP growth or weather uncertainty, and not uncertainty regarding the effectiveness of policy measures.

*Facility to purchase carbon credits from overseas*

14. We support the proposal to adopt a target based on the “net UK carbon account” principle. Purchased EUA, CDM and JI credits all have a role in reducing emissions at least cost and allow the carbon market to operate efficiently.

15. However, it is also essential that the Climate Change Bill provides a UK Government view on the level of “supplementarity” that it deems acceptable (and therefore establishes a minimum level of domestic abatement required). Without this clarity there is a risk that industry will simply adopt a strategy of purchasing carbon credits from overseas rather than making physical CO₂ abatement investments in the UK.

16. In determining its view on the level of purchases of allowances from other countries it will allow, the UK Government must consider the financial risks that this creates. We have seen a significant divergence between actual CO₂ emissions and targets for the UK sectors that participate in the EU ETS. In Phase 2 of the EU ETS the UK electricity sector could be required to purchase 70 million allowances per annum to comply with its targets. The costs for compliance will eventually feed into the UK economy and will expose the UK to carbon price shocks driven by volatility in carbon markets in much the same way that it is exposed to sudden oil and gas price movements.

17. Furthermore, being too dependent on emissions reductions in other countries and failure to reduce emissions domestically will undermine the UK Government’s credibility and its ability to become a leader on climate change action and policy development.

*Review and revision of budgets*

18. The inclusion of any power to review the 2020 and 2050 targets or budgets increases uncertainty for investors. In particular, the possibility of relaxation of a target creates a risk of stranding early, low carbon investments. If this risk is perceived to be high it may reduce industry investment in abatement and force the UK Government to rely more heavily on purchases of allowances from either the EU ETS or from CDM/JI projects to meet its legal CO₂ emission obligations. At the same time we recognise that the UK Government will need to respond to changes in international agreements and scientific knowledge.

19. If the Government requires the flexibility to modify future targets, it must clearly set out the criteria and methodology for modification. The timescales for such revisions must be such that they will allow business to make some assessment of the direction of future policy changes (predictability) and incorporate the risk in its investment decisions.

20. EDF Energy believes that the criteria for reviewing targets must be kept to an absolute minimum to prevent reviews from undermining the regulatory stability that the Climate Change Bill is seeking to provide. To create the correct balance between providing the UK Government with flexibility and reducing uncertainty for investors we propose that any power that is introduced should therefore be constrained by the following conditions:
   - the powers should not provide for a relaxation of the 2020 target; the target reductions could however be increased, for example in response to an increase in the EU greenhouse gas emission reduction target from 20% to 30%; and
   - once set, the CO₂ target for any budget period should not be relaxed, it could however be made more stretching—this condition would prevent the relaxation of the 2050 target once three five-year budget periods extend to cover 2050.

21. Preventing the relaxation of budgets and targets does potentially create some risk for the UK economy. However, we believe that this risk is small due to:
   - the broad consensus on the need for early action in response to climate change science;
— the evolutionary nature of climate change science developments and as a result the confidence in the certainty of outcomes; and

— political EU agreement for, if necessary, unilateral action.

22. Without the conditions preventing short-term target and budget relaxations we outline above, it would appear that political and climate science risks (that are best managed by governments) would be disproportionately placed onto investors.

23. EDF Energy believes that any potential to relax future targets will significantly increase risks for investors in low carbon technologies and curtail investment in abatement. In these circumstances it is essential that Government makes specific provisions to protect stranded investments and minimise competitive distortions in the downstream markets that these new investments will serve. EDF Energy has outlined a possible mechanism, “a carbon hedge”, in its response to the UK Energy Review that we believe could be used to provide the level of assurance required by investors and ensure that the UK makes progress on reducing its CO₂ emissions and which is compatible with the EU ETS and competitive and liberalised energy markets.

24. If targets or budgets are to be subject only to stretching, rather than relaxation, then the power to introduce more onerous targets by order should itself be subject to a procedure that is more stretching than the normal process for changing primary legislation by order. An example would be the protections that are applied to the order-making powers available under the Legislative and Regulatory Reform Act 2006.

25. In particular, we recommend the use, if targets or budgets are to be stretched, of a parliamentary procedure under the climate change legislation analogous to the super-affirmative resolution procedure established under section 18 of the 2006 Act. It should be noted that the protections available under that Act are not merely procedural, since they make provision for an additional mechanism enabling a committee of either House charged with reporting on an order to prevent that order from being made.

26. We do not believe that any future increase in fuel and energy prices, that might adversely affect low income households, should be considered as a valid reason to modify climate change targets or budgets either in scale or focus on any particular customer group. We believe that any actions required to alleviate such effects should be treated via policies that address poverty and not climate change which will only distort objectives and hinder performance.

ADAPTATION

27. In the UK, the adaptation framework is less mature than that for the mitigation of climate change. We believe a more coherent and strategic approach is required to identifying and monitoring regional impacts, and the management of climate change risks. Climate change has the potential to have a significant impact on the UK economy and civil society. Early preparation and a proactive approach to managing the impacts of climate change can help manage these implications. We believe statutory reporting has a role to play in progressing adaptation and increasing transparency.

COMMITTEE ON CLIMATE CHANGE

Composition and appointment

28. The Committee on Climate Change should be comprised of technical experts who represent a broad spectrum of experience and knowledge. These experts should be able to understand the positions of stakeholders, but must be independent in their approach and decision-making and independent of policy development. Only through this independence in composition and function can the Committee establish itself as a respected arbiter of the positions of competing stakeholder groups. Although comprised of experts who are able to undertake their own analysis, the Committee should establish a consultation process to ensure the views of wider stakeholders are actively sought in reviewing the effectiveness of policy and its ability to achieve the declared targets.

Function and responsibilities

29. We believe that establishing an independent body to provide independent expert analysis is critically important to the wider task of identifying, and assessing the balance of priority between the cost-effectiveness and impact of different policy measures so that the UK can be in the best possible position to optimally achieve its emission reduction goals. It is equally important that the Government is seen to be committed to accepting the Committee’s advice and reports except in the most exceptional circumstances.
30. Perhaps the best current model of a genuinely independent public body, within the UK, is the Monetary Policy Committee. However, it is important to remember that the MPC has an executive function, to set interest rates, whereas the Committee on Climate Change will have only advisory functions. Because of this distinction, the hurdle for rejecting this Committee’s advice should be set quite high. In particular, any decision by a government to reject or materially depart from advice contained in a Committee report should have to be explained in a statement laid before Parliament for debate, leading to a vote.

31. A strongly analytical role should clearly be at the heart of the Committee’s work, but not to the exclusion of all other considerations. In particular, it is worth noting that the factors which the Committee must take into account in formulating its advice to government on carbon budgets are just the kind of qualitative factors which are required to inform the work of, for example, utility regulators. This inevitably adds a policy dimension to the Committee’s work and will therefore make it all the more important that the Committee establish an open and transparent consultation process with the widest possible range of stakeholders. However, it should not be the formal responsibility of the Committee to develop policy. Its primary focus must be to report on the progress being made against targets and on the effectiveness of policy measures, with policy formulation and policy development ultimately remaining the role of Government.

32. The Committee on Climate Change should be responsible for the annual reporting of the UK’s progress towards its targets to Parliament. This report should utilise Government’s actual emissions performance required under the Climate Change and Sustainable Energy Act 2006. This should form the basis of the Committee on Climate Change analysis and assessment that reviews performance and analyses trends and emissions trajectory and the effectiveness of policy. To provide investor confidence, we believe the Committee should also validate the emissions reduction targets. This independent report should not duplicate existing Government reporting efforts and responsibilities, or create an environment where government and stakeholders focus on the short term reduction objectives rather than longer term drivers that will deliver a low carbon economy.

ENABLING POWERS

33. The enabling powers currently proposed cover an impressive range of design elements, including compliance mechanisms, appropriate penalties, and appeals mechanisms, and should be sufficient to introduce effective new policies. Because of the likely substantial and possibly novel implications of new trading schemes for British industry, and the energy sector in particular, it would be desirable to ensure that the secondary legislation to implement such schemes is in all cases subject to no less than the affirmative resolution procedure.

34. The intent of the “trading schemes” that the legislation will enable to be introduced from the consultation document appears to be restricted to obligations and cap-and-trade schemes [Box 6, page 39 of the DEFRA consultation document]. The ability to introduce schemes for the auctioning of carbon abatement measures and contracts for difference (eg the carbon hedge as proposed by EDF Energy) must also be provided for in the legislation. It is essential to provide for the introduction of all types of measures that cannot be provided for via other routes (eg the annual Finance Bill) to provide the full-range of options to the Government. To exclude any types of measures would be to pre-empt the findings of the first report by the Committee for Climate Change and may delay or prevent the introduction of the optimal set of carbon abatement reduction measures.

APPENDIX A

THE CARBON HEDGE

Long term financial instruments to secure investment in low carbon technologies in the electricity sector

INTRODUCTION

The EU ETS as currently structured is not capable of underwriting the investment needed to reduce CO2 emissions in the electricity sector and move the UK to a low carbon economy. The primary reason for this is that the policy timescales of the EU ETS do not match the investment life cycles of the sector and investors are unwilling to accept the regulatory uncertainty surrounding future CO2 abatement targets. Furthermore, the timescales of policy development must recognise the need to achieve significant carbon dioxide reductions in the next capacity replacement cycle in the electricity sector to deliver the carbon dioxide reductions that Government aspires to.

Although considerable efforts are being made to agree long term abatement targets across the EU (Phase 3 and beyond) and internationally, these are unlikely to be agreed in the near future. The challenge we face is to find a mechanism capable of bridging this gap in regulatory certainty to galvanise early investment in low carbon technologies.
The EU ETS also currently excludes carbon free technologies such as carbon sequestration and nuclear from the scheme. Although these technologies can benefit from higher electricity prices driven by CO₂ prices in the EU ETS, the time scales of the EU ETS and the visibility and certainty of future prices do not match the investment life cycles of these assets. The potential risks faced by investors investing in low carbon or carbon free technologies are:

- the EU ETS being discontinued leading to a collapse in CO₂ prices;
- EU or individual Member State governments implementing or influencing policy in a manner that leads to a low or non significant price for CO₂; and
- Governments providing assistance to carbon emitting technologies by allocating free carbon allowances to new entrants under the EU ETS.

EDF Energy believes that commercial market based instruments, such as the “carbon hedge” explained below, can be used to underpin the significant capital investment required to lower the carbon intensity of the electricity sector without exposing the UK Government to unacceptable financial risks.

**PROPOSED MECHANISM FOR THE CARBON HEDGE**

The Carbon Hedge has the capability of hedging the risk for “low carbon technology” investors related to low carbon prices and can be designed to be consistent with existing policy mechanisms. The hedge has the further advantage of allowing Government “to bite off as much as it wants to chew” by allowing it to control its liabilities under the hedge by controlling the volume of abatement it is willing to underwrite using this mechanism. Government can further limit its liabilities by influencing wider policy development and retaining the carbon price within a reasonable range that minimises its financial exposure. The carbon hedge is also attractive because:

- it can be designed to allocate the regulatory risk associated with carbon markets more evenly/fairly; and
- it can provide certainty on delivering known CO₂ reductions.

The following section sets out a framework for this mechanism and examines some of the commercial and regulatory features of the carbon hedge.

**How does the Hedge work?**

- Electricity companies would bid in to supply a fixed volume of carbon free electricity from a certain date in the future for a number of years based on an assumption that each unit of carbon free electricity would displace the need for a unit of electricity from other forms of generation.
- The bid price submitted to secure the hedge would determine a guaranteed floor price for CO₂.
- If the market price for CO₂ fell below the agreed floor price during the term of the hedge then the investor would be compensated for the difference between the floor price in the hedge and the actual market price of CO₂.
- Any payments to investors that did arise in the event that the carbon market price fell below the contract price could be recovered from customers through a top-up carbon levy on electricity prices.
- The investor would not receive any payment if the market price remained above the floor price agreed in the hedge.
- The carbon hedge is designed purely to mitigate the political risk associated with the uncertainty of future CO₂ emission reduction targets and does not seek to mitigate any other risk, such as fossil fuel price or electricity market risks.
- The hedge would be a transitional instrument designed to reinforce the functioning of the EU ETS and enable it to galvanise the early investment in low carbon technologies.
- Once the EU ETS and global carbon market are put on a sufficiently long term basis, it may no longer be necessary for the government to offer any further carbon hedge contracts.
**Life cycle of the carbon hedge**

The timeline for developing and delivering low carbon investments using the carbon hedge and the key activities in each phase are illustrated below.

<table>
<thead>
<tr>
<th>Pre</th>
<th>Competitive Tender</th>
<th>Consenting</th>
<th>Construction Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Approval</td>
<td>Finalise contract conditions</td>
<td>All project consents achieved</td>
<td>Developer begins construction of project</td>
</tr>
<tr>
<td>Draft conditions for tender</td>
<td>Contract indemnity provisions agreed</td>
<td>Regulatory consents achieved</td>
<td>Project is operational and developer receives payments for carbon abatement in line with agreed performance criteria</td>
</tr>
<tr>
<td>Draft contract CO₂ abatement parameters including tonne/MWhr benchmark</td>
<td>Conditions Precedent for proceeding to construction agreed</td>
<td>Commercial Contracts relevant to Conditions Precedent agreed</td>
<td></td>
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<tr>
<td>Notional volumes of reductions and time scales for reductions declared</td>
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<td></td>
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<tr>
<td>Participant / Consortia credibility established</td>
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**Terms of delivery and failure to deliver**

The Government will have a legitimate expectation that as a policy measure the carbon hedge will deliver specific carbon reductions. The contracted reductions are likely to inform future Government targets for emissions reductions. The hedge is therefore likely to include expectations of minimum and maximum performance levels and associated penalty or bonus payments based on actual performance levels.

**SUMMARY**

In summary:

- Commercial market based instruments in the form of a carbon hedge have the capability of underwriting long-term capital intensive investments required to move the UK to a low carbon economy.
- A one way contract for difference format would be suitable for the electricity sector.
- The form of the hedge should be adapted if the Government policy is to continue with allocating free allowances to new entrants under the EU ETS.
- There are some policy issues and some of detailed design that will have to be addressed in finalising the form of the carbon hedge.

EDF Energy

*May 2007*
Joint memorandum submitted by the Baptist Union of Great Britain, the Methodist Church, the Religious Society of Friends (Quakers) and the United Reformed Church (CCB 26)

1. BACKGROUND

We welcome the draft Climate Change Bill and are grateful for an opportunity to comment on the proposed legislation.

There are some 150,000 members of Baptist churches associated with the Baptist Union of Great Britain. The Methodist Church has about 295,000 members and 800,000 people are connected with the Church. The Religious Society of Friends (Quakers) has a membership of around 15,000 with up to a further 15,000 attending Quaker worship. The United Reformed Church comprises about 150,000 adults and 100,000 children.

Many in our churches are gravely concerned about human-induced climate change. Our relationship with God’s creation and role as responsible stewards is viewed as an integral part of our relationship with God. Individuals and congregations have sought to model sustainable and responsible lifestyles. However, the challenge of reducing household carbon emissions to levels consistent with a theoretical sustainable per capita carbon budget is considerable. There is increasing recognition that effective government legislation is necessary to complement voluntary action.22

The work of our denominations on climate change draws on contributions across a range of sectors including those with public policy, business and technical expertise. This work is undertaken in collaboration with Christian Aid, Operation Noah and other groups.

2. TARGETS

2.1 The basis for determining targets for reduced emissions

The European Union advocates action to limit global temperature rise to two degrees. We believe that this should be the starting point for determining a trajectory for UK emission reductions.

Section 5 of the draft Bill provides a list of matters to be taken into account in relation to carbon budgets and the reassessment of 2020 and 2050 targets. Given that competing priorities are represented here the draft Bill should state more explicitly that scientific knowledge about climate change must be the over-riding consideration in setting targets. This is essential if the UK is to continue to demonstrate leadership. We see no difficulty in meeting our international obligations if the UK were to adopt this approach as there are unlikely to be circumstances in which they would be more onerous that the obligation implied by the consensus on climate science.

The Tyndall Centre has described an approach for tracking back from the temperature threshold to determine national emission pathways.23 We suggest that the targets that are proposed should provide a confidence of more than 50% that they represent a UK contribution to avoiding a greater than two-degree temperature rise. Not withstanding the several variables involved to establish this correlation, we ask whether independent scientific scrutiny of proposed targets could be carried out to determine whether a target provides this degree of confidence. One could argue that a greater degree of confidence could be sought but anything less than 50% would appear to conflict with the UK Government’s commitment to the precautionary principle.

2.2 The 2020 and 2050 targets

Against the above test the 2050 target of at least a 60% reduction on 1990s levels already looks inadequate. We therefore urge that the 2050 target (and therefore the 2020 target) be reassessed in the light of the fourth report of the International Panel on Climate Change.

We do not see why an upper limit should be set for the 2020 target; if swifter progress can be made, that is all to the good.

2.3 The rationale for five-year budgetary periods

We support the rationale provided for a five-year budgetary period. We also support the proposal to set targets for three five-year periods at any one time providing business with a sound basis for making long-term investment decisions.

22 Prosperity with a Purpose, (Churches Together in Britain and Ireland, 2005).
23 A response to the Draft Climate Change Bill’s carbon reduction targets, Anderson and Bows, (Tyndall Briefing Note 17, March 2007).
We would argue that the second and third five-year periods should be supported with an indication of the necessary policy recommendations to achieve reductions in the longer-term. These recommendations should provide an indication of the likely contribution of various sectors of the UK economy. These policy recommendations should also be subject to scrutiny by the Committee on Climate Change.

2.4 Monitoring and early warning systems to ensure achievement of targets is on track

While we do not support the placing of annual targets in primary or secondary legislation (i.e., Option 3 in Climate Change Bill—Explanatory Notes, section 5.1) we do consider that the legislation could be strengthened to provide consistency and accountability in target setting. We propose that, within the duty to report on proposals and policies for meeting carbon budgets, the Secretary for State be required to propose annual milestones for achieving the five-year carbon budget. These would complement the requirement within the current draft Bill for the Secretary for State to provide an annual report on actual carbon reductions.

2.5 Emissions from aviation and shipping

Emissions from UK aviation are forecast to double in the next decade. The arguments put forward for establishing international leadership on setting targets in legislation would appear to apply equally in the area of aviation emissions. We do not consider the lack of international agreement on aviation emissions to constitute a strong argument for their exclusion from UK legislation.

If the draft Bill were to make provision for the UK contribution to aviation emissions it would provide a better basis for long-term planning in an increasingly significant sector.

3. Carbon Budgeting

3.1 Borrowing from a later period to cover a deficit in emission reduction

We appreciate that some flexibility in the timing of emissions reduction is helpful.

If, as proposed, the facility to borrow emission rights from a later period is restricted to 1% of that period it should not undermine the discipline of carbon budgets.

3.2 Carrying forward a surplus

The rationale for carrying forward a surplus to a later period is questionable and we note that little restriction is placed on the extent to which this facility could be available. The draft Bill gives the impression that the whole of a surplus could be carried forward regardless of the cause that gave rise to this surplus. If a surplus arose as a result of one or two unusually mild winters there would in our view be no sound basis for carrying this forward. We think therefore that some criteria for permitting carry forward ought to be developed with the intention of ensuring that any carry forward is properly justified.

3.3 The use of carbon credits

Our approach to the purchase of carbon credits recognises that developed countries such as the UK have gained economic advantage from the availability of cheap fossil fuels. We recognise that carbon credits may be helpful in attracting investment in non-Kyoto countries to encourage and facilitate the development of such economies along different lines.

However, the use of carbon credits must not enable the UK to duck its responsibility drastically to reduce domestic carbon emissions. The purchasing of one-third of the 2050 abatement effort with carbon credits24 may provide a cost-effective path to reducing carbon but is inequitable. It enables the wealth developed, in part through cheap but damaging fossil fuels, to be used to perpetuate an unsustainable level of carbon output.

In our view the obligation on the UK to reduce carbon emissions should not be exported overseas. In practice this would require a limit to be placed on the overall contribution of carbon credits to achieving carbon reduction targets.

4. Adaptation

The recommendations for statutory reporting on adaptation in our view provide an appropriate framework for co-ordination across government.

24 A scenario outlined in the Climate Change Bill—Explanatory Notes para 5.1.37.
5. **International Implications**

We agree with the UK Government’s position that the developed countries must lead on emission reductions and that through the implementation of this bill the UK government is better placed to build a consensus for deeper commitment from the EU and possibly internationally.

Churches can contribute to these efforts by helping to build a strong call from civil society for legally binding targets. The churches in the UK maintain relationships with their partners overseas on a range of issues and climate change is a priority for many at this time. By taking a lead to set targets in UK legislation we strengthen the position of church leaders and other leaders in civil society in other countries. It provides them with greater confidence to call for similar action from their own governments.

*May 2007*

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**Memorandum submitted by The Wildlife Trusts (CCB 27)**

**Introduction**

1. The Wildlife Trusts welcome the opportunity to submit written evidence to the Environment, Food and Rural Affairs Committee inquiry into the Climate Change Bill.

2. There are 47 local Wildlife Trusts across the whole of the UK, the Isle of Man and Alderney. We are working for an environment rich in wildlife for everyone. With 670,000 members, we are the largest UK voluntary organisation dedicated to conserving the full range of the UK’s habitats and species, whether they be in the countryside, in cities or at sea. 108,000 of our members belong to our junior branch, Wildlife Watch. We manage 2,200 nature reserves covering more than 80,000 hectares; we stand up for wildlife; we inspire people about the natural world and we foster sustainable living.

3. The impact of climate change on habitats and species in the UK is well documented and has led The Wildlife Trusts to focus on three key areas of response:
   - Adaptation—Ensuring that the environment has sufficient resilience and wildlife has the flexibility to adapt to the changes resulting from climate change.
   - Reducing emissions—Ensuring that emissions that contribute to climate change can be reduced through policy and behaviour change.
   - Demonstration—Ensuring that we reduce the carbon footprint of The Wildlife Trusts and provide leadership on climate change issues.

4. This submission sets out The Wildlife Trusts’ views in relation to “whether adequate provision is made within the Bill to address adaptation to climate change”, an area where we have particular expertise and knowledge particularly in relation to the natural environment.

5. We would be pleased to provide further information to support statements made in this submission.

**General Comments**

6. The Wildlife Trusts welcome the principle of a Climate Change Bill and the leadership that Government is showing on climate change. This is the most serious long-term threat to our environment and it is important that Government is bold, visionary and urgent in its response.

7. We believe that while the Bill rightly focuses on reducing emissions of greenhouse gases it needs to be much stronger and more meaningful on dealing with the consequences of climate change. This should be driven by the realisation that we are already locked into at least thirty years of adaptation to the changes caused by emissions currently in the atmosphere, and by understanding the consequences, outlined in the Stern Review, of not taking urgent adaptation measures now.

8. The Wildlife Trusts welcome the reference to the requirement for the Secretary of State to report on adaptation measures. However, this measure does not sufficiently reflect the importance of this aspect of climate change. We believe that adaptation measures should focus on landscape-scale conservation. This involves both expanding sites of greatest value for biodiversity to create more resilient larger areas, together with improving connectivity by linking and buffering sites. Expanding and enhancing at a landscape-scale provides species and habitats with the resilience and flexibility to cope with the changes brought about by climate change. It also helps to provide more robust functioning ecosystems that can deliver the essential
ecosystem services of flood protection, aquifer recharge, soil conservation, pollution control and absorption of carbon dioxide. Adaptation measures are relevant to the marine as well as the terrestrial environment. The Stern Review is particularly relevant in this context—the appropriate quote is given below.

Protecting natural systems could prove particularly challenging. The impacts of climate change on species and biodiversity are expected to be harmful for most levels of warming, because of the limited ability of plants and animals to migrate fast enough to new areas with suitable climate (Chapter 3). In addition, the effects of urbanisation, barriers to migration paths, and fragmentation of the landscape also severely limit species’ ability to move.

For those species that can move rapidly in line with the changing climate, finding new food and suitable living conditions could prove challenging. Climate change will require nature conservation efforts to extend out from the current approach of fixed protected areas. Conservation efforts will increasingly be required to operate at the landscape scale with larger contiguous tracts of land that can better accommodate species movement.

Policies for nature protection should be sufficiently flexible to allow for species’ movement across the landscape, through a variety of measures to reduce the fragmentation of the landscape and make the intervening countryside more permeable to wildlife, for example use of wildlife corridors or “biodiversity islands”.

9. We believe that the UK’s response to climate change is a key test of the political parties’ environmental credentials, and forms part of the Green Alliance Green Standard tests for environmental leadership.25

SPECIFIC COMMENTS

10. The Wildlife Trusts believe that the Climate Change Bill represents a major opportunity to demonstrate joined-up Government by setting out adaptation measures across all parts of Government with an influence on land use—key departments of UK and national government, regional planning, and the role of local authorities. Urgent action to further this landscape scale agenda lies particularly within the remit of Defra and CLG. Policies should work with natural processes to ensure long-term cost effectiveness and sustainability, such as moving flood management away from hard defences to more natural solutions, or regeneration projects such as the Thames Gateway and the Olympics making a long-term contribution to delivering landscape scale conservation.

11. We believe that an existing instrument could be amended to provide a focus for measures to address adaptation across Government. The duty to “have regard to the conservation of biological diversity” that applies to all Government Departments and public bodies in the Countryside and Rights of Way Act (2000) and Natural Environment and Rural Communities Act (2006) should be amended to include specific reference to promoting connectivity and ensuring that wildlife can adapt to climate change. In addition, the Bill should include a specific duty on the Secretary of State to ensure a national climate change adaptation strategy is in place, which includes clear measures for the natural environment. This duty should extend to regional bodies with a requirement for regional climate change adaptation strategies to be produced (these would make up the national strategy), and that these should be included within regional spatial strategies.

12. Under the above duties, the following measures are examples of re-focusing policy within joined up Government to put adaptation into practice:

— Agri-environment schemes to support adaptation and mitigation:
  Ensuring synergy between the benefits of cross-compliance and Entry Level stewardship; physical linkage and networking of environmental measures on the ground; and targeting of Higher Level Scheme where it delivers greatest benefits in climate change adaptation.

— Existing site designations should be recognised as important “nodes” in climate adaptation networks:
  Current protected areas are both refuges from which plants and animals can move to colonise new areas, and vital stepping stones in a network where the most sensitive and fastidious species can survive. Sites of European value remain crucially important in the international response to climate change adaptation and existing protection legislation should not be dismantled. Climate changes gives greater impetus to protect and safeguard these areas as the building blocks for adaptation.

25 The Green Standard tests for environmental leadership:
  UK action on climate change;
  International action on climate change;
  Green living;
  Natural environment;
  Planning;
  Environmental tax and subsidies.
— Flexibility of how we interpret current site designation and prioritisation rather than removal of site based approach;

The plant and animal species within protected areas may change gradually in response to climate. The intrinsic features of geology, morphology, land-use history and soil chemistry remain and are irreplaceable. One set of rare and threatened species may be replaced by another but SSSIs will remain of very high conservation value. Existing SSSI protection legislation should not be dismantled implementation should be more flexible to cope with change—again, climate change gives stronger impetus for their protecting.

— Regional and local planning system should inform spatial patterns of development and landscape structure within individual developments:

The Bill should ensure all new major development are more permeable to wildlife. This can be achieved by climate adaptation opportunity mapping based on current and historical local data from local records centres and voluntary bodies. Opportunity maps should be embedded in Regional Spatial Strategies, which set the vision in context.

— National planning overview should put sustainability at the heart of planning:

National planning must avoid negative impacts, for example from transport and waste developments. National Government should support mapping by facilitating a UK-wide spatial framework for landscape scale conservation. Government should use incentives such as Planning Gain Supplement and stimulate or devise new measures such to promote habitat restoration or ensure that Local Area Agreements can facilitate this approach.

— Reflecting the duty in funding and management programmes:

Public bodies and other funding organisations should embrace large-scale habitat restoration and reflect these ambitions in their funding programmes. They should manage the public estate to maintain and enhance biodiversity and its resilience to climate change. Parks, hospitals and schools can contribute to landscape scale conservation, and also enhance health and wellbeing.

— Water resource management reflecting adaptation needs:

Water policy should reflect environmental limits and habitat enhancement identified through opportunity mapping, to set it in the context of climate change adaptation.

— Standards for homes and development:

Building standards should track the rapid improvements in energy efficiency and set ambitious targets for industry and domestic use In addition they should be designed to allow wildlife to be “permeable” to wildlife.

— Recreation—corridors for people and wildlife:

Landscape design in new developments should maximise connectivity of green infrastructure, both to allow wildlife dispersal and to encourage walking and cycling (energy-efficient and healthy).

— Inspire local people to improve their quality of life:

Local authorities should use mechanisms such as community planning and Local Strategic Partnerships to engage and inspire local people about landscape-scale conservation. There is scope for the Government to encourage this through indicators for Local Area Agreements.

— Build climate adaptation into social policy:

Promote large-scale habitat schemes and landscape linkage as adaptation through social policy such as tourism, schools, outdoor learning provision, preventative healthcare volunteering schemes and youth work.

— Energy:

The Wildlife Trusts support a massive increase in use of renewables but these do not need to conflict with our vision for climate change adaptation if they are delivered at the right scale and location. Most delays to windfarms and other large renewable-energy infrastructure projects result from inadequate environmental statements and mitigation, rather than a slow planning system.

— Ecosystem services:

We welcome the adoption of an ecosystem approach by Defra, and the updating of Biodiversity Action Plans to reflect habitat rather than species focus. The delivery of the new approach should not be compromised by hurried and ill-considered developments and infrastructure which prevents future joined-up land-use policy. A realistic assessment of ecosystem services, combined with opportunity mapping, will help to establish environmental limits, ensuring that development does not deplete natural resources and processes, and does not threaten the integrity of future landscape scale developments.

13. The Wildlife Trusts believe that non-statutory Local Wildlife Sites have a particularly important role to play in underpinning connectivity to support adaptation measures and act as reservoirs of high biodiversity. They should also play a role in providing an important indicator of the resilience of the natural environment in monitoring our adaptation response. In order to do this, Local Wildlife Site systems require
statutory underpinning, with a requirement on Local Authorities to ensure systems are operating to common standards, building on the guidance published by Defra in 2006. The Climate Change Bill should include such measures.

We believe that the reporting measures in the Bill do not go far enough. We need to see a greater focus on how Government monitors change and amends policies to bring about adaptation, rather than simply reporting on progress or failure to progress:

- Monitoring must cover sufficient indicators and measures to enable a robust assessment of the effectiveness of adaptation of both wildlife and people to be made.
- There is a danger that if progress is not rapid enough or monitoring highlights unexpected changes, there are no instruments in place that Government can draw upon immediately to address the situation, leading to delays in responding to such situations.

The Wildlife Trusts

May 2007

Memorandum submitted by the Local Government Association (CCB 28)

1. Executive Summary

1.1 Councils are already on the frontline in the climate change challenge, leading the way on energy and water conservation, waste, flooding and reducing greenhouse gas emissions. The LGA has appointed leading energy economist Professor John Chesshire OBE to chair a Climate Change Commission to investigate how councils can best cut emissions in their own buildings and services, lead local action, and plan for and build capacity to adapt to climate change.

1.2 LGA key messages on draft Climate Change Bill

- Councils are already taking action on climate change. The LGA is now looking to go further with an independent Climate Change Commission for Local Government to investigate how councils can best cut their emissions, lead local action, and plan for and build capacity to adapt to climate change.
- The LGA strongly supported proposals in the Local Government White Paper for a national outcome on climate change within the new performance framework for councils. The creation of statutory national targets and carbon budgets to aid progress to a 60% carbon reduction by 2050 is another positive step. Defra must now work with us to support councils and their partners in setting targets through the Local Area Agreements that are consistent with this national ambition.
- Ministers must guarantee that any carbon trading scheme for local government will be developed in partnership with council leaders. It is critical that such a scheme complements the new local performance framework rather than merely duplicating its effects at higher cost.
- The LGA urges the Government to make a firm commitment to providing a place for local government on the proposed Climate Change Committee. Given the central role in delivering this agenda and on-the-ground expertise, local government representation is essential if the Committee is to effectively “present the economics of the costs, benefits and risks of abatement decisions.”
- Government must now place a much greater emphasis on adaptation, with support to councils in identifying risk and mapping vulnerabilities if we are to minimise the costs resulting from failure to plan for change. The proposed five yearly reviews of progress on adaptation must make an initial report as soon as possible if the process is provide leadership and support action at the local level.

1.3 Local Government’s role in tackling climate change

There are number of specific actions that councils are already undertaking to mitigate against and adapt to climate change. These include:

- taking action to reduce council greenhouse gas emissions through improved energy efficiency and use of green energy;
- tackling transport related emissions through green travel plans and local transport plans that promote low carbon fuels or alternatives to car travel. These include public transport and community planning to reduce the need to travel;
- partnership working with all sectors of the community, including business, the voluntary sector and government and other agencies working on the environment—for example using Local Area Agreements and Local Strategic Partnerships to deliver climate change priorities;
— using the planning and building control system to promote sustainable buildings in new developments and an increase in onsite renewables and microgeneration;
— setting procurement strategies to green the acquisition and use of council goods and services and to influence community choices towards greener goods and services, such as locally produced food;
— tackling fuel poverty through adopting affordable warmth strategies that also help tackle climate change;
— tackling waste to reduce absolute levels and improve recycling and reuse rates, and looking at waste to energy options;
— using the education system to raise an environmentally aware generation and to link to parents and other sectors of the community through schools, colleges and other learning settings; and
— building capacity for and planning strategies for adapting to climate change.

1.4 The LGA’s Climate Change Commission was launched on 9 March 2007 and is chaired by Professor John Chesshire OBE with six other commissioners from leading roles across the public, private and voluntary sectors.

1.5 The Commission’s objectives are to:
— Review and critically evaluate local government’s track record on climate change, and identify the factors which have contributed to and hampered local government’s effectiveness;
— Make recommendations for local government, central government and other organisations on how the local government response could be improved;
— Raise the local government profile in responding to climate change, to all local authorities, central government and the public.

1.6 Professor Chesshire and the Commission are expected to publish a short, interim report in July and a full set of findings by the end of 2007. The Commission will also consult with councils in Scotland, Wales and Northern Ireland. The Commissioners are looking forward to engagement with government and parliament.

2. **Targets**

2.1 The LGA supports the creation of statutory national targets and carbon budgets for progress to a 60% carbon reduction by 2050. This will provide certainty over government intentions and re-affirm the UK’s commitment to taking real action to meet our climate change goals. The appropriate timescale for setting and reporting on targets must be based on the need to drive harder and faster action, in partnership with local authorities, against climate change.

2.2 The Local Government White Paper proposed a simplification of the performance framework with a clear set of national outcomes reflecting national priorities, a maximum of 200 performance indicators, and targets negotiated through Local Area Agreements. Local Government is confident that this will ensure that effective action is taken on climate change at the local level. It will, in effect, provide a mandatory scheme for the sector with published, audited results and public transparency on performance at individual council level.

2.3 The LGA hopes that Government departments and offices will now work with us to support councils and their partners in setting targets through Local Area Agreements that are consistent with this national ambition.

2.4 Local authorities can play a central role in partnership working with all sectors of the community, including business, the voluntary sector and government and other agencies working on the environment.

2.5 Kirklees Metropolitan Council has set up “energy services companies” with revolving loan funds to enable installation of energy efficiency and renewables measures in the homes of local residents. By providing appropriate pay-back periods they created a win-win for the environment and for the end users who get cheaper energy bills. The council has also announced this spring that it is funding schemes to enable all householders in the area to benefit from cost effective insulation.

2.6 Southampton, Nottingham and Sheffield Councils have installed extensive “district heating schemes” serving council buildings, retail, industrial and residential areas. Such schemes are energy efficient in both generation efficiencies and in taking a step towards a more decentralised energy network.

3. **Carbon Budgeting**

3.1 For carbon budgets to be meaningfully translated into action there needs to be an accurate measurement of emissions and ability to understand where it is most appropriate to focus action to reduce emissions, so that budgets are not exceeded. Issues such as banking or borrowing from budgets need to be resolved so that perverse incentives are not inadvertently engineered.
3.2 The new performance framework for Local Government proposed in the Local Government White Paper will drive an outcome on climate change that can help to meet national targets through action at local level. We now need agreement on which areas of control and influence are appropriate for assessing council performance.

4. Adaptation

4.1 Government must now place a much greater emphasis on adaptation, with support to councils in identifying risk and mapping vulnerabilities if we are to minimise the costs resulting from failure to plan for change. The proposed five yearly reviews of progress on adaptation must make an initial report as soon as possible if the process is to provide leadership and support action at the local level.

4.2 Councils can provide coordination for planning and building capacity to adapt to climate change, not only through service delivery but also as community leaders. Councils now need to be supported in planning for change through:

— building on Local Government White Paper proposals for a greater council focus on climate change both in their own performance and in their work with their Local Strategic Partnerships;
— Implementation of the White Paper proposals for a duty on specific partners to co-operate with councils in partnership arrangements;
— a greater focus on risk and mapping vulnerabilities, and the need to minimise exposure to costs from failure to plan for change;
— support for best practice schemes and national bodies working with councils to develop models for adaptation.

4.3 Devon County Council is already undertaking a local vulnerability mapping approach to ensure that it and its citizens are aware of, and have the capacity to respond to, potential extreme weather events.

5. Committee on Climate Change

5.1 The LGA supports the establishment of an independent Committee to provide expert advice to government on the reduction of CO2 emissions. It is vital that the impact of policy decisions is fully and expertly evaluated and that robust advice underpins the budget setting process.

5.2 The LGA will be urging the government to ensure that the on-the-ground experience of councils is represented, with a place for a council with council experience on the Committee. This will be vital if the Committee is to effectively "present the economics of the costs, benefits and risks of abatement decisions." Local government is not only a key partner in delivering real cuts in emissions but also provides access to expertise and experience. It has a real focus on the ability to deliver at sub regional and local level on national objectives.

6. Enabling Powers

6.1 The LGA will be seeking a commitment from Minister to ensure that any carbon trading scheme for local government will be developed in partnership with council leaders. It is critical that such a scheme complements the new local performance framework rather than merely duplicating its effects at higher cost.

6.2 The Local Government sector must have the opportunity to give in-depth consideration to any new instruments for reducing emissions in order to ensure that they do not duplicate other instruments already in operation.

6.3 Councils can deliver a step change in reducing carbon emissions from their own buildings and fleet, but, in addition to new mechanisms, the 2007 Comprehensive Spending Review must provide for significant expansion of up-front finance to put in place energy efficiency measures and renewables. Also, if councils are going to be able to maximise the impetus of the proposed Comprehensive Area Assessment performance framework they need to be able to have sufficient relief from resource pressures to build in-house capacity and expertise as well as funding to deliver measures.

6.4 Shropshire County Council is already developing bio-fuels for use in its own fleet of vehicles. It has also become the first council to offer for sale 100% biodiesel from public forecourts. Poole Unitary Council was the first local authority to introduce a waste collection lorry powered by vegetable oil while in Bury St Edmonds the council is paying its staff 20p per mile to use bikes for work travel.
7. International Implications

7.1 Local government has consistently engaged with the UN and EU on the future of post-2012 policy through a range of fora. More emphasis should be placed by Government on developing a co-ordinated position with local government when detailed negotiations are taking place on future climate policy.

7.2 A more comprehensive approach is needed across policy negotiation at the EU level. This should work to ensure that the whole raft of EU policies—from vehicle emissions to energy efficiency criteria—afflicting how we impact on the climate post 2012 creates a more comprehensive policy package that meets the needs of local communities.

7.3 Local government should be a key partner in this process. Resources should also be given to helping local authorities engage with counterparts internationally to drive forward action to adapt to and mitigate climate change.

7.4 UK local government strongly encouraged leaders of the EU’s 27 member states to endorse European Commission proposals for emissions to be cut by 20–30% by 2020 when they met in Brussels earlier this year. The deal reached was part of a major package of climate and energy proposals which had been put forward by the European Commission in January.

8. General

8.1 Councils also need a set of reliable, up-to-date data to work from and a framework and methodology for emissions baseline monitoring. At present elements of data sets are available but other data sets need to be compiled and a framework to enable comparability is needed.

8.2 Councils also need wider access to existing data sets collected for specific purposes, such as data on energy efficiency of existing homes which will be collated for all marketed homes under the Home Information Packs scheme (the Energy Performance Certificates). This valuable data will not be available to bodies such as Local Authorities (LAs) trying to engage with householders to raise domestic energy efficiency levels which is a wasted opportunity to develop joined up approaches at least cost.

LGA
May 2007

Memorandum submitted by Natural England (CCB 29)

1. Introduction

Natural England was established under the Natural Environment and Rural Communities Act 2006 with the purpose of ensuring that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

2. Key Issues

Proactive approach to adaptation

Natural England accepts the scientific evidence presented this year by IPCC which affirms the need for the climate mitigation policy goal to restrict global temperature rise to no more than 2°C above pre-industrial levels. On the basis of the available evidence, the proposed 60% reduction target for CO2 emissions by 2050 seems appropriate.

We support the proactive approach taken in setting emission reduction targets. However, we have significant concerns about the approach to adaptation; this is reactive, with no clear statutory requirement to establish measures against which performance can be assessed.

Regardless of the robustness of emission reduction targets, we will be committed to several decades of climate change which cannot be prevented. This is due to the residence times of greenhouse gases once in the atmosphere—including those which have already been emitted in recent decades and those which will be emitted in the future.

It is therefore essential that, in parallel with setting emission reduction targets, the Bill includes statutory mechanisms which will firstly identify the impacts of unavoidable climate change and then develop adaptation response strategies to minimise these impacts. The establishment of appropriate measures could be a role for the Committee on Climate Change and its terms of reference and the expertise of its membership would need to reflect this.
It is essential that the proposed quinquennial review of the risks posed by climate change to the UK includes an assessment of the impacts on the natural environment. This will help to ensure that adaptation for the natural environment is one of the Government’s policy priorities and that measures to deliver adaptation are included in the statutory framework.

**Multi-gas approach**

The proposal that emission reduction targets will only apply to CO₂ and not other greenhouse gases is a shortcoming of the draft Bill. IPCC’s Working Group III report on Mitigation (May 2007) states conclusively that “a multi-gas approach and inclusion of carbon sinks generally reduces costs [of mitigation] substantially compared to CO₂ emission abatement only”.

International approaches to climate change mitigation and emissions reduction have taken a multi-gas approach. For example, the Kyoto Protocol set legally binding targets for all major greenhouse gases, non-CO₂ gases are likely to be brought into the EU Emissions Trading Scheme (EUETS) post-2012 and the approach of the Stern Review is to include the total stock of greenhouse gases.

The UK’s domestic action on emission reductions should be consistent with international multi-gas approaches. Such an approach would enhance synergies between the UK’s domestic and international efforts to reduce emissions and offer improved opportunities for overall emission reductions. As the UK has demonstrated successfully through its Kyoto commitment, it is possible to achieve emission reductions for all greenhouse gases and not just for CO₂.

**Strong enabling powers**

Natural England strongly supports the enabling powers proposed in the draft Bill. Such powers will provide the necessary incentives and regulation required for the Agriculture, Forestry and Land Management sector to make a significant contribution to climate mitigation. As agriculture is responsible for two-thirds of the UK’s nitrous oxide emissions and over a third of methane, inclusion of these gases in the statutory target would give the sector a clear incentive to further reduce its emissions.

Furthermore, farmers and land managers are uniquely placed to enhance the natural absorption of carbon in soils and vegetation, so helping to maintain and strengthen carbon sinks. In a UK context, this is particularly the case for peaty soils, which store an estimated 3 billion tonnes of carbon and could become major sources of CO₂. As the scientific understanding of these systems becomes clearer, enabling powers could help deliver conservation and restoration measures to secure and sequester significant amounts of carbon.

There are at present no economic instruments that directly encourage or reward land managers for mitigation activities and the draft Bill presents an important opportunity to address this.

Natural England

*May 2007*

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**Memorandum Submitted by the National Farmers’ Union (CCB 30)**

**EXECUTIVE SUMMARY**

1. The NFU welcomes the draft Climate Change Bill. It is a great opportunity for British agriculture to positively engage and help achieve the carbon dioxide targets, by producing low-carbon renewable energy for heat, electricity and transport fuels, by storing carbon in soils and vegetation, and by producing biogas from digesters (which helps reduce methane emissions, as well as producing renewable energy). The Bill is a positive step in encouraging renewable bioenergy and gaining a consensus for a joined-up delivery by government of the Energy White Paper published in March 2007. We do however need consistency in climate change policy from the present and future governments to enable farmers to adapt to changing policies as the environment changes. The NFU looks to government to provide genuine commitment and the positive incentives that will stimulate the necessary investment in these types of mitigation options.

2. These emission targets need to be EU-wide to ensure British farming does not suffer as a result of extra regulation, and not put at a competitive disadvantage. Also, within the UK, government must ensure that the setting of any targets involves stakeholders in the development of cost effective sector specific plans to meet these targets. All sectors need to do their bit, rather than the arbitrary legislation to date where sectors such as horticulture, pigs and poultry have been seriously affected by Climate Change Levy and IPPC regulations, whilst other sectors of the economy such as aviation are left unregulated.
3. We also look to the Government to give specific detail as soon as possible as to how they plan to achieve these targets.

The NFU’s comments below correspond to the paragraphs in the Committee’s call for evidence. We do not offer comments at this time on some of the paragraphs.

1. **The validity of the Government’s domestic targets to**
   - reduce CO₂ emissions by 60% below 1990 baseline levels by 2050, and
   - reduce CO₂ emissions by 26–32% below 1990 baseline levels by 2020.

2. **The agricultural industry is aware of the need to reduce greenhouse gas emissions.** As a sector, we are responsible for less than 1% of carbon dioxide emissions, but are working to reduce these emissions through energy efficiency (most notably through the industry’s excellent performance within the Climate Change Levy Scheme), renewable fuels etc. We can help meet these stringent targets set out in the Bill both for our sector, and for the other industrial and the domestic sectors. This can be met through a number of measures including the increasing development of the biofuels and biomass market, the increasing use of technologies such as anaerobic digestion, and through other processes such as the use of other non-food crops to substitute fossil fuel use.

3. **The UK has significant capacity to produce energy from biofuel crops to deliver real benefits in terms of proven carbon savings, domestic energy security, aid environmental conservation and support for the rural economy.** This could help meet these stringent targets, as these crops offer significant CO₂ reductions, with greenhouse gas savings of around 60% compared to fossil fuels. Further carbon saving will be possible as new technology emerges, but all biofuels must be accredited environmentally to ensure that they are sustainable and meet carbon saving targets.

4. **Currently, the main market for biomass is through co-firing in coal-fired power stations which reduces carbon emissions associated with electricity generation.** Further carbon savings can be made through biomass-fuelled combined heat and power (CHP) stations, which can be small. Opportunities for CHP range from small-scale heating systems (such as hospitals and schools), to fully integrated combined heat and power stations, with district heating for residential, industrial and commercial sectors. The feedstock for these generators can come from waste products as well as dedicated energy crops such as short rotation coppice (SRC) and miscanthus. UK farmers are well equipped and capable of providing these to meet the demand as well as providing useful biomass through waste by-products such as poultry litter, straw and wood.

5. **Despite this substantial resource, bioenergy infrastructure and markets are not well developed in the UK and require government intervention to facilitate substitution of fossil fuels.** The Government needs to provide long-term biofuel and biomass market signals, committing to separate renewable energy use targets (to EU targets and beyond) to provide investor security. The bioenergy market must be demand-led, underpinned through strong government leadership that ensures bioenergy is sufficiently supported in the long-term to meet well-defined targets. Without such commitment, investment in the market remains a considerable gamble both for potential supplier and energy producer. On a local scale, authorities need to lead by example with public procurement of bioenergy crops for energy use in heat, power and vehicles.

6. **The Biomass Task Force estimated that one million hectares of agricultural land could be available for non-food uses in general.** This along with an estimated five to six million tonnes of wood waste and vast unused potential of animal and other organic farm wastes could provide a significant proportion of UK energy needs, meet the Climate Change Bill targets and tackle climate change.

7. **Other non-food crops may also be suitable to develop to meet these targets.** New uses of plant-derived materials are able to substitute fossil fuel based products such as plastics, polymers, paints and pens. These are real opportunities for the UK biotechnology industry developing expertise in these areas and providing further carbon savings. With suitable stimulation, this market may be able to provide further carbon savings to meet targets.

8. **Other technologies such as anaerobic digestion (AD) can reduce carbon emissions and meet carbon emissions targets by the offsetting of electricity generation elsewhere.** There are significant start up costs of this technology, so financial support for farmers to set up biogas digesters is desirable. There are also other barriers which need to be overcome, such as the regulation surrounding the use of waste products in energy generation and the process involved with connection to and selling electricity to the national grid. We also look for a reliable output for the digestate with a revenue stream around the sale of digestate or liquor (as fertiliser) making the process more economically viable. There is a need to provide a clear AD digestate standard, so that producers understand what their end users require from the products.

9. **In the short term, the agricultural sector may also be able to sequester carbon within its soils and vegetation to help meet carbon targets.** Large quantities are stored under, for example, grassland, which could be used to offset emissions from other sectors. This could help as a short term solution with storing increasing carbon dioxide emissions, while new technologies are developed.

10. Carbon targets will also help to stimulate these fledgling industries, providing market certainty for their development.
13. We are satisfied that presently the greenhouse gas targets do not include non-carbon gases. The agricultural sector is responsible for larger percentages of methane and nitrous oxide emissions in the UK than for carbon. When compared to carbon dioxide, non-carbon greenhouse gases are not increasing at the same rate. Whilst as a sector we take responsibility for these non-carbon emissions (most notably methane and nitrous oxide), we do not feel that stringent targets to tackle these emissions is appropriate at present. We welcome the commitments made within the climate change programme 2006, which are looking at such actions as the feasibility of a market based mechanism for tackling these gases. However, the actual methods and instruments to reduce methane and nitrous oxide emissions on farm are currently not well developed and need considerable work. Research is being undertaken, particularly in the fields of manure management, animal feeds (including utilising GM technology) and anaerobic digestion, but the ways and means of transferring this knowledge on to farm in a technically feasible way is not clear. The reduction in these gases may not hold the same “quick wins” which can be achieved with carbon dioxide, certainly on farm. As such, the introduction of non-carbon greenhouse gas reduction targets at this time is not practical and we welcome the Government’s decision to leave out non-carbon gases from the targets, but to review this periodically.

14. We also urge that measures are taken to include international aviation and shipping within these targets. Whilst there are significant problems with exactly how to measure these emissions, and also which country they originate from, it is clear that these are carbon dioxide emission sources which needs to be tackled. It is important that all sectors of the economy are targeted for emission reduction and regulation, rather than just some such as the pig and poultry businesses which both fall under the Climate Change Levy and IPPC regulations. With overly stringent targets on these sectors, we risk exporting this industry and its associated emissions abroad. This means that not only are emissions made elsewhere, but perversely higher carbon emissions result as these goods are shipped back to UK markets.

2. Why the carbon budget for the period including the year 2020 cannot exceed 32%

15. It is important that a carbon budget for a given period cannot exceed a certain amount. The agricultural sector is already tackling carbon emissions as explained above. However, at the current time, there is a limit on how much agricultural businesses can feasibly reduce their carbon emissions. By focusing too heavily on these carbon emissions, there is a risk that any “carbon heavy” industries and processes will simply be exported to countries that do not have such stringent targets. Whilst it is important that the UK is setting an example to the rest of the world on climate change targets, it is also vital that we have a level playing field with our competitors in other countries, using sound science for a best course of action.

3. The rationale for a five-year budgetary period

16. A five-year period over which carbon levels are measured is important to allow a certain amount of flexibility over emissions. This is especially important in the agricultural sector whose performance tends to be heavily influenced by the weather. Bearing this in mind, it is however also important that long-term certainty on emissions is considered. Long-term market trends dictate investment, and it is imperative that sensible longer term targets (of 2008–12, 2013–17 and 2018–22) are set to allow clear signals for infrastructure development.

We have no comments to make at present on the issues raised in paragraphs 4 to 8 of the call for evidence.

4. Monitoring and early warning systems to ensure achievement of targets is on track

5. Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non-compliance

6. The facility—in any given budgetary period—to “borrow” emissions rights from a subsequent period, or to “bank” any “surplus” emissions reductions for use in the next budgetary period

7. The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources

8. The range and validity of changes in circumstances in which budgets can be subject to review and revision

9. The reporting procedure and Parliamentary accountability

17. We support the proposal for the Committee on Climate Change. There is certainly a need for such a body, to independently analyse results and review targets. The proposed annual reporting to Parliament, and the obligation on government to respond, is an important safeguard. We look to Parliament to make appropriate arrangements for the careful scrutiny of the reports and the responses by government.
10. Whether adequate provision is made within the Bill to address adaptation to climate change

18. Farmers are in a position to use their land to alleviate some of the effects of climate change. With increasing stormy weather and sea level rise they may be able to take floodwaters onto their land with the correct financial backing. They may also be able to help in times of water scarcity, with on-farm reservoir use and water efficiency (irrigation methods, rainwater harvesting, better irrigation scheduling etc). Where on-farm reservoirs are economic, this allows a switch to abstraction during times of high flow (which could potentially help reduce flood risk, though is unlikely to impact extreme floods) as well as reduce the impact of having to abstract during the summer months at times of low flow.

COMMITTEE ON CLIMATE CHANGE

11. Its composition and appointment, including length of tenure and degree of independence

19. The Committee on Climate Change is an extremely important part of the draft Bill. It should help to maintain independent analysis and must be free from political interference. In our view a technical expert relating to the rural or land-based sector should be a member of this committee. Given the agriculture sector’s unique emissions profile, and its ability to be a key part of the solution to climate change, the Committee would benefit for an expert in this field.

We have no comments to make at present on the issues raised in paragraphs 12 to 15 of the call for evidence concerning the Committee on Climate Change.

12. Its function and responsibilities

13. Its powers in determining carbon budgets and the provisions within each budget

14. The adequacy of its range of functions in overseeing the targets

15. The resources available to the Committee

16. The adequacy and implications of the proposed enabling powers allowing the Secretary of State to establish greenhouse gas emission trading schemes by means of secondary legislation

20. A review of the inclusion of non-carbon greenhouse gases may be necessary if the inclusion of non-carbon greenhouse gases is implemented within the EU ETS. We are also cautious of including other gases other than carbon dioxide within the EU ETS, with particular reference to including agriculture within such a scheme. Whilst trading schemes allow greenhouse gas savings to be made at least cost, we do not feel that the EU ETS as it stands would be suitable for the agricultural sector. This is mainly due to the make up of the sector, with its large number of small and diverse producers. This however does not mean that a trading system for agriculture could not be applied, but the details would need to be carefully considered, with the correct scientific research and development supporting it.

We have no comments to make at present on the issues raised in paragraph 17 of the call for evidence.

17. The validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post-2012

18. Whether there are other domestic climate change issues which it would be appropriate to include in the Bill

21. As stated above, we do not believe it is appropriate to include non-carbon greenhouse gases in the Bill.

NFU
May 2007

Memorandum submitted by the UK Petroleum Industry Association (CCB 31)

The UK Petroleum Industry Association (UKPIA) represents nine companies engaged in oil refining and marketing in the UK. Our member companies supply most of the transport fuels and other oil related products used in the UK. As such, CO₂ reduction, in particular from road transport, and climate change are issues of concern and therefore we welcome the opportunity to respond to the Committee’s inquiry into the draft Climate Change Bill.

Our more detailed responses are confined to those questions where we have specific knowledge or expertise.
SUMMARY

UKPIA’s views can be summarised as follows:

1. The UK oil refining and marketing industry supplies about 33% of the primary energy used in the UK. The UK Government’s own projections and those of the International Energy Agency show that oil will remain a key part of the UK and global energy mix for decades to come. Our concern is that the UK should continue to be able to attract the essential investment flows needed to maintain secure and competitive energy supplies and adjust to a low-carbon economy, and this submission is focussed on the practical issues of energy supply associated with the Inquiry.

2. Our key messages are:
   — However ambitious the objectives may be, it is essential to provide considerable short-term operational flexibility to ensure secure energy supply to meet demand on the day, and to be clear what is to be done (or not done) in the short term if a target looks likely to be missed.
   — Considerable investment will be required to adapt to a low carbon economy, and the UK oil refining and marketing industry will need to be able to attract its share of international investment. The UK must remain an attractive and competitive destination for investors. Government policy has a considerable influence and given the long term nature and size of investment in the refining sector to meet legislative changes, it is essential that there are clear signals of long term policy direction.
   — Emission reductions will require a well-balanced and proportionate mix of policies acting on all sectors of the economy, including such “difficult” areas as domestic heating, personal transport, etc. UKPIA believes that the most cost effective measures, ie those that deliver the carbon saving at the least cost to the UK should be implemented first.
   — Cap-and-trade schemes are only appropriate when the duty-holder has direct management control of the emission.
   — In the wider context, the industry takes seriously, and is closely involved in meeting, the challenge of reducing greenhouse gas emissions. For road transport, public, commercial and domestic sectors, savings are likely to come from a range of options, including new technology, bioenergy, renewables, increased energy efficiency and changes in consumer behaviour.
   — The oil industry is currently working towards meeting the Government’s target of replacing 5% of road fuels by biofuels by 2010 under the Renewable Transport Fuels Obligation (RTFO), which they estimate will save 1 million tonnes carbon/year. This will require time and significant investment by the industry at refineries and in the supply/distribution chain.
   — The oil industry is actively developing and/or deploying new technology which will reduce emissions of greenhouse gases, such as biofuels, wind, solar, carbon capture and storage, hydrogen and also fundamental research. Energy efficiency is also being improved in our operations for example by installing gas fired CHP in our refineries. This is backed by active participation in groups like the Low Carbon Vehicle Partnership and policy guidance from studies such as the Concawe/Eucar/JRC well-to-wheels study of different alternative fuels.

The following comments address some of the Committee’s questions on their invitation to submitters:-

3. Q3 The rationale for a five-year budgetary period.

This seems a reasonable balance to us to allow longer term trends to be separated from normal annual fluctuations in both demand and supply, often associated with factors not under UK control. The proposed five year period also allows a reasonable balance between the certainty investors desire, and the operational flexibility needed to adjust to future emissions trends and costs.

4. Q5 Accountability and enforcement mechanisms to ensure compliance with targets and sanctions in cases of non-compliance.

We need to be clear what measures, if any, are envisaged for enforcement of targets on the energy supply industries. These industries are already heavily regulated and comply with existing legislation such as the EU Emissions Trading Scheme etc. Energy supply security is founded on diversity of energy sources, the flexibility to switch supply sources, and a degree of spare capacity. External and unplanned events could cause an increased demand for higher carbon fuels, and this should be recognised in discussion of enforcement.

5. Q6 The facility—in any given budgetary period—to “borrow” emissions rights from a subsequent period, or to “bank” any “surplus” emissions reductions for use in the next budgetary period.

As part of the operational flexibility necessary, we support banking and borrowing between periods, and the power to review targets through secondary legislation. Furthermore, any cap-and-trade scheme needs a “safety valve” such as is provided in the current EU ETS, to enable operators if necessary to be able to pay a penalty in place of surrendering allowances if necessary.
6. Q7 The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources.

It benefits society as a whole if carbon emission reductions are made wherever they are most cost-effective, and this applies at the international level. There should be minimum constraint on the use of recognised international mechanisms provided the reductions are properly validated.

7. Q8 The range and validity of changes of circumstances in which budgets can be subject to review and revision.

As noted in paras 4 and 5 above, it is essential to recognise that competitive and secure energy supply is founded on operational flexibility, and this should not be constrained by the budget process. It is fundamentally almost impossible to accurately forecast future reduction needs and costs, and international energy supply markets are well-known for their volatility.

8. Q11 Committee on Climate Change—its composition and appointment, including length of tenure and degree of independence.

We agree that the Committee’s members should be experts in their field, and we support the proposal that this should include expertise in energy production and supply to ensure that full consideration is given to the practical issues of delivery.

9. Q16 Enabling Powers—The adequacy and implications of the proposed enabling powers allowing the Secretary of State to establish greenhouse gas emission trading schemes by means of secondary legislation.

There are some practical issues to be borne in mind when establishing new emission trading schemes:

(a) The duty to surrender allowances should always be on the person who has direct operational management control of the activity, and hence is the key decision-maker. The EU ETS follows this principle, and the proposals to include aviation correctly place the duty on the aircraft operator. We believe that the same approach should be applied to shipping, which the Commission is looking to include in the EU ETS, with the duty placed on the ship owner. Current studies to include road transport fuels in the ETS consider it too difficult to apply to the millions of vehicle owners and move the onus to the fuel supplier so breaching this principle—and hence will have no more environmental benefit than an equivalent increase in road fuel taxation—ie not much benefit at all.

(b) Any trading scheme needs a buy-out price/mechanism as a safety valve.

(c) New entrants should be treated as favourably as incumbents to encourage investment.

(d) Whilst rigorous monitoring is essential, the costs of monitoring, reporting and verification need to be kept proportionate for the smallest players in any trading scheme—and this can be a significant barrier to wider application of such schemes. Thus the current review of the EU ETS is considering how to reduce this burden on the smaller participants.

10. Q17 International implications—The validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post-2012.

While wishing to play a leading role, the UK must also maintain the UK as an attractive destination for investment and a competitive industrial country—there is no environmental benefit from displacing industry elsewhere if the products are then to be imported—possibly from less carbon-efficient plant. The Government’s measures on industries exposed to import substitution must be highly harmonised with EU, and broadly comparable with non-EU areas. For example, if the UK were to auction allowances in the EU ETS to industries whose products are traded internationally while EU and non-EU areas give free allowances, this would threaten the survival of many industries in the UK and not benefit the environment.

Thank you for the opportunity to contribute to this important debate.

UK Petroleum Industry Association (UKPIA)

May 2007
Memorandum submitted by the Mayor of London (CCB 32)

SUMMARY

The Mayor strongly supports the publication of the Government’s draft Climate Change Bill. The Bill represents a landmark piece of legislation in combating climate change, and the Government should be commended for its publication. However, the Mayor’s view is that the Bill needs to be strengthened in terms of targets, enabling powers and the role of the Committee on Climate Change.

1. The Mayor strongly welcomed the Government’s recent announcement to bring forth a Climate Change Bill, setting both short and longer-term carbon reduction targets, for this first time, on a statutory basis. However, the Mayor’s view is that the Bill needs to be strengthened both in terms of the carbon dioxide reduction targets set, and the scope of the enabling powers introduced, to ensure that Government works effectively to tackle climate change.

2. The Mayor supports the Government’s statement that the Bill will “put the UK at the very front of global efforts to tackle climate change”, however, this goal will only be achieved if UK actually significantly reduces its own carbon dioxide emissions. The latest statistics published by Defra in March 2007 show that UK CO2 emissions now stand at their highest level for 10 years.

3. In line with the Mayor’s recently released Climate Change Action Plan, the Mayor also calls on Government to take into account the recent analysis from the Intergovernmental Panel on Climate Change (IPCC) and others, that a faster trajectory for the reduction in carbon emissions needs to be achieved and therefore a 60% carbon reduction (baseline 1990 emissions) needs to be achieved by 2025. This is the goal set with the Mayor’s CCAP and should be the target set within the Climate Change Bill. The London Climate Change Action Plan not only set this more ambitious goal, but set out a delivery programme showing how it could be achieved.

4. The carbon budget concept put forward by the Climate Change Bill mirrors the proposal put forward by the Mayor within the Climate Change Action Plan (CCAP). This states that, to stabilise global carbon emissions at 450 ppm on a contraction and convergence basis, London has to set a limit for the total amount of carbon dioxide between now and 2025 to about 600 million tonnes.

5. The rolling five-year budget system proposed by Government is a practical way forward. Banking and borrowing of a limited number of allowances across each of the years within a budget period is acceptable. Borrowing of allowances from future budget periods, should, however, not be allowed.

6. The Mayor is, however, concerned with the proposal that international carbon allowances can be purchased by Government to meet its carbon budget targets. The Government seeks authority in the Bill to “spend money on overseas credits and allowances to help the UK remain within budget if necessary”. However, no indication with regard to the limit of allowances is given in the Bill or supporting documents. In terms of these credits, the Government states that it will issue guidance in terms of “supplementarity”—this is a further issue of key importance which needs to be considered by Government if allowed to purchase overseas credits to meet its targets.

7. The first budget period needs to reflect the Government’s commitment to its manifesto target of 20% carbon dioxide reduction by 2010. The target should not be “smeared” across the budget timeline. This is a longstanding Government target of key importance and needs to remain a cornerstone of the Government’s commitment to carbon reduction.

8. The Mayor, whilst mindful that the proposed Committee on Climate Change will not practically be able to advise on the overall budget for the first commitment period this year, strongly supports that the forthcoming Energy White Paper sets out robust policies to achieve deep carbon dioxide cuts now. Government should not be waiting for the Committee’s initial advice, which is not anticipated until Summer 2008.

9. The Government’s National Allocation Plan (NAP) under Phase II of the EU Emissions Trading Scheme (EUETS) has already set a “budget” of allowances for the traded sector, which represents, approximately, 50% of UK carbon dioxide emissions. This, therefore, sets a much clearer scope for the Government’s energy policies in terms of the remaining sectors of the economy that need to be tackled in terms of reducing carbon (ie broadly, transport, including aviation, domestic and the non-EUETS commercial and industrial activities).

10. The proposed make-up of the Committee strongly represents scientific and economic disciplines. Whilst recognising that significant technical expertise is required in setting the carbon budgets, the Mayor is concerned that, at present, there lacks representation in ensuring that appropriate policy mechanisms are put forward to ensure that carbon reduction delivery mechanisms are introduced as necessary.

27 Section 5.33 page 32 of the Climate Change Bill consultation paper.
11. The Committee also lacks any regional representation. The Mayor believes this is a significant oversight in terms of the Committee’s make-up, as regional bodies are key delivery vehicles for the Government’s carbon reduction policies. Cities are, in fact, the largest emitters of carbon emissions and therefore, have the key role in reducing emissions. New areas of policy need to be rapidly progressed: the energy sector is already calling for significant change in the way it’s market is regulated in order to combat climate change; the key role of planning in helping reduce carbon emissions is only now being addressed; significant new targets for the growth of renewable energy have recently been agreed upon, and the role of supplying heat sustainably is only now being studied. The Committee should be able to supply strong signals to Government in terms of the regulatory and other changes needed, and the enabling powers required, in order to enact these changes.

12. The Mayor is concerned that, as currently proposed, the Committee will have limited ability to influence Government policy. Government’s failure to date in terms of carbon reduction has not been in terms of target-setting, but in introducing real, long-term and effective energy policies to create a successful low-carbon economy. The Committee’s annual reporting requirements appear, at present, to be analogous to those of a Parliamentary Select Committee, with the requirement on Government limited to responding to the Committee’s recommendations. The Committee must not only provide advice on the carbon budget targets, and update Government on the overall trajectory it should undertake to achieve, but also identify where Government policy is conflicting in achieving the UK’s carbon goals.

13. The Committee needs to include within its scope carbon emissions in areas of the economy not covered at present, such as shipping and aviation.

14. The Mayor looks forward to the Government’s recommendations within the forthcoming Energy White Paper. The enabling powers within the Bill should reflect the scale of the challenge to reduce UK carbon emissions and help create the framework to ensure that all sectors of the economy can play their role in reducing emissions. New areas of policy need to be rapidly progressed: the energy sector is already calling for significant change in the way its market is regulated in order to combat climate change; the key role of planning in helping reduce carbon emissions is only now being addressed; significant new targets for the growth of renewable energy have recently been agreed upon, and the role of supplying heat sustainably is only now being studied. The Committee should be able to supply strong signals to Government in terms of the regulatory and other changes needed, and the enabling powers required, in order to enact these changes.

15. The Mayor welcomes the commitment by Government within the Bill on the more regular reporting on Climate Change adaptation. This issue has, to date, been poorly focussed on. The Mayor, however, believes that the proposal within the Bill of a quinquennial review of adaptation policies is too long, and that they should be reviewed every two years.

Mayor of London
May 2007

Memorandum submitted by the City of London Corporation (CCB 33)

This letter follows the Committee’s recent announcement of plans to undertake pre-legislative scrutiny of the Government’s draft Climate Change Bill.

The City Corporation welcomes the Committee’s interest in climate change mitigation and the draft Bill’s objective to address climate change planning and adaptation from a national perspective by, for example, the proposed national carbon emission trading schemes by which the UK will operate within its “carbon budget”. The Committee may be aware that, in 1999, the City along with others established the UK Emissions Trading Group (UK ETG) which laid the foundations on which the UK, and then the EU, Emission Trading Schemes have been built. The City has, as a result, accrued significant expertise in the design and execution of such schemes and, given its role in their genesis, the City Corporation naturally welcomes the draft Bill’s focus on domestic emissions trading schemes as one way to tackle climate change.

In light of the draft Bill’s assumption that carbon emission reductions should be evaluated nationally, with efforts focused on a UK-based target, the Committee might like to note the achievements which can be secured at a local level. The City Corporation has taken voluntary steps to reduce its carbon “footprint”. The Lord Mayor’s official travel has, for instance, been offset for the last five years and for the last four years the City has voluntarily offset the CO₂ produced by the Lord Mayor’s Show. This will happen again in 2007. Further, since 2004 the City Corporation has made considerable use of expertise in the emerging carbon offset sector, including CO2e.com, a subsidiary of global financial services firm Cantor Fitzgerald which operates in the European Emissions Trading Market. Moreover, through the CarbonNeutral Company, the City Corporation has invested in a variety of forestry and development projects. In 2006 the City purchased its carbon offsets through CO2e.com and participated in a project which manufactures high efficiency wood burning stoves for use by South African communities. These schemes, along with the purchase of renewable “green” energy, have enabled the City to cut its own CO₂ emissions by 35% based on a 1997 baseline. While some valid questions do remain about the unregulated voluntary offset market, the City accepts that carbon trading can have a positive environmental impact and can bring wider social and economic benefits.

While, therefore, the City Corporation appreciates the advantages inherent in the draft Bill’s approach, the City’s experience suggests that carbon offsetting can also play a vital part in the carbon reduction effort at a local, as well as national, level. Future, bolder use of carbon offsetting could bring economic and social

rewards to London and elsewhere and, to this end, it is surprising that no mention is made in the draft Bill of the role of governmental bodies below the national level in relation to carbon dioxide removal. In particular, it is not clear at present how local offset projects, as already undertaken by the City, are intended to integrate with the national legislative scheme. If this is not clarified, there is a risk that the national scheme could hinder support, and engagement, with the aims of the legislation.

Moreover, in the context of the duty which the draft Bill would impose on the Secretary of State to report periodically on adaptation, it is perhaps worth pointing out that the City Corporation was the first UK local government authority to develop a Climate Change Adaptation Strategy.\(^{29}\) Produced in co-operation with climate risk management consultants Acclimatise, *Rising to the Challenge* employs the UKCIP02 climate change scenarios.\(^{30}\) This strategy has identified the priority risks associated with climate change and proposes adaptation measures which are designed to ensure that the City infrastructure and services cope with a changing climate. It might be argued that the draft Bill ought to present a more robust vision of well-developed adaptation schemes than it does at present. The Bill’s approach is welcome as far as it goes, but the Committee might want to consider whether, as the progenitor of a comprehensive climate change policy, the draft Bill should contain measures which encourage mitigation schemes at a sub-national level where, arguably, they can most efficiently be put in place. To this end, the City Corporation would welcome a clearer steer on the Government’s present thinking on how essential local adaptation planning, such as that taking place in the City, should work alongside national mitigation measures proposed in the draft Bill.

It is also recognised that there could be new business opportunities in the carbon emission marketplace for those who are willing to innovate. Recent City Corporation research\(^{31}\) has, indeed, highlighted the potential scope offered by carbon emissions trading and offsetting and has sought to identify the next generation of trading opportunities. The Committee might, therefore, want to give thought to whether this draft Bill should also promote and encourage effective climate change planning at the same time as putting necessary mitigation measures in place.

City of London Corporation

*May 2007*

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**Memorandum submitted by RWE npower (CCB 34)**

**BACKGROUND**

1. RWE npower, part of the RWE Group, is one of the UK’s largest energy suppliers, with some 6.5 million customers and a diverse portfolio of over 9,000 MW of generation capacity in the UK. We sell our expertise in power generation in key markets and are one of the UK’s leading renewable energy developers and operators. We have been one of the most active participants in the European Union’s Emissions Trading Scheme (EU ETS) since it came into effect on 1 January 2005.

2. We welcome the opportunity to contribute to the Environment, Food and Rural Affairs Committee’s pre-legislative scrutiny of the Government’s Draft Climate Change Bill. In our evidence below we concentrate on those areas of the Committee’s terms of reference where we feel our comments will be most useful to the Committee or where we have the greatest concerns.

**GENERAL**

3. We believe that the 2020 target range of 26 to 32% is potentially very challenging for the UK to deliver if it relies solely on domestic policies. EU wide measures such as the EUETS in addition to domestic policies will be essential for its delivery. Meeting it would require emission reductions well in excess of those identified as potential additional measures in the Government’s Energy Review. The electricity sector is currently responsible for around 30% of the UK total emissions and has delivered the bulk of the CO₂ emission reductions achieved since 1990. It will be critically important that the Government develops a wide-ranging policy framework, which ensures the engagement of all sectors of the economy in delivering further reductions, if the 2020 and 2050 targets are to be achievable.

**TARGETS**

4. We welcome the leadership being shown by the UK Government in setting out its ambitions in terms of CO₂ emission reduction targets and, for some time, we have advocated the need for a long-term trajectory for CO₂ emissions reductions going forward. However, this has to be designed at European Union level

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\(^{29}\) *Rising to the Challenge—The City of London Corporation’s Climate Adaptation Strategy*. January 2007. Accessible online at [http://213.86.34.246/NR/drdonlyres/7347D392-3CF3-4344-8B2D-9AF9315E8801/0/SUS—climateadapt.pdf](http://213.86.34.246/NR/drdonlyres/7347D392-3CF3-4344-8B2D-9AF9315E8801/0/SUS—climateadapt.pdf)

\(^{30}\) Which provide, for example, that by 2040, the average annual temperature for the UK is expected to rise by between 0.5 and 1°C, depending on region. There is expected to be greater warming in the south and east than in the north and west.

given that the EU ETS is the key policy instrument which will determine investments in the power generation sector over this timeframe. We do not, therefore, believe that unilateral action by the UK Government in terms of targets provides the necessary certainty for the operators of and investors in generating facilities.

5. Furthermore, once targets are set unilaterally they are likely to form the starting point for negotiations at EU and international level and this raises the question of how UK targets and International targets will interact. We believe that any UK targets should be framed as greenhouse gas targets from the outset in order to be consistent with International targets such as Kyoto and EU burden sharing arrangements. The UK CO₂ reduction targets for 2010 and interactions with Kyoto greenhouse gas reductions targets for the period 2008-2012 illustrate the complexity of the issue and the need to ensure that UK targets are fully aligned with targets at EU level.

6. A carbon management system based on five-year carbon budgets would seem appropriate, provided these are always set out sufficiently far in advance ie at least 15 years in advance to align with investment timescales. However, whatever timeframe for setting targets is chosen, it should ideally be aligned with other EU targets and international obligations which we would ideally like to see set out to at least 2030.

CREDITS FOR INTERNATIONAL EFFORT

7. CO₂ is a global problem and ultimately should be addressed by global action within an agreed international policy framework. It will be important to ensure emission reduction effort purchased from other countries through the operation of international project mechanisms and the EU ETS is eligible to contribute towards the UK targets. This is also essential to align with EU ETS as the key policy measure for delivering emission reductions from industry and to minimise the impact on UK competitiveness.

8. In line with this, the criteria governing the types of project eligible for CDM/JI credits should be set at international level within the context of the UNFCC framework. A guiding principle is that emissions reductions should be achieved in the most cost-effective manner and, therefore, there should be no restriction on access to CDM/JI measures.

COMMITTEE FOR CLIMATE CHANGE

9. We believe that the terms of reference and make up of the Committee on Climate Change are critical if it is to fulfil a beneficial role. It must be independent with a focus on technical expertise and free from political bias. We are concerned that its role may conflict with that of other departments including the Office of Climate Change.

10. In particular, we would welcome clarity about the distinction between the roles of the Committee on Climate Change and Office of Climate Change as we see considerable scope for potential duplication of effort and conflicts of interest. There is a real need to demonstrate that this is not the case and define the respective terms of reference and remits of these organisations accordingly.

11. We do not believe the Committee needs a large support staff (eg in terms of analytical capability which is available elsewhere in Government) and there should be minimum duplication of effort and associated costs. We remain to be convinced that it should be the role of the Committee, rather than the Government, to report on the UK’s progress towards its targets. Reporting must not conflict with the Committee’s role in scrutinising progress and making recommendations on Government policy.

ENABLING POWERS FOR SECONDARY LEGISLATION

12. Our concern is that enabling powers in the draft Bill in terms of secondary legislation (to introduce new trading schemes) may result in measures being introduced without sufficiently rigorous debate and scrutiny through the parliamentary process. An associated risk is that Government may pursue “trading schemes” in circumstances where other policy instruments may be more appropriate, for example, direct regulation or taxation.

13. We would prefer targets to be stable and, as far as possible, enduring once they have been set. We are concerned that introducing a power to review the targets through secondary legislation to take account of wider developments may negate the benefits of setting long-term targets in the first place. This may be considered to be one of the dangers associated with the UK taking unilateral action on CO₂ reductions. It is important that any revision of targets does not jeopardise investments made by industry in good faith or lead to the stranding of assets.

CONCLUSION

14. In conclusion, while both the 2020 and 2050 targets for CO₂ reductions are challenging, we welcome the idea of carbon budgets covering five year periods, which should cover a period of up to 15 years in advance to line up with the investment cycles of the power industry.
15. However, targets have to be designed at European Union level given that the EU ETS is the key policy instrument dictating investments in the power generation sector over this time frame. We are, therefore, concerned that unilateral action by the UK Government in terms of targets would not provide the necessary certainty for the operators of and investors in capital intensive generating facilities.

RWE npower
May 2007

Memorandum submitted by the Natural Environment Research Council (CCB 38)

1. The Natural Environment Research Council (NERC) is one of the UK’s seven Research Councils. It funds and carries out impartial scientific research in the sciences of the environment. NERC trains the next generation of independent environmental scientists. Its three strategic research priority areas are: Earth’s life-support systems, climate change, and sustainable economies.

2. Details of NERC’s Research and Collaborative Centres are available at www.nerc.ac.uk. NERC supports, jointly with the EPSRC and ESRC, the Tyndall Centre for Climate Change Research, and many of NERC’s other Research and Collaborative Centres conduct research in this area.

3. NERC’s comments are based on input from Swindon Office staff.

INTRODUCTION

4. NERC welcomes the opportunity to contribute to the Committee’s scrutiny of the draft Climate Change Bill published by Defra on 13 March 2007. As an independent Non-Departmental Public Body (NDPB) with a primary remit to fund and carry out research, and a linked remit to ensure that research findings are made available to policy makers, we are not able to comment on all the issues raised.

TARGETS

(1) The validity of the Government’s domestic targets to:

(a) reduce CO2 emissions by 60% below 1990 baseline levels by 2050, and
(b) reduce CO2 emissions by 26–32% below 1990 baseline levels by 2020.

5. NERC welcomes the inclusion in the Bill of power to amend the percentage emissions reduction targets in the light of developments in the scientific knowledge about climate change (or in international law or policy). However, there does not appear to be any obligation on the Secretary of State to consider or react to such developments, even when it would be appropriate to do so. Nor, it seems, would the Climate Change Committee necessarily be asked to advise on the targets. Its remit (unless asked for more) appears to be restricted to providing advice on the pathway to those targets, not on the targets themselves.

6. In view of this, it appears all the more important to ensure that the targets in the final legislation reflect current scientific evidence. The IPCC Fourth Assessment Report Working Group III Summary for Policymakers, published on 4 May 2007,\(^{32}\) includes a table (Table SPM.5) of scenarios which indicates that a 50–85% cut in global CO2 emissions (relative to 2000 emissions—which in the UK were only slightly below those in 1990) by 2050 would have a reasonable chance of keeping the global average temperature increase to 2.4–2.0°C only if global CO2 emissions peak by 2015. Despite the uncertainty in the predictions, it would appear that a more ambitious target is almost certainly necessary. Tyndall Centre researchers have calculated that a 30% chance of not exceeding the 2°C threshold (widely agreed to be critical) would require the UK to cut its total carbon emissions by 70% by 2030 and by about 90% by 2050.\(^{33}\)

7. Of particular concern is the exclusion of international aviation and shipping emissions from the current targets (paragraph 5.8 of the Defra consultation document; Clause 15(1) of the Draft Bill). Again, researchers at the Tyndall Centre have argued strongly that these emissions should be included.

(2) Why the carbon budget for the period including the year 2020 cannot exceed 32%.

8. A reduction in CO2 emissions by 32% below 1990 emissions in the budgetary period including the year 2020 would be significantly off the trajectory suggested by the need for a cut by 70% by 2030 and 90% by 2050 (Tyndall centre calculation above).

\(^{32}\) Climate Change 2007: Mitigation of Climate Change www.ipcc.ch/SPM040507.pdf
\(^{33}\) Tyndall Briefing Note March 2007 www.tyndall.ac.uk/publications/briefing—notes/bn17.pdf
(3) The rationale for a five-year budgetary period.

9. The Draft Bill includes only two targets, and although there would be scope in the secondary legislation to specify a carbon budget trajectory consistent with those targets, there would also be scope to allow emissions to remain high in the early periods, resulting in much higher cumulative emissions than the Tyndall’s calculation allows for if the atmospheric CO2 concentration is to remain within “safe” limits. See also point 6 below.

(4) Monitoring and early warning systems to ensure achievement of targets is on track.

10. NERC recognises the importance of monitoring programmes, and the need to improve the accuracy of predictions made through modelling scenarios, and is keen to work with Defra in this area.

(5) Accountability and enforcement mechanisms to ensure compliance with targets, and sanctions in cases of non-compliance.

11. Not within NERC’s remit.

CARBON BUDGETING

(6) The facility-in any given budgetary period-to “borrow” emissions rights from a subsequent period, or to “bank” any “surplus” emissions reductions for use in the next budgetary period.

12. The facility to carry forward the whole or part of any amount by which the carbon budget for a budgetary period exceeds the next UK carbon account for the period (Clause 8(3)) could lead to a temptation to set higher budgets in the periods before 2018–22 than would be consistent with a straight-line trajectory, resulting in much higher cumulative emissions that those suggested (schematically) by Figure 4 of the consultation document. If a large amount were carried forward into the 2018–22 period, would the 2020 target still be regarded as having been met?

(7) The facility to purchase carbon credits from outside the UK to meet domestic targets, in terms of their overall quantity and sources.

13. It is not within NERC’s remit to comment in detail. However, there are arguments that because the UK’s trading and consumption patterns result in substantial “externalisation” of GHG emissions (and of other environmental impacts), such that we are probably responsible for more than the claimed 2% of global GHG emissions (paragraph 3.15 of the consultation document), the UK should in any case be working to reduce emissions outside the UK—as well as domestic emissions.

(8) The range and validity of changes in circumstances in which budgets can be subject to review and revision.

14. No comment.

(9) The reporting procedure and Parliamentary accountability.

15. Not within NERC’s remit.

ADAPTATION

(10) Whether adequate provision is made within the Bill to address adaptation to climate change.

16. NERC’s new strategy will include the Living With Environmental Change (LWEC) initiative, an interdisciplinary research programme in partnership with most of the other Research Councils and a number of Government Departments and Agencies, led by NERC. The ten-year programme will provide the scientific knowledge and tools to speed mitigation of, and adaptation to, environmental change, and information to help decision makers manage and protect ecosystem services.

17. For appropriate adaptation measures to be adopted, those involved in planning need to receive accurate information about the mitigation measures that will be taken and their probable outcome in the long term—in terms of regional temperature increases, for example.

18. We welcome the news that the Government is currently developing a cross-Government framework regarding adaptation, to be published later this year (paragraph 3.16 of the consultation document), and would support an obligation on the Government to report regularly in this area (Clause 37 of the Draft Bill). We wonder whether the suggested frequency (every five years) is adequate. It will be interesting to see whether the forthcoming EU green paper on impacts and adaptation will influence requirements in the UK (paragraph 3.10 of the consultation document).
Committee on Climate Change

(11) *Its composition and appointment, including length of tenure and degree of independence.*

19. Schedule 1 indicates that the Secretary of State would appoint the chair and (after consulting with the chair) appoint the other members. Nothing appears to be said about the involvement of non-Government parties or other stakeholders in the selection of members; NERC would welcome an opportunity to comment. There is also no obvious mention of a regular turnover in membership, as would be standard for most advisory committees.

20. Schedule 1 lists the experience and knowledge that would be desirable in the Committee. NERC thinks that expertise in climate modeling (as a specific component of climate science), risk assessment, carbon budgeting, ecosystem services and resource valuation, sustainable development, and international affairs, should be included on the Committee. The reference to energy production and supply could helpfully emphasise energy efficiency and use reduction; there might also be a case for specific knowledge of transportation, construction, agriculture and other industry. An understanding of behavioural psychology in many of these areas (and those listed in Schedule 1) could be beneficial. Provision could be made to capture expertise in some of these areas on sub-committees rather than the main Committee.

21. We welcome the implication that the work and advice of the Committee would be transparent.

(12) *Its function and responsibilities.*

(13) *Its powers in determining carbon budgets and the provisions within each budget.*

(14) *The adequacy of its range of functions in overseeing the targets.*

22. As we comment under point 1 above, the Committee's remit (unless asked for more) appears to be restricted to providing advice on the pathway to achieving the targets already set in the Bill, not on the targets themselves. This is surprising, especially given the inclusion of climate science in the list of desirable knowledge.

23. The Draft Bill states that “In making any decision as to the level of the carbon budget for a budgetary period, the Secretary of State must take into account the advice of the Committee on Climate Change” (Clause 4 (3)). Similar clauses are included regarding carrying an amount back or forward from one budgetary period to another (Clause 8(4)), and regarding alterations to carbon budgets (Clause 13(2)). However, Paragraph 5.2.6 of the Partial RIA confirms the impression that “obtaining and taking into account the advice” does not mean accepting the advice; it is therefore particularly important that the advice be made public.

(15) *The resources available to the Committee.*

24. NERC welcomes the proposal to provide resources for the Committee to, for example, carry out or commission research (Clause 23(2)). We hope that the Committee and its Secretariat would, like Defra, seek to build links with all parts of the research community relevant to the advice and reporting with which the Committee is tasked.

Enabling Powers

(16) *The adequacy and implications of the proposed enabling powers allowing the Secretary of State to establish greenhouse gas emission trading schemes by means of secondary legislation.*

25. Not in NERC’s remit.

International Implications

(17) *The validity of the Government’s view that the Bill will act as an effective example to drive international climate change policy post-2012.*

26. No comment.

General

(18) *Whether there are other domestic climate change issues which it would be appropriate to include in the Bill.*

27. None that we are in a position to comment on.

The Natural Environment Research Council (NERC)

May 2007
Memorandum submitted by the Better Regulation Commission (CCB 40)

1. The Better Regulation Commission (BRC) was set up in 2005, and its remit is to provide independent advice to Government, from external stakeholders, about new regulatory proposals and about the Government’s overall regulatory performance. The Commission continues the challenge role carried out by the Better Regulation Task Force, as well as vetting departmental plans for simplification and administrative burden reduction.

2. Following publication of the Stern review the BRC published a report on the regulatory aspects of climate legislation, seeking to provide analysis and guidance for good regulation in this area. The costs of addressing climate change will be significant, the Stern review estimated 1% of GDP per year. Therefore, creating the best value regulatory system will be essential. Climate change presents a challenge to decision-makers, the costs of inaction may be high but so might hasty and inappropriate legislation.

3. The BRC would like to emphasise the importance of the regulatory aspects of the draft Climate Bill, without seeking to comment on policy objectives, which are beyond its remit. The Commission’s Report makes a number of recommendations to Government and a formal response is expected by the end of May.

4. In the context of the Committee’s Enquiry, much the most important of the Report’s recommendations—as it would apply to every measure and regulatory intervention that would arise from the draft Climate Bill—proposes that the Government adopt the BRC’s “seven tests for better climate change regulation”.

BRC’s Seven Tests for Better Climate Change Regulation

5. The BRC originally established five principles which can be used in the development of good regulation: proportionality; accountability; consistency; transparency; targeting.

6. Climate change carries particular challenges, and we have identified some specific tests which will need to be met in order to fulfil those principles. We have recommended that Government adopt these tests, and will receive a formal response to our report by the end of May. The seven tests are as follows:

Ensure climate policy is consistent with a healthy UK economy

We must find a way to be “green and grow”. Climate policy must not be seen as undermining the economy, or it is likely to fail with far reaching consequences.

Government must develop and act consistently with a climate change strategy; avoiding piecemeal announcements

Knee-jerk regulatory responses to the climate change challenge and announcements of measures in a piecemeal fashion should both be avoided. A strategic approach to climate change should always be apparent. New initiatives should be evidence based, add value to the existing climate programme and make clear which market imperfections they are seeking to resolve.

Test policy against a carbon price benchmark

Climate change policies must be backed up by robust analysis of the cost per tonne of carbon saved. Value for money assessments of policy-measures must be consistently applied across Departments.

Carbon policy choices must be efficient; don’t do things twice

Government must carefully assess the appropriate level of intervention, and avoid “double-banking” carbon whereby emissions are counted twice under different initiatives.

Keep administrative costs to a minimum

Government must take full account of the administrative costs and burdens which could result from specific climate initiatives, and seek the most efficient course of action.

Do not use climate change as a justification for other policy goals

Policy-makers must avoid using climate change as a justification for measures which have other motivations.
If it isn't working, change it

Climate change is a new challenge and it is likely that some early measures will prove to be ineffective, or outdated. Policy-makers should be alert to these occasions and act to remove or update redundant regulation.

The Commission would additionally submit the following responses in respect to other points raised by the Committee in its call for evidence.

THE DRAFT CLIMATE BILL

7. The BRC welcomes the publication of the draft Climate Bill, and sees it as an important step in providing a clear strategic direction. Overall the draft Bill is aiming at better regulation, however:
   - Economic instruments still need to be subject to proper impact appraisal;
   - The trading system itself is a legislative framework and may impose unnecessary burdens; and
   - There is a danger that the draft Bill ignores broader behavioural change by focusing on trading and industry.

8. It is the first attempt at setting binding targets. However, the detail on how the objectives are to be achieved will follow through secondary legislation. As a result of this method of legislating, achieving the outcomes of effective climate policy requires that the process issues are well thought out, and what is not clear at this time is how better regulation principles will be safeguarded through the entire process.

9. The draft Climate Bill seeks powers to create trading schemes covering direct and indirect emissions of greenhouse gases. Consequently, secondary legislation in this case could have a huge impact on both businesses and other sectors of society. The fact that secondary legislation cannot be amended by Parliament means that the need for high quality analysis prior to its drafting is even more critical than with primary legislation.

Scope of the draft Bill

10. The enabling powers in the draft Bill can be applied to create trading schemes in order to meet the carbon reduction target, but trading is only one of a number of regulatory options for addressing climate change. Is there a danger that the draft Bill could encourage the use of trading regardless of whether it is the most appropriate approach? Focusing on trading in this way could limit real discussion of the wide range of options available. It also raises questions over how far the draft Bill can facilitate behavioural change outside the sphere of industry in the domestic sector.

11. The Energy White Paper is expected to contain climate related proposals, and although the draft Bill impact assessment acknowledges this fact it would be helpful to have a greater understanding of the synergies between the two.

Regulatory Impact Assessments for Statutory Instruments

12. As the draft Bill does not provide the policy instruments needed to achieve the emissions targets, the Regulatory Impact Assessment (RIA) cannot explain precisely the nature or level of costs associated with this objective. Although the lack of quantitative data is acknowledged in the RIA, we wish to reinforce that making appropriate decisions will rely on the quality and timing of RIAs for delegated legislation, and the subsequent scrutiny process.

13. The quality of Regulatory Impact Assessments will be of crucial importance if such far reaching legislation is being proposed through secondary instruments. Scrutiny must be maintained and process must be a robust as possible. We would like to see regular reviews of impact assessments for policies initiated under the Climate Bill to ensure that they are of consistent quality. The National Audit Office currently has a remit to periodically review impact assessments, but retrospectively as an auditor, not during the policy-making and legislative process. We feel that there should be ongoing scrutiny of impact assessments throughout the policy process.

14. Given the framework nature of the draft Bill, we believe that it is also important for the Government to provide more detail at this stage on specific measures that the delegated powers might be used for.

Consultation

15. The broad reach of the draft Bill means that instruments introduced under it need to be subject to focused and comprehensive consultation. The Government’s existing consultation processes regularly engage with representative organisations, but how effectively are the views of ordinary citizens sought? If the impact of trading schemes and other climate instruments extends beyond businesses to the general public, consultation will need to be carefully crafted in order to capture their views.
Management of delegated legislation

16. We welcome clause 6 of the Bill which provides for the Secretary of State to "set out as soon as is reasonably practicable after making an order setting the carbon budget for a period, a report setting out the proposals and policies . . . for meeting the carbon budgets for current and future budgetary periods up to and including that period."

17. The Government will need to be explicit about managing the overall package arising from the proposed Bill. Given the cross-departmental nature of climate policy, it will be important to manage the output of delegated legislation to avoid overlaps and inconsistencies. Depending on the volume of instruments which may arise from the Climate Bill a credible management system will be needed to ensure that interested parties can understand how the programme is emerging and to enable scrutiny of the programme as a whole, not just individual instruments. The reasoning put forward by the Government as to why delegated legislation is preferred is that this will speed things up. If this is the case, an important priority, will be ensuring that information on preferred policy options is set out as soon as possible so that there is adequate time for considered responses.

Transparency

18. The enabling powers in the draft Bill mean that subsequent legislation could apply and impact across a wide spectrum of interests, from businesses and organisations to the general public. Departments must therefore make every effort to provide all relevant information to those who will be affected by a proposal as early as possible. Transparency, timely consultation and robust impact assessment are key to good legislation.

Post implementation review

19. The Government has committed to the post-implementation review of legislation in general, and for the draft Bill we believe that a robust system of review should be in place from the start. As well as the annual report to Parliament on UK emissions and Clause 6, we believe it would be useful to also provide a commitment to regular reviews of the effectiveness of the instruments brought in under this draft Bill. This is a slightly different emphasis to the Government’s stated intention to review progress towards the targets.

Role of the Committee on Climate Change

20. The BRC welcomes the proposed climate change committee, and it should provide a valuable source of independent advice to Government on an extremely technical area. It would be helpful to have clarity on how far the role of the committee includes providing advice and recommendations on specific regulatory interventions. In providing advice on the appropriate carbon budgets and the balance of contributions to these budgets from different sectors of the economy, it will be very difficult to distinguish this from making specific recommendations on policy.

21. In any event, all the Committee's advice needs to be provided as transparently as possible, and involve extensive consultation with those likely to be affected. We would also like to see all decisions on policy by Government, and advice by the Climate Change Committee, taking into account the BRC seven tests.

HOW DOES THE CLIMATE BILL MEASURE UP TO THE SEVEN TESTS?

Test 1 Ensure climate policy is consistent with a healthy UK economy

The draft Bill is drafted in the context of safeguarding the interests of the UK economy whilst seeking changes to behaviour which intend to ameliorate the impacts of climate change. This test should not be just about industry, and neither should an effective climate Bill. Care must be taken in deciding how the balance of impact should fall, and the draft Bill acknowledges these concerns, but as we state earlier, we need a better understanding of climate policy beyond emissions trading, and clarity that the best instrument, not the easiest to implement will be chosen.

Test 2 Government must develop and act consistently with a climate change strategy; avoiding piecemeal announcements

The Bill is intended to provide a strategic framework for climate action in the UK, and provides a clear set of targets for the medium term. This provides clarity of strategic direction, however more explanation of how this will be achieved would be useful. More information should be provided on the processes required for managing subsequent legislative proposals and ensuring they are joined up.
Memorandum submitted by Sir David King, ScD FRS (CCB 43)

Thank you for your letter of 24 May asking for my thoughts on the targets set out in the draft Climate Change Bill.

I would prelude my response by endorsing the approach adopted by the Bill in enshrining the UK’s medium and longer term emissions targets in law. I believe this is a key step from both a national and international perspective. The Bill serves to demonstrate a clear commitment on the part of Government over the long term to progressive and significant emissions reductions, giving businesses and investors the greater certainty in future policy direction that they have long been calling for, and at the same time cementing the UK’s position of leadership and reinforcing our credibility in the international dialogues and negotiations.

There is no simple calculation to arrive at the appropriate level of a UK target. It may be helpful if I briefly set out the factors involved and the steps needed to determine the extent of emissions reductions required. Each step in this process is associated with a degree of uncertainty.

Firstly, it is necessary to determine the level at which you are seeking to stabilise greenhouse gases in the atmosphere. This is only partly a scientific question. It is not possible to arrive at a fully objective determination of what is “dangerous climate change” given the value judgements involved. Personally, I believe we are already seeing dangerous levels of climate change, such as the 2003 European heat-wave which led to over 30,000 fatalities. I believe what is now essential is that we do the best we possibly can, accepting the reality of where we are now.
In considering this issue, the Stern Review concluded that we should aim to stabilise global greenhouse gas emissions between 450 and 550 ppm CO₂eq (parts per million of carbon dioxide equivalent). Given that concentrations are already at around 425 ppm CO₂eq and increasing at around 2ppm annually, the reality is that 450ppm CO₂eq is probably the best that we can achieve, but would represent a major challenge. We should aim to stabilise as close to this as we can manage. The science is fairly clear that 550ppm and above risks catastrophic events. A degree of uncertainty is inherent in setting any such goal; the best we can say is that with stabilisation at 450ppm, with a 5 to 95% confidence level, we expect 1.7 to 3.7°C of global temperature change.

We then need to consider in turn what such a stabilisation target means for global emissions reductions, the contribution to be made to this by the developed world, and what the UK’s share should be. There is again no simple relationship between the stabilisation target and emissions reductions target because what also matters is the shape of the trajectory. It is the total emissions that will determine future climate, not just those made in 2050. The level of developed countries emissions reductions will, to some extent, be dependent on the approach taken to the post-2012 framework, but is more dependent on the overall emissions reduction needed.

To give two examples of recent estimates: the spring EU Council conclusions recognised that stabilisation at 450ppm requires developed country emissions reductions of around 60–80% over 1990 levels; and a recent report commissioned by Defra from Ecofys suggests developed country reductions of 70–95% to achieve a similar goal. While estimates vary, I believe that in the long run we are likely to aiming at a target of around 70% emissions reductions by 2050 (although this may change with time): 60% clearly represents the minimum that we shall need to achieve, as recognised by the “at least” included in the Bill.

In the absence of an international agreement, the UK’s unilateral target need not necessarily be the same as the level of emissions reduction that may ultimately be required. I believe it is critical that the target in the Climate Change Bill be seen to be achievable. In this regard I feel that a 60% target is challenging but achievable, and strikes a reasonable balance between the different factors involved. Most importantly, it sets a clear policy direction and provides the impetus to accelerate early progress towards this.

Going further than 60% will become more achievable once international agreement is reached. As noted by Nick Stern in his review, by acting on concert countries will be able to act more effectively and bring down the costs of emissions reduction for all. International agreement will help bring forward new technologies and investments and addressing competitiveness concerns.

As time goes on the uncertainty in the science will continue to reduce, the impacts will become clearer and new technologies will develop. In this context I believe it will be possible both internationally and domestically to ratchet up action. The Bill’s provision to be able to review the target seems sensible in this respect.

An interim goal of at least 26% is useful in ensuring that we make earlier emissions reductions which will help keep later reductions achievable and prevent the lock-in of high carbon investment. Making reductions early will also be important in enabling us to go further than 60% if this proves to be necessary.

With regard to whether the target set out in the Bill should be for carbon dioxide only or for all greenhouse gases, on balance I feel that it is appropriate for the government to focus on carbon dioxide reductions at the moment. Significant reductions on non-CO₂ emissions have already been made and CO₂ now makes up 84% of emissions. The significant life-time of the infrastructure associated with carbon dioxide emissions, in particular from the built environment, means that these sectors will most benefit from a clear long-term signal when making investments. A 60% reduction in carbon dioxide combined with current projections of other greenhouse gas reductions will give us a reduction of around 60% of greenhouse gases overall by 2050.

I am in regular contact with Defra colleagues, including to communicate my views on issues discussed in this letter.

Sir David King  
Chief Scientific Adviser to HM Government and Head of the Office of Science and Innovation  
June 2007