House of Commons
Environmental Audit Committee

Budget 2011 and environmental taxes

Sixth Report of Session 2010–12

Volume I

Volume I: Report, together with formal minutes, oral and written evidence

Additional written evidence is contained in Volume II, available on the Committee website at www.parliament.uk/eacom

Ordered by the House of Commons to be printed 29 June 2011

HC 878
Published on 7 July 2011
by authority of the House of Commons
London: The Stationery Office Limited
£15.50

The Environmental Audit Committee

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

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Summary

Taxation has an important role to play in helping to protect the environment. Whether ensuring at least some of the environmental cost is borne by those responsible, or making an environmentally damaging activity economically unattractive, environmental taxes create an incentive to move towards more sustainable behaviours. For environmental taxes to be effective they need to be straightforward so that taxpayers understand the behavioural change signal being sent, and seen as fair so that political momentum can be gained for higher environmental taxation. In practice, however, many perceive them as just another means of raising revenue, and their growing complexity means that many businesses are unaware of the cumulative impact of the environmental taxes affecting them.

There is a pressing need for Government to take a more coherent approach to environmental taxation. A clear strategy should be adopted, setting out their objectives and rationale, the basis on which rates are set, and how their impact will be evaluated. Even partially hypothecating revenues from environmental taxes for environmental ends can also help to build greater acceptance, whilst also providing much needed funding for the low-carbon transition.

Announcements on transport taxes in the Budget were disappointing. By dropping a penny on Fuel Duty rates and providing few tax incentives to switch to lower carbon transport alternatives, the Government missed an opportunity to be much clearer with the public about the long-term need to switch to lower carbon alternatives. The proposed changes to Air Passenger Duty will do nothing to make it a more effective environmental tax. Abandoning plans for a per-plane duty, albeit on legal advice, and relying on the EU Emissions Trading System (EU ETS) is a risky approach, because its success in reducing aviation emissions turns on the wider effectiveness of the EU ETS in curbing emissions more generally.

It cannot be all stick and no carrots. A shift to environmental taxes must be accompanied by a corresponding reduction of taxes on the things that are valued by society, such as jobs, incomes and profits. There is also a role for other policy instruments alongside taxes to help achieve the desired change.

The Government's definition of a 'subsidy' in relation to nuclear is not robust and does not hold up to scrutiny. Nuclear will be subsidised in the same way as renewable energy sources, which have no adverse environmental impacts, and nuclear will benefit the most from the Carbon Floor Price mechanism.

The *Plan for Growth* did not provide the much needed step change to aid the transition to a low-carbon economy, and in some areas—e.g. the zero carbon homes standard—the Government has taken a backwards step. The forthcoming *Roadmap to a Green Economy* must demonstrate a greater Government commitment to the green economy, and in doing so dispel any suggestion that a green economy is an 'add-on' rather than an integral part of the Government's sustainable development plans.

The Green Investment Bank could be a driver for the green economy but preventing the Bank from borrowing will limit its impact on renewables and the support it can provide for the Green Deal. Fresh consideration should be given to when, and under what fiscal circumstances, the bar on the Bank's lending powers might be eased.

1 Introduction

1. This report follows a series of annual inquiries on the Pre-Budget Report and the environment in the previous Parliament by our predecessor Committees.[1] They consistently found that Government was not doing enough to shift the balance of taxation from 'goods' (for example profits and income) to 'bads' (for example pollution) and expressed concerns that existing taxes such as Fuel Duty and Air Passenger Duty were not structured effectively to drive the change in behaviour needed for the transition to a low-carbon economy.

2. The 2011 Budget was delivered on 23 March 2011, and followed the current Government's Spending Review in October 2010.[2] The Budget Report stated:

> The Government is committed to being the greenest Government ever. A simple, efficient and cost effective policy framework will meet environmental objectives while supporting growth and maintaining a sound fiscal position. Market-based solutions to price carbon are at the heart of this approach, achieving objectives at the lowest possible cost. The Government will increase the proportion of tax revenue accounted for by environmental taxes.[3]

Alongside the 2011 Budget, the Government set out measures to deliver its priorities for the economy in the *Plan for Growth*,[4] and launched a consultation on Air Passenger Duty.[5]

Our inquiry

3. Against this background, we decided to explore the principles of environmental taxes (Chapter 2). Our aim is to set out some foundations for future inquiries on environmental taxation and Budgets during the course of this Parliament. In this first report in this series, we go on to examine the application of these principles for transport taxes in particular (Chapter 3), the Carbon Floor Price (Chapter 4), and whether the Budget and *Plan for Growth* further the green economy agenda (Chapter 5). We received 43 submissions and took oral evidence from non-governmental organisations, think-tanks, academics and the Economic Secretary to the Treasury, Justine Greening MP. We are grateful to them all.

1 Most recently: Environmental Audit Committee, Third Report of Session 2008-09, *Pre-Budget Report 2008 —Green Fiscal Policy in a Recession*, HC 202.

2 HM Treasury, *Spending Review 2010*, Cm 7942, October 2010.

3 HM Treasury, *Budget 2011*, HC 836, March 2011, paragraphs 1.110 and 1.111.

4 HM Treasury and Department for Business, Innovation and Skills, *The Plan for Growth*, March 2011.

5 HM Treasury, *Reform of Air Passenger Duty: a consultation*, March 2011.

2 Principles of environmental taxation

4. Taxation has an important role to play in helping to protect the environment by helping to incorporate the costs of environmental damage into the price of the goods, services or activities which give rise to it. Often, the side-effects of production and consumption that impact on the environment ('environmental externalities') do not enter into the calculations of producers and consumers. By levying a tax on the activity giving rise to such externalities, those costs can be 'internalised', creating an incentive to shift away from environmentally damaging behaviour.[6]

Increasing the proportion of environmental taxes

5. In 2009, the Green Fiscal Commission[7] advocated a shift to environmental taxation—reducing taxes on the things that are valued by society (jobs, incomes and profits) and funding the lost revenue by taxes on things that damage society (pollution and environmental damage). The Commission found that such an environmental tax shift could help the UK meet its 2020 climate change targets with practically no cost to the economy overall and with an increase in employment.[8] Ben Shaw from the Policy Studies Institute, which has continued the Commission's research programme, told us that for environmental taxes to help deliver those climate change targets "how aggressive the policy can be is the issue and I think it is the politics, rather than the theory of the policy, that is going to determine whether we meet the targets".[9]

6. The Commission identified two main 'political' obstacles to a significant environmental tax shift—its perceived effects on, first, the international competitiveness of some vulnerable business sectors (energy intensive industries) and, second, on poorer households who pay proportionally the greatest percentage of their income on energy.[10]

7. The current Government has adopted the previous Government's commitment to increase the proportion of tax revenue accounted for by environmental taxes.[11] The UK Environmental Accounts[12] indicate that environmental taxation, as a proportion of all taxation and of Gross Domestic Product, peaked at 9.7% and 3.4% respectively in 1999. Then, until 2009, the proportions generally fell, reflecting the increasing tax revenue from income and profits before the global recession hit (Figure 1).

6 Chartered Institute of Taxation, *Green Tax report*, May 2009.

7 The Green Fiscal Commission was an independent body whose membership includes experts from business, academics, senior MPs from all three main UK political parties, members of the House of Lords, and representatives from consumer and environmental organisations.

8 The Green Fiscal Commission, *The Case for Green Fiscal Reform: Final Report of the UK Green Fiscal Commission*, October 2009.

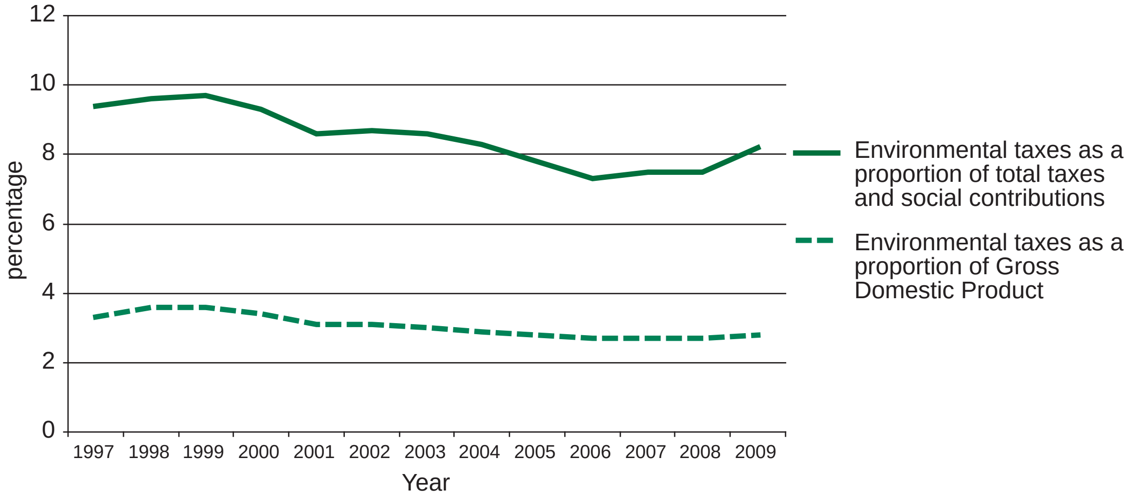
9 Q 26

10 *The Case for Green Fiscal Reform: Final Report of the UK Green Fiscal Commission*, *op cit*.

11 HM Treasury, *Budget 2011*, HC 836, March 2011, paragraph 1.111.

12 Satellite accounts of the National Accounts, compiled by the Office for National Statistics (http://www.statistics.gov.uk/statbase/Product.asp?vlnk=3698).

Figure 1: Environmental taxes as a proportion of total taxes and 'social contributions', and as a proportion of Gross Domestic Product



Source: UK Environmental Accounts, ONS

8. The Treasury has not set out a strategy for how it will increase the proportion of environmental taxes except to tell us that revenues from the new Carbon Floor Price, Carbon Reduction Commitment and receipts from auctioning of EU Emissions Trading System allowances will primarily deliver the increase. [13] These taxes were forecast to raise £1.7 billion in 2011–12, rising to £5.3 billion in 2015–16.[14] The Economic Secretary told us that she intends to look at the direction of travel rather than set a precise target for increasing the proportion of environmental taxation.[15] However, some of our witnesses told us that the Treasury should be more ambitious and aim to collect a significant, specific, proportion of tax revenues—perhaps between 10% and 20%—from environmental taxes, which would show the Treasury's intention.[16] We recognise that any target percentage would be an imperfect measure of the success of the Government's environmental policies. High environmental tax revenues could result either from high rates of tax or from high levels of taxable environmental harm.[17]As Andrew Leicester from the Institute for Fiscal Studies told us:

> I am not convinced that the share of revenues that you raise from environmental taxes is a good indicator of anything very much, partly because it depends on how much revenue you are collecting from anything else. I think there was a huge jump in that indicator during the period of the recession because non-environmental revenues collapsed massively.[18]

EDF energy also cautioned against relying on an arbitrary percentage as a measure of success.[19]

13 Ev 41

14 HM Treasury, *Budget 2011*, HC 836, March 2011, tables 2.1, 2.2 and C.3.

15 Q 57

16 Qq 5 [Aldersgate Group] and 28 [Policy Studies Institute]

17 Office for National Statistics, *UK Environmental Accounts 2010*, June 2010.

18 Q 29 [Andrew Leicester]

19 Ev w39

Definition of environmental taxes

9. Clearly identifying any progress in increasing the proportion of environmental taxes will be difficult because there is no single definition of an environmental tax. The Treasury told us that it was conducting a review of its principles of environmental taxation and will set a new definition of environmental taxes once this work is complete.[20] That work, they indicated, suggests a narrow definition based on the *primary intention* behind the introduction of a particular tax, whereas the long-standing Office for National Statistics (ONS) definition looks more to the *effect* of a particular tax.[21] The Treasury listed six taxes which it regards as environmental taxes—Climate Change Levy, Aggregates Levy, Landfill Tax, EU Emissions Trading System, Carbon Reduction Commitment and the Carbon Floor Price.[22] As the Chartered Institute of Taxation explained, however, the ONS's 2010 Environmental Accounts also included Fuel Duty, VAT on Fuel Duty, Renewable Energy Obligation, Vehicle Excise Duty and Air Passenger Duty in its definition (and confusingly Air Passenger Duty appeared under an 'environmental tax' heading in the 'budget policy decisions' table in this year's Budget Report).[23]

10. The Treasury's treatment of motoring taxes and Air Passenger Duty differed from the ONS's. The Treasury did not consider these to be environmental taxes as they were not primarily structured to change environmental behaviour (Figure 2).[24] **We recommend that the Treasury should set out its detailed plans for increasing the proportion of environmental taxes as part of an environmental tax strategy** (paragraph 80)**, along with how these taxes are defined. We favour the Office for National Statistics' definition, which considers the effects of a particular tax, because the most important characteristic of an environmental tax is that it promotes more sustainable and less environmentally damaging behaviours regardless of why it was introduced.**

20 Ev 41

21 Ev 41. See also Treasury Committee, Fourth Report of Session 2007–08, *Climate change and the Stern Review: the implications for Treasury policy*, HC 231.

22 Ev 41

23 Ev w60

24 Q 68

Figure 2: Comparison of environmental tax definitions

	Office for National Statistics[25]	HM Treasury[26]
Definition	An environmental tax is defined as a tax whose base is a physical unit such as a litre of petrol, or a proxy for it, for instance a passenger flight, that has a proven specific negative impact on the environment. By convention, in addition to pollution related taxes, all energy and transport taxes are classified as environmental taxes.	The Government is developing a workable definition of an environmental tax that will be based on the following broad principles: • The tax is explicitly linked to the Government's environmental objectives; and • The primary objective of the tax is to encourage environmentally positive behaviour change; and • The tax is structured in relation to environmental objectives, for example: the more polluting the behaviour, the greater the tax levied.
Taxes which meet that environmental taxes definition	Landfill Tax Aggregates Levy Climate Change Levy EU Emissions Trading System Fuel Duty VAT on Fuel Duty Vehicle Excise Duty Air Passenger Duty Renewable Energy Obligations	Landfill Tax Aggregates Levy Climate Change Levy EU Emissions Trading System Carbon Reduction Commitment Carbon Floor Price

11. At present the Office for National Statistics publishes, as part of the Environmental Accounts, statistics on the proportion of revenues collected by environmental taxes (using its definition).[27] Budget 2011 announced changes which will reduce forecast revenues to be collected by motoring taxes and Air Passenger Duty. On both the ONS's definition and the Treasury's, we calculated that environmental taxes as a proportion of all taxes will rise over the period up to 2013–14 before levelling out (Figure 3). **The forecast proportion of environmental taxes increases over the life of this Parliament, under both the Treasury's and ONS's definitions. By excluding Fuel Duty and Air Passenger Duty from the Treasury's new definition of environmental taxes, however, there will be no incentive to increase them as part of the Government's commitment to increase the proportion of environmental taxes.**

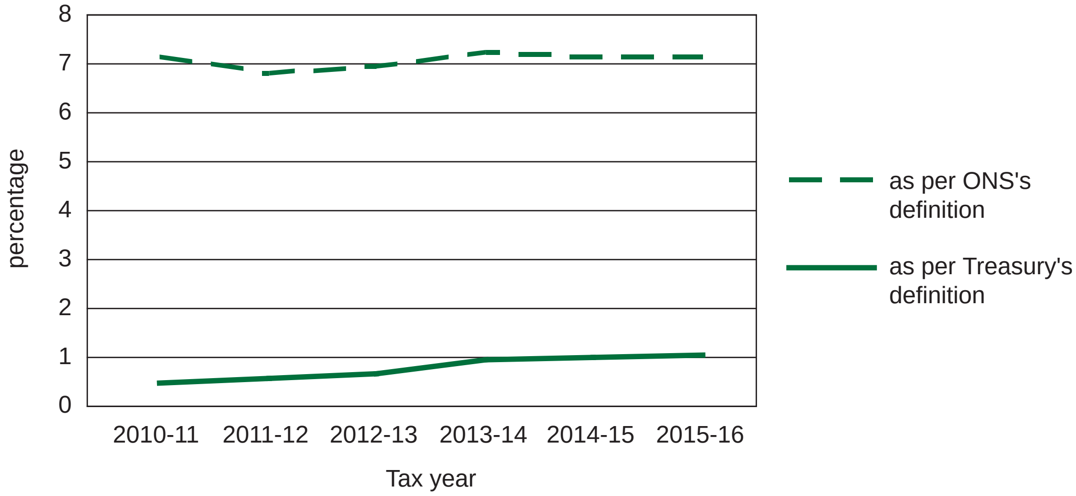
12. It will also make less transparent the Government's progress in increasing the proportion of environmental taxes. **The Treasury should therefore publish statistics (including in its Annual Report) on the proportion of environmental tax under both definitions.**

25 Office for National Statistics, *UK Environmental Accounts 2010*, June 2010. This definition has been adopted by the Statistical Office of the European Communities (Eurostat) and Organisation for Economic Co-operation and Development. The ONS is still to decide on the treatment of the Carbon Floor Price.

26 Ev 41

27 Office for National Statistics, *UK Environmental Accounts 2010*, June 2010, table 3.1.

Figure 3: Projected trend for the proportion of revenue raised from environmental taxes, based on Budget 2011 forecasts of the relevant taxes



Source: Budget 2011 and UK Environmental Accounts

Setting the tax rate—raising revenue or promoting environmental change

13. As well as raising revenues, environmental taxes are also intended to promote more environmentally friendly behaviours, typically by ensuring that at least some of the cost of damaging behaviour is borne by those responsible.[28] According to the Chartered Institute of Taxation, environmental taxes can be split into three broad categories which influences the rate at which the tax is levied:

a) Cost covering charges—aiming to ensure that those making use of the environment contribute to, or cover, the cost of monitoring or controlling that use.

b) Incentive taxes—aiming to change environmentally damaging behaviours, though not to raise revenues.

c) Revenue raising taxes—taxes intended to change behaviours while also generating substantial revenues.[29]

14. The Government has not been clear about the basis for how it has set environmental tax rates; whether to cover environmental costs, to change behaviours or to raise revenues.[30] This may be in part because calculating the cost of environmental externalities associated with an activity is complex and there is no agreed methodology for deciding which costs to include. On aviation, the International Air Transport Association was of the opinion that aviation is over-taxed, estimating that Air Passenger Duty produces enough revenue for the Government to cover the carbon cost of the UK's flights four times over.[31] TUI said that aviation pays its external environmental costs, yet pays in full for its own

28 Ev w60

29 Chartered Institute of Taxation, *Green tax report*, May 2009.

30 Q 16 [Andrew Raingold]

31 Ev w87

infrastructure, unlike subsidies for rail and surface transport.[32] Others, on the other hand, considered that aviation does not pay fully for its environmental costs. As Chris Hewett from Green Alliance told us:

> ... in comparison to other transport modes, aviation is under-taxed. It is exempt from VAT. It is exempt from Fuel Duty. You pay roughly three times as much tax if you drive a car to Edinburgh than if you fly to Edinburgh.[33]

15. On Fuel Duty, PricewaterhouseCoopers estimated that the implicit carbon price was £247 per tonne of carbon compared to the EU ETS where the carbon price was only €17.[34] And the Taxpayers' Alliance were of the view that motorists are taxed excessively (estimating this amounted to £18 billion in 2008–09) because of, for example, the benefits of supporting a broad network of amenities and enabling economic activity to be more geographically dispersed. Its modelling therefore only took into account a narrow view of the costs—only those associated with maintaining or building additional roads and the cost of carbon emissions.[35] Matthew Sinclair told us that:

> The tax charged now is so far beyond the Pigovian rate, it is why every time you challenge the Treasury on this the response you get isn't, 'We disagree with your analysis' but 'Well, we are using this to raise revenue'. That is the reason why no one trusts green taxes and it is the reason why, in the end, this is seen as an attempt to take money from motorists and it isn't functioning effectively as a green tax, and people need to stop trying to sell it as one or they will discredit other green taxes, rightly.[36]

The Campaign for Better Transport, on the other hand, were of the opinion that the revenue raised from road transport taxes did not outweigh the costs involved, including the costs from delays, accidents, poor air quality, physical inactivity and noise.[37]

16. There is an argument that sometimes a focus only on identifying environmental costs is misplaced. Andrew Leicester from the Institute for Fiscal Studies highlighted the importance of setting some tax rates to meet specific environmental (e.g. emissions reduction) targets.[38] And Ben Shaw from the Policy Studies Institute noted that to say that environmental taxes should be about covering externalities is "the wrong approach" because they also serve to raise revenue and "create a very clear behaviour signal".[39]

17. The Chartered Institute of Taxation was of the opinion that Government needs to be clear for each tax whether the environmental objective or the revenue-raising objective is paramount, in order to measure its success—an environmental tax that raised no money at

32 Ev w54

33 Q 17

34 Ev w95

35 Taxpayers' Alliance, *Excessive motoring taxes*, January 2010.

36 Q 42 [Matthew Sinclair]

37 Ev 27

38 Q 16 [Andrew Leicester]

39 Q 8 [Ben Shaw]

all could be a success simply because it had driven out the behaviour it was targeting.[40] The Institute of Directors felt that the onus must be on Government to demonstrate the cost of the environmental externalities when setting the rate of environmental taxes.[41] The Treasury told us that badly designed taxes can do more harm than good, reducing economic output and harming the UK's long-term growth prospects.[42]

18. Even when the aim of an environmental tax is not focused on revenue raising, an appropriate tax rate alone will often not be enough to change behaviour. There is a role for other policy instruments to achieve the desired change.[43] As the Campaign for Better Transport noted, environmental taxation must be part of a larger package of measures for achieving environmental goals and targets.[44] Chris Hewett from Green Alliance cited the Landfill Levy as an example of an environmental tax that has been relatively successful because of a strategic package of complementary regulations, investments and incentives for waste reduction and recycling.[45] It is not clear, however, how the Government determines the most effective package of interventions (tax, regulations, guidance, spending) to affect the required behavioural change. The Association of Chartered Certified Accountants found that there was often little cost-benefit analysis to support the use of tax over other possible measures.[46] **Feeding into the choice of whether an environmental tax is preferable to affect the required behavioural change, with or without complementary regulations and incentives to support it, should be a thorough assessment of the environmental impacts of the various possible interventions so that the most effective is selected.** As the custodians of the 'Green Book' methodology for investment appraisal across Government, the Treasury should be in an ideal position to utilise such a comprehensive approach. **In justifying tax changes in each Budget, the Treasury should explain how it has assessed the environmental impacts of the various possible interventions to arrive at their optimal mix.**

19. Rather than introducing new environmental taxes, existing taxes can also be flexed to provide incentives for environmental friendly behaviour.[47] The Chartered Institute of Taxation suggested that this approach would minimise the burden placed on taxpayers, and in particular small businesses, given the existing complexity in the tax system.[48] Such an approach could also be used to complement Government policies that would otherwise be supported outside the tax system. Tax incentives could be used, for example, to improve the take up of the Green Deal. As Friends of the Earth suggested, to encourage people to take up the Green Deal:

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40 Ev w60

41 Ev w35

42 Ev 41

43 Mirrlees, S. Adam, T. Besley, R. Blundell, S. Bond, R. Chote, M. Gammie, P. Johnson, G. Myles and J. Poterba (eds), *Mirrless Review*, November 2010.

44 Ev 27

45 Q 23

46 Association of Chartered Certified Accountants, *Green Taxation in a Recession*, August 2009.

47 *ibid*.

48 Ev w60

> ...incentives will be hugely important —both carrots (financial incentives) and sticks (legislation for future minimum standards on energy efficiency). Financial incentives could take the form of a council tax rebate or money off stamp duty and would make a significant difference to the attractiveness of the Green Deal to consumers.[49]

We recommend that the Government consider providing tax incentives, such as a council tax rebate or stamp duty discount, in next year's Budget to support the take up of the Green Deal.

Complexity and fairness

20. To be effective, environmental taxes need to be *straightforward* so that taxpayers understand the behavioural change signal being sent, and seen as *fair* so that political momentum can be gained for higher environmental taxation.

21. The UK has a complex mix of environmental taxes and price signals, particularly for energy. For example, there are now four carbon 'tax points' in the electricity supply chain[50] and there are a multitude of different effective tax rates on carbon emissions that vary between different users of energy and between different fuels.[51] The Mirrlees Review of the tax system concluded that there is a long way to go to achieve a consistent price for carbon and that the range of policies and emissions sources is so complex that it is hard to say what the effective carbon prices are.[52] Several of our witnesses were concerned that the Carbon Floor Price announced in the Budget would add to this complexity, calling for a rationalisation of existing climate change tax policies to improve their effectiveness.[53] As PwC put it:

> Taxpayers need to be able to understand what the environmental tax seeks to achieve, how it is levied, how much it costs and what behaviour is needed to avoid paying it...The private sector is frustrated in their attempts to understand the carbon prices currently applying...[54]

22. **The present complex mix of environmental taxes and price signals undermines the effectiveness of both in securing beneficial behavioural changes. Businesses cannot be expected to change their behaviours and investment decisions if they are unaware of the cumulative impact of the environmental taxes affecting them.** Consumers do not know exactly how much they are paying through their fuel bills to fund the various environmental taxes and policies.[55] **The Budget amended existing environmental taxes (and introduced a new one—the Carbon Floor Price), but did not address this growing issue of complexity.**

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49 Ev w3

50 Ev w95

51 *Mirrless Review*, *op cit*.

52 *Ibid*.

53 Ev w73; Ev 32; Ev w68

54 Ev w95

55 Ev w65

23. Environmental taxes can penalise those responsible for harming the environment and therefore have the potential to be popular, but in practice they are not. The Chartered Institute of Taxation attributed this in part to many people perceiving environmental taxes as just another means of raising revenue.[56] In advocating a shift towards environmental taxation, the Green Fiscal Commission envisaged such tax increases being offset by reductions elsewhere. Andrew Raingold from the Aldersgate Group told us, however, that the Budget was a missed opportunity in that regard because the £10 billion raised by increasing the supplementary charge on North Sea oil and gas production should have been used to reduce taxes on income rather than to pay for a decrease in Fuel Duty.[57] The EEF, a trade body for manufacturers, told us that the proposed Carbon Floor Price will inefficiently duplicate existing carbon taxes.[58] The Mineral Products Association complained that the Budget increased environmental taxation without an equivalent reduction in non-environmental taxation. Matthew Sinclair of the Taxpayers' Alliance, citing the example of Vehicle Excise Tax, told us that people no longer trusted Government to implement environmental taxes in a revenue-neutral way.[59]

24. Environmental taxes are also seen as regressive as they are not clearly related to the ability to pay. A high fraction of low-income household budgets is spent on electricity, heating fuel, and transportation, but the gains from environmental protection may accrue to higher income households who have the most 'willingness to pay' for that protection.[60] In 2008, 18% of households were classified as being in 'fuel poverty'.[61] Ben Shaw from the Policy Studies Institute suggested that improving information about environmental taxes, including why they are introduced, would increase trust and support for them.[62] Andrew Leicester from the Institute for Fiscal Studies suggested that the Government should be more upfront and label a tax a 'tax' rather than "calling it 'a levy' or 'a support rate' or whatever name you want to call it apart from the 'T' word".[63] **To tackle the growing complexity of environmental taxes and to build greater trust in their purpose, a coherent and clearly articulated approach is needed towards environmental taxes and broader environmental policy. A clear environmental tax strategy,** as we discuss below, **should be a key component of this** (paragraph 80)**.**

25. Hypothecating revenues—earmarking them for a specific propose—would be likely to increase support for environmental taxes. Research by the Green Fiscal Commission found that while 51% of people supported environmental taxes, this rose to 73% if revenue raised by them were hypothecated for reducing emissions.[64] The Campaign for Better Transport argued that Government should, in particular areas such as motoring, spend at least as

56 Ev w60

57 Q 20 [Andrew Raingold]

58 Ev w42; Ev w78

59 Q 43 [Matthew Sinclair]

60 Mirrlees Review, *op cit*.

61 DECC, *Annual Report on Fuel Poverty Statistics 2010*. (Fuel poverty is regarded as more than 10% of household disposable income being used for energy bills).

62 Q 35

63 Q 33 [Andrew Leicester]

64 Ev 27

much as it collected in taxes.[65] The previous Government told our predecessor Committee that spending was not determined by the way in which the money is raised, and that hypothecating revenues to particular spending programmes would impart inflexibility in spending decisions and lead to a misallocation of resources.[66] We questioned the Economic Secretary on the current Government's view. She told us that she does not see a role for greater hypothecation, but wanted a "more thoughtful and genuine approach" that changes behaviours.[67]

26. Andrew Leicester, from the Institute for Fiscal Studies, argued that tax and spend decisions should be driven by the overall effectiveness of taxation and expenditure programmes rather than by hypothecation, and that the only merit of hypothecation was in terms of "a kind of public acceptability role ... of trying to ensure that people believe that environmental taxes are not just there to take a few extra pounds from their pocket but are designed for a specific purpose".[68] An example was the Aggregates Levy Sustainability Fund which was funded by partial hypothecation (around 10%) of Aggregates Levy revenue and aimed to support projects that reduce the effects of aggregate extraction on local communities and the natural environment.[69] (The 2010 Spending Review announced that the scheme would be discontinued.[70]) **Hypothecating revenues for environmental ends can restrict spending flexibility. It can also help, however, to build trust and acceptance of environmental taxes. The Treasury should therefore consider greater use of at least *partial* hypothecation of revenues from environmental taxes, as applied for example to the Aggregates Levy.**

Evaluation

27. A problem with environmental taxes is that it is difficult to evaluate the efficacy of measures because the actual environmental impact is often uncertain.[71] It is difficult to identify the extent to which taxation rather than any other factor or policy initiative is responsible for behavioural changes.[72] The Economic Secretary told us that the Treasury had held workshops to consider initiatives in particular tax areas, including environmental taxes, to look at their impact on behaviours "from the perspective of the public and the company, back to the tax, not the other way round".[73] **The Government's workshops on particular tax areas are welcome, but detailed research is needed on the impact of environmental taxes on behaviours to establish what works, and that analysis should be made public to help engender public trust in the purpose and application of environmental taxes.**

65 Ev 27

66 Environmental Audit Committee, Fourth Special Report of Session 2008–09, *Pre–Budget Report 2008: Green fiscal policy in a recession: Government Response to the Committee's Third Report of Session 2008–09*, HC 563.

67 Environmental Audit Committee, Second Report of Session 2010-12, *The Green Investment Bank*, HC 505.

68 Q 6 [Andrew Leicester]

69 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/alsf.aspx

70 http://archive.defra.gov.uk/environment/quality/land/aggregates/index.htm

71 Association of Chartered Certified Accountants, *Green Taxation in a Recession,* August 2009.

72 Ev w60

73 Environmental Audit Committee, Second Report of Session 2010–12, *The Green Investment Bank*, HC 505.

28. At present, the only information provided on the environmental impact of taxation changes announced in the Budget is on CO_2 emissions levels. HM Revenue and Customs produces *Tax Information and Impact Notes,* detailing the specific impact from tax changes. These showed, for example, that removing the Fuel Duty escalator and cutting Duty by 1p a litre could result in a relatively small, 0.4 $MtCO_2e$, increase in emissions in 2011–12.[74] There appears to be no publicly available modelling of wider knock-on effects to the environment from changes to environmental taxes, such as poorer air quality, land-use change, congestion and traffic accidents. The Economic Secretary told us that the Treasury, along with the Department for Transport, had done much work looking at 'the overall burden of taxation in relation to the externalities caused by motoring'.[75] We asked to see that assessment, comparing the cost of environmental damage with the tax revenue received.[76] However this has not been shared with us. Instead, the Treasury simply told us that motoring contributes 20% of UK emissions and that 'work is carried out with other Government departments on the wider environmental impacts of relevant taxes to ensure that we have robust data to form our assumptions'.[77] **We are disappointed that the Treasury did not provide the information we require for this inquiry. The material we sought is important for demonstrating the full impact that environmental taxes are having, and for building greater trust and acceptance of environmental taxes. In its response to this Report, we wish to see the Treasury's assessment of the environmental costs of motoring, beyond a simple quantification of the emissions involved.**

29. **To tackle the uncertainty over whether environmental tax rates adequately reflect externalities (or indeed over-tax them), the Treasury should seek to build consensus on a methodology for calculating environmental externalities. That would allow evaluation criteria to be formulated for assessing whether environmental taxes are having the desired effect on changing behaviours. Such a methodology and evaluation criteria should then be included in a published environmental tax strategy** (paragraph 80)**.**

30. **The Treasury should also publish an 'environmental impact assessment' alongside future Budgets, in a similar manner to the 'Household assessment' in Annex A of the Budget Report. This should cover the fullest possible assessment of the environmental impacts of proposed tax changes, including a monetised assessment of the environmental cost compared with the change in tax revenue.**

Natural capital

31. In June 2011, the Government published the *National Ecosystem Assessment*, which found that ecosystems are 'consistently undervalued in conventional economic analyses and decision making'. It estimated that natural ecosystem resources are worth £30 billion a year to our economy. Soon after, Defra published its *Natural Environment White Paper*.[78]

74 Fuel Duty Tax information and impact note (see http://www.hmrc.gov.uk/budget2011/tiin6330.pdf)

75 Qq 90, 97

76 *Ibid*.

77 Ev 46

78 *The Natural Choice: securing the value of nature*, Cm8082, June 2011.

The White Paper recognised that more needs to be done to reflect the economic value of the natural environment in decisions made by Government, business and people. It set out measures aimed at putting 'natural capital at the centre of economic thinking and at the heart of the way we measure economic progress nationally', including incorporating natural capital within the UK Environmental Accounts and producing an action plan to expand markets and schemes in which payments are made by the beneficiary of a natural service to the provider of that service.

32. In our January 2011 report on embedding sustainable development we noted that the Treasury was in a position to exert influence over departments and help drive sustainable development across Government, including the valuation of natural capital in policy-making to reflect the Treasury's 'Green Book' methodology.[79] The Natural Environment White Paper noted that the Government would update the 'Green Book' to reflect the natural environment in policy appraisals '[covering] techniques for monetary and non-monetary valuation and the need to take into account values from individuals, communities, businesses and other interested parties when undertaking environmental valuation'.[80] In the light of this we were surprised during our current inquiry to learn that the Treasury, at that stage, did not appear to have been clearly involved in this work. As the Economic Secretary told us, "Defra are engaged in that work and, from a Treasury perspective, we would be very interested to work with them on that".[81] **The Treasury should take greater ownership of the Government's efforts on valuing and managing the country's natural capital, to ensure that policy-making in all departments reflects such valuations.**

33. Once stocks of natural capital are quantified and valued, it could be possible to include these in the tax system in some way. We put this idea to the Treasury who told us that due to the absence of a 'simple and robust way of attaching value to natural capital it is unlikely the taxation system could be used to directly protect and increase stocks of natural capital —there is a strong risk of high costs and challenge'.[82]

34. **We welcome the Government's plans to incorporate natural capital into the Environmental Accounts. In the light of that work, the Treasury should keep under review the possible scope for broadening the tax base in due course to include natural assets, to help protect or increase our stocks of natural capital. While taxes based on natural capital valuation might be open to challenge at this stage, the Government should explore using the scope for financial incentives outside the tax system to reward positive environmental behaviours, calibrated according to the value of the natural capital involved.**

79 Environmental Audit Committee, First Report of Session 2010-12, *Embedding Sustainability Across Government, after the Secretary of State's announcement on the future of the Sustainable Development Commission*, HC 504.

80 *The Natural Choice: securing the value of nature*, op cit.

81 Q 121

82 Ev 41

Strategy

35. The previous Government's vision document for environmental taxation—*The Statement of Intent on Environmental Taxation*—has not been refreshed since it was introduced in 1997 and the Treasury Select Committee has previously expressed disappointment that commitment to this Statement had faltered.[83] The Budget detailed the Government's high-level aim for environmental taxation:

> ... a simple efficient and cost effective policy framework will meet environmental objectives while supporting growth and maintaining sound public finances. Market-based solutions to price carbon are at the heart of this approach, achieving objectives at the lowest possible cost.[84]

36. The Government has not yet set out its strategy, however, articulating how the Treasury will deliver on its objectives for environmental taxation. Witnesses have highlighted a need to set out a clear strategy for environmental taxes to help taxpayers understand and accept the environmental rationale.[85] Andrew Leicester, from the Institute for Fiscal Studies, told us that what was lacking from the Budget was a sense of the big picture in terms of environmental taxes: "So there was a lot of tinkering, there was a lot of fuss around Fuel Duty, but what is the big long-term strategy for transport taxes or energy taxes going forward?".[86] **The Government should set out a strategy for how its vision for environmental taxes will be delivered by individual taxes. Such a strategy should set out why environmental taxes are set and what they are there to achieve** (paragraph 80)**.**

83 Treasury Select Committee, Fourth Report of Session 2007–08, Climate *change and the Stern Review: the implications for Treasury policy*, HC 231.

84 HM Treasury, *Budget 2011*, HC 836, March 2011, paragraph 1.110.

85 Q 6 [Andrew Leicester]; Ev w60

86 Q 2 [Andrew Leicester]

3 Transport taxes

37. In this chapter we explore further some of the issues in Chapter 2 which relate to transport, including Budget announcements on Fuel Duty and a per-plane aviation duty.

Motoring taxes

38. Motoring is a significant source of carbon dioxide emissions. The most recent data show that emissions from domestic transport account for 21% of all UK emissions (up from 16% in 1990), with around half of these relating to domestic motor vehicles.[87] Motoring also causes a number of well-known environmental externalities including congestion, air pollution, noise and accidents.[88] The RSPB highlighted some that are often overlooked such as wildlife habitat loss and barriers across wildlife corridors.[89]

39. There are two main environmental taxes on motoring :

- Vehicle Excise Duty paid on car ownership.
- Fuel Duty paid on sales of all hydrocarbon fuels, including petrol, diesel, LPG, biodiesel, and bio-ethanol. Rates vary by fuel type, and fuels used in certain vehicles are exempt or pay a reduced rate. The average price of unleaded petrol during March 2011 was 133p a litre, with around 61% taken as tax.[90]

Fuel Duty accounts for around 65% of all (ONS defined) environmental tax revenues.[91] Although not introduced with environmental objectives in mind (rather to raise revenue for road and infrastructure projects), they have increasingly become an instrument of Government environmental policy.[92] The previous Government announced a fuel duty escalator[93] in Budget 2009[94] and since 2001 rates of vehicle excise duty have been based on the level of carbon dioxide emitted by the vehicle.

40. The Economic Secretary told us that the Treasury does not count Fuel Duty as an environmental tax because it was not introduced or structured to change behaviours. However, for Vehicle Excise Duty there was more of a debate to be had.[95] Whilst not counting motoring taxes as environmental ones, the Treasury does consider them to have a role in promoting more sustainable behaviours by 'incentivising the development and purchase of electric and ultra low-carbon vehicles and supporting sustainable biofuels'.[96]

87 Department for Transport, *Transport Statistics Great Britain: 2010,* November 2010.

88 Mirrlees Review, *op cit*, Chapter 5.

89 Ev w73

90 The AA, *Fuel price report March 2011*, April 2011.

91 Office for National Statistics, *UK Environmental Accounts 2010*, June 2010.

92 Chartered Institute of Taxation, *Green tax report*, May 2009.

93 An increase in fuel duty of 2 pence per litre on 1 September 2009, and of 1 penny per litre in real terms each year from 2010 to 2013.

94 HM Treasury, *Budget 2009*, HC 407, April 2009, paragraph 7.51.

95 Q 68

96 Ev 41

There is indeed evidence that petrol prices, bolstered by tax, have an important beneficial impact on behaviours, with train operating companies reporting a 5% shift to rail in the first few months of 2011 due to rising oil prices.[97] And drivers have reduced their average speed to conserve fuel, due to concerns over rising fuel costs.[98]

41. The Campaign for Better Transport pointed out that rail and bus travel generally resulted in substantially fewer emissions per passenger-mile than either car or air travel. [99] With 56% of car journeys being less than five miles,[100] a transport policy to support a modal shift towards public transport, cycling and walking, underpinned by Fuel Duty, could help to deliver significant reductions in emissions. **Fuel Duty is an environmental tax by any other name. We are concerned that by not classifying it as an environmental tax the Treasury is loosening the link between the rate of the tax and the cost of environmental externalities associated with motoring, and thereby reducing further the likelihood of using the Duty as a lever of behavioural change.**

42. There is a clear upward trend in the underlying price of crude oil, with a fourfold increase over the past ten years. The Policy Studies Institute found that this trend had remained stable over time and that there was no reason to expect that it will not continue in the medium term.[101] A continuing dependence on oil could however undermine the public finances in the longer term because of the effect on the economy.[102] Ben Shaw from the Policy Studies Institute told us that there is an opportunity to be much clearer with the public about this long-term trend and the need to take action to reduce the cost of motoring through other alternatives rather than, "King Canute-like", trying to drive the price of fuel down.[103]

43. The Budget announced a Fuel Duty cut of 1 pence and the replacement of the fuel duty escalator by a 'fair fuel stabiliser'. When oil prices are high, Fuel Duty will be increased by inflation only, offset by increased tax on North Sea oil production. The previously-planned April 2011 inflation-only increase was delayed to January 2012, and the April 2012 increase delayed to August 2012.[104] Increasing the tax on North Sea oil profits is forecast to raise £10 billion[105] and, as Friends of the Earth pointed out, that will be all spent on "cutting Fuel Duty and none of it on measures to cut our dependence on oil".[106] The Aldersgate Group commented that the fair fuel stabiliser was a missed opportunity to fund additional support

97 Association of Train Operating Companies (see http://www.atoc.org/media-centre/latest-press-releases/tens-of-thousands-switch-from-cars-to-trains-as-petrol-prices-rise-100489)

98 Research commissioned by Green Flag (http://www.greenflag.com/news/press/One-in-five-motorists-driven-off-the-road-by-soaring-fuel-prices.html)

99 Ev 27

100 Ev w51

101 Policy Studies institute, *Road transport fuel prices, demand and tax revenues: impact of fuel duty escalator and price stabiliser*, February 2011.

102 Office for Budget Responsibility, *Assessment of the Effect of Oil Price Fluctuations on the Public Finances*, September 2010.

103 Q 20 [Ben Shaw]

104 *Budget 2011*, HC 836, March 2011, page 4.

105 *Budget 2011*, *op cit*, table 2.1.

106 Ev w3

for fuel efficient vehicles or public transport.[107] Similarly, Chris Hewett of Green Alliance questioned the justification for its being used only in assisting road users.[108]

44. PwC pointed out that dropping Fuel Duty by 1p was unlikely to have any impact on its environmental efficacy, given the "extremely high rate of environmental tax implicit in the existing Fuel Duty rate, the inelastic demand for fuel and the far greater impact of increasing oil prices".[109] In a similar vein, the Economic Secretary told us that "the oil price has fed through far more to changing behaviour than Fuel Duty was able to do".[110] **In the short-term, dropping Fuel Duty by one penny might be justifiable in terms of reducing the impact on economic growth of high fuel prices, but** as the Economic Secretary acknowledged **the Budget change was insignificant compared with the large petrol market price changes. And in the medium to long-term, the Government should not use taxpayers' money to keep fuel prices artificially low, but instead focus its efforts on helping motorists move away from oil.**

45. As we discussed in Chapter 2, environmental taxes need to be carefully structured if they are to carry taxpayers with them. Unfortunately, in terms of following the environmental tax principles we discussed there, the Budget changes for motoring taxes have sent the wrong signal.[111] They have not, for example, assisted the required 'tax shift' advocated by the Green Fiscal Commission (paragraph 5). The Treasury raised North Sea oil and gas production taxes but used the revenue to cut Fuel Duty, and even with that regrettable linkage there are now concerns about the likely North Sea revenues anticipated.[112] The Energy and Climate Change Committee recently examined this issue.[113]

46. It is also unclear what the wider objectives of the Government's motoring taxes are. The Budget provided very little in the way of tax incentives to help motorists switch to lower carbon transport or alternatives. The Campaign for Better Transport claimed that over the last two decades, public transport fares have increased significantly while the overall costs of motoring have been falling, and that this trend is set to continue.[114] Sustrans thought that the effectiveness of Fuel Duty in promoting a modal shift would be enhanced if there were complementary policies such as reducing public transport fares, perhaps hypothecating Fuel Duty revenues,[115] and a political and financial commitment towards increasing levels of walking and cycling.[116] As Stephen Joseph from Campaign for Better Transport pointed out, alternatives still need to be provided to single-occupancy car use for a lot of the journeys people have to make.[117] The Campaign for Better Transport suggested that a cut in the price of public transport of 20% would increase bus travel by 13% and rail

107 Ev 32

108 Q 20 [Chris Hewett]

109 Ev w95

110 Q 90

111 Ev w73

112 http://www.oilandgasuk.co.uk/news/news.cfm/newsid/617

113 Energy and Climate Change Committee, Oral evidence session held on 4 May 2011, transcript published as HC 1018-i.

114 Ev 27

115 Ev w51

116 *Ibid*.

117 Q 42 [Stephen Joseph]

travel by 17% within eight years.[118] Axeon suggested additional tax measures could be taken to persuade consumers to purchase electric vehicles such as a 'feebate' scheme, where a new purchase tax on relatively high CO_2-emitting vehicles would subsidise lower-emitting vehicles within that same class.[119] This could be fiscally neutral. **The Treasury should consider providing greater incentives to encourage motorists to switch from polluting cars to lower carbon alternatives, including a 'feebate' scheme on the purchase of new cars.**

47. The sense of a lack of strategic vision for what motoring taxation is intended to achieve is also illustrated by the Budget implementing the previous Government's plans to remove the 20p Fuel Duty price differential for biodiesel made from used cooking oil.[120] The UK Sustainable Biodiesel Alliance stated that biodiesel manufactured from used cooking oil can reduce lifecycle carbon emissions by up to 90%.[121] Agri Energy told us that this tax incentive had:

> …been largely successful in promoting the use of waste derived bioliquids in transport fuel and ensuring that waste oil is not illegally poured down the drain... [serving] as a case study of how well targeted fiscal measures can drive behavioural change, private sector innovation and job creation.[122]

They told us that vehicles can easily switch back to using ordinary diesel.[123] **The removal of fiscal incentives to use biodiesel was a strategically retrograde act.**

48. **We are disappointed that the Budget provided few tax incentives to help motorists switch to lower carbon transport alternatives. The Government should consider partially hypothecating revenues from Fuel Duty to invest in low-carbon alternatives. But perhaps most importantly, the Treasury needs to set out a clear vision and strategy for motoring taxation,** reflecting the principles in Chapter 2, **to demonstrate what transport policy objectives it is seeking to support. Until it does so, it will be open to accusations of sending mixed messages to motorists and undermining taxpayers' support for such environmental taxation.**

Aviation taxes

49. Carbon dioxide emissions from aviation have grown rapidly over the last forty years, and account for around 6% of the UK's total greenhouse gas emissions.[124] The Government forecasts emissions from air travel to continue to rise, with emissions from domestic and international flights set to account for 21% of total UK carbon emissions in 2050.[125] Air Passenger Duty was introduced in 1994 as a way of raising revenue. Environmental

118 Ev 27

119 Ev w32

120 Q 95

121 Ev w16

122 Ev w11

123 *Ibid.*

124 HM Treasury, *Reform of Air Passenger Duty: a consultation*, March 2011.

125 Department for Transport, *UK air passenger demand and CO2 forecasts*, January 2009.

objectives were not part of the rationale for the tax's introduction.[126] However, in 2009 rates were re-structured around four distance bands 'as an effective way of reducing emissions from aviation', aiming for those that travel further 'and have a larger environmental impact [to] meet the cost'.[127] There has been much criticism of the bandings for not reflecting the actual flight distance, and even taxing some shorter journeys more than longer ones.[128]

50. Under the Coalition Agreement the Government undertook to 'reform the taxation of air travel by switching from a per-passenger to a per-plane duty, and [to] ensure that a proportion of any increased revenues over time will be used to help fund increases in the personal allowance'.[129] Research by the Greener by Design Group,[130] sponsored by the Government, had found that there was little evidence that Air Passenger Duty had had a material environmental impact.[131] However, the 2011 Budget announced that the Government would not introduce a per-plane duty at the present time, given 'concerns over the legality and feasibility of this approach'. Instead, the Government committed to work with international partners to build consensus for a per-plane duty in the future.[132]

51. In terms of feasibility, the Policy Studies Institute examined proposals for different bases for a per-plane duty—compatible with the Chicago Convention—including NOx emissions, take-off weight and number of engines.[133] Alongside the Budget, the Government launched a consultation on proposed changes to Air Passenger Duty 'to simplify APD in a way that improves the efficiency and fairness of the tax'.[134] It discusses how the tax should relate to distance travelled[135] (although long-haul flights have lower emissions per passenger-mile, short-haul journeys typically emit less given the difference in distances travelled).[136] We received evidence on the different tax treatment of short-haul and long-haul flights, and concerns about UK aviation competitiveness.[137] Gatwick airport pointed out that the proposed reforms, overall, do nothing to make Air Passenger Duty a more effective environmental tax:

> APD is only calculated according to one element of a given flight—the distance travelled. The 2011 Budget does not propose to change this. There are a whole range of other factors relevant to a given flights' impact on the environment, including the type and age of the aircraft, the time that the aircraft is physically in the air as well as

126 Chartered Institute of Taxation, *Green tax report*, May 2009.

127 HC Deb, 24 November 2008, col 499.

128 Ev w59

129 HM Government, *The Coalition: our programme for government*, May 2010, page 30.

130 Greener by Design group is a Department for Business, Innovation and Skills sponsored body with the remit of assessing options for addressing aviation's environmental impacts. It is based within the Royal Aeronautical Society but is not aligned with any sectoral interest.

131 Ev w1

132 HM Treasury, *Budget 2011*, *op cit*, paragraph 1.152.

133 Policy Studies Institute, *A new basis for aviation taxation*, June 2010.

134 *Reform of Air Passenger Duty: a consultation*, March 2011, page 2.

135 *Reform of Air Passenger Duty: a consultation*, paragraphs 2.6, 3.4.

136 *Reform of Air Passenger Duty: a consultation*, paragraph 3.4.

137 Ev w101; Ev w87

> how heavy it is. The Government choose not to take these factors into account. In its current form, the effectiveness of APD as an environmental tax is severely limited.[138]

We questioned the Economic Secretary as to whether she had thoroughly investigated the options for a per-plane duty. She told us:

> I can assure you we looked at a number of different ways in which we could structure this taxation to try and encourage better environmental behaviour...I think our sense was—particularly on things like NOx, for example—that there were better ways of making improvements on that than through tax.[139]

52. As regards the legality issue, the Economic Secretary told us:

> To be clear, the Coalition Agreement talked about us looking at the options to reform APD, including looking at this per plane duty. I think, realistically, looking at the legalities of how we would pursue it, it simply wasn't going to be sensible to do it. Because what became clear was that the international legal framework that we operate in, including the Chicago Convention, certainly right now meant that we couldn't go down a per plane tax route.[140]

Our predecessor Committee had previously raised the Chicago Convention being a block to developments in aviation taxation[141] and the then Government responded that 'the UK continues to argue for change at international level, and is engaging constructively with our international allies'.[142] **We are disappointed that little progress has been made on revising the Chicago Convention since we last examined this area, and we are left wondering whether, given earlier Government examination of the scope for reform within the terms of the Convention, there was ever any realistic prospect for bringing forward the work envisaged in the Coalition Agreement. In responding to this Report, the Treasury should detail what work it has undertaken on investigating per-plane tax options, and explain what the basis was for holding out the prospect for a per-plane tax in the Coalition Agreement.**

53. The Government's efforts to explore a per-plane tax has to some degree been undermined because the Treasury now no longer considers Air Passenger Duty to be an environmental tax (paragraph 11), but one instead to 'raise revenues for the Exchequer in a simple, fair and efficient way'.[143] This seems to be a change from the 2011 Budget Report, where Air Passenger Duty was included under an 'Environmental tax' heading.[144] **The Treasury must clear up the confusion as to whether Air Passenger Duty is an environmental tax.**

138 Ev w55

139 Q 99

140 Q 98

141 Environmental Audit Committee, *Third Report of Session 2008–09, Pre-Budget Report 2008: Green fiscal policy in a recession*, HC 202, paragraph 52.

142 Environmental Audit Committee, Fourth Special Report of Session 2008-09, *Pre–Budget Report 2008: Green fiscal policy in a recession: Government Response to the Committee's Third Report of Session 2008–09*, HC 563, page 9.

143 Ev 41

144 *Budget 2011*, *op cit*, page 43.

54. The EU Emissions Trading System (EU ETS), by extending its coverage into aviation in 2012, will at least clearly represent an 'environmental tax' (paragraph 9). The Treasury told us that this 'represents an internationally co-ordinated and least-cost approach to limiting the carbon impact of aviation across Europe in the future'.[145] At present Air Passenger Duty on flights to EU destinations is £12 in economy and £24 in premium class.[146] Gatwick Airport pointed out that as a result of aviation coming within the EU ETS, by 2020 airline tickets for a return journey could increase by between €4 and €39 per passenger depending on the length of the journey across the EU.[147] The Policy Studies Institute believed that the terms on which the sector will join the EU ETS are generous, and that the price of carbon in the scheme was expected to be much too low to have much effect on the growth of emissions from aviation.[148] Tim Johnson from the Aviation Environment Federation told us that the impact would be "very, very small", with demand by 2020 expected to rise by 135–137% rather than 142%.[149] **Relying on the EU Emissions Trading System to reduce emissions from aviation is a high risk and low impact strategy. Its success in reducing aviation emissions turns on the effectiveness of the EU Emissions Trading System in curbing emissions more generally.** We are examining in a separate inquiry the role of the UK carbon budgets system in delivering our Climate Change Act emissions reduction commitments, which, for the 'traded sector' at least, depends crucially on the effectiveness of the EU ETS.

55. In the absence of further restraints on demand, air passenger numbers are forecast to grow by up to 200% by 2050.[150] The Office for Budget Responsibility expects the number of air passengers to grow from 2011, even with current Air Passenger Duty rates increasing by inflation each year.[151] The Government has stated that aviation has an important role to play in delivering growth and that the Government wants to see aviation prosper.[152] However, it has also said that unconstrained aviation growth is not an option.[153] There is a tension between growth and environmental protection running through the Government's policy on aviation taxation. **The Government's up-coming 'sustainable aviation framework'[154] must set out clearly how the Government expects to balance its competing objectives for aviation, along with how Air Passenger Duty and EU Emissions Trading System revenues will contribute to environmental objectives, to give a foundation for planning aviation tax strategy.**

145 Ev 41

146 *Reform of Air Passenger Duty: a consultation*, *op cit*.

147 Ev w55

148 Policy Studies Institute, *A new basis for aviation taxation*, June 2010.

149 Q 52 [Tim Johnson]

150 *Reform of Air Passenger Duty: a consultation*, *op cit*.

151 HL Deb, 11 January 2011, col 1288; Office for Budget Responsibility, *Economic and Fiscal Outlook*, November 2010.

152 *Reform of Air Passenger Duty: a consultation*, *op cit*.

153 Department for Transport, *Developing a sustainable framework for UK aviation: Scoping document*, March 2011.

154 *ibid*.

4 The Carbon Floor Price

56. The 2011 Budget announced that the Government would introduce a Carbon Floor Price (or 'Carbon Price Support') from 1 April 2013 to drive investment in the low-carbon power sector. The Floor Price will be put in place by reforms to the Climate Change Levy and Fuel Duty so that they are levied on all fossil fuels used to generate electricity in the UK.[155] The Floor will start at around £19 per tonne of carbon dioxide, (£16, rising to £30 in 2020, in 2009 prices). This would require an effective levy of nearly £5 per tonne in 2013–14. The Treasury expects this to raise £740 million in 2013–14, rising to £1.4 billion in 2015–16.[156]

57. The Energy and Climate Change Committee had recently reported on the Carbon Floor Price[157] and we have not sought to duplicate that extensive work, instead examining the potential effects of the Floor Price on international competitiveness and the Government's pledge on no new subsidy for nuclear power.

The impact on competitiveness

58. One of the environmental taxation issues we discussed in Chapter 2 was that a tax alone will often not be enough to change behaviour. There is often a role for other policy instruments alongside to achieve the desired change. Many of the written submissions provided to our inquiry criticised the potential impact of the Carbon Floor Price on the international competitiveness of UK businesses, particularly energy intensive industries. These industries will require measures to help them adjust to a low-carbon future. EEF pointed out that the 'implicit price' of carbon in the UK as a result of the combined effect of all existing climate policies is 'already significantly higher than in other major industrialised economies'.[158] The British Ceramics Confederation recommended that the Government measure the cumulative costs of all the UK's environmental taxes through impact assessments to "ensure that the UK does not just meet its emissions reductions targets by off-shoring manufacturing—the UK needs to avoid 'carbon leakage' of energy-efficient manufacturing in the UK to less-regulated economies, exporting GDP and jobs". It conducted a survey of its members and found that the Carbon Price Floor will put about half of them "out of business" as "it was not an option to increase prices to pass on this cost to customers due to the internationally competitive market in which they operate".[159] Ineos Chlor noted an absence of a plan for helping energy intensive industries to manage the transition to a low-carbon economy.[160] EEF suggested that the Green Investment Bank could form part of such a plan.[161]

155 HM Treasury, *Reform of Air Passenger Duty: a consultation*, March 2011, page 18, Box 4.A.

156 *Budget 2011*, *op cit*, pp 32 and 43, table 2.1; *Carbon Floor Price Consultation: the Government response*, *op cit*, page 16.

157 Energy and Climate Change Committee, Fourth Report of Session 2010-12, *Electricity Market Reform*, HC 742.

158 Ev w78

159 Ev w68

160 Ev w14

161 Ev w78

59. Andrew Leicester told us that without the EU Emissions Trading System targets being tightened, the Carbon Floor Price is unlikely to result in less emissions:

> Anything that is introduced on energy that is within the wider context of the EU ETS has very little impact if it does not result in the ETS's calculations being tightened.[162]

We support the Government's commitment to push for 100% auction of EU Emissions Trading System allowances[163] and a European emissions reduction target of 30% by 2020.[164] The Office for Budget Responsibility estimates that £7.7 billion of proceeds will be raised from the auction of EU Emissions Trading System allowances between 2010–11 and 2015–16,[165] but the Treasury does not plan to ring-fence these proceeds for investment in low-carbon infrastructure.[166] The Government intend to publish a package of measures for the energy-intensive industries whose international competitiveness is most affected by energy and climate change policies by the end of 2011.[167]

60. **The Treasury is missing an opportunity to support low-carbon investment by not ring-fencing receipts from the EU Emissions Trading System or the Carbon Floor Price. The Treasury should consider investing a proportion of these proceeds, perhaps through the Green Investment Bank, to support energy-intensive industries to take steps to reduce their carbon footprint, enabling them to remain in the UK, to be greener, and to be competitive.**

Nuclear power

61. The Committee on Climate Change recently concluded that nuclear power currently appears to be the most cost-effective of the low-carbon technologies, and should form a greater part of the energy mix assuming safety concerns can be addressed (up to 40% of the energy mix in 2030). However, it pointed out that full reliance on nuclear would be inappropriate, given uncertainties over costs, site availability, long-term fuel supply and waste disposal, and public acceptability.[168] In the Coalition Agreement, the Government has said that it is committed to allowing the replacement of existing nuclear power stations, provided that they are subject to the normal planning process for major projects (under a new National Planning Statement) and provided that they receive no public subsidy.[169]

62. Producers of low-carbon electricity, including existing and new nuclear generators, will benefit from any increased Climate Change Levy triggered by the Carbon Floor Price. The Economic Secretary told the House that the existing nuclear sector will benefit by an average of £50 million per annum to 2030, whilst the renewable energy sector is expected to benefit by an average of at least £25 million a year.[170] Others have estimated that the

162 Q 7 [Andrew Leicester]

163 Q 86

164 HC Deb, 17 May 2011, col 177.

165 *Budget 2011*, *op cit*, page 92, table c.3.

166 Qq 87 and 88

167 HC Deb, 17 May 2011, col 176.

168 Committee on Climate Change, *The Renewable Energy Review*, May 2011.

169 HM Government, *The Coalition: our programme for government*, May 2010, page 17.

170 HC Deb, 9 May 2011, col 1024W.

benefits to nuclear could be higher than this.[171] **In its response to this Report the Government should provide its comprehensive assessment of the possible financial consequences of the Carbon Floor Price for existing and new nuclear power.** EDF Energy told us that the Carbon Floor Price will influence investment decisions on extending the life of the UK's existing nuclear plants.[172] This raises a question over one of the principles we discussed in Chapter 2—the need for clarity about the objectives of environmental tax (and for these purposes we regard any Floor Price levy as an environmental tax[173]). In this context, the issue is whether the Floor Price arrangement is intended to support low-carbon power or to support non-nuclear low-carbon power.

63. The Secretary of State for Energy and Climate Change told the House that:

> there will be no levy, direct payment or market support for electricity supplied or capacity provided by a private sector new nuclear operator, unless similar support is also made available more widely to other types of generation. New nuclear power will, for example, benefit from any general measures that are in place or may be introduced as part of wider reform of the electricity market to encourage investment in low-carbon generation.[174]

64. We asked the Treasury (without success) to set out for the purposes of our inquiry a general definition of a subsidy.[175] Nevertheless, the International Energy Agency defines energy subsidy broadly as 'any government action that lowers the cost of energy production, raises the price received by energy producers or lowers the price paid by consumers'.[176] The effect of the Carbon Floor Price will be to reduce the cost of nuclear energy generation when compared to CO_2-emitting generation sources. On that basis, the Carbon Floor Price could be considered a subsidy for nuclear power when compared with fossil fuel energy sources.[177] However, the Government considers that it will not break its promise in the Coalition Agreement on no subsidy for nuclear if any subsidy is not "specific" to the nuclear industry.[178] The Economic Secretary told us that she saw the Carbon Floor Price as "putting in place a level playing field—a floor on the carbon price that will encourage a shift away from high carbon power generation".[179]

65. The Energy and Climate Change Committee recently recommended that the Government should address the advantages, risks and challenges of promoting new nuclear generation head-on and honestly: 'It should not distort the market merely to save

171 Ev w3; *Electricity Market Reform*, *op cit*, page 43.

172 Ev w39

173 The Office for National Statistics already counts the Climate Change Levy as a 'tax on non-domestic use of energy' in the National Accounts but was still to determine the treatment of the Carbon Floor Price (Office for National Statistics, UK Environmental Accounts, page 70).

174 HC Deb, 18 October 2010, col 42-6WS.

175 Ev 46

176 UNEP and IEA, *Reforming Energy Subsidies,* 2002.

177 Ev w104

178 The Secretary of State for Energy and Climate Change told the Energy and Climate Change Committee during its inquiry on Electricity Market Reform that a subsidy for nuclear generation would be "something which is specific to the industry"; *Electricity Market Reform*, *op cit*, paragraph 125.

179 Q 69

political face about the precise meaning of the Coalition Agreement for Government'.[180] **The Government's definition of a 'subsidy' in relation to nuclear is not robust and does not hold up to scrutiny. The Carbon Floor Price will subsidise nuclear in the same way as renewable energy sources, which have no adverse environmental impacts, and nuclear will benefit the most from the Carbon Floor Price mechanism. As the Energy and Climate Change Committee recommends, the Government should recognise the issues related to new nuclear head-on and honestly.**

66. We questioned the Minister on whether she had considered a clawback tax on existing nuclear generators (so that they pay the same tax as oil and gas generation).[181] She told us that it was not possible to make nuclear power generators pay back the hidden subsidy in the Carbon Floor Price because that would raise "issues of State aid" benefits "for one particular sector more than another". She also argued that, to maintain 'fiscal neutrality', "we can't suddenly unilaterally tax one particular area in a way that is deemed unfair to other areas; so we don't have perfect freedom to do that".[182] A more compelling case will have to be made before we can accept the Treasury's rationale barring such a clawback tax. We note, for example, that the Government increased the tax rate on domestic oil and gas production to pay for the cut in Fuel Duty. **In its response to this Report, the Government should explain clearly whether, and on what legal basis, it would be possible to levy a clawback tax on existing nuclear generators so that they pay the same tax as oil and gas powered generation. If in fact legally permissible, the Government should require nuclear power generators to pay such a clawback tax to fulfil its promise to provide no nuclear subsidy.**

180 *Electricity Market Reform*, *op cit*, paragraph 132.

181 Q 10

182 Q 74

5 The 'Plan for Growth'

67. In this chapter we examine whether the measures announced in the *Plan for Growth*, published alongside the Budget, are sufficient to drive the green economy, and the announcements made on the development of the Green Investment Bank since our inquiry on the Bank.[183]

Green economy

68. The Treasury listed for us the main policy announcements in the *Plan for Growth* intended to support delivery of the transition to a low-carbon economy:

- the £3 billion initial capitalisation of the Green Investment Bank to finance green infrastructure;
- the introduction of a floor price for carbon for electricity generation from 1 April 2013;
- government not introducing a levy on electricity bills to pay for future Carbon Capture and Storage demonstration plants; and
- a cap on the cost of policies funded through energy bills.[184]

69. Witnesses expressed their disappointment that these measures did not provide the much needed step-change to aid the transition to a low-carbon economy. The *Plan for Growth* focuses on low-carbon energy generation rather than on the green economy as a whole.[185] It suggests only a marginal impact on the development of the green economy in the UK relative to international competitors.[186] Friends of the Earth called the Budget a 'huge economic opportunity blown, damaging the potential for new jobs and the UK's economic recovery by hobbling some of the country's fastest growing sectors'.[187] Chris Hewett from Green Alliance told us that he was "deeply disappointed, because at headline level putting fuel in your tank was the strap line that set the tone".[188] In some areas, we heard that the Government risked taking a backwards step and of particular concern was the watering down of the 'zero carbon homes' standard.[189] WWF resigned from the Government's advisory board as a result.[190] Paul Appleby, a consultant in sustainable design, pointed out that so-called 'unregulated emissions', such as those from white goods and televisions, were likely to make up between a third and a half of carbon emissions from

183 Environmental Audit Committee, Second Report of Session 2010-12, *The Green Investment Bank*, HC 505.

184 Ev 41

185 Q 37 [Andrew Raingold]

186 Ev 32

187 Ev w3

188 Q 2 [Chris Hewett]

189 The Government would hold house builders accountable only for those carbon dioxide emissions that are covered by Building Regulations (carbon dioxide emissions from energy use through heating, fixed lighting, hot water and building services). They do not cover emissions related to energy use from cooking or from plug-in electrical appliances such as computers.

190 http://www.wwf.org.uk/wwf_articles.cfm?unewsid=4799

homes, and that "many of the manufacturers, suppliers, installers and developers who have been gearing up for zero carbon will be left high and dry".[191]

70. Concerns were also raised about the changes announced to the planning system. Stephen Joseph of Campaign for Better Transport told us that he saw these announcements as the most environmentally damaging part of the *Plan for Growth*, which "sees land use planning as entirely an obstacle to growth, rather than as something that can genuinely aid sustainable development and sustainable growth and in fact help people reduce the need to travel and car dependence".[192] We have previously reported on the proposed presumption in favour of sustainable development in the Localism Bill.[193]

71. The Aldersgate Group believes that green economy measures need to be incorporated into all policy decisions to be successful. They suggested that a number of the policy announcements, such as the sectoral growth reviews and introduction of enterprise zones could have incorporated a 'greening' element without changing their overall policy direction significantly.[194] Defra (along with DECC and BIS) is now due to publish a *Roadmap to a Green Economy* in July, after a 3 months delay,[195] 'that will outline how Government will seek to maximise economic growth, whilst decoupling it from impacts on the environment'.[196]

72. **We are disappointed that there was very little in the Budget and *Plan for Growth* to help drive the low-carbon economy. The Government must focus on delivering growth that is genuinely sustainable, and that does not degrade the environment or entail increased consumption of resources. The forthcoming *Roadmap to a Green Economy* must demonstrate a greater commitment to the green economy, and in doing so dispel any suggestion that, with its separate publication, it is an 'add-on' rather than an integral part of the Government's sustainable development plans. We recommend that in the Government's forthcoming review of the *Plan for Growth* it is consolidated with the *Roadmap*. This is vital for ensuring that a green economy is at the heart of Government's plans, and to provide a stronger and more coherent strategy for sustainable development.** In the build up to the United Nations Conference on Sustainable Development in 2012 ('Rio+20'), which will address green economies as one its two main themes, we intend to conduct a separate inquiry into the Government's green economy policies and the *Roadmap*.

Green Investment Bank update

73. Following publication of our report on the Green Investment Bank,[197] the Business Secretary published an update on the design of the Bank which stated that it will be

191 Ev w8

192 Q 41 [Stephen Joseph]

193 Environmental Audit Committee, Third Report of Session 2010-12, *Sustainable development in the Localism Bill*, HC 799.

194 Ev 32

195 Department for Environment, Food and Rural Affairs, Business Plan update, May 2011.

196 Defra website: http://sd.defra.gov.uk/gov/vision/green-economy/

197 Environmental Audit Committee, Second Report of Session 2010-12, *The Green Investment Bank*, HC 505.

operational from April 2012.[198] In our report we raised concerns that the Government had not contacted the European Commission soon enough to start the process of securing State aid approval for the Green Investment Bank's operations. This can be a lengthy process and the Bank might be restricted in what it is able to do before approval is secured.[199] The Business Secretary announced in May that his Department would make investments on behalf of the Green Investment Bank from April 2012, until State aid approval is secured,[200] at which point the Bank will be established as a stand-alone institution.[201] We noted in our earlier inquiry that the Bank's independence will be crucial for building investor confidence.[202] **We are disappointed that unnecessary delays in securing State aid approval seem likely to result in the status of the Green Investment Bank being fudged. We are disappointed that the Government did not heed our earlier advice to make preliminary contact with the European Commission to start the process for securing State Aid approval.**

74. The 2011 Budget stated that the initial capitalisation of the Green Investment Bank will be £3 billion and that this level of Government investment, alongside private finance, could produce an additional £18 billion of investment in green infrastructure by 2014–15.[203] The Government would enable the Bank to have borrowing powers from 2015–16 'and once the target for debt to be falling as a percentage of GDP has been met'.[204] During our previous inquiry we noted that the Green Investment Bank, if properly designed, could play a transformational role in building a highly competitive low-carbon economy, given the critical importance of energy networks and systems, transport, and waste and water management infrastructure to economic growth. Given the Government's fiscal strategy, the increase in the capitalisation of the Bank to £3 billion announced in the Budget is welcome. However, it still falls short of the £4 to £6 billion capitalisation recommended,[205] *and* the powers to borrow, required to tackle the scale of the green investment funding gap. Transform and E3G considered the £3 billion capitalisation to be 'a reasonable start but still too low'.[206]

75. The Government expects the Bank, as a long-term institution and the first of its kind in the UK, to require a period of bedding in. Delaying its borrowing powers was described by the Economic Secretary as "sensible and pragmatic".[207] However the sooner the Bank can borrow the sooner it can start lending funds to the stock of viable schemes unable to get finance elsewhere. The Committee on Climate Change's recent review of the potential for renewable energy identified a crucial window of opportunity for the Bank's support for off-shore wind in the period before 2015–16, during which new electricity market

198 HM Government, *Update on the Design of the Green Investment Bank*, May 2011.

199 *The Green Investment Bank*, *op cit*.

200 HC Deb, 24 May 2011, col 789.

201 *Update on the Design of the Green Investment Bank*, *op cit*.

202 *The Green Investment Bank*, *op cit*.

203 Q 113

204 *Budget 2011*, *op cit*, paragraph 1.112.

205 *The Green Investment Bank*, *op cit*, page 14.

206 Ev w84

207 Q 116

arrangements will still be uncertain.[208] The Committee on Climate Change concluded that 'unless it can be demonstrated that risks of a shortage of finance to 2015–16 can be mitigated, allowing the [Bank] to borrow money from its inception should be seriously considered'.[209]

76. Following the publication of the 'update' on the design of the Green Investment Bank, the Government was exploring the Bank's priorities, including off-shore wind energy.[210] The Government also said that it is assessing the potential and necessity for the Bank to support the financing of the Green Deal during its 'first stages',[211] which we had recommended in our earlier report.[212] However, preventing the Bank from borrowing may limit its impact on renewables investments and Green Deal support. **As we said in our report on the Green Investment Bank, the Government expects green growth to be a major future driver of the economy, able to create new jobs and help transform the UK to a low-carbon economy. The 'step change' that this requires means that this is an urgent agenda. The Government should reconsider its decision on when and under what fiscal circumstances the bar on the Bank's lending powers might be eased.**

208 Committee on Climate Change, *The Renewable Energy Review*, May 2011.

209 *ibid*.

210 HC Deb, 24 May 2011, col 789.

211 *Update on the Design of the Green Investment Bank*, *op cit*.

212 *The Green Investment Bank*, *op cit*.

6 Conclusion

77. Taxation has an important role to play in helping to protect the environment by creating incentives to move towards more sustainable behaviours. Greater environmental taxation could help the UK meet its climate change targets and fund reductions in taxes on things that are valued by society, such as income and employment.

78. To be effective, environmental taxes need to be carefully structured and the rationale behind them well articulated so that taxpayers understand the behavioural change signal being sent. However, environmental taxes are often perceived as just another means of raising revenue, and their growing complexity means that many businesses are unaware of their cumulative impact. Weaknesses in the Government's approach are borne out by transport taxes where the Budget tinkered with motoring taxes, sending the wrong signal. There was confusion as to whether Air Passenger Duty is an environmental tax, and under the Carbon Floor Price, nuclear power will have the same financial incentives as renewables, which has no environmental impacts.

79. The *Plan for Growth* did not provide the much needed step-change to aid the transition to a low-carbon economy, and in some areas the Government has taken a backwards step. The forthcoming *Roadmap to a Green Economy* must demonstrate a greater Government commitment to the green economy, and in doing so dispel any suggestion that a green economy is an 'add-on' rather than an integral part of the Government's sustainable development plans. The Green Investment Bank could be a driver for the green economy but preventing the Bank from borrowing will limit its impact on renewables and the support it can provide for the Green Deal. Fresh consideration should be given to when, and under what fiscal circumstances, the bar on the Bank's lending powers might be eased.

80. **There is a pressing need for Government to take a more coherent and clearly articulated approach to environmental taxes. A clear strategy is needed, setting out their objectives and rationale, the basis on which rates are set, and how their impact will be evaluated. The following elements could feature in such a future strategy:**

- **a definition of environmental taxes, identifying those taxes meeting this definition** (paragraph 10);
- **an examination of why environmental taxes are set, the rationale for the rate of the tax** (paragraph 14)**, and what environmental aims particular taxes seek to achieve** (paragraph 46);
- **detailed plans for increasing the proportion of environmental taxes** (paragraph 8), **including any intention for a taxation 'shift' which reduces taxes on 'goods' as a result of increases in environmental taxes on 'bads'** (paragraph 23);
- **a methodology for assessing the full environmental 'externality' costs, and how such costs compare with the tax revenue raised** (paragraph 29)**; and**
- **a broad set of evaluation criteria for environmental taxes should be set to assess whether environmental taxes are having the desired effect on changing behaviours** (paragraph 29)**.**

Conclusions and recommendations

A strategy for Environmental Taxes

1. There is a pressing need for Government to take a more coherent and clearly articulated approach to environmental taxes. A clear strategy is needed, setting out their objectives and rationale, the basis on which rates are set, and how their impact will be evaluated. The following elements could feature in such a future strategy:

   - a definition of environmental taxes, identifying those taxes meeting this definition
   - an examination of why environmental taxes are set, the rationale for the rate of the tax and what environmental aims particular taxes seek to achieve
   - detailed plans for increasing the proportion of environmental taxes including any intention for a taxation 'shift' which reduces taxes on 'goods' as a result of increases in environmental taxes on 'bads'
   - a methodology for assessing the full environmental 'externality' costs, and how such costs compare with the tax revenue raised
   - and a broad set of evaluation criteria for environmental taxes should be set to assess whether environmental taxes are having the desired effect on changing behaviours (Paragraph 80)

Definition of environmental taxes

2. We recommend that the Treasury should set out its detailed plans for increasing the proportion of environmental taxes as part of an environmental tax strategy, along with how these taxes are defined. We favour the Office for National Statistics' definition, which considers the effects of a particular tax, because the most important characteristic of an environmental tax is that it promotes more sustainable and less environmentally damaging behaviours regardless of why it was introduced. (Paragraph 10)

3. The forecast proportion of environmental taxes increases over the life of this Parliament, under both the Treasury's and ONS's definitions. By excluding Fuel Duty and Air Passenger Duty from the Treasury's new definition of environmental taxes, however, there will be no incentive to increase them as part of the Government's commitment to increase the proportion of environmental taxes. (Paragraph 11)

4. The Treasury should publish statistics (including in its Annual Report) on the proportion of environmental tax under both [the Treasury's and ONS's] definitions. (Paragraph 12)

Setting the tax rate—raising revenue or promoting environmental change

5. Feeding into the choice of whether an environmental tax is preferable to affect the required behavioural change, with or without complementary regulations and incentives to support it, should be a thorough assessment of the environmental impacts of the various possible interventions so that the most effective is selected. ...In justifying tax changes in each Budget, the Treasury should explain how it has assessed the environmental impacts of the various possible interventions to arrive at their optimal mix. (Paragraph 18)

6. We recommend that the Government consider providing tax incentives, such as a council tax rebate or stamp duty discount, in next year's Budget to support the take up of the Green Deal. (Paragraph 19)

Complexity and fairness

7. The present complex mix of environmental taxes and price signals undermines the effectiveness of both in securing beneficial behavioural changes. Businesses cannot be expected to change their behaviours and investment decisions if they are unaware of the cumulative impact of the environmental taxes affecting them. ...The Budget amended existing environmental taxes (and introduced a new one—the Carbon Floor Price), but did not address this growing issue of complexity. (Paragraph 22)

8. To tackle the growing complexity of environmental taxes and to build greater trust in their purpose, a coherent and clearly articulated approach is needed towards environmental taxes and broader environmental policy. A clear environmental tax strategy, should be a key component of this. (Paragraph 24)

9. Hypothecating revenues for environmental ends can restrict spending flexibility. It can also help, however, to build trust and acceptance of environmental taxes. The Treasury should therefore consider greater use of at least *partial* hypothecation of revenues from environmental taxes, as applied for example to the Aggregates Levy. (Paragraph 26)

Evaluation

10. The Government's workshops on particular tax areas are welcome, but detailed research is needed on the impact of environmental taxes on behaviours to establish what works, and that analysis should be made public to help engender public trust in the purpose and application of environmental taxes. (Paragraph 27)

11. We are disappointed that the Treasury did not provide the information we require for this inquiry. The material we sought is important for demonstrating the full impact that environmental taxes are having, and for building greater trust and acceptance of environmental taxes. In its response to this Report, we wish to see the Treasury's assessment of the environmental costs of motoring, beyond a simple quantification of the emissions involved. (Paragraph 28)

12. To tackle the uncertainty over whether environmental tax rates adequately reflect externalities (or indeed over-tax them), the Treasury should seek to build consensus on a methodology for calculating environmental externalities. That would allow evaluation criteria to be formulated for assessing whether environmental taxes are having the desired effect on changing behaviours. Such a methodology and evaluation criteria should then be included in a published environmental tax strategy. (Paragraph 29)

13. The Treasury should also publish an 'environmental impact assessment' alongside future Budgets, in a similar manner to the 'Household assessment' in Annex A of the Budget Report. This should cover the fullest possible assessment of the environmental impacts of proposed tax changes, including a monetised assessment of the environmental cost compared with the change in tax revenue. (Paragraph 30)

Natural capital

14. The Treasury should take greater ownership of the Government's efforts on valuing and managing the country's natural capital, to ensure that policy-making in all departments reflects such valuations. (Paragraph 32)

15. We welcome the Government's plans to incorporate natural capital into the Environmental Accounts. In the light of that work, the Treasury should keep under review the possible scope for broadening the tax base in due course to include natural assets, to help protect or increase our stocks of natural capital. While taxes based on natural capital valuation might be open to challenge at this stage, the Government might explore using the scope for financial incentives outside the tax system to reward positive environmental behaviours, calibrated according to the value of the natural capital involved. (Paragraph 34)

Motoring taxes

16. Fuel Duty is an environmental tax by any other name. We are concerned that by not classifying it as an environmental tax the Treasury is loosening the link between the rate of the tax and the cost of environmental externalities associated with motoring, and thereby reducing further the likelihood of using the Duty as a lever of behavioural change. (Paragraph 41)

17. In the short-term, dropping Fuel Duty by one penny might be justifiable in terms of reducing the impact on economic growth of high fuel prices, but the Budget change was insignificant compared with the large petrol market price changes. And in the medium to long-term, the Government should not use taxpayers' money to keep fuel prices artificially low, but instead focus its efforts on helping motorists move away from oil. (Paragraph 44)

18. The Treasury should consider providing greater incentives to encourage motorists to switch from polluting cars to lower carbon alternatives, including a 'feebate' scheme on the purchase of new cars. (Paragraph 46)

19. The removal of fiscal incentives to use biodiesel was a strategically retrograde act. (Paragraph 47)

20. We are disappointed that the Budget provided few tax incentives to help motorists switch to lower carbon transport alternatives. The Government should consider partially hypothecating revenues from Fuel Duty to invest in low-carbon alternatives. But perhaps most importantly, the Treasury needs to set out a clear vision and strategy for motoring taxation, to demonstrate what transport policy objectives it is seeking to support. Until it does so, it will be open to accusations of sending mixed messages to motorists and undermining taxpayers' support for such environmental taxation. (Paragraph 48)

Aviation taxes

21. We are disappointed that little progress has been made on revising the Chicago Convention since we last examined this area, and we are left wondering whether, given earlier Government examination of the scope for reform within the terms of the Convention, there was ever any realistic prospect for bringing forward the work envisaged in the Coalition Agreement. In responding to this Report, the Treasury should detail what work it has undertaken on investigating per-plane tax options, and explain what the basis was for holding out the prospect for a per-plane tax in the Coalition Agreement. (Paragraph 52)

22. The Treasury must clear up the confusion as to whether Air Passenger Duty is an environmental tax. (Paragraph 53)

23. Relying on the EU Emissions Trading System to reduce emissions from aviation is a high risk and low impact strategy. Its success in reducing aviation emissions turns on the effectiveness of the EU Emissions Trading System in curbing emissions more generally. (Paragraph 54)

24. The Government's up-coming 'sustainable aviation framework' must set out clearly how the Government expects to balance its competing objectives for aviation, along with how Air Passenger Duty and EU Emissions Trading System revenues will contribute to environmental objectives, to give a foundation for planning aviation tax strategy. (Paragraph 55)

The Carbon Floor Price

25. The Treasury is missing an opportunity to support low-carbon investment by not ring-fencing receipts from the EU Emissions Trading System or the Carbon Floor Price. The Treasury should consider investing a proportion of these proceeds, perhaps through the Green Investment Bank, to support energy-intensive industries to take steps to reduce their carbon footprint, enabling them to remain in the UK, to be greener, and to be competitive. (Paragraph 60)

26. In its response to this Report the Government should provide its comprehensive assessment of the possible financial consequences of the Carbon Floor Price for existing and new nuclear power. (Paragraph 62)

27. The Government's definition of a 'subsidy' in relation to nuclear is not robust and does not hold up to scrutiny. The Carbon Floor Price will subsidise nuclear in the

same way as renewable energy sources, which have no adverse environmental impacts, and nuclear will benefit the most from the Carbon Floor Price mechanism. As the Energy and Climate Change Committee recommends, the Government should recognise the issues related to new nuclear head-on and honestly. (Paragraph 65)

28. In its response to this Report, the Government should explain clearly whether, and on what legal basis, it would be possible to levy a clawback tax on existing nuclear generators so that they pay the same tax as oil and gas powered generation. If in fact legally permissible, the Government should require nuclear power generators to pay such a clawback tax to fulfil its promise to provide no nuclear subsidy. (Paragraph 66)

The Green economy and Green Investment Bank

29. We are disappointed that there was very little in the Budget and *Plan for Growth* to help drive the low-carbon economy. The Government must focus on delivering growth that is genuinely sustainable, and that does not degrade the environment or entail increased consumption of resources. The forthcoming *Roadmap to a Green Economy* must demonstrate a greater commitment to the green economy, and in doing so dispel any suggestion that, with its separate publication, it is an ‘add-on’ rather than an integral part of the Government’s sustainable development plans. We recommend that in the Government’s forthcoming review of the *Plan for Growth* it is consolidated with the Roadmap. This is vital for ensuring that a green economy is at the heart of Government’s plans, and to provide a stronger and more coherent strategy for sustainable development. (Paragraph 72)

30. As we said in our report on the Green Investment Bank, the Government expects green growth to be a major future driver of the economy, able to create new jobs and help transform the UK to a low-carbon economy. The ‘step change’ that this requires means that this is an urgent agenda. The Government should reconsider its decision on when and under what fiscal circumstances the bar on the Bank’s lending powers might be eased. (Paragraph 76)

31. We are disappointed that unnecessary delays in securing State aid approval seem likely to result in the status of the Green Investment Bank being fudged. We are disappointed that the Government did not heed our earlier advice to make preliminary contact with the European Commission to start the process for securing State Aid approval. (Paragraph 73)

Formal Minutes

Wednesday 29 June 2011

Members present

Joan Walley, in the Chair

Peter Aldous	Caroline Lucas
Martin Caton	Dr Alan Whitehead
Zac Goldsmith	Simon Wright

Draft Report (*Budget 2011 and environmental taxes*), proposed by the Chair, brought up and read.

Caroline Lucas and Peter Aldous declared a non-pecuniary interest as members of the Aldersgate Group, and Zac Goldsmith declared a non-pecuniary interest as a trustee of Green Alliance.

Ordered, That the Draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 80 read and agreed to.

Summary agreed to.

Resolved, That the Report be the Sixth Report of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

Written evidence was ordered to be reported to the House for printing with the Report, in addition to that ordered to be reported for publishing on 27 April, 4, 11 and 18 May and 8 June 2011.

* * *

[Adjourned till Wednesday 6 July at 2.00 p.m.

Witnesses

List of printed written evidence

List of additional written evidence

(published in Volume II on the Committee's website www.parliament.uk/eacom)

List of Reports from the Committee during the current Parliament

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2010–12

First Report	Embedding sustainable development across Government, after the Secretary of State's announcement on the future of the Sustainable Development Commission	HC 504
Second Report	The Green Investment Bank	HC 505
Third Report	Sustainable Development in the Localism Bill	HC 799
Fourth Report	Embedding sustainable development: the Government's response	HC 877
Fifth Report	The impact of UK overseas aid on environmental protection and climate change adaptation and mitigation	HC 710

Oral evidence

Taken before the Environmental Audit Committee

on Wednesday 27 April 2011

Members present:

Joan Walley (Chair)

Peter Aldous	Ian Murray
Neil Carmichael	Sheryll Murray
Martin Caton	Caroline Nokes
Zac Goldsmith	Mr Mark Spencer
Simon Kirby	Dr Alan Whitehead
Caroline Lucas	Simon Wright

Examination of Witnesses

Witnesses: **Chris Hewett**, Associate, Green Alliance, **Andrew Leicester**, Senior Research Economist, Institute for Fiscal Studies, **Andrew Raingold**, Executive Director, Aldersgate Group, and **Ben Shaw**, Head of Environment Group, Policy Studies Institute, gave evidence.

Q1 Chair: Thank you all very much for coming in and coming along to our session on the Budget this afternoon. Whether this is the greenest Budget ever is the question, I suppose. May I say at the outset that we are going to be short for time because we are expecting to have a vote at 4.00pm, which means that ideally we have to get through the two sessions by the time the bell goes at 4.00pm. I think it is always difficult when there are witnesses from four different organisations, so I would ask you to be as succinct as you can be with your answers and we thank you very much for coming along this afternoon.

I want to kick off by asking each of you what is your overall reaction to the environmental aspects of the Budget and—given my comment just now about "the greenest Budget ever"—how many marks out of 10 for that? Mr Shaw, perhaps you would like to start.

Ben Shaw: Good afternoon. I think we would give a very low number out of 10, perhaps three or four if we are being generous. I tried to look for positives but, yes, we found it slightly hard. I think the key negatives were that the carbon floor price was not ideal. It seems to postpone the development of the green energy by business in its current form. The borrowing capacity of the Green Investment Bank is a problem. The relaxation of planning controls seems to be at odds with sustainable development, and it is not quite clear how the desire to have a presumption in favour of sustainable development will be compatible with freeing up planning controls.

The weakening of the zero carbon homes standard was negative. The reduction of fuel duty to assuage this claimed war on the motorist is not good and there is no mention of public transport users, who are equally seeing costs increase. There is no progress on aviation taxes, so that is not overly positive. The only thing that is perhaps interesting and could be picked up on is that there is quite a lot of acknowledgement of intergenerational equity in the Budget document but that only extends to economic debt rather than climate stability, which might be an interesting issue to pursue at a later date.

Q2 Chair: Does anyone else want to add to or detract from any of those points?

Andrew Raingold: In the lead up to the Budget the Aldersgate Group launched a report called *Greening the Economy,* and this set out the case for a comprehensive green growth strategy, which goes beyond reducing the Budget deficit and drives a dynamic economic recovery. I can see, Joan, you have a copy in your hand. Considering this was a Budget for growth it was a missed opportunity in terms of accelerating green growth. There were some positive announcements: for example, the increased funding for the Green Investment Bank was very welcome but, overall, it is a missed opportunity.

A number of market failures have not been addressed. We would particularly like to see more action on energy efficiency, sustainable procurement, green skills and a number of other areas, particularly in the context of the ambitious regulatory and fiscal frameworks that are being implemented around the world, as the UK risks being left behind in the green economy race. Of course, the roadmap to the green economy is the next opportunity in which to address some of these issues.

Andrew Leicester: I think the one thing I would add is that maybe what was lacking from the Budget was a sense of the big picture in terms of environmental taxes at least, going forward. So what does the Government see as the future for transport taxes? There was a missed opportunity to try to equalise some of the disparities for different effective carbon taxes in the economy. So there was a lot of tinkering, there was a lot of fuss around fuel duty, but what is the big long-term strategy for transport taxes or energy taxes going forward?

Chris Hewett: I was deeply disappointed, because at headline level putting fuel in your tank was the strap line that set the tone. I will not repeat the number of stalled measures mentioned already, but there was a specific reneging on a coalition agreement pledge to change aviation taxation to a plane tax and even the surprises were not green ones, for example the announcement on zero carbon homes, which resulted in WWF resigning from the Government's own advisory board, down to the fact that rather than incentivising green investment, we are pulling solar out of some of the investment incentives. So I would give the Budget a low rating—two out of 10.

Chair: Mr Shaw, you raised the issue about the carbon floor price. I am going to bring in Dr Whitehead on that very issue.

Q3 Dr Whitehead: We had a carbon floor price in the Budget, which it is claimed will come to an underpinning of, I think, £4.89 under the EU ETS in 2013 but effectively leveraged in such a way that it turns out to be a straight tax. I think the suggestions are that the Government will make £800 million a year from that tax. Do you think that is the right way to go as far as the carbon floor price is concerned and do you think, bearing in mind that it has to be levied in the way it is, that there is any case for hypothecation?

Chris Hewett: Our view at the Green Alliance was that there was a good way of using the green carbon floor price by setting the target price at £40 a tonne for 2020 and then having a linear increase between now and 2020, which would have given space for the Government to increase it significantly between now and the end of this Parliament. Some of that revenue—I agree with your implications—should have been hypothecated particularly to help fund energy efficiency in the homes of the fuel poor. It could have been structured in a way that avoided the worst effects on the houses in fuel poverty.

What the Government have done is more akin to a stealth tax: it will not raise large amounts of revenue and there is no real mechanism to guarantee the certainty that that revenue will continue to increase over time. In a sense, there is not enough increase to be able to generate the revenue to be able to help the fuel poor or to demonstrate the carbon price is going to increase over time. It is a little bit akin to what they did with the carbon reduction commitment, which turned what could have been a green measure into a bit of a stealth tax, so that is why we were disappointed with that.

Q4 Dr Whitehead: In the *Plan for Growth*—I think on page 82—there is also a proposal to introduce a levy cap in terms of the extent to which levies may be placed on household bills in future. Is it your understanding that the carbon floor price falls within that provision or outside that provision?

Chris Hewett: I do not have any understanding of it. I am not sure if my other colleagues on the panel do. To be honest, we have not seen the policies. We don't know. As far as we are aware that has not been set out by the Government yet.

Q5 Ian Murray: Given what you have already mentioned, do you think there is any evidence in the Budget, or the attached *Plan for Growth* that goes with the Budget, that the Government have any clear principles in terms of what they expect to achieve from environmental taxes? I think back to the previous Government's *Statement of Intent on Environmental Taxation*, which was published some 13 to 14 years ago now. Do you think there is a linkage between what they were trying to do and what the current Government are trying to achieve? Mr Hewett, I think you described a measure as a stealth tax as opposed to being used for a particular purpose.

Chair: Who would like to answer?

Andrew Raingold: We have a coalition agreement commitment to increase the proportion of green taxes. This is a measurable target, whereas the *Statement of Intent* is not measurable. A measurable target is welcome but what the analysis shows is—through the policies that have already been announced—that the Government will meet that commitment by 2015; I think, by £1.4 billion. What is needed is an increase in that target, so we would support the proposition from the Liberal Democrats' conference for a 10% proportion of green taxation by 2015. Although that is quite an arbitrary measure, it does show the intention and the level of ambition.

Q6 Ian Murray: I think the important thing that you mentioned previously, though, was that hypothecation might be an issue. The Treasury team have already told this Committee that they would not want to see any greater move towards that. Do you think that would be a good approach in order to encourage people to see that environmental taxes were used for a particular purpose?

Andrew Leicester: I would tend to be somewhat sceptical about the merits of hypothecation. I suspect that the Treasury probably have the same view that we, as the IFS, have tended to take on hypothecation, which is: you should think about the system of tax and spend that you have as a whole system, or you should be thinking about raising revenue in the most effective way, spending that revenue in the most effective way and not spending on project X revenues from tax Y. I think the only merit that hypothecation has is in terms of a kind of public acceptability role—that might be what you are talking about—of trying to ensure that people believe that environmental taxes are not just there to take a few extra pounds from their pocket but are designed for a specific purpose.

I would also argue that the Government should be trying to sell why they are setting these taxes; what the environmental rationale is for what they are doing, and what the underlying case is for what they are doing, more heavily than simply saying, "We are trying to be the greenest Government ever", which is a bit of a slightly empty catchphrase.

Andrew Raingold: Having said that, when there are examples of hypothecation they have tended to be quite successful. If you look at the Sustainability Fund, which came off the back of the Aggregates Levy, that has been very successful. Secondly, when the Landfill Tax was first introduced, it helped to fund bodies, such as WRAP and NISP, which produced significant economic benefits and in the end led to greater tax revenues for the Treasury. So there have definitely been instances where hypothecation has been successful.

Chris Hewett: You may use a proportion of revenue, for example some of 10% of the Climate Change Levy went to fund the Carbon Trust. Similar amounts of the Aggregates Levy and the Environmental Tax have gone to fund environmental purposes. It is good politics to do that because it helps explain the purpose and connect to the public better. It is also more environmentally effective modelling. The Green Fiscal Commission demonstrated that if you do use a proportion of the revenues—say 10%—to fund innovation projects and to fund subsidy support for the alternative to a high carbon economy, that does bring those technologies on faster and gets you to the environmental goal quicker.

Q7 Ian Murray: In saying that then, can you give the Committee any examples of where environmental taxes have very little environmental impact?
Chris Hewett: Ben, do you want to say something about the evidence that the Fiscal Commission came up with?
Ben Shaw: The Green Fiscal Commission looked at the evidence of the effectiveness of the green taxes and found that in just about all examples of they tended to be effective, but with caveats. It tended to be that the taxes were introduced at very low levels and there were significant exemptions brought in for energy intensive industries, and so on. So, while they were effective and generated environmental benefits and sometimes economic benefits, they were limited by the scale of the tax introduced.
I think in the UK a range of different measures were introduced and there has probably not been very much consideration of how effective those measures are. Overall, if you increase the price of something you are likely to see less of that environmental bad created but, beyond that, knowing a lot of the detail of impact is quite hard.
Andrew Leicester: There are green taxes that have very little environmental impact. I think one wider point relates to the new energy taxes and the carbon floor price support. Anything that is introduced on energy that is within the wider context of the EU ETS has very little impact if it does not result in the EU ETS calculations being tightened. We need to be sure that those more dynamic effects will happen in the long run. At the moment we are trying to meet our own domestic goals but we have to think about everything within the context of the international systems that are in place as well.

Q8 Zac Goldsmith: I am sorry to jump back a step; I was too slow coming in after Dr Whitehead. On the carbon floor price, is it your view that it should exist to raise revenue or to send a clear signal to investors or both; and, regardless of the balance that should exist in your view as a panel, where do you all think the floor price should be set to have a real impact?
Ben Shaw: I would make the general comment that green taxes can be used for multiple purposes. I think to say it is about covering externalities and not about revenue-raising is the wrong approach. Any tax can be used for multiple purposes. So the main taxes we have at the moment—like fuel duty, and so on—are significant revenue raisers and that is an important purpose. As taxes go up, they create revenue for Government, they also create a very clear behaviour signal. So I think balancing any tax you introduce is important; environmental taxes introduced on either of those perspectives is important. The same can be said about the carbon floor price. It is about creating a clear signal to consumers of energy and the investment community.
Andrew Leicester: I think one issue with the floor price is clearly about creating certainty in the long run about policy direction. My slight concern about that is the way that it has been introduced, because looking forward to what the ETS price is expected to be creates a possible opportunity for future Chancellors, who are slightly worried that energy prices are too high, to renege on the commitment to setting the floor price to meet that trajectory of carbon prices. We have seen that a bit with fuel duty. You think, "The pre-tax prices are too high; the pump price is too high. Let's use our instrument to help the consumer". You could imagine a similar situation arising in the future with the carbon floor price.

Q9 Zac Goldsmith: The idea is that the price is set so that, whatever happens in terms of the carbon markets, carbon remains a financial liability. That is the theory behind the floor price. So the question is: at what level would it have to be set to ensure that carbon does remain a factor in the decision-making process, regardless of what scale of investment it is taking? In your view, where should that level be set and is it more or less in the right ballpark?
Chris Hewett: In the terms that the Treasury consultation was put out originally they had three scenarios: they had one that said it should be at £20 a tonne by 2020—this would go flat and then up—one that is £30 and one that is £40. We think the most politically feasible and the best for the environment would be to take the third scenario, which is £40 a tonne in 2020. The target price should have a linear direction; it should have a linear path between here and now.

Q10 Zac Goldsmith: Where do you think the Treasury is on that at the moment?
Chris Hewett: In a sense they have come halfway, because £30 a tonne is better than £20, and they have gone from a linear path. So there is some measure to move towards that but, in terms of an investment signal, there will not be too many people in the City or in utility companies thinking, "Right, we are going to start rushing to invest in low carbon on the back of this instrument".

Q11 Zac Goldsmith: My very last question relates to nuclear power. I am very sorry but I want to make sure this is in the discussion. Obviously investors in nuclear power could see this floor price as an indirect subsidy. First of all, do you agree that it is an indirect subsidy and should that be taken into account, given that the Coalition Government's position on nuclear is that it should flourish but without any public subsidy at all; is there a contradiction there?
Chris Hewett: There is a clear subsidy—which should be corrected and has not been by the Treasury—for existing nuclear. So the existing nuclear power stations will benefit; in fact, they will receive a windfall as a result of even this carbon floor price. That could be corrected with a windfall clawback tax

on that sector, on the existing build. So there is some subsidy there definitely.

Q12 Zac Goldsmith: On new nuclear?
Chris Hewett: That is not something that we've studied. We have looked at the numbers along with other NGO on existing nuclear, but that is where the most obvious subsidy exists, which should be completely removed.

Q13 Dr Whitehead: Forgive me, can I raise these issues again. Is it not the case that if you have a floor price that is predicated on the EU ETS, even if it is a fixed sum, given that the quantum emissions is actually a European setting mechanism, the actual emissions that will be saved as a result of that particular floor price, in that particular way, are nil?
Chris Hewett: Across the European Union, yes.

Q14 Dr Whitehead: Would you put that in the category—as Ian Murray intimated earlier on—of a tax that has no environmental consequence?
Chris Hewett: I think if it was done right then it could attract more investment in low carbon technologies to this country. So we would be delivering more of the low carbon technologies and there are lots of economic and environmental—
Dr Whitehead: That would be its purpose.
Chris Hewett: In the short term, yes, but, as Andrew said earlier, the knock-on effect of the UK doing that and the politics of how you set the next cap is where the long term environmental benefit lies, so time will tell. It is a way of our demonstrating that we want to go further and are willing to take other political decisions to go further than the current emissions trading cap. I agree it will end up going up the chimney stacks of Poland but it means that we have taken a political hit on making it tougher. So hopefully, if others follow suit as well, that will then follow through to the negotiations for the next stage.
Chair: Mr Shaw, I think you wanted to come in?
Ben Shaw: I agree with Chris—I don't have anything to add—that it will benefit the UK but not at the European level.

Q15 Chair: I think the issue is whether or not it is going to represent a future subsidy to nuclear, and how that stands alongside the coalition agreement there should in fact be no subsidy for nuclear.
Chris Hewett: I think it is clearly a subsidy for existing nuclear. It is not a tax on new nuclear, and nor is it an extra Government subsidy. It depends on how you define subsidy, doesn't it?
Chair: Okay, we must move on.

Q16 Caroline Nokes: Going back to environmental taxes, if you work on the theory that they cover the relevant environmental cost, do you think it is possible to assess that? Does the Government have enough information to set those tax rates and, if so, do they have it right at the moment?
Andrew Raingold: In a word, no. It is very complex to price accurately the environmental costs associated with economic activities. For example, in terms of carbon policy, a couple of years ago the Government tried to calculate the social costs of carbon, namely the current cost of carbon emissions in terms of future economic costs. As this was problematic, the Government rightly decided to take a different approach and look at the costs associated with carbon abatement, which is a much more preferable method. So they now consider a politically determined cap and base the costs in terms of meeting that cap.
Andrew Leicester: Is more information a good thing? Of course, more information is generally always a good thing. I pick up the example of the Landfill Tax. This is a case where the Government set the tax rates, based on the best estimates at the time of the external costs of landfill and then, of course, events took over; the European Landfill Directive came in and it was suddenly realised that these tax rates were much too low to hit that target. Given that we live in an economy and in an environmental context where we are very target driven at the European level, and at the national level, then I guess the question now may not be so much about what is the right tax rate to meet the external cost, but about what is the right tax rate to hit the target? Whether the target is appropriately set, in terms of the environmental cost, is a different question.
Chris Hewett: The other factor you want to look at is the price of the alternatives. So a classic example is the cost of motoring over decades versus the cost of public transport. The cost of public transport has increased year-on-year above inflation for the last three decades. The cost of motoring—including all costs, not just the price of fuel—declined for a while, then it was flat lining. It goes up slightly when the price of oil goes up, but in relation to public transport the cost of motoring has increased far less. The economic signals across the decades have favoured private transport over public transport, so those sorts of signals, the alternatives and what the market does in response must also be considered.

Q17 Caroline Nokes: Having mentioned motoring, what about aviation?
Chris Hewett: Numerous studies have shown that, in comparison to other transport modes, aviation is under taxed. It is exempt from VAT. It is exempt from fuel duty. You pay roughly three times as much tax if you drive a car to Edinburgh than if you fly to Edinburgh. There are clearly inequities there that need to be addressed, and there are complex international rules that prevent you from seeking the most obvious best solutions. Certainly the Government was proposing to go for a plane duty, which was a more finely tuned solution than the Air Passenger Duty, but the bigger question is that we need to increase the current tax on aviation, by whatever means. It is under taxed at the moment.

Q18 Caroline Nokes: Would you all agree with that?
Andrew Raingold: Yes.
Andrew Leicester: The obvious issue with aviation is what happens once it moves into the ETS from next year? I think any reform of aviation tax clearly ought to be done with the international picture in mind: what is the most appropriate role for a domestic aviation tax once we, in theory, capture the carbon emissions

through the ETS and whether or not we are doing that appropriately.

I am not sure I would necessarily agree that once aviation is introduced into the emissions trading system that it would be under taxed, but I think there are issues with domestic aviation, in particular. It should be brought into the VAT system. Domestic fuel for aviation should be taxed and there is no reason why that could not be done.

Caroline Nokes: Can I ask a specific question about the fuel duty escalator.

Chair: Sorry, just before we move on, I think Caroline wanted to come in on that point.

Q19 Caroline Lucas: I just want to go back on to aviation, because the inclusion of aviation into the ETS is often suggested as a way of properly trying to internalise the true costs of aviation. Of course the problem with the ETS is that, because you are able to outsource quite a lot of the responsibilities that the ETS brings—in other words, you can pay other countries to reduce their emissions in order for you to carry on with business as usual—wouldn't that be an example again of a mechanism that has not succeeded in having a positive environmental benefit? I mean it might be meeting a target in theory but there are lots of estimates that suggest aviation will continue growing in this country, for example, and in the rest of the EU because essentially the ETS will be met through outsourcing responsibility for emissions to developing countries.

Andrew Leicester: To be honest, that may be true. I think that is an issue around the design of the ETS in general, and whether you think it is appropriate that those kinds of payments are acceptable as part of the way that people can meet their commitments.

Chris Hewett: Another reason why the inclusion of aviation in the ETS is not a sufficient policy is that all the alternatives to aviation are not covered by ETS. It is the wrong comparison. You need to compare it to fuel duty and how other forms of public transport are treated, so you are not comparing it with the aluminium sector; you are comparing it to something completely different. Plus, I think the terms by which the aviation sector was included into the ETS were quite favourable as well.

Q20 Caroline Nokes: Fuel duty: should the Government have abandoned it?

Ben Shaw: No. Fuel prices are high but the way it was dealt with in the Budget seems to be in denial of the external conditions we are operating in, in terms of oil prices and the long term trend of oil price. I think there was an opportunity to be much clearer with the public about the long term trend and the need to take action to reduce the cost of motoring, through other alternatives other than trying to drive the price of fuel down: so that means improving efficiency or changing lifestyle so that we drive less, or changing fuels and so on to indicate the long-term trend. But just saying we can drop fuel price by reducing the escalator this year, means we will be in exactly the same position next year, and so on, so it seems to be King Canute-like to suggest we can keep the price of oil down.

Andrew Raingold: It is also a missed opportunity, because if you are going to raise £10 billion from taxing oil and coal production, you could have used that to reduce taxes on income instead of reducing taxes on oil and petrol. So I think it is a missed opportunity in terms of accelerating a green tax shift.

Andrew Leicester: I would probably say that in terms of what is the economically efficient rate of fuel tax then, whether it is 57p, 59p, 62p or whatever, I think you can almost certainly get sensible estimates of what the various costs are that would justify those kinds of rates. I think that again I would come back to the point I made right at the beginning about the bigger picture here: do the Government believe that in 20, 30 or 40 years' time fuel duty will continue to be a large source of revenues, given increases in efficiency and given the move to electrification? What do they think the appropriate future for road transport taxation is, and will it involve congestion pricing or road pricing versus fuel taxation? So I don't think it makes that much difference—apart from a few billion pounds here and there—whether they carried on or not with the escalator. It was more a political than an economic decision, but I think they should have been thinking more about the long term and the big picture.

Chris Hewett: Politically, the only transport users they were helping were those who use cars and lorries. Not a penny went to users of the buses, users of the trains, or any other forms of transport, so if they wanted to help middle Britain with some giveaways to reduce transport costs, they only gave them to a section of it.

Q21 Caroline Nokes: Finally, there are different rates at which emissions are taxed. Some are covered by carbon reduction commitment, some by the ETS and some not taxed at all. Do you think that this inconsistency makes it harder for people to accept green taxation?

Andrew Raingold: I think it can create perverse signals. These policies are very complicated and have developed over many years, so to what degree they can be streamlined is questionable, but if, at the least, it were possible in the long term to arrive at a uniform, or close to uniform, carbon price, that would help to provide the right signals to create the right investments throughout the economy.

Q22 Mr Spencer: Firstly, can I ask you about the balance between regulation and tax. Do you think we have the balance right between regulation and taxation if we are going to change behaviours? Could you identify anywhere where you think taxation is preferable to regulation?

Andrew Raingold: I think the first point I would like to make is that regulation and taxes are a means to an end, they are not an end in themselves. What is important is the effectiveness of policy rather than the actual balance. Regulation is particularly useful when there is a substance that you would like to outlaw or phase out or a cap, such as carbon, which you can work towards. Where taxation is preferable is where you would like more certainty in terms of prices and revenue. So I think the carbon floor price, for example, is being implemented because the EU ETS has not provided a long term and credible carbon price, and a tax is being implemented to supplement that regulatory signal.

Q23 Mr Spencer: If we are going to change behaviours I am really trying to establish how. If you apply it to the populist, which is the most effective, and do we have the balance right between the two if we are going to change the behaviour of—dare I say—normal people?

Chris Hewett: This is going to be an unsatisfactory answer: you need a package of measures. To take landfill waste and recycling, taxation was a very important driver to push up the cost of landfill so that the alternatives became more attractive. The consumer needed the local authorities to put in the door-to-door recycling so that it was made easier and the barriers to recycle were reduced. That in turn makes the elasticity of the Landfill Tax a more effective tax, because it makes it easier for people to change behaviour to respond to the tax signal. You can apply that lesson across energy efficiency or public transport and driving. There is always going to be a package of measures and you can't say, "Is regulation better or is taxation better?" In many cases you need two or three things working in tandem.

Q24 Mr Spencer: Is the balance right then at the moment?

Ben Shaw: I think we need more. The challenges that we have on our plate are pretty significant. Price is a powerful mechanism, so given the progress we are making towards the carbon and other environmental objectives, doing something with price is important. We need to do more of that. Whether it is in the form of taxes or incentives is up for debate, but price is an important mechanism. I think if you change behaviour and don't change price, people will consume things elsewhere.

Q25 Mr Spencer: There must be areas then where the demand and the behaviour is so strong, so ingrained, that it doesn't matter how much taxation you apply—it wouldn't change their behaviour. Can you identify any of those behaviours that are going to be difficult to change no matter how much tax you apply?

Chris Hewett: I think it depends on the timescale we are looking at. Some may argue that the price of fuel is quite inelastic and people don't change behaviour as a result of that in the short term, but it is much harder if you run a certain car and you work in a certain place. That is true, but if you look over the long term at the price of fuel across the whole of Europe, which has largely been tax driven, versus the price of fuel in the United States, which is also tax driven, spatial planning has developed around the car, the engine sizes are larger, fuel consumption is lower than in Europe, and that is a long term process. I am not arguing that that is the only factor, but it has clearly been a big underlying factor in the difference in the way our economies have developed over decades.

Q26 Caroline Lucas: If you can imagine that we are not looking at business as usual but looking at what I think we need, which is a dramatic reduction in CO2 emissions by 2013, not by 2050 and so forth, to be able to shift behaviour radically and dramatically, would you agree that taxation is not going to get us where we need to be? There will always be enough rich people to go on doing enough environmentally damaging things, and that means we need to look at other more radical options like, for example, tradable quotas or personal carbon rations. There are different terms for it but, essentially, it means looking at a way of capping the amount people can use in ways other than through taxation because that can always be exceeded.

Chris Hewett: Even if you introduce those sorts of measures they will manifest themselves in a price signal, so if there is a quota, then the price of the thing you have put a quota on—like emissions trading—goes up. So, in a sense, you will end up with some price signal that does change behaviour and there will be distributional impacts. It is true that it is always going to be easier for the rich to have a private jet, but if you look across the entire economy I suppose the investment signal is the important thing. If the price of carbon gets to a certain level then it starts to make it more attractive for serious amounts of money to go into the low carbon economy, low carbon infrastructure. Then we start to make it much easier to choose the low carbon version than the high carbon version. Again it is not either/or, you are always going to have some form of price signal certainly, whether it is through a tax measure or through another means.

Ben Shaw: The Green Fiscal Commission looked at an ambitious green tax shift and said, "If we increased environmental taxes to about 15% to 20% of tax revenues what would happen?" Through some fairly aggressive escalators on energy, domestic, business and other taxes, it was found in the modelling that we could meet our carbon objectives for 2020 over a 10 year period. The prices were pretty high and there were some political acceptability issues, but it was possible. How aggressive the policy can be is the issue and I think it is the politics, rather than the theory of the policy, that is going to determine whether we meet the targets.

Q27 Chair: Just following on from that, in terms of the Budget and its emphasis on green taxation, and Caroline's point about timing and the urgency with which action needs to be taken on the environmental front, do you think there is enough understanding of the time factor in relation to fiscal policy as well?

Chris Hewett: No.

Ben Shaw: The Budget did not suggest—

Chair: The point I am making is: how do you factor in the timing by which action is needed if you are going to look at the carbon reductions that are needed?

Andrew Raingold: I think a number of studies—including the recent report by the Committee on Climate Change—have said that we will need a step change in policy. I think it is very clear that this Budget was not a step change in policy.

Ben Shaw: I think, by indicating longer term development of policies:, the Green Fiscal Commission was aimed at ongoing escalators and so, with the compound interest, you increased prices pretty quickly.

Q28 Sheryll Murray: The Government has said that it will increase the proportion of tax revenue accounted for by environmental taxes. Is it possible to work out what the proportion of environmental taxes should be?

Ben Shaw: When it was doing its modelling to work out what might be appropriate the Green Fiscal Commission said, "Well, let's go high in terms of setting environmental taxes", and we initially said, "Well, let's try 20%", but if you try and find 20% of your tax from environmental taxes it is quite hard so we ended up with a lower figure. I guess we are looking at something above where we are at the moment and below 15%, somewhere in the middle would seem about appropriate.

Andrew Raingold: In terms of this Parliament, my earlier answer was that a 10% target by the end of this Parliament would be about the right ballpark. The other thing to consider is that we understand the Government have asked the Office for National Statistics to look at the definition of what is green taxes, and the possibility of moving away from the internationally accepted definition. I think that would be a cause for concern.

Q29 Sheryll Murray: Is there a better way of capturing the success of the Government's environmental taxation policy rather than just focusing on an indicator, such as a percentage of tax revenue collected from environmental issues?

Andrew Leicester: Personally, I am not convinced that the share of revenues that you raise from environmental taxes is a good indicator of anything very much, partly because it depends on how much revenue you are collecting from anything else. I think there was a huge jump in that indicator during the period of the recession because non-environmental revenues collapsed massively. It does not mean that the Government was suddenly much more environmental and could pat itself on the back.

So on environmental objectives, we are already looking at a whole range of targets and indicators. How high are our emissions? Are we making progress towards these domestic and European targets? It is not clear to me that a percentage of revenue raised from an as yet undefined set of green taxes is telling you very much about how green the Government is. It may be something it is holding itself up to, but it is only a part of its environmental policy and not something we should be judging the whole success of its environmental agenda on.

Ben Shaw: Just to say briefly: the idea of a green tax shift seems to be good and stands up intellectually because it has an environmental and economic benefit, so anything which reflects an increase in the proportion of green taxes seems to be a good thing. I accept Andrew's caveats on any simple measure, so I think broader measures are needed looking at the effectiveness of the measures. I think there has been a lack of evaluation of a number of environmental policy measures that could quite usefully be done to find out what works best.

Q30 Sheryll Murray: What is the scope for broadening the tax system to cover, as yet, untaxed natural resources such as land usage or water extraction?

Chris Hewett: I think there is a long way to go in the land tax debate before we are ready to start implementing things on the ground, but I think it is certainly one that more research should be carried out into and the Government should be involved and follow that closely.

The one area I think we need to move into carefully in this country is introducing some level of taxation on domestic energy use. That is caveated heavily, in terms of that has to be done and structured in a way that is not regressive and that uses some of the revenues to offset the problems of low-income people who live in housing that is very hard to heat. Over the next decade we have to move into that area alongside the others. I think aviation is the other area I would highlight in the short term as one where we can raise more revenue. It is not taxed enough and, conversely, that is a progressive green tax. It is very clear that it is the top echelon of society—the top two deciles—who travel and fly the most. Those in the bottom either fly not at all or very little, so increasing that taxation would be progressive.

Ben Shaw: In terms of the objective of green taxation, with the Green Fiscal Commission work we were very interested in revenue-raising taxes and thought we ought to have a tax shift, and—to have taxes that raise revenue over a long period of time. So we considered domestic and business energy taxes, business water use and a car purchase tax, which would increase over the 2010/2020 period. Beyond that, I think there are probably some interesting opportunities for creating financial incentives within modes of consumption, so rewarding people who buy new efficient products, efficient cars and penalising those who don't. So there is a transfer within that mode of consumption rather than it being revenue raising. There could be some interesting opportunities there. The other area of financial incentives relates to congestion charging and road user charging.

Q31 Sheryll Murray: Can I just come back to land usage. Do you see that there is an opportunity to use financial incentives perhaps to promote the construction of passive housing, for instance?

Ben Shaw: It is not something I have looked at in detail but I dare say that could be worked on. I should say the Green Fiscal Commission excluded consideration of land taxes, because it felt it was such a broad and complex area that needed consideration by itself.

Q32 Zac Goldsmith: A very quick supplementary to that: you mentioned the purchase tax on cars and that was an issue that was raised and discussed frequently by the Conservative Party before the election. It even made it into a press release, which was very badly mangled by the PR Department at Central Office, which will come as no surprise to anyone in this room and certainly not to the Conservative Party. It has always puzzled me, though, why this issue has been seen to be so politically difficult, given that it is theoretically revenue neutral for the Government: you put an extra tax at the point of purchase on the dirtiest cars and use that money to reduce the cost of the cleanest cars. Government is not taking any money; it is not a stealth tax; you still allow people the choice that they had beforehand but you are clearly pushing people in a particular direction. It has been tried and tested and works in Denmark. Why is this so controversial? It seems to me a no-brainer. Why does this always hit the buffers in this country, regardless of who is running the show?

Ben Shaw: I don't know. It is something we would push forward and we would support, but I think one problem is that obviously you have to know how people respond. There can be issues with people going for the subsidised cars and the Government losing out in paying subsidies for those because—

Zac Goldsmith: Rates can be adjusted, though, over time in any case.

Ben Shaw: Yes. I think there have been examples of countries where it has been introduced, with problems of Governments sometimes making subsidies they were not expecting to subsidise but, in principle, creating clear signals for people to make the right choices seems like a good thing.

Chris Hewett: I would put your question to the Treasury and to the Society of Motor Manufacturers and Traders and see what they say.

Chair: I have two Members of the Committee who want to come in on supplementary ones: Dr Whitehead and Neil Carmichael. Two more questions as we are a bit short for time.

Q33 Dr Whitehead: I appreciate that we are very short of time, so I will make it very brief. Chris, you mentioned the landfill levy and one way that appears to be favoured for effectively hypothecating green taxes is for them not to be taxes at all. The landfill levy is in fact tax avoided. It does not ever go into Inland Revenue. It goes straight to the environmental trusts for use. Similarly the energy company obligation will effectively be hypothecated for energy saving measures, by not reaching the tax authorities in the first place but reaching the customers' accounts instead. In your view, is that any way forward as far as green taxation is concerned, or do you think that is a method of tax avoidance or the consequence of tax avoidance, which could create difficulties in terms of consumer consequences?

Andrew Leicester: I would tend to say—

Chair: I do need a brief answer because I am very conscious of time.

Andrew Leicester: Where the revenue goes or how the revenue is spent doesn't necessarily mean something isn't a tax. So I would argue that it is still a tax even if it is then spent in some particular way. If you are talking about public acceptance and the idea that things are not seen as stealth taxes, I think you would want to be more upfront and say, "This is a tax but we are doing it for X, Y and Z reasons", rather than calling it "a levy" or "a support rate" or whatever name you want to call it apart from the "T" word.

Q34 Zac Goldsmith: I am going to be very quick as we are running out of time. The main criticism of environmental taxes is that they disproportionately hit the poorest hardest. A very quick question, so please try and find a short answer: what should the Government do to try and tackle that perceived consequence of environmental taxation?

Chris Hewett: You need to take each tax in turn. It is true you will need to structure some of them in a careful way, particularly if you are going to go down the route of taxing domestic energy. That has to be structured in a more progressive way. There are ways of doing that, but I won't go into them now. Aviation taxation is a progressive tax and fuel taxation is regressive for those people who own cars and use cars, but for those people who do not use them then they are out of that tax bracket altogether. So you need to look at each one in turn. It is definitely a valid question and environmental taxes need to be designed correctly and with that in mind. It is not a reason not to introduce green taxes, in my view.

Andrew Leicester: I tend to take a slightly different view from Chris, and say that you should look at the tax system as a whole. So if tax X is regressive, that is not necessarily a bad thing. So if you are talking about a package of measures that increase the price of transport and increase the price of energy, you want to look at the overall effect of that package rather than the effect on one tax and trying to correct one tax, which might have effects elsewhere. I think I would tend to take a more "Let's look at the system as a whole" view. When you are looking at energy, in particular, I think it is almost impossible that you can completely compensate all the losers. So, if it wanted to go down that route, the Government would have to think how it would best want to compensate the losers but I think it would be almost impossible to create any kind of green shift that was not going to create losers at all.

Q35 Zac Goldsmith: My last question is: in the absence of hypothecation what can Governments do to ensure that people trust environmental tax and don't just see them as stealth taxes, and an excuse to rein the tax back without hypothecation?

Ben Shaw: From working with the public in the deliberate research, it is clear that when you explain what a green tax is and why it is being introduced, people support it, but the trust issue is very significant, and people need more information. So I think having some institutional arrangement that allows shifts in taxation to be very clear, articulates what is happening and which tax is being reduced to compensate the increase in green tax, would be a worthwhile mechanism and might be something that the Office for Budget Responsibility might like to consider.

Q36 Zac Goldsmith: In the Conservative Manifesto there was a commitment that environmental taxation would be neutral across the board. Is that something you think is very important?

Ben Shaw: I think in the context of increasing tax take you can see an increase. It seems like an opportunity for green taxes to be increased to replace the taxes that otherwise would have to increase more, so it makes the messaging slightly more complex but, overall, revenue neutrality is a good principle.

Q37 Peter Aldous: Very quickly, I will wrap it up into one long question. What are your views on the Government's *Plan for Growth* and what are you hoping to see in the *Green Economy Roadmap* that may not be in the *Plan for Growth*?
Andrew Raingold: First, the *Plan for Growth* looked at low carbon energy generation rather than at the green economy as a whole, so I think my first recommendation would be to look at the opportunities in the green economy more widely. The associated target in the *Plan for Growth* in this area is increased investment in low carbon technologies. If you look across the G20 almost every country last year managed to do this, so that target in itself is lacking in ambition and what would be preferable is a relative target as opposed to an absolute target. So if you look at the research that has just been published by the Pew Charitable Trust, that shows that the UK moved from fifth place in the global green economy race—and this is measured on clean technology investments—to outside the top 10, so we are now 13th. A table which benchmarked the UK's green performance in relation to international competitors would be a much more ambitious measure rather than an absolute target.
I think more widely another missed opportunity, so to speak, is a greening element to the Enterprise Zones and the growth reviews. We would like to see future growth reviews—and these are the sector growth reviews—not only focus on sectors that will be essential to the transition to a low carbon economy but also incorporate a greening element to every other sectors, where that is relevant.
Neil Carmichael: Can I just add—
Chair: I thought Peter was going to come back.
Peter Aldous: No, I'm happy.
Chair: All right. Okay.

Q38 Neil Carmichael: Can I just mention that taxation has loads of different functions: collecting money, redistribution, altering people's behaviour, and so on, so it is very difficult to decide the impact of tax, especially on things like green environment and stuff, but I think you have made a good effort at trying.
What I wanted to ask was: why don't we think about taxing in ways to encourage the right kind of behaviour rather than to prevent the wrong kind of behaviour? I am thinking here about capital allowances for investment in the right kind of technology to overcome CO_2 problems, for example. You could start thinking of various other ways in which the taxation system could be adapted in order to encourage—in line with Peter's question about growth—the right kind of growth. Do you have any thoughts on that?
Andrew Raingold: That would be very welcome. If you look at offshore wind, for example, only 10% to 20% of the value of Thanet and the London Array has gone to British-based firms. To address this, the Government needs to ensure, for example, the tax system can be used to encourage investment in production, manufacturing and the UK's supply chain. So, I think that is a very important lever.
Neil Carmichael: Can I ask a supplementary?
Chair: Mr Shaw wants to come in, and then I think we are going to have to tie this up because we have to move on to the next lot of witnesses.
Ben Shaw: No, it's okay.
Chair: Go on then, Neil.

Q39 Neil Carmichael: If you think of renewable energy and the Government's idea of returning business rates to the community, that is a good example, isn't it, of tax being used in the ways that we have just been discussing. So presumably, you could think of more that the Government might be interested in to promote. That is the first thing I leave you with. Secondly, the international question of aviation. Effectively, you can't tax aviation and, of course, there are elements of capital investment that are going to be difficult to trace as well, certainly in investment. So do you have any thoughts on that?
Chris Hewitt: One of the proposals the Government had coming into power was tax incentives for green ISAs, and that seems to have disappeared without a trace. I think there are definitely some areas where incentives could be given for investors and savers to place their money in areas where low carbon investment could be a result.
The final point I want to make about the *Plan for Growth* and green growth relates to the iconic issue of the Green Investment Bank. You have already produced a very good report on that. I want to highlight to you that yesterday the CBI came out supporting the need for legislation for a Green Investment Bank, which you recommended, and for borrowing powers to be given from the word go. We and many other colleagues have been saying that for two years but for the CBI to say that now is a very important signal, so I hope again the Government heeds that and takes that forward in May.
Chair: On that note about the Green Investment Bank, we must finish this session. I am sorry we have had to curtail you and cover so much ground, but we have a second panel of witnesses we desperately want to hear from before the forthcoming vote. Thank you very much.

Examination of Witnesses

Witnesses: **Tim Johnson**, Director, Aviation Environment Federation; **Stephen Joseph OBE**, Chief Executive, Campaign for Better Transport; **Matthew Sinclair**, Director of Policy, Taxpayers' Alliance, and **Francis Wood**, Policy Adviser, Federation of Small Businesses, gave evidence.

Q40 Chair: Thank you very much, all four of you, for coming along. We are about to be racing against the clock, I will warn you. We would welcome short answers if possible because we want to cover the ground. I am going to turn straight to my colleague Martin Caton.

Martin Caton: Thank you, Joan. What are your views of the environmental aspects of the Budget, taken together with the *Plan for Growth*?

Matthew Sinclair: I think that the environmental aspects in the Budget will have very significant costs to consumers, both residential and industrial, particularly the carbon floor price because the Government's argument that it will lead to a fall in prices from the late 2020s isn't credible. I think that on the other hand there are some measures that will reduce the burden, particularly motoring taxation, which is unfairly high, and therefore that is to be welcomed. Overall, I think this Budget has marked a consolidation of the trend towards Britain having very strong unilateral policies that will have very severe costs for British families and businesses, and therefore is bad news.

Q41 Martin Caton: Before anybody else comes in, does your organisation recognise climate change as a real challenge for the future of the world?

Matthew Sinclair: We have no corporate view on the science of climate change. We are content to base our work on the views of the IPCC and the scientific mainstream. I am not a scientist and I wouldn't claim to be able to engage in that debate.

Francis Wood: From the viewpoint of the Federation of Small Businesses we gave it a lukewarm reception. We are grateful for the additional £2 billion capitalisation of the Green Investment Bank, yet we still feel this is too low. We are disappointed the bank will not be able to borrow until 2015/2016, which we think will severely limit its effectiveness as an institution.

In terms of the carbon price, we welcome any initiative that can drive investor confidence in the low carbon economy but we are wary of power generators simply passing on the carbon price to small business consumers. In terms of fuel duty, we are very grateful for the measures taken to help small businesses with the price of fuel but we are disappointed that a longer term approach to setting and implementing fuel duty wasn't introduced.

Tim Johnson: I think, from an aviation perspective, it was a very neutral Budget in terms of what it actually delivered. I think what it did do of course was to announce some future measures. When it comes to the reform of air passenger duty, I think we were very disappointed not only with the scope of the proposed reforms—they were certainly drawn too narrow for our liking—but by the fact that they did not go further in proposing increases in the total revenue take that you could get from the aviation sector.

Of course, parallel to that we had the announcement that we would get a new aviation policy. We did welcome that as a very positive move, certainly we have been pushing for a long time for something to replace the *Air Transport White Paper.* Although we have a two year process, the early signs are quite encouraging. We welcomed the renewed commitment to no new runways at the three London airports and, in particular, the better not bigger agenda.

As a final remark that ties all those different elements together, perhaps there is a little bit of a lack of coherence in the Budget at the moment. We have statements in the air transport's policy scoping document that talk about unconstrained growth not being an option, yet we have statements in the Air Passenger Duty reform consultation that talk about APD not hampering growth. I think there is a tension running through this about growth versus environmental protection that does not have a clear identity at the current time.

Stephen Joseph: I think we saw the Budget as a missed opportunity to move towards real changes in behaviour, in terms of travel and which actually reduce carbon emissions. We saw a small reduction in fuel duty that, given the underlying rise in oil prices, is perhaps understandable but we think it went beyond what was necessary. The background to that is the fact that that comes at a time when there have been significant cuts in funding for bus services and real increases in rail fares, which means that the choice available to people in how they get about has been reduced rather than increased. So, as I dare say we will cover later, we see the Budget and the taxation issues within it as only part of the story and I think there is a failure to join that up.

The other comment I would make is that probably the most environmentally damaging part of the Budget was the comments about planning and the *Plan for Growth*, which sees land use planning as entirely an obstacle to growth rather than as something that can genuinely aid sustainable development and sustainable growth and in fact help people reduce the need to travel and car dependence.

Q42 Chair: Can I ask, given the work that you have done over the years on integrated transport, how you see the whole concept of integrated transport fitting into that concept of growth that you have just referred to?

Stephen Joseph: We think that the challenge we have at the moment—and it is still the case that, along with The Netherlands, we have some of the highest car use per head of any of the original EU15—is to provide real choices and options for people to choose alternatives to single-occupancy car use for a lot of the journeys they have to make, and that choice is still not available for too many of the journeys that people want to make.

Matthew Sinclair: The demand for motor fuel is fundamentally very inelastic. The IMF made a statement, which came out a few days ago, saying a 50% rise in oil prices is in the long term associated with a 5% reduction in consumption in developed countries. It is a 2% one in developing countries, which shows that necessity is even greater in the developing world and as a result that is why the tax can raise so much revenue. The tax charged now is so far beyond the Pigovian rate, it is why every time you challenge the Treasury on this the response you get isn't, "We disagree with your analysis" but "Well, we are using this to raise revenue". That is the reason why no one trusts green taxes and it is the reason why, in the end, this is seen as an attempt to take money from motorists and it isn't functioning effectively as a green tax, and people need to stop trying to sell it as one or they will discredit other green taxes, rightly.

Zac Goldsmith: Can I jump in on that?

Chair: Yes, of course.

Q43 Zac Goldsmith: In terms of inelasticity of fuel dependence, that would be potentially the case in relation to individuals but not if you take it a higher step and you were to address the manufacturers of cars, for example. I don't know whether you were sitting in on the last session, but one of the ideas that was raised was a purchase tax, which puts a new tax on the dirtiest cars at the point of purchase and uses that money to reduce the cost of the cleanest cars. If that were implemented bullishly by Government as a policy it would not be a stealth tax. It would be very hard to question it on that basis, but it would reduce our consumption of energy as a country. So I am interested, as a bit of an indulgence, whether or not you or your organisation would support such a measure?

Matthew Sinclair: You are looking at the long term effects of the oil price, which is what the IMF are doing, which works as a pretty good proxy for anything that increases the costs. You are looking pretty closely at the fundamental elasticity. You are giving it enough time for people to get through those purchase decisions. You are looking at it over 20 years. So, if you are doing that and you are still finding low elasticities, then I think it is not a matter of what mechanism you use, it is simply a matter of, outside of the cities, the practical way to get around is in a car and the size of the car people buy depends on things like their family size. We have all seen the gas guzzlers but they are not statistically significant enough—

Zac Goldsmith: The question is by definition that policy would be revenue neutral so you would not put costs up but the price up on the dirty cars—

Matthew Sinclair: People have been told lots of policies are revenue neutral before. Even the most ironclad supposedly revenue neutral policy, in terms of the rules, runs into a fungibility issue. There is always another way to raise money from motorists and I think people rightly do not trust these promises of revenue neutral schemes any more. They have been sold that on things like Vehicle Excise Duty, which originally people trusted then came to resent because they saw it wasn't revenue neutral.

Q44 Zac Goldsmith: No, I absolutely agree with that and people do not trust green taxes because there are not that many and quite often it is an excuse, a mugging dressed up in green clothes, and I think that assumption is correct. My question is: if it was revenue neutral, would you support that kind of measure? Because it seems to me there is a blockage there and I am trying to understand what it is, what it is that is preventing the Government from jumping in. I think it is a fear of the tabloids. I think it is a kind of pigheadedness within the Treasury historically. It doesn't make sense because it is not a stealth tax. It is by its definition revenue neutral and it doesn't deny people the kind of choice that your organisation has been standing up for, but it does reduce the cost of living for huge numbers of people in the country, as has been demonstrated very clearly in Denmark, so—if, if, if—would your organisation accept it?

Matthew Sinclair: I just think that taxes don't work in a revenue neutral way. They alter the constraint facing Government, in terms of its tax and its spending decisions. I am an economic historian and I tell you that that will always be the problem with these green taxes, they can't be revenue neutral, they alter the political balance between spending and taxation.

Chair: I am going to give Stephen Joseph the final say on this series of questions.

Stephen Joseph: I just want to make a very quick comment. Firstly, those IMF figures on long term elasticities are challenged by a number of economists in this country, notably Stephen Glaister and Dan Graham, who suggest that long term elasticities in motoring in this country are rather higher in relation to motoring and I would strongly support that. Our evidence to the Committee has supported what was known as the Feebate Scheme as a means of shifting the behaviour of manufacturers and giving incentives for people to buy the greenest car in class, which can be a very large car or can be a very small car depending on what their needs are. So, I don't think it necessarily affects people's decisions and travel in the way that Mr Sinclair implied. I think there is more potential, than perhaps has been implied, for those kinds of taxes in terms of changing behaviour.

Q45 Neil Carmichael: I do think that the reduction in fuel duty by 1p was the right balance, given the cost to households and businesses, as opposed to the need to tackle climate change. You have had a stab at this already but the other three haven't.

Francis Wood: I think with the price of one litre of unleaded petrol at £1.30 the Government was right to help small businesses with the price of fuel. Around 70% of our membership regard road use as essential to their business; 79% in a recent survey were saying they were very notably affected by the high price of fuel; 62% were saying they were having to increase prices due to the price of fuel and one in 10 were saying they were considering laying off staff due to the high price of fuel. So it is very much hurting small businesses. What I would emphasise is it not just the high price of fuel that hurts, it is the volatility in the price of fuel; it is not knowing what your overheads will be in three months' time or in six months' time. That is what is really hurting. We do believe that fuel duty has a role to play in meeting the environmental objectives but there is a balance between meeting those environmental objectives, helping the economy and not damaging the economy too much.

Q46 Caroline Lucas: I was interested in your point about volatility. Surely that would be an argument in favour of the fuel escalator rather than against it?
Francis Wood: What we were looking for in the run-up to the Budget was a true fuel duty stabiliser, one that stabilised the price of fuel at the pump.

Q47 Caroline Lucas: That is going to be far more volatile, in terms of the overall impact on the economy than an escalator. Over time you can see exactly what is going to happen.
Matthew Sinclair: The escalator is related to inflation, which will tend to mean it will accentuate rises in the fuel price that also feed into inflation. So I don't see how the escalator could be predictable, as far as Government policy is concerned, except that it certainly will not be counter-cyclical with respect to oil prices.

Q48 Neil Carmichael: Have we struck the right balance between fuel duty and Vehicle Excise Duty, or do you think there should be a change there?
Francis Wood: I think from a policymaker's point of view, with environmental objectives in mind, fuel duty is obviously a more attractive option than VED to pursue, because there is a closer link between carbon emissions and car use rather than just vehicle ownership. So I can see there is some merit in that, but I think you have to bear it in mind that fuel duty is a very heavy handed instrument to wield. It hits road-dependent small businesses very hard, it hits rural communities very hard, so it needs to be dealt with carefully. As an organisation, we want to see support for a kind of greening of VED but we would also like purchase taxes on high carbon vehicles. We think that is more of a long term alternative.
Stephen Joseph: The only comment I have to make is I think—like other people have said—we need a wider range of taxes than just VED and fuel duty; for example, for freight. I am sure many of Mr Wood's members are big users of freight. We are one of the very few countries in Europe that do not have some kind of distance-based charge for lorries. That is used as a means of providing much more targeted support for domestic hauliers, in places like Germany for instance, and to give signals about, for example, buying green lorries and things like that; so freight, which has been a sector that has been shouting very loudly about the impact of high fuel prices and the use of the lorry road user charging scheme, should be considered. What the Government is proposing at the moment is a simple vignette scheme, which is not the same thing. A distance-based charge scheme, combined with other taxes, could provide a lot more targeted support and create incentives for greening freight, which is after all a very large proportion of UK transport CO_2 emissions. Similarly, things like purchase tax, use of company car taxes, and things like that, could be used as a means of more targeted approaches to changing behaviour in the purchase of vehicles.

Q49 Neil Carmichael: Essentially, you would like us to be much more sophisticated in the way in which we formulate tax for, say, engines that have higher emissions and so on.
Matthew Sinclair: Sorry, Stephen, I disagree with that on the basic grounds that you wind up with a problem, which is: you try and ameliorate the impact on individual group after individual group and then in the end the back of the ordinary consumer gets broken, people on middle incomes who can't be bailed out as a specific group. Fundamentally, fuel duty has got to such a stage where the people who are most suffering because of it are just ordinary motorists. You can find individual groups who are being particularly affected but getting in there and complicating the tax system further, creating more and more sticking plasters, will not deal with the fact that fuel duty is just too high. All these attempts to justify it, like the one in the *Campaign for Better Transport* document, are all based on counting all of the negative externalities and none of the positive ones. They: double-count and, regulate externalities already regulated outside the tax system". You are not going to get around that by trying to fiddle the system. You will wind up with the same kind of problem you have in welfare.
Stephen Joseph: I think we do have some evidence that use of other taxes can change behaviour significantly. Company car tax changes, for instance, which moved from taxing on the basis of mileage to taxing on the basis of emissions resulted in significant changes in behaviour, because that tax was in the interests of business and of company car users and the previous system had very perverse incentives in it. That seems to me an example of a tax change that does have some benefits in fact.
Chair: I am afraid we are going to have to move on.

Q50 Simon Wright: To what extent do you feel it is appropriate to use fuel duty rates as a means of trying to change behaviour and reducing car use?
Francis Wood: I think fuel duty does have a role to play in changing behaviour in relation to environmental concerns, but you have to bear in mind it is a very blunt instrument to wield. As I said earlier, it hurts road-dependent small businesses, it hurts rural communities. I think it is unfair to use fuel duty alone without there being adequate alternatives in place, viable alternatives that allow small businesses to go about their business while not using high carbon road transport.
Stephen Joseph: Very quickly, I think the fuel duty on its own does not change behaviour. It is not enough, because you would need to have alternatives in place that people can move to. Unless fuel duty is part of a much wider package, which includes—as my friend from the Taxpayers' Alliance said—regulation and includes funding for alternatives, then it will not change behaviour. Behaviour will remain inelastic. The good news is that there is good evidence that providing those alternatives does change behaviour in quite significant ways. We have seen that, not just with the London congestion charge but also with the sustainable travel towns: in Darlington, Worcester and Peterborough, where we saw reductions in car use of around 10% or more.
Chair: I am really sorry, but we do want to cover a bit more on aviation and there is a vote coming up. If

there are issues that you wish to send back to us in writing that will be fine, but I must turn to Caroline Lucas on aviation.

Q51 Caroline Lucas: Thank you very much. We have already talked about the fact that the Government abandoned the plans for a per plane duty. In so doing, they said basically that the EU ETS would be the principal mechanism for reducing CO_2 emissions from aviation. Do you think that approach will cut demand and emissions sufficiently?

Tim Johnson: I don't think the EU ETS on its own, as it currently stands, will cut either demand or emissions; not to a significant extent. At risk of knocking it altogether, I think it is worth pointing out that the EU ETS is still the first of its kind anywhere in the world. It is the first time we have sought to bring this aviation activity under a regulatory cap and of course there is potential in the future, if the politicians so wish, to move to full auctioning and to toughen that target. That said, looking forward it is only ever going to provide a short term solution. There are no guarantees in the long term that the carbon credits the aviation industry needs will always be there, so we have to keep the focus on trying to reduce emissions from within the sector itself and I think that is where other measures come into their own.

Q52 Caroline Lucas: Do you know any of the figures around how much the emissions within the sector itself will come down under the EU ETS?

Tim Johnson: The Commission's own figures suggest that demand by 2020 will have reduced from a potential growth rate of 142% down to around 135% or 137%, so the impact on demand is very, very small. That was done about six or seven years ago. As for more recent analysis, Standard & Poor's have just come out with their own impact assessment. It suggests that it will probably add about 7% to the cost of a tonne of fuel and, therefore, the cost passed through to passengers is probably going to be in the region of 2%. I think a model—if you run it through a model—will always show you an associated demand in emissions impact, because it is always a linear relationship. I think in practice those price rises are likely to have very little impact.

Matthew Sinclair: The problem with the Emissions Trading System for this sector is that it magnifies the wider problems of that scheme in that you have a fixed supply of allowances and demand varies with economic demand and with the progress people make on cutting emissions. What that means is that as growth changes, politicians will continue to get the wrong supply and, therefore, the price will drastically rise or drastically fall. It has drastically fallen so far but it could drastically rise next time. In aviation you have a particularly volatile sector in terms of demand. It has always been one that has swung with the economic cycle more than most sectors, and if you are going to apply an Emissions Trading Scheme that has fixed supply of allowances, it is going to further destabilise the overall emissions price.

APD has no better record in terms of cutting emissions. There was a study that argued that the doubling of APD could have increased emissions because it was acting essentially to cause people to fly further, not less. I don't personally think people flying less should be an objective of Government, and it is also wildly unilateral. We have a rate that is 10, 20 times more than our neighbours' on many journeys. So I think that neither of these policies provides an efficient tool for cutting emissions.

Q53 Caroline Lucas: Let me come on to another one then, because the Government does not anticipate that the proposed reforms to Air Passenger Duty bandings will have an impact on emissions levels. Do you think that is a wasted opportunity?

Tim Johnson: I think our starting point is: we don't see it as an environmental tax. We have long argued that there are very good reasons—and you went through them in the earlier session, so I won't take the time to repeat them—why the sector is under taxed and, therefore, APD goes a long way to addressing some of those concerns. Beyond that, there is a very considerable environmental impact that the EU ETS will not cover. At best it partially covers the carbon cost. What it does not cover is the local environmental impact and some of the other wider climate change questions. If you wanted to move down that route, then I think you would need to structure APD in a different way from how it is framed at the moment to achieve that objective.

Chair: I think we have been beaten by the Division bell. I am truly sorry. There are many issues that we wanted to cover but I have to say that I do not think that I am going to be able to get a quorum to come back because we are likely to have two votes. May I say we really appreciate your time, we know how busy you are? We appreciate your written evidence and if there are issues arising out of our session this afternoon, which you think you haven't had a chance to put on the record, please do send that on to us. Thank you again for your time.

Wednesday 18 May 2011

Members present:

Joan Walley (Chair)

Peter Aldous	Caroline Lucas
Neil Carmichael	Ian Murray
Martin Caton	Sheryll Murray
Katy Clark	Caroline Nokes
Zac Goldsmith	Dr Alan Whitehead
Simon Kirby	Simon Wright

Examination of Witnesses

Witnesses: **Justine Greening MP**, Economic Secretary to the Treasury, HM Treasury, and **Mike Williams**, Director, Business and International Tax, HM Treasury, gave evidence.

Q54 Chair: By way of introduction, can I say that we are expecting a vote at 4.00 pm. As you can see, we are an exceptionally large Committee, so we obviously have a lot of material to cover. We understand that you would like to make a very brief opening statement to us, but could I ask you if, in making that opening statement, you could perhaps refer as well to how much green taxes really do feature in the *Plan for Growth*? Could you bear in mind the concerns that were expressed at the Liaison Committee yesterday, when interviewing the Prime Minister, that there were real concerns that the Budget should be looking at environmental issues, but there seems to be scant reference to it, and it seems to be much more as an add-on? Could you perhaps respond to that in your opening statement?

Justine Greening: Yes, of course.

Chair: Then we shall move straight on to direct questioning.

Justine Greening: Well, thank you very much. I am delighted to be here. Perhaps the first thing I ought to do is introduce you to Mike Williams, who is our lead official in this area. Hopefully, if there is any incredibly technical stuff that some of you want to know about, we can either get you an answer or write to you separately. In response directly to your first question, green taxation is something that this Government does take incredibly seriously. One of our coalition agreement commitments is to be the greenest Government ever. As you are aware, we have an additional commitment in relation to growing green tax and environmental tax as a proportion of the overall tax take.

I think the key to success for us has been to ensure the measures that we bring in and the instruments that we put in place actually work effectively. That means having the range of discussions that we have had with stakeholders from industry, also from the green groups and a whole host of other groups, agencies and charities that we have been talking to over the past year. As you will know, we did hold some workshops to pull together those stakeholders for the first time earlier this year.

In terms of principles of how we approach this and our baseline, I know you will have some more questions on that, no doubt, as we go through the questioning today, so perhaps I will not go into that too much now. Suffice it to say, I think that your report can play an important role in helping us work through some of the finer details of how we do that. I think the inquiry that you are doing is potentially of real help and interest to Government, particularly at this moment. So we very much welcome this work that you have undertaken.

I am not going to talk about the principles right now, because I think we will get on to those later. In terms of the Budget, though, we have pressed ahead already with increasing the proportion of our tax take from environmental taxes. In fact, Budget 2011 did announce a number of taxation and spending measures that contributed towards achieving a low carbon economy and also wider environment benefits. Perhaps the most important, if I can run through them, were the introduction of the carbon price floor, which was the first mechanism of its kind and that should incentivise investment in low carbon electricity generation. We also introduced the progress that we made towards allowances under the Carbon Reduction Commitment, and made an announcement that those allowances will be priced at £12 per tonne of carbon dioxide for 2011–12. We are legislating to increase the standard rate of landfill tax. In fact, that is probably something we will cover at the next session of the Finance Bill Committee that we are in now.

As you will also be aware, on the spend side, we went beyond our initial commitment at the Spending Review to put £1 billion against the Green Investment Bank. We also increased that and said that we would channel another £2 billion to take that total of £3 billion from proceeds from asset sales. So there are a number of steps in the Budget that did absolutely relate to transition to a low carbon economy, making sure we deliver our coalition agreement to increase the proportion of taxation from environmental taxes. With that brief introduction, it is may be wiser now for me to hand over to you.

Chair: I think it is sufficient, thank you.

Q55 Martin Caton: When you were last here, Minister, you were in the process of reviewing environmental taxes, including holding workshops. Can you tell us what came out of that review, and are you now in a position to produce a strategy on environmental taxes?

Justine Greening: When we got the workshops set up back in January, I think we were very open-minded about how they would work. It was something that I don't think the last Government had done. I don't think that was a particular criticism; it was just a recognition that—perhaps in this agenda more than any other—there is a need to pull people together because it is about finding a balance. Interestingly, I was at a breakfast with the all-party parliamentary motor group, where their attitude towards the Budget was, in some ways, it was too green. They felt some of these measures were going to be a hindrance.

One of the things we recognised is we have to square that circle. That means getting people with different perspectives in the same room at the same time. That was helpful. It has given us a base on which now—post-Budget—to look at how we view green taxation and what some of the opportunities were, in terms of changing behaviour. The other important discussion we had, which we can talk about now, is what those people told us about the principles perhaps that we needed to have behind our approach to green taxation—around fairness, for example. So I think they were very important.

We do have a timetable in the Treasury every year, because we have the Budget every year. We see that as an ongoing annual challenge to make sure that, each year, we are making progress towards meeting our coalition agreement.

Q56 Martin Caton: Will you be producing and publishing a strategy on environmental taxes? Will you be producing explicit statements on the intended outcomes of specific taxes? Will you be publishing any Treasury analysis of how well environmental taxes are achieving their aims?

Justine Greening: We will be, because one of the things we need to set out is our assessment of what the baseline is that we are working from. Although we have already in advance of that taken steps on the carbon price floor, on the Carbon Reduction Commitment, which will increase the proportion of the tax base that comes from environmental tax, you are right that nevertheless, we need to set out the principles and we will be doing that over the coming weeks. In fact, as I go back to my previous comments, in a sense, I think your report has a potentially important role to play in helping us finalise our views, in terms of what those principles should be and the strategy.

Q57 Martin Caton: You have already mentioned, Minister, the Government's intention to increase the proportion of tax revenue accounted for by environmental taxes. Have you a target proportion that you are aiming for?

Justine Greening: That will ultimately be very much driven by the baseline that we decide and—as I am going to guess we will come on to—there are different ways in which you can set that baseline. For us, perhaps more than targets, we are keen to make sure that our direction of travel is right because any baseline that we set in terms of percentage will, to some extent, be in part driven by the rest of the taxation base, if you see what I mean, and possibly what is happening in terms of the economy. I think what is most important is that we have a baseline that drives the right kind of decision making in Government—to challenge Government to make sure that a higher proportion of that underlying tax base is driven by environment and environmental behaviour, and driving good environmental behaviour.

Q58 Martin Caton: From the additional briefing you submitted for this session, it appears you don't count motoring taxes or Air Passenger Duty as environmental taxes. Changes in the Budget to these taxes reduce future revenue. Does excluding these taxes affect that pledge to increase the proportion of environmental taxes?

Justine Greening: No.

Martin Caton: Thank you.

Q59 Zac Goldsmith: One of the reasons for environmental taxes is to encourage businesses to clean up their act and change their behaviour, but the system of green taxation, environmental taxation, is increasingly complex. Is there anything the Government is doing to simplify the systems so it will be easier for businesses to see how much tax they can avoid by changing their behaviour?

Justine Greening: That is one of the key things that came out of the workshops. In a sense, the first decision we have taken is to try to not make the landscape any more complicated. For example, there was the Carbon Capture and Storage Levy that was due to have been introduced. It would have been yet another tax that would have been added on to this overall landscape. We haven't gone ahead with that and, instead, we plan to fund any future demonstrations from public spending, as we did with the Spending Review for the first one.

We also have to challenge ourselves to look at the individual policies and say, "Do they work as effectively as possible?" It is one of the reasons why, although we have gone ahead with the Carbon Reduction Commitment, we had a very clear message from business that they have seen it as something that is too complex, which is why DECC is looking over the next few months at how we can introduce it, but make sure that it is more straightforward for business to use.

Then, the final piece I think is important, Zac, is, perhaps now more than ever before, it is important for us to understand what the totality of this is on business, particularly, for example, energy-intensive industries. There is a piece of work that has now been kicked off between BIS and DECC absolutely to get that oversight, so that we are very clear what all of this adds up to.

Q60 Zac Goldsmith: Just on that, who is driving that process—the review on the energy-intensive businesses?

Justine Greening: It is a joint process from BIS and DECC.

Zac Goldsmith: They are working together.

Justine Greening: Yes.

Q61 Zac Goldsmith: Another problematic area in relation to green taxes is that, for many members of the public, environmental taxes look like they are stealth taxes—that they are an excuse to raise money. There is a general question: is the Government doing anything or does it have any proposals for bridging that gap and tackling that scepticism? The second follow-up is more of an answer than a question: is the Government willing to consider or reconsider its position in relation to hypothecation, which is the most obvious way of creating a more transparent system, because they see why they are being taxed and where the money is going?

Justine Greening: On the first point, you are right that people have to feel like it is fair. I think one of the biggest problems that people have encountered in the past is they feel like they are being taxed for their green behaviour when they haven't been able to change it. In the worst cases, they were taxed for their retrospective behaviour, which they couldn't possibly go back and change. In terms of the principles that we have in place, we want to be very explicit on the tax measures we bring forward: first of all, we are up-front and we say this is about the environment, this is about tackling emissions; secondly, we are very clear that the purpose of the tax is to encourage environmentally positive behaviour. In other words, it has to be something you haven't done yet, otherwise you can't change it. Then the third thing is that the tax has to be structured to do that.

Possibly an interesting example is to go back to the road tax change in 2008, where it was said to be a green tax. Fair enough: that is a tick for that principle. Arguably, it was structured like a green tax. That was the third example, so a second tick on the third box. In terms of whether it could encourage positive behaviour change: no, because people had already bought the car.

Q62 Zac Goldsmith: I understand the Treasury has been clear on this issue of hypothecation, but if you were to look at all the examples of environmental taxation over the last few decades in this country, the only one that has clearly worked, been accepted and has had a measurable impact is probably the landfill tax, which was originally hypothecated—not completely, but there was a link there. Is there not a case, then, if not for immediate or complete hypothecation, at least for a partial hypothecation where at the very least, a tax raised somewhere is seen to be matched by a tax decrease elsewhere, or an investment elsewhere for something that might also lead to a change in behaviour? At least the link is made in people's minds and becomes therefore more acceptable.

Justine Greening: I think you can make that case. In fact, it is something that we, in Opposition, had talked about, saying that people need to feel that it is not just always tax on top of tax. As long as we are very clear cut that, in the same way that we are switching the base of taxation more to environmental tax—that it is a switch at the base, it is not just a growth that is gratuitous on either business or on the public. You are right that Treasury does not like hypothecation because we think that they are separate things, in terms of how you structure types of change of behaviour and then where that money then goes, but at the broader level people do want to see a switch. They do not want to see green tax adding on.

Q63 Zac Goldsmith: It was absolutely the case, certainly in our manifesto and I think also in the coalition manifesto—an absolute commitment to neutrality, revenue and tax neutrality, when it came to green taxation, which is in effect a kind of hypothecation. At least, if it goes up somewhere you imagine therefore it has to come down elsewhere.

I want to ask you one specific point, because we are running out of time, that has been referred to it by DECC in relation to the Green Deal. I asked Chris Huhne whether or not he might be making the case to the Treasury for introducing a stamp duty rebate—so obviously, at the point where a home changes ownership—for those homes that are very energy efficient, which are plugged into the Green Deal. I get the very strong impression that DECC are keen for the Treasury to accept such a move and I certainly think it would provide a massive boost for the Green Deal, which is obviously the flagship project. Is that something that the Treasury has considered and, if not, is it something the Treasury will very seriously consider?

Justine Greening: I think the first thing to say is that the ministerial team in DECC is genuinely passionate about the agenda that they have within their Department. I think they have been very effective in making their case across different Government Departments, in pursuing how they feel the overall policy landscape can help them support the strategy that they need to deliver.

In terms of explicit tax, I don't think I am going to go into saying what we can or can't do on something like stamp duty and land tax, because I think that would be pre-empting what is quite a lot of work that will go on over the coming year, and of course at the moment—

Q64 Chair: Who is it a matter for, if you can't?

Justine Greening: I guess what I am saying is: I don't think it is right for me to pick out individual taxes and set some hares running in that respect. That is not how the Treasury wants to go about making taxation policy. What we want to do is talk with our stakeholders; obviously, to hear from Select Committees; we want to have a consideration then of what our options are. Having done that, we then want to launch consultation papers that we then get responses on. We have a much more long-term policymaking approach to taxation than perhaps a glib statement in a Select Committee.

What I would say, Zac, is that we are working with DECC to make sure that the Green Deal is successful, because it is so important that it is successful. Perhaps, a lot of what the Budget looked at was around how we can challenge business, but there is a huge part of this agenda that is around individuals, and we recognise that. That is one of the reasons why we wanted to make sure that we get our principles and our baseline right, because of course it is a baseline that has personal taxation in, as well as business taxation.

Q65 Chair: Before we leave this subject of definitions of environmental taxes, and picking up the reply that you gave to Martin Caton just now, for the record can I check with you: you were very explicit in saying that the way that you define taxes would not affect your pledge to increase the proportion of environmental taxes. If I can just finish this point—but isn't that contrary to the methodology that is used in the ONS and in respect of how the Office for National Statistics goes about defining taxes, where it actually says, "All energy and transport taxes are classified as environmental taxes"? I wonder how the Treasury squares that circle.
I suspect we are going to have to wait until after the Division, because I think that Members will want to go and vote.
Justine Greening: It is entirely up to you. I am happy to—
Chair: Sorry.
Justine Greening: Okay, we will come back to that, no problem.
Sitting suspended for a Division in the House.
On resuming—

Q66 Chair: Minister, if I can recap and perhaps if we could follow on from where we left off before the Division, I would be grateful. Just on this issue about the definition of what is or isn't an environmental tax.
Justine Greening: I think the question was: how can we keep our coalition agreement commitment to increase the proportion of green tax if we are using a different definition, for example, from the ONS. I think the first thing to say is obviously, intellectually, wherever you draw the line, you can improve from it, and what I would say is the way we have looked at it is—and again, I am interested to get the Committee's views because the OECD have their definition, and EUROSTAT have a slightly different definition again—there is a debate to be had about this.

Q67 Chair: I think the point is: the ONS uses an internationally agreed definition. So, if HM Treasury is departing from that and if we are changing the definition of environmental tax—plus the points that Zac Goldsmith was making, which related to behaviour change and so on and so forth—and if we don't have certain taxes that previously were defined as an environmental tax, which now no longer are, how can we then look at changing all the different behaviours? How can we tick the boxes when the Treasury is not in sync internationally?
Justine Greening: A couple of things: first of all, if you look at how we term "environmental taxes" now it is no different, if you look at parliamentary questions that the last Government put out talking about the percentage of the tax base that was driven by green tax. I think the other issue is you have to go back to why we are doing this. Am I doing it to have some kind of interesting PhD-style thesis on what is or isn't an environmental tax; or am I doing it to set Government a baseline that I think, first, is understandable, but secondly, will drive the right kind of pressure for good decision making going forward? My sense is that I think we should be challenging Government to say, "Well, there are only a limited number of taxes we have at the moment that are truly environmental". There are only so many that are not only explicitly meant to be environmental but are about changing behaviour and, on top of that, are overtly structured in order to drive positive behaviour change towards the environment. That is the reason I have taken the approach that I have taken, because I think it will mean that we are more likely to challenge ourselves in Government and say, "Well, this currently doesn't meet all these principles and if we do want it to we are going to have to go back and make it better in terms of how it works".

Q68 Chair: So it would be fair to conclude from what you have said that the Treasury is not including: fuel duty, VAT on fuel, Vehicle Excise Duty and Air Passenger Duty as environmental taxes?
Justine Greening: Say the list again and I will absolutely double check that I agree with it; just for completeness. I don't want to say "yes" when actually—so, it was fuel duty?
Chair: Fuel duty, VAT on fuel duty, Vehicle Excise Duty and Air Passenger Duty—the issues that arise from the additional supplementary evidence that the Treasury submitted to our inquiry, but if you would like to get back to us on that, that is fine.
Justine Greening: I can give you my reaction to it, in a sense, because I think it is helpful for the Committee to build in. On fuel duty, no, I don't think that is a green tax. I don't think it is structured in order to change behaviour. That is not why it was brought in. That is not how it is structured, in my opinion. On APD, we have looked at this as a Government, and I think our sense is APD may have some environmental benefits but it is not so overtly structured as a green tax.
Chair: To cut you short, if I may. We will be coming to the detail of these taxes. I was just concerned at this stage—
Justine Greening: Later on this session?
Chair: Yes.
Justine Greening: Fine; okay.
Chair: I was just concerned to get the definition of what is or isn't an environmental tax at this stage.
Justine Greening: It is just that I would accept that there is a debate to be had over VED. So it is not a pure "yes".
Chair: Okay then, thank you.

Q69 Caroline Lucas: I wanted to turn to the issue of carbon floor prices, and wonder if you agree with the conclusion of the Energy and Climate Change Committee in its inquiry into electricity market reform, where it said very clearly that it felt that the carbon floor price was indeed a subsidy; I wonder what your view is on that.
Justine Greening: It is not a subsidy. It is about putting in place a level playing field—a floor on the carbon price that will encourage a shift away from high carbon power generation. Therefore, that is what it is intended to do and I don't think it particularly overtly favours any low carbon power generation over another.

Q70 Caroline Lucas: In an answer that you gave to the hon. Member for Cheltenham, you acknowledged that the benefit that nuclear will get from a carbon floor price is £50 million a year; renewables are down there on £25 million. Those are your figures, so that looks like a significant benefit to one particular energy source.
Justine Greening: I think that is a function of the decisions that power companies have already taken in terms of their power generation portfolio, more than it is in terms of the way in which we structured our policy. The whole point of this is to make sure that over the coming key five-to-10-year time frame, when we know that we need an awful lot of investment in power generation to take place, that we have a taxation structure that supports—alongside electricity market reform—making sure that that investment goes into the low carbon power generation that we want to see as part of our future power mix.

Q71 Caroline Lucas: I think there is a little confusion over what the Government understands by the word "subsidy". It seems that because a level of support is going to more than one energy source—and, yes, it is going to all low carbon energy sources—it seems that, just because it is going to more than nuclear, somehow in the Government's interpretation that means that it is not a subsidy. Surely it still is a subsidy, even if it is going to renewables and nuclear; even if its purpose is to do a range of other things, it is still a subsidy.
Justine Greening: I don't agree with that at all.

Q72 Caroline Lucas: Can you define what you understand by the word "subsidy" in this context?
Justine Greening: I think it is a very consistent tax mechanism that works evenly across the board, precisely because it puts in a consistent—
Caroline Lucas: It is not even. It just seems as if it—
Justine Greening: Precisely because it puts in a common floor price for carbon—and we know that one of the biggest challenges across this agenda is that the different policy measures, effectively, cost carbon in different ways. So I don't think I agree with you at all that it is a subsidy. It will no doubt be a continuing matter for debate. I hoped that you would welcome the carbon price floor. I don't know whether you think it has been set at the right level. I suspect, looking at some of the evidence given before, you would like it to be higher, but I think the point is: it is a step in the right direction, in terms of our green tax agenda and in making sure we do get the right investment in the right low carbon power generation going forward.

Q73 Caroline Lucas: Could you define the word "subsidy" in this context? What do you understand is a subsidy?
Justine Greening: I don't think I have a dictionary definition of "subsidy" on me at the moment, Caroline, but I am sure I can fish one out and send it to you.

Q74 Caroline Lucas: I look forward to it, thank you. In the meantime, whatever it is, nuclear is getting £50 million a year as a direct result of the carbon floor price. Would your Department considering levying some kind of tax on the nuclear power generators, to make sure that in a sense they are not getting a windfall tax, so that they are paying the same amount as operators from oil and gas, for example?
Justine Greening: As you know, in terms of how we structure tax, one of the key things first of all is general issues of state aid. So, in other words: are we perhaps benefiting one particular sector more than we are another, disproportionately? Secondly, this concept of fiscal neutrality—which means we can't suddenly unilaterally tax one particular area in a way that is deemed unfair to other areas. So we don't have perfect freedom to do that, and I think the way in which we have approached the carbon price floor is probably the most sensible way to ensure that we create investment certainty. Because one of the messages we get back from people needing to invest in this area is, they want to know what their returns are, but secondly to make sure that there is this comparability across the board so that low carbon is not disadvantaged.

Q75 Caroline Lucas: I think the renewables side of it might not see it as being a particularly fair way of moving forward, but will the carbon floor price be accounted for as a subsidy in the national accounts, like the renewables obligation? What is the advice coming from the ONS about how to classify it?
Justine Greening: It is not going to be classed as a subsidy and I think probably, Mike, you may know the precise way in which the ONS is going to handle it within the national accounts.
Mike Williams: I doubt that they will take a final decision until they change to the levy regimes that are put in place, but it is an adjustment to existing tax structures. That is how the floor is put in place. I think the ONS will take quite a lot from that, rather than looking at it completely separately from that. What we are doing, for example, is removing a rebate or reducing the level of a rebate, depending on the fuel used to generate the electricity—so, I mean the changes to the structure of existing levies and duties.

Q76 Dr Whitehead: On that issue, you have, however, also introduced a Treasury control cap on DECC levy spending. In that control cap at the moment come ROCs, FITs and warm homes discount, defined by ONS as imputed tax and, therefore, subsidy. There are a number of other items under consideration by ONS and, indeed, it is possible that the energy company's obligation could be considered under that category. I presume that ONS will look at carbon floor price at some stage. Now all of those potential imputed tax and subsidy candidates, if they are indeed determined as imputed tax and subsidy, would come within the Treasury control framework within the present spending round, would they not?
Justine Greening: Yes. We have set up a spending control framework in order to get a better ability to work with DECC on this issue of the levies and the funding of the subsidies—first, how high they are, and the likelihood then that they will obviously flow through into consumables so that we have a better control of that across Government.

Q77 Dr Whitehead: What is the control total over the spending period on that?
Justine Greening: We will have to write to you to give the exact figure because it is obviously part of the DECC overall Spending Review total, which I don't have on me today. I am sure if you had a DECC Minister they could probably provide you with that, and I am very happy to provide that data.

Q78 Dr Whitehead: It is also annually capped, isn't it?
Justine Greening: It flows across the Spending Review period and then, within that, yes, there are the annualised totals.

Q79 Dr Whitehead: If any of those particular items are classified as imputed tax and spend, and are so classified within the present spending period, they would come within that control total and, presumably, would have to be taken out of that control total in order to be realised, put into practice.
Justine Greening: I don't understand the last part—I understood most of your question—"to be realised and put into practice". I think what you are saying is, do DECC have to stay within that overall spending control framework within their Spending Review agreed totals? The answer is, yes.

Q80 Dr Whitehead: Yes. So, for example, if the energy companies' obligation was to be classified, or the carbon floor price was to be so classified, it would have to come within that control total in the present spending round?
Justine Greening: We are determined to make sure, within the overall spending review total that DECC have, that this framework gives us some control to enable us to manage the levy fund of subsidies as a whole, and we are already clear on which of those levies and which of the levy fund of subsidies are treated by ONS as tax spend. Those are the ones that we have in the control framework.

Q81 Dr Whitehead: Would it be your understanding that, say, if the carbon floor price or energy companies' obligations were to come within that framework, the only way of making that work would be to take away some of the money that has already been placed within the control framework for things such as renewable obligation, feed-in tariffs or the warm homes discount, for example?
Justine Greening: I don't think you are going down the right road of questioning in terms of carbon price floor. I don't think that is an issue within carbon price floor. That is a Treasury policy that we have brought forward; it is not a DECC policy.

Q82 Dr Whitehead: Energy companies' obligation then, which is clearly—
Justine Greening: That is already part of the Spending Review settlement that we worked out with DECC. Obviously there are policies that they have in place now—legacy policies, many of them. Then there are policies that they plan to introduce.

Q83 Dr Whitehead: However, since we don't know what the energy companies' obligation will consist of right now, if it were to be quantified and it were to be determined to be imputed tax-and-spend by ONS, that would then be placed within that pot, in terms of the total amount of spend that DECC could undertake in that period.
Justine Greening: It is part of the DECC overall control framework. It is one of the policies that we discussed with them at the Spending Review and agreed that they should be bringing forward. Therefore, it is part of the Spending Review overall settlement and, therefore, it is part of that overall control framework.

Q84 Dr Whitehead: Do you think that that control framework, whether it has arguments in its favour in terms of the question of the extent to which levies are exponential for environmental purposes, nevertheless produces a brake on the extent to which any of these policies can come forward for environmental purposes within the present spending period, since they appear to be within that overall control total box?
Justine Greening: I think what it means is that we need to—as we have with business—have some sense of the totality of these policies, and how they can feed through that into company bills and household bills. I think having some mechanism by which there is an overall control on that is quite sensible. It is a far healthier position for Government to be in than to have the potential, as we otherwise would have done, where you could have had a whole range of policies that could have fed through independently into household bills without any mechanism to say, "Well, at some point, it becomes too much", or "At some point we need to go back and challenge whether the totality of it is not going to deliver what we want"; which is: to find a balance between shifting to a low carbon economy in the whole range of ways but, at the same time, doing it in a way that is sustainable for people as we go down that route. It is not easy to get there but I think we have a sense that, if we can put in some controls, then it would give Government some assurance. Hopefully, it will give businesses and the public some assurance that we are conscious of that particular problem for them.

Q85 Dr Whitehead: You are happy there is no "baby and bathwater" problem here?
Justine Greening: No, I think it is long overdue that we recognise that we have this very difficult balance to strike. It is my personal view that for too long the debate has been about targets and purely where we end up, and probably not enough on how we get there, some of the risks that we need to manage, and the different phases that we might go through as we transition. I think across Government now there is a lot more focus on, "What does it mean for the next five years, the next 10 years?" and whether it is carbon price floor and we have set a trajectory. I think there is much more understanding that it is not enough to say where the end point is; you have to be a bit more explicit about the framework that gets us there.

Q86 Chair: Before we leave this complex issue of carbon floor price, and I accept it is complex, we have had companies expressing concerns that their international competitiveness will be hit by the unilateral introduction of a carbon floor price in the UK. I wondered what you can realistically do to influence the EU ETS scheme, so that it creates a sufficiently high price of carbon on its own. Connected to that I would be very interested—and this is a brief question, the second part—if you could give an indication of how the money from the ETS auctioning will be spent in the UK.
Justine Greening: In answer to the first question, as I have said to the Committee, in a sense we are conscious of the fact that introducing the carbon floor price is done in a way that it has to bite, but we want to make it bite in a way that is sustainable. As you will know, we have climate change agreements that help do that and, specifically in relation to energy-intensive industries, we are also looking across the piece at them.
In terms of the European aspect, we are absolutely working with other Member States to have a debate to press for a much higher percentage of allowances to be auctioned and, in fact, as you probably know, we want to see 100% of allowances auctioned. The fact that we are continuing to show leadership in this area, as we did earlier this week in accepting the Committee on Climate Change's fourth carbon budget—I think it was starting to say, "We are willing to take these steps but we want to see other countries do it too", and the message from yesterday was exactly that. Yes, we are willing to step up to the plate but we want to make sure that we see other countries come along that path too, in order to make sure that this risk of competitiveness is properly managed.

Q87 Chair: In respect of how that EU ETS auctioning will be spent in the UK.
Justine Greening: That feeds into the General Fund that funds public services; is that the question you are asking there?
Chair: We talked about hypothecation earlier on, and I am interested in how it is—
Justine Greening: In that case it is. So, yes, it just comes back into the totality of our overall—

Q88 Chair: So it is not going to be specified for investment in renewables or any of those other things?
Justine Greening: It is not going to be hypothecated, but then you have to bear it in mind that on different measures we are channelling investment into moving to a low carbon economy—for example, the Green Investment Bank. So I think we do look at things overall to say, "What are we able to do, not just within DECC but across the piece to drive investment?"
Chair: We must move on.

Q89 Neil Carmichael: We have touched upon the question I was going to ask, which was about fuel duty. You have already said that it is more of a tax than an environmental instrument, so I won't pursue that much further.
Has the Treasury ever done any calculations to compare the cost of environmental damage by motoring to the tax revenue received; any sort of analysis of that type—cost of motoring versus tax revenue received?
Justine Greening: You mean in terms of carbon?

Q90 Neil Carmichael: Yes, but other things might be thrown into the pot as well, like congestion or whatever.
Justine Greening: I think Treasury has periodically, alongside the DFT, done quite a lot of work to look at the overall burden of taxation in relation to the externalities caused by motoring. I have no doubt that motoring stakeholder groups would be adamant that the level of taxation that we get from motoring taxes was in excess of perhaps some of those externalities.
The 1 pence fuel duty cut will have had a minor impact overall on the emissions from motoring. In a sense, what it shows is it backs up my argument, which is: I don't think in reality fuel duty is a green tax. There is an aspect of it but it doesn't drive environmental behaviour. It is not a pure green tax because, at the end of the day, clearly the oil price has fed through far more to changing behaviour than fuel duty was able to do.

Q91 Neil Carmichael: An extension to that question: if you were thinking in terms of, let's say, tackling car use or emissions, what instrument would you think of?
Justine Greening: I think there are probably two elements: one is short term and the second is long term. There is a whole—I was going to say—plethora. It is probably not quite a plethora but there are a fair number of tax incentives in terms of capital allowances, regulation issues—things like plugged-in places—that we have put in place, building on what the last Government had put in place as well, to try and drive this modal switch, if you want to call it that, from petrol cars to electric vehicles. The other reason why the carbon price floor is important is that, in a sense, it is all very well doing that, and hopefully we will do it successfully—we can help in terms of domestic consumption through the Green Deal—but we have to make sure that if you are in an electric vehicle, the electric you are using is in itself green. Overall, we have these sorts of jigsaw pieces that we have to put together, and that is why carbon price floor becomes quite important alongside electricity market reform.

Q92 Neil Carmichael: Absolutely. Last but not least, in the last Budget report you produced an interesting assessment of the impact of the Budget on families.
Justine Greening: Sorry—on what, Neil?
Neil Carmichael: The impact of the Budget.
Justine Greening: On families?
Chair: On households.
Neil Carmichael: Households. How about a similar sort of structure for the impact on environment protection?
Justine Greening: Once we have published our assessment of the baseline I think that will put us in a position to start saying, "Well, this is where we are. This is how our policies will affect it". As you know, we already have an element of the Budget Book that talks about what we think the emissions impacts will

be of some of the policies. At that stage, then we will have a baseline and we will be able to say, “These are the things that have changed in it as a result”.
Neil Carmichael: Great, thank you.

Q93 Caroline Nokes: I am sticking with motoring. You did make reference to “plugged-in places”, but specifically didn’t the Budget almost act as a disincentive to people to move away from motoring? There was a drop in fuel duty and the amount of subsidies for electric cars has been reduced. So do you not think the Government was sending a bit of a strange message there—that you are not trying to encourage people to make a shift in the way that they move around?
Justine Greening: No. I think that people understood, given the high price of oil and how it fed through into pump prices, that we did want to do something in the short term to try and alleviate the pressures on the cost of living for people. Does it perhaps change that long-term message they have—that the next time they buy a car, because it is so expensive now for people to fill up a petrol car, they will want to see what they can do to get some kind of a hybrid or an electric vehicle? No, I think those incentives are still there. Again, it comes back to saying, well, for us as Government I think, depending on which area you are looking at, you will use different mechanisms to try and drive behaviour.
So, clearly, the price of fuel is having a major impact on motorists. We wanted to try and at least somewhat alleviate that for them in the short term, but I think it is now at a level where people are saying, “The next time I buy a car I will look at getting a more fuel-efficient one”, and I think you also have the industry continuing to challenge itself on emissions. We have seen emissions from individual vehicles drop on average steadily year on year, and I think now you see huge investment going into not just electric vehicles but fuel cells. You can see a progression of technology coming through there.
So I think it very much depends on the area that you are looking at, but particularly on motoring, I think we will have a range of other incentives—including the company car structure—that hopefully over time will drive this modal shift.

Q94 Caroline Nokes: Yet there was a focus on helping household budgets with their transport costs when it came to the private car, but we have seen a significant increase in the number of people using the train. We know that coach travel is one of the most environmentally friendly forms of travel but there was no support for that, no encouragement to people to shift to those modes of transport.
Justine Greening: I think we come back to the underlying challenge faced by Government, which is: unfortunately, there is not an awful lot of spare cash slopping around the place to perhaps give us the flexibility that I am sure lots of Governments would like. I think what we can do is make sure that—for people who don’t have much of an alternative to the behaviour they have to use, which is to get in their car to go to work, particularly in maybe more rural areas—we do support those people. We are seeing the Department for Transport work with local bus operators and local councils to say, “Well, in terms of the grants that they get to subsidise fares, how can we make sure we get more out of them?” You are right: they are constrained, and I think it is just in the sense of the fact of the public finances that we have been handed over, unfortunately.

Q95 Caroline Nokes: I suspect the public finances are going to feature largely in this next response. The Budget removed tax incentives for motorists to use biodiesels, specifically those made from used cooking oil, which have significantly lower emissions over the lifecycle. So do you regard that as a retrograde step, to have removed those tax incentives?
Justine Greening: Those were simply plans that had already been in place from the last Government, so they were ones that we simply implemented having had them put in place. In terms of the renewable transport fuel obligation, that is a DFT policy and that whole issue of biofuels now falls within that, so it is something that they are pushing forward.

Q96 Caroline Nokes: Is that, in itself, a bit of a problem: how does the Treasury work with the other Government Departments so that changes in taxes in that way don’t cut across other policies, other Departments?
Justine Greening: You are right that we have to make sure we work in a joined up way, but I think we do do that. I do have meetings with my counterparts in the DFT and in DECC, so from my perspective I think we do work closely together. I think it is because, particularly in this agenda maybe more than others, you do have to look at the whole package that you are bringing forward. Tax is one part of that, but there is often regulation; there is often industry; voluntary behaviour; there can be public spending, like you say. Those often happen outside of Treasury, and so we do absolutely work with those other Departments to make sure that it adds up as a whole.

Q97 Chair: Before we move on from fuel duty, you said in relation to Neil Carmichael’s question that you had done calculations that compare the costs of environmental damage done by motoring with the tax revenue received. I think the Committee would find it very helpful if you could let us have a summary of the work that has been done, perhaps in written form. I am not suggesting that you give it to us now verbally, but it would be very interesting to see how that has been done and how it takes into account different aspects of this.
Justine Greening: I think that will involve work on the environmental side done by DFT, and then we will match that up with our taxation.
Chair: It is just that you said it had been done, so I think we would like to see it.

Q98 Simon Wright: The coalition agreement refers to replacing Air Passenger Duty with a flight duty, and as you know the Budget overturned that previous goal. I wonder if you could perhaps provide a bit more information on the legal advice that the Treasury sought before coming to that conclusion.

Justine Greening: To be clear, the coalition agreement talked about us looking at the options to reform APD, including looking at this per plane duty. I think realistically, looking at the legalities of how we would pursue it, it simply wasn't going to be sensible to do it. Because what became clear was that the international legal framework that we operate in, including the Chicago Convention, certainly right now meant that we couldn't go down a per plane tax route. What we want to do, what we are going to be doing, is working with other international partners to see if we can perhaps build some more consensus for this.

My sense is that when the Chicago Convention was brought in, in 1944, those people didn't have any intention of stopping individual countries taking action in the future to structure their aviation taxation in a way that would improve the environment. Nevertheless, that framework is a real hindrance in enabling us to bring forward per plane.

So our sense was that therefore, we should make sure, first of all, that we responded to some of the other criticisms that we had had on Air Passenger Duty. In many cases those centred around people feeling it was unfair, and we had a number of representations from a number of MPs—particularly those with communities that had, for example, family ties back to places like the Caribbean—saying that they felt the way in which it was structured at present was fundamentally unfair. So we decided that we would consult on some of those issues, and, fine, we have to stick with APD, but let's try and make sure that it raises revenue, but in a way that we think is broadly fairer and tries to tackle some of these other issues people raise. Of course, the other thing we did try to make it fairer—the other thing we proposed—is that we extend it to business jets.

Q99 Simon Wright: Thank you. The Policy Studies Institute published a paper in June last year in relation to the Chicago Convention. They concluded that they think PPD on fuel used, or carbon, would not be compatible with the Convention. However they did suggest looking at other bases, which would include NOx landing and take-off emissions, number of engines and maximum take-off weights as a good way of alternatively looking at the environmental impact. Were those areas that you pursued?

Justine Greening: I can assure you we looked at a number of different ways in which we could structure this taxation to try and encourage better environmental behaviour, but I think it comes back to what I was saying to Caroline Nokes, in a way. At the end of the day, I think our sense was—particularly on things like NOx, for example—that there were better ways of making improvements on that than through tax: that if we wanted to do what we want to do as a Government, which is to have a more simple tax system, one that is not excessively complicated, the best thing to do was to work with the DFT, for example, to get industry improvements in aviation to tackle some of those other environmental issues, and then to try and get some more international consensus around moving to per plane and whether that can be made possible, but in the meantime to make APD fairer.

I think it is also fair for me to say to the Committee that the other thing that was very clear cut—I remember going and looking at how often the Chicago Convention has been changed since 1944, and the answer is it has been changed several times but it tends to be incredibly small technical amendments, so this would be quite a dramatic change—was that we just had to be realistic that we can pursue that route but, in the meantime, we should try and tackle some of the current issues with APD that people had raised with us.

Q100 Simon Wright: Thank you. The APD consultation lists 31 bodies that have been consulted since the Budget, but only one of these was an environmental body: the Campaign for Better Transport. Why hasn't the Government sought views from more environmental groups?

Justine Greening: Well, we have. We had a workshop earlier in the year that a whole range of environmental groups attended. In addition to the formal consultation, as you can imagine, I met up with a number of groups who came into Treasury to talk to me about their individual concerns, so we did interact quite a lot. I think our overall conclusion was: we do want to see improvements in terms of aviation in the environment, but the best way to do that was through the Emissions Trading Scheme and the fact that aviation is going to become part of that from 1 January next year.

Q101 Neil Carmichael: The EU Emissions Trading Scheme has not exactly been a striking success at reducing CO_2 from the aviation sector; hence there are various other measures. What do you expect to happen to the trading scheme in the foreseeable future?

Justine Greening: It is hard for it to have been a striking success in terms of aviation because aviation is not in it yet. I think once it is in there, what we want to see across the board is a higher proportion of allowances auctioned. In other words, we think that will be a far better way of making sure this system can work effectively.

I think I am right in saying we are on phase 2, and I think the point is: as we go through the next phase that is what we are going to be arguing for as a Government. I think there is obviously a general debate about what is the best way to go about that. Our sense is, we want to show some leadership in this area and we think that is a smarter way to make sure we get people to follow us. But as I said, in terms of the fourth carbon budget being clear cut, we are not just going to go it alone and see our competitiveness eroded. We want to see other countries come with us.

Q102 Neil Carmichael: It is going to take a fair bit of leadership to get from the position where we effectively are at the moment towards a target for 2050, which is an 80% carbon reduction. So, what big changes do you expect to see, because that is a huge reduction?

Justine Greening: At the moment, I think I am right in saying that the Committee on Climate Change say we are on track in the course of this first carbon budget, so what we need to do is make sure that this transition plan is put in place. So Treasury has a role to play in that in terms of carbon price floor. DECC clearly has a huge role to play in it; so does Defra. I think that on the retail side of demand from the public, Green Deal is a key part of that. Then, as you will be aware, there is—I think I am right in saying—on the DECC website some of the DECC modelling they have done: people can go in and plug in different combinations of where the power generation mix will come from, to see how much that then reduces our emissions.

Of course, the other unknown is that, ultimately, although we can track what we think the forward curve of the price of carbon will be, what we definitely know is that, as the Stern report made clear, if we don't get ourselves down this route the cost of inaction will be greater than the costs of action. We just need to make sure that the costs of action are minimised in terms of cost-effectiveness and that we understand where they bite, so that we don't have negative consequences that we can't alleviate.

Q103 Neil Carmichael: It is difficult to imagine an aeroplane flying using electricity, so you are effectively tied to technology which is certainly capable of significant incremental steps to reduce emissions. There is no doubt about that if you look at the way in which jet engines have advanced in the last 20 years—and certainly the technology of, say, the Airbus 380 and so forth, given the number of passengers and the materials used, and so on. Is there any long-term plan that the Government is thinking about to advance still further that sort of technical solution?

Justine Greening: Realistically, you are probably better off putting that question to a Transport Minister who works with the industry day to day. My understanding of one of the key challenges within that whole agenda is this interplay between emissions and noise, for example. If you have a fatter, shorter plane, you have one particular kind of environmental challenge in terms of how much thrust you need to get it off the floor and then land it. Then if you have a thinner plane, my understanding is—I think I have this right—perhaps you need less thrust to get it off the floor. I know there is one switch, but it is noisier, or the emissions are higher. In other words, there are some choices to be made by all of us about what matters most. I don't think they are easy to get over, and there are some literally simple science facts that the industry is trying to grapple with, in terms of making progress on all fronts at the same time.

Neil Carmichael: Undoubtedly. Because, of course, if you go back to the Brabazon Committee, which effectively paved the way for the development of aviation in Britain—named after Lord Brabazon who was the Minister at the time—virtually every step we took was the wrong step, as it happens. The Brabazon was too heavy, it needed a long runway; the Comet dropped out of the sky because it had square windows; Concorde couldn't fly because it just absorbed so much fuel. Ironically, the Americans always managed, almost by accident, to get the right answer without any rational planning at all, which is an interesting comparison of a public policy.

Chair: I think we need to just bring it back to the focus if we can.

Q104 Neil Carmichael: It is quite an interesting question. Anyway, the last question: is there a rationale for lowering the rates of Air Passenger Duty if you are moving on to the ETS?

Chair: Mr Williams, do you want to come in?

Mike Williams: It links back to your question, Mr Carmichael, about emissions trading that, yes, we have to make a very sizeable reduction in CO_2 emissions by 2050, to meet the target, but the big advantage of an Emissions Trading Scheme is that you achieve that reduction in emissions in the cheapest way. So if it turns out—and I think we can't speculate about technological developments 20 or 30 years down the line—that it is particularly hard for the aviation industry to reduce emissions, then you have, through the Emissions Trading Scheme, a way of getting the emissions reduced by some other part of the economy which can more readily reduce it. You are avoiding the sort of planning effect, which you described with previous attempts to co-ordinate what happens in the aviation industry.

Neil Carmichael: Yes. I thought I would bring it all round in a circle. Thank you.

Q105 Chair: I am just going to bring in Dr Whitehead, but just on this, given that taxation is all about having public support for what the Treasury does—or hopefully having public support—and it is about behaviour change, and given the previous report of this Committee on offsets in respect of aviation, are you concerned at all that there doesn't appear to have been very much progress by the air companies in making it easier for people who do want to offset their flying to do so easily? Does that feature on your radar at all?

Justine Greening: I would say I think that is principally a matter for the Department for Transport in terms of the rest of the—I was going to say—regulatory structure, but obviously this is outside of that: the mix of things that can be done to try and bear down on aviation's impact on the environment. Obviously, we take an interest in all of this.

Q106 Chair: It is a cross-cutting agenda, isn't it?

Justine Greening: In terms of the responsibility for that particular piece you talk about, then that more readily fits within DFT.

Q107 Dr Whitehead: It is true that within carbon budgets, and obliquely within EU ETS, you can switch between heads in order to maximise the benefit of carbon reductions, even if some areas are not keeping up to the extent they might. The effect of aviation coming into EU ETS is calculated as only requiring about a 5% reduction in emissions from the aviation sector by 2020. At the same time, if the total of aviation continues to grow at the rate it is at the moment, on those sorts of figures you would have to undertake some enormous changes in other area headings in order to compensate for that very small

change. Do you think that is a problem as far as the entry of aviation in the EU ETS is concerned? I think the EU Commission has already agreed to undertake an element of auctioning in phase 3, but do you think that alone would provide the bridge, or do you think there is a problem in terms of the size of the change related to the sort of switching around that would be possible within a carbon budget?
Justine Greening: I think it is one of the reasons why, if we could drive to see the Chicago Convention changed, that would give us more options around the rest of the tax structure in relation to aviation. That would mean we could perhaps start to have more options to try and tackle some of those issues. At the moment, as Mike said, really we are left with an ETS system. Obviously, we absolutely support the fact that aviation is coming into it, but it is the mechanism principally by which we can have a fiscal incentive to bear down on aviation in terms of emissions. One of the reasons why we are keen to see whether we can make some common cause with other countries, in terms of the Chicago Convention, is that I think it would be better if we had more opportunities.
Chair: I want us to move on to the Green Investment Bank, and I am going to bring in Peter Aldous.

Q108 Peter Aldous: Thank you, Madam Chairman. Minister, thank you very much for your answers so far. Just looking to the Green Investment Bank and the announcements that were made on 23 March, which I think were threefold—the additional £2 billion of start-up funding; the announcement starting next year; and finally, not being able to borrow to 2015–16—one of the things I think the Government have promised is that before the end of May they would announce the design and operational model for the Green Investment Bank. I am conscious the end of May is approaching, and I just wonder where we are on that.
Justine Greening: That is still our intention. So, as you say, the end of May is approaching. We suggest you will be hearing something shortly.

Q109 Peter Aldous: We can expect something next week?
Justine Greening: It is not even the end of May at the end of next week. I think we are aiming to meet that timeline that we set ourselves.

Q110 Peter Aldous: One of the issues that also needs to be addressed is, there is an issue with regard to state aid that needs to be clarified with the EU Commission. I just wonder where the Government is on overcoming that particular hurdle.
Justine Greening: Mike, can you fill in the latest on that?
Mike Williams: In broad terms, we obviously need to make sure that the Commission is happy with there not being state aid difficulties. As in other areas, ultimately it is not possible to get a commitment from the Commission until you have completely specified what you are going to do, obviously. So it will be an iterative process to make sure that we are not going to re-jig the state aid rules.

Q111 Peter Aldous: Have there been any discussions with them so far on that?
Mike Williams: I think we need to write to you on that. That is not directly my area. We have a lot of areas where state aid impacts on Treasury business, so to that extent there are areas where the rules are very clear and areas where they are less clear, and we need to make sure we are operating in the right area.
Justine Greening: I think the other thing I would point out on this is it is a BIS lead, so the lead on this has come from them rather than Treasury. What we want to do is make sure that the Green Investment Bank is capitalised to a level that we think is going to make it worth while. Of course, we have had the discussion about making sure the borrowing powers are done in a sustainable way, given that debt is a big problem for our country at the moment.

Q112 Chair: On state aid, if I may, given that I think Sheryll Murray raised this issue on the previous occasion when you came before the Committee, it is a great concern to us that, if it is BIS led, it shouldn't be that we don't know what the Treasury are doing in respect of making sure there aren't going to be any last-minute hiccups through this whole issue of state aid. In terms of Peter Aldous' question, I think we would like to know chapter and verse on what the Treasury is doing on it.
Justine Greening: I think what I will say, Chairman, is that we will make sure we talk to BIS to make sure we can get you an update from them, as the lead Department, about this particular issue. But, as Mike has been right to say, clearly we will have something to get their take on in Europe once we have come out with our proposed working model later this month. I think right now, we have been having our discussions across Government about the objectives, what the structure should be, how much it should be capitalised, and there is a challenge for the EU in saying whether they think there would be any state aid issues, when we haven't finalised what that model will look like. We are nearly there now and I think at that stage the process can get properly under way, but what we will make sure we do is to clarify that process with BIS and then write to the Committee.

Q113 Peter Aldous: Thank you for that, Minister. Moving on, I believe the Chancellor did state that the seed corn of the £3 billion start up funding would help get in an additional £15 billion of investment by 2014–15, and I would be interested to know the basis on which that prediction was made.
Justine Greening: I think it is done on the basis of looking at normal venture capital; what a normal institution in this sort of arena might be expected to be able to leverage in. In some way it is contingent on the model that we end up with, but I think our sense is that that is a realistic amount that we could expect: a £3 billion capital base to be able potentially to leverage it over time.

Q114 Peter Aldous: Did you have a look at what other models in Europe, the Dutch model or the German model might have—

Justine Greening: As you can imagine we have looked at an awful lot of those different models. There is in some cases a comparability issue. If you look at those sorts of banks that we see in other countries, a lot of them were set up literally 100-plus years ago. So they are in a slightly different place and it is not always quite easy to say, "Well, they have this amount of capital base and they have leveraged in that amount of extra money". Some of them don't go on that model anyway, but I think we have had a relatively good go at understanding how much extra we can get in on the back of this capital base.

Q115 Peter Aldous: So it is a realistic, sensible assumption assessment?
Justine Greening: We believe so.

Q116 Peter Aldous: Moving on and looking at the decision to delay the ability to borrow to 2015–16, the Chancellor and the Treasury set out the reasons for that, but I am conscious that the CBI, in particular, did question the rationale for that. I will read what they said: "While the initial funding is certainly a good start, it is insufficient to make a significant impact on the total investment required. The Government has chosen to postpone the GIB's borrowing powers to avoid any adverse impact on its debt and deficit reduction targets. But as far as the financial markets are concerned, if the GIB is to issue debt, the timing of this is largely irrelevant. If investors are to have confidence in this important institution, it must have the power to raise funds on the capital markets as soon as possible". How would you respond to what the CBI have said?
Justine Greening: I think "as soon as possible" is relative. The GIB is still being set up. The business model will be planned to be put out into the public arena by the end of the month. We think that the action we took in the Budget, in terms of asset sales and adding on to that £1 billion Spending Review total, will mean that it can start investing sooner, in 2012–13. But if you look at when we are saying it should have the ability to start borrowing, in 2015–16, I think that is a pretty sensible and pragmatic balance between saying, "Well, the thing has to get up and running and we have to understand it is up and running in a way that is robust"—it is not going to be able to do it on day two—and at the same time that we want to make sure that we meet our overall public finance imperative of getting rid of the structural deficit and making our borrowing levels more sustainable.
We understand those sorts of comments, but they have to be seen in terms of, realistically, when we would want to see any new institution having borrowing powers, having just been put in place in 2012, and having made its first investments possibly some time after that. So I think that is probably a pragmatic timeline, yes.

Q117 Peter Aldous: So it is a different timescale as between yourself and the CBI, then?
Justine Greening: No, I think in many respects they probably recognise that it is a very sensible, structured approach that we are taking towards getting this bank set up. We ought to make sure it works in the long term, and I think that is the most important thing. That means making sure it is structured right and then, over time, making sure it is financed appropriately. I think that is what we set out in the Budget.

Q118 Peter Aldous: Moving on, last week the Committee on Climate Change identified that there is a crucial window of opportunity with regard to the funding of offshore wind, which is coming up in the very near future. Do you feel, with just the £3 billion and with the ability to borrow being put back, that that is sufficient to tackle that particular problem?
Justine Greening: I think that, in terms of the overall amount of investment that we need to get into low carbon power generation across the board, of which offshore wind is part, the GIB is one of the policy mechanisms to do that. I think we recognise that it is not on its own going to be enough. It is one of the reasons why we have looked at electricity market reform; we have brought through the carbon price floor because we need to improve the overall policy landscape to encourage that investment to come in.

Q119 Peter Aldous: Just one final point, when this Committee had its inquiry on the Green Investment Bank, I think the Treasury did tell us at that time that capitalising the bank from Government asset sales would not impact on your fiscal rules. Can we take that perhaps as meaning that you might consider additional funds to the GIB in due course?
Justine Greening: I think it would be very dangerous of me to pre-empt what my two Treasury colleagues—the Chancellor and the Chief Secretary—may want to agree with Departments in the future. We set out the Spending Review for the course of the Parliament, but I think we have always been very clear-cut that we want to see a Green Investment Bank set up that will be successful at the end of the day. I think the key is making sure the model is right, and making sure it is done in a way that can leverage in all of this extra external capital. I think that is the key to its success.

Q120 Chair: Will there be circumstances that would perhaps lead you at least to look at that suggestion from Peter Aldous as an option?
Justine Greening: I would say, let's get the Green Investment Bank set up first. Let's get these asset sales done. Let's get the thing moving, and I think that is probably step one, but I have no doubt that your Committee will want to look at its success over the years.

Q121 Simon Kirby: Thank you, Minister, for a very interesting afternoon. Defra are looking very carefully at valuing natural capital. Well, you can value natural capital a number of different ways, and I am wondering if you are working alongside them and whether you see any scope for any part of the tax system to help protect our natural capital.
Justine Greening: Defra are engaged in that work and, from a Treasury perspective, we would be very interested to work with them on that. The Green Book that we have in place across Government is a very good base on which already to start to place some

monetary valuation on broader environmental costs and benefits that I think, perhaps in years gone by, we haven't been able to do. In fact, there is a piece of work happening right now that—I think I am right in saying—Defra led but also with input from Treasury, which is looking at how we can improve it.
The other thing I would point out, which might get this point across to the Committee, is the French have asked to translate the Green Book.
Chair: So it is truly green.
Justine Greening: So I hope that will be seen as somewhat of a sign, because I am sure they do many things in their mind incredibly well, but this is one of the areas where they have wanted to translate our Green Book, because they clearly think it is of use. So we are very keen to continue working with Defra to make sure that we do have a better valuation of these non-financial issues, mainly because the better we can do it, then the better decision making we will get and the better balance we will get of the environmental positives and negatives of policy decisions that we may take.

Q122 Simon Kirby: That is interesting, Minister; they do have a financial value as well. Not only is there an environmental aspect; in the Conservation Credit Scheme, for instance, money derived from one place can be used somewhere else. I am just wondering—if I can press you again—how closely you have been working with Defra on that scheme, for instance?
Justine Greening: It is a Defra lead but as you can imagine, to the extent that it can weigh on business, it is going to be a new mechanism, potentially, that we bring in. Of course, Treasury wants to make sure that we feel it is something we are happy with too, but I think we do want to look at seeing how and whether we can make that sort of approach work successfully.
Simon Kirby: Okay. Thank you.
Chair: Well, thank you very much. I think we have covered quite a lot of ground, so may I thank you for your patience with us? I think we have only slightly extended our deadline on account of the Division. We very much look forward to seeing how, in the fullness of time, the Treasury can have a Green Book that is truly green and that includes environmental issues. So thank you both very much for your time this afternoon.

Written evidence

Written evidence submitted by Campaign for Better Transport

SUMMARY

- The costs from road transport outweigh the revenue raised from road transport taxes.
- Tax levels should be set as part of a package to achieve policy outcomes, particularly the urgent challenge of climate change.
- The principles that should be used in designing environmental taxes should be:
  - Fairness.
  - Effectiveness.
  - Transparency and accountability.
- Environmental taxes can help achieve policy aims but should be used alongside regulation and spending. The "one-in, one-out" rule on regulation and spending cuts will weaken the Government's ability to achieve its environmental ambitions and could mean too much reliance is put on environmental taxes alone
- Travel behaviour is not a given and dependent on past trends and can be influenced by government action.
- "Nudges" through smarter choices programmes can play a role but pricing should be part of strategies to encourage a shift towards less carbon-intensive modes of transport.
- The spending review resulted in moves which are likely to add to the cost of public transport and the Budget was a missed opportunity to address this when the Chancellor only announced measures to help motorists.
- The Plan for Growth published alongside the Budget could have supported green growth but includes attacks on the planning system which could lead to increased congestion and carbon emissions from transport.

  This submission from Campaign for Better Transport is informed by our work on transport taxation, including hosting the Transport Taxation Group, which brings together transport organisations, environmental groups, academics and consultants to discuss transport taxation issues, commission research and produce recommendations to Government.

1. *Approaches to shifting the burden of taxation to "bads" and factors to be considered when designing and introducing green taxes*

1.1 Definitions

The Committee has noted the lack of definition about what constitutes an environmental tax. Given the commitment in the Coalition Agreement to raise the proportion of environmental taxes within the overall tax take, the Committee may wish to ask Ministers how they will report back on progress. For instance the recent consultation on a carbon floor price from the Treasury defined fuel duty as a "transport tax…designed primarily to raise revenues for public expenditure",[1] suggesting that HM Treasury may not view it as an environmental tax.

1.2 Approaches to shifting the burden

The costs of the current transport system, with its reliance on private cars for personal mobility and on lorries for freight, impose significant costs/externalities. These are greater than the revenue raised from fuel duty, VAT on fuel and vehicle excise duty.

1.3 The former Strategy Unit in the Cabinet Office in its report on urban transport estimated the following costs in urban areas alone:[2]

Summary of wider costs in all urban areas greater than 10,000 population	*Costs (£bn per annum, 2009 prices and values)*
Excess delays (2009)	10.9
Accidents (2008)	8.7
Poor air quality (2005)	4.5–10.6
Physical inactivity (1998)	9.8
Greenhouse gas emissions (2003)	12–3.7
Noise—amenity (2006)	3.0–5.0

1 See para 2.10, Carbon price floor: support and certainty for low-carbon investment, HM Treasury, December 2010

2 The Wider Costs of Transport in English Urban Areas in 2009, Strategy Unit, November 2009 http://webarchive.nationalarchives.gov.uk/20100407162256/http://www.cabinetoffice.gov.uk/media/307739/wider-costs-transport.pdf

1.4 Earlier work by the University of Leeds for the then Department for Environment, Transport and the Regions also sought to estimate these costs. Using this methodology gives us high and low estimates in pence per kilometre (1998 prices) for operating costs (.42 to .54), collisions (.82 to 1.4), air pollution (.34 to 1.7), noise (.02 to .05), climate change (.15 to .62) and congestion (9.71 to 11.16).[3] In an earlier submission to the Transport Committee,[4] we adjusted these figures for inflation to give estimates in 2006 prices. This gave a figure of £70.6 billion per annum (low estimate) and £95.3 billion (high estimate) in 2006 prices; roughly two to three times the revenue raised by central Government.

1.5 Tax revenue from heavy goods vehicles also fail to cover their costs. Taking the lowest HGV costs and greatest income, calculations from various studies show that at best HGVs cover 61% of their costs—a shortfall of up to £3.35 billion a year.[5]

1.6 Not all of motoring's impacts can be quantified satisfactorily. The permanent loss of ancient woodland to road building, or the impact of noise on once tranquil environments simply cannot be quantified and efforts to do so merely trivialise the impact. Similarly the impact of nocturnal traffic noise on sleep varies according to the amount of sleep lost; few would begrudge being woken once by a particularly loud vehicle, but the aggregate impact of being woken every night is far more costly than the sum of its parts. Recent research has also suggested that the costs from noise may not just be to amenity, but will also have health impacts.

1.7 There is no agreed consensus as to which marginal external costs should be included, and therefore how much damage roads traffic can be said to cause. Pro-motoring organisations dismiss many of the external costs included in the above calculation, and therefore arrive at a much smaller figure (conveniently below that taken by the Treasury in motoring taxation)[6]. Environmental groups would broaden those externals even wider, including, for instance, the cost of social exclusion caused by the centralisation of services designed around car use (such as the closure of local post offices or hospitals, and the resultant impact on rural communities). There will also be costs to society from the impacts of traffic on social capital, including its severance effect between neighbourhoods and also in terms of affecting neighbourhood friendships.[7]

1.8 All of this means that, given the lack of consensus over the true level of costs, it is difficult to expressly link the level of taxation to the external costs. Instead, it may be useful to think of taxation as part of a package for achieving environmental goals and targets. This is especially important with respect to climate change, where scientific consensus is that climate changing emissions should be controlled so that global temperature increases are kept to within 2ºC, and that beyond this point substantial changes to the world's climate are likely. In this case debate about external costs and values of carbon become academic, and the focus of taxation and other policy must be to meet these scientifically-based limits. The Government should therefore clearly set out how it is using the money raised from fuel duty and VED to reduce dependence on oil, especially for transport, and enable us to meet our climate change targets.

1.9 There is in fact no conflict between this and supporting a strong economy. Peak oil is now widely accepted as a phenomenon and this will imply continued high/unstable oil prices with consequent economic impacts. There is therefore a strong economic as well as environmental imperative for reducing dependence on oil for transport.

1.10 Factors to consider for designing and introducing environmental taxes

In our view, there are three key principles for the design of new environmental taxes. These should be:

- Fairness:
  - Taxation that recovers some of the costs from activities that are environmentally damaging should be focussed on those who benefit from that behaviour, rather than from taxes on the general population. Within this, it should focus on those whose behaviour adds most costs.
  - There should be opportunities for people and organisations to shift away from environmentally damaging behaviour in response to environmental taxes. In particular, Government should take active steps to ensure that those on lower incomes have alternatives.
  - The intended outcomes need to be fair between generations, for instance ensuring action now on CO2 rather than down the line when the impacts of global warming become more severe.

[3] Surface Transport Costs and Charges: Great Britain 1998, Sansom et al., 2001, http://www.its.leeds.ac.uk/projects/STCC/downloads/SurfaceTransportCostsReport.pdf

[4] See http://www.parliament.the-stationery-office.co.uk/pa/cm200809/cmselect/cmtran/103/103we23.htm

[5] Heavy Lorries: do they pay for the damage they cause, MTRU 2008, http://www.bettertransport.org.uk/system/files/heavy_lorries_MTRU_research.pdf

[6] See, for example, the Taxpayers Alliance report, "The Burden of Green Taxes", which dismissed every external save the cost of highway maintenance. It justified ignoring the cost of road traffic collisions and fatalities because the measures taken to reduce collisions, such as "driving tests, speed limits, speed cameras and… speed bumps… impose significant costs on drivers", as though the cost of travelling within the speed limit equated to the cost of being hit (and possibly killed) by a driver.

[7] See Driven To Excess: A Study of Motor Vehicle Impacts on Three Streets in Bristol UK, Joshua Hart, University Of The West Of England http://www.walk21.com/papers/Josua_Hart.pdf

- Effectiveness:
  - Transport taxes should be simple to operate, for instance focussed on market transactions in transport rather than related to overall emissions where the information required may be overly onerous or allow avoidance by polluters.
  - Taxes should give a clear price signal at the point at which organisations or individuals are making decisions.
  - Taxes should influence decisions to shift to less environmentally damaging behaviour and avoid shifting behaviours to other actions which are environmentally damaging. As such, taxes should work as a package and be combined with regulations or incentives (such as feebates) to encourage shifts to less environmentally damaging behaviour.
- Transparency and accountability:
  - The Government's stated purpose for a tax should be consistent with what any revenue from that tax is spent on. It would be inconsistent, for instance, to state that motoring is taxed to cover the damage it causes to society but to invest the revenue in defence or education, because neither addresses the stated cause for the tax.
  - Taxation policy which links the penalising of polluting behaviour with the funding of greener behaviour is more politically acceptable than just penalising damaging behaviour. With "green" taxes, public support hinges on whether the revenue is earmarked for environmental ends; ie whether the revenue tackles the problem or expressly encourages less damaging behaviour. A poll by the Green Fiscal Commission showed that while 51% of people supported green taxes, this rose to 73% where revenue was hypothecated towards reducing CO_2 emissions.[8]

1.11 Environmental taxes are one of the measures available to Government to achieve environmentally positive outcomes. HM Treasury, in their written evidence to the recent Treasury Committee inquiry on the principles of taxation said that "the tax system can be used to support wider objectives, but if tax policy is used to support these objectives it should be judged as representing the best value for money with respect to alternatives such as regulation or spending."[9]

1.12 The Government's inflexibility on new regulation (the one-in, one-out rule) coupled with spending cuts means that there may be a temptation to see environmental taxation as the default move to promote environmental objectives. The planning system also plays a strong role in delivering positive environmental outcomes and mediating between competing interests but is in danger of being weakened (as discussed in the final section of this submission).

1.13 There is in fact good evidence that travel behaviour can be changed. There has been a lot of attention to the changes in travel behaviour in London since the introduction of the congestion charge and other measures, which have led overall to a 6% decline in distance travelled by car from 2000 to 2009 compared to a national increase of 8%.

1.14 However, there is also evidence that travel behaviour can be changed in smaller settlements and among a wide range of individuals. The Sustainable Travel Towns and Cycling Demonstration Towns have shown increases in cycling use and in public transport and reductions in car use. These were achieved through the application of "nudge"-type measures known as "smarter choices": a 2004 literature review for DfT identified the potential for significant shifts in travel behaviour and cited significant changes in behaviour in journeys to schools and workplaces and in car use and car sharing.[10]

1.15 The DfT is taking this forward with the Local Sustainable Transport Fund. Reinforcing such measures with local/national fiscal measures will enhance their effectiveness—and by the same token smarter choice measures will give more people real choice in how they travel and help enable them to reduce the motoring taxes they pay.

2. *Scope for tax system to create modal shift to lower carbon alternatives*

2.1 Role of fuel duty, VED and pricing in modal shift

Fuel duty and VED meet some of the factors above. They:

- Recover costs from those whose behaviour creates the costs to society and will recover more from those travelling longer distances or in more polluting cars.
- Are relatively simple to operate.
- Can give clear price signals (eg the showroom tax element of vehicle excise duty).
- Influence decisions to move to less environmentally damaging behaviour.

[8] Green Fiscal Commission, Public Attitudes to Environmental Taxation, November 2007, http://www.greenfiscalcommission.org.uk/images/uploads/baselinepoll.pdf

[9] See evidence from HM Treasury to Treasury select committee on the principles of taxation http://www.publications.parliament.uk/pa/cm201011/cmselect/cmtreasy/753/753.pdf

[10] Smarter Choices—Changing the Way We Travel, DfT, 2004

2.2 However, there are some problems:

— The variability of convenient alternatives to the car or lorry.

— The price of alternatives may be higher or perceived as higher.

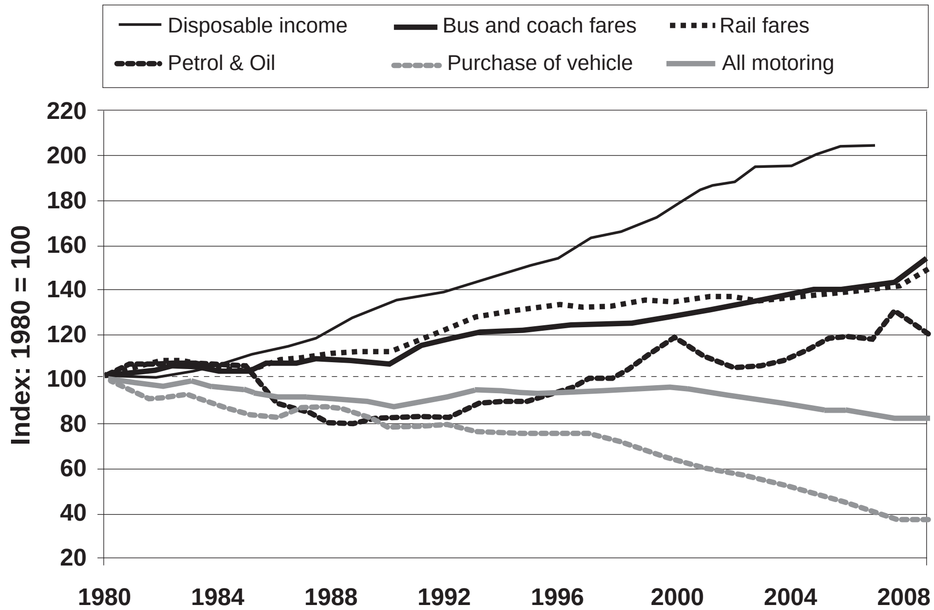
— Lack of transparency and accountability over how the sums are used and how they help people to move to less damaging behaviours.

2.3 In general, transport taxes can play a helpful role in reducing emissions. Comparisons of carbon emissions by transport mode suggest that rail and bus generally result in substantially fewer emissions per passenger-km than either car or air travel. Therefore a transport policy that supported an increase in the modal share of public transport within a given overall level of transport demand could help to deliver significant reductions in emissions.

2.4 In principle, such a policy would include measures designed to ensure that the costs of carbon emissions were properly reflected in the price of each mode, thereby encouraging greater use of public transport in preference to higher emission alternatives. However, over the last two decades, public transport fares have increased significantly while the overall costs of motoring have been falling. Public transport fares in the UK are some 20% above the European average. Together with the Netherlands, we have the highest modal share for car of all the EU 15 countries.

2.5 These outcomes support the view that, in practice, relative transport prices in the UK have tended to encourage car ownership and use and suppress the demand for public transport. They also suggest that Government does not apply a holistic pricing policy across transport modes. Such a policy is essential if the trends in relative prices experienced in recent years are to be reversed. The graph below shows the changes in the costs of different modes since 1980 compared to disposable income.

2.6 Changes in the real cost of transport and in income: 1980 to 2009, United Kingdom[11]



2.7 At the same time, the growth of car travel has been moderated and even reversed during periods of high motoring fuel costs, as can be seen at the present time. Further, the introduction of concessionary bus fares for the over 60s across the UK appears to have stimulated demand, while growth in some rail markets has been partly achieved by competitive pricing on the part of train operators. This experience highlights the potential for using transport pricing in order to influence travel decisions in general and modal choice in particular, and demonstrate that Government is sometimes willing and able to send strong signals through price mechanisms.

2.8 In order to test this potential further, we commissioned Steer Davies Gleave to develop a simple Transport Demand and Emissions Model, drawing on the results of research into the price elasticity of demand for different types of travel undertaken in recent years. The model allowed SDG to assess the effect of changes in relative transport prices in terms of changes in modal demand and emissions levels from a base case. Their model results suggested that a 20% reduction in public transport fares would increase bus travel by 13% and rail travel by 17% within eight years. This would have grown the use of bus and rail travel combined so that it would now be at a level of public transport use not achieved since 1960.

2.9 However, the model also demonstrated that changes in motoring costs as well as fare reductions are needed to make a significant impact on carbon emissions. The results indicated that a package of measures, involving increases in motoring taxation combined with substantial reductions in bus and rail fares, would

[11] Taken from p36 of Transport Trends 2009, DfT, 2010

reduce the share of car travel in overall transport demand from 87% in the base case to around 78% by 2025. They also suggested that the use of aviation taxation to improve the competitiveness of rail in longer distance markets could secure a significant reduction in aviation emissions. SDG estimated that overall, under a Maximum Impact Scenario, carbon emissions from transport could be reduced by some 16 million tonnes per annum, around 13% of base case emissions, by 2025.[12]

2.10 Impacts of changes announced in the Budget

The recent cut in fuel duty and new policy on future increases will not make major differences to the price of fuel but will reduce revenue. If the Government were to attempt significant interventions to cut prices by cutting fuel duty it would be unaffordable. To bring the price of fuel down to December 2009 levels would potentially cost the taxpayer almost £6 billion in the first year alone.[13]

2.11 Neither would it be sensible to introduce a fuel duty stabiliser. Last summer, the Office of Budgetary Responsibility (OBR) produced a short report exploring the impact a stabiliser would have. It concluded that, contrary to expectations, overall tax take fell as the price of fuel rose, because increase fuel duty was offset by lower spending across the economy as a whole.

2.12 Even if we could afford to, we should not embark on a futile attempt to hold prices down by cutting fuel duty. The cost of fuel is high at the moment because of temporary instability in the Middle East. That will not last forever, and prices will come down in the medium-term. But in the long-term, the price of oil can only go in one direction. There is not enough oil to keep track with rising demand; extracting what little is left will only get harder and more expensive.

2.13 The increasing necessity to cut carbon emissions from transport (the sector where least fundamental progress has been made) means that we need to enable changes to the way that people travel, and attempts to have cheap fuel would merely delay the ability to make those changes.

2.14 Whilst the Government is keen to be seen to be addressing the concerns of drivers over the costs of fuel, they have decided that most rail fares will rise by 3% above the RPI rate of inflation from 2012 (up from the current RPI+1% formula) and they are cutting the direct support for bus services by 20%.

2.15 Campaign for Better Transport recognises that the high price of fuel is putting a significant burden on some lower income households who have fewer transport options and rely on the car, particularly in rural areas. However, the overall impacts on the poorer households of higher fuel duty is less than for middle income households as many of those on low incomes do not own a car (as the IFS have shown).[14] Instead, they will be much more affected by rises in bus fares.[15]

2.16 As Chancellor, Gordon Brown promised in 1999 that any rises in fuel duty above the rate of inflation would “go straight to a ring-fenced fund” to modernise the transport system.[16] That never happened. The Government should learn from Gordon Brown’s mistake and use fuel duty revenue to make sure alternatives are affordable and that our mix of transport is not so dependent on oil.

2.17 On aviation, Campaign for Better Transport welcomes the proposed extension of air passenger duty to business jets, which we have called for previously. These journeys contribute 30 times more carbon dioxide per passenger than similar scheduled flights.[17] We are disappointed that the Government does not feel able to progress the proposal for a per plane duty. The Government should work with other partners internationally to remove barriers to the introduction of a per plane duty and look at how freight and transit passengers could be covered.

2.18 Our submission to the Treasury before the Budget also recommended introducing emissions based VED differentials for vans and to remove the distortion resulting from not charging employee national insurance contributions on company cars which would reduce the incentive to skew remuneration packages.

3. *Plan for Growth*

3.1 The Plan for Growth announced alongside the Budget contains a number of proposals that could have a negative impact on the environment for little in the way of sustainable economic development. The Department for Transport’s white paper on local transport has an approach which focuses on delivering CO2 reductions which can also support local economies.[18] In contrast, it is disappointing that the Plan for Growth proposals

[12] Transport Costs and Carbon Emissions, SDG for Campaign for Better Transport, December 2008 http://www.bettertransport.org.uk/system/files/Transport_costs_and_carbon_emissions.pdf

[13] See Green Alliance report http://www.green-alliance.org.uk/uploadedFiles/fuel%20stabiliser%20brief%20-%20final.pdf

[14] See IFS briefing note 8 (http://www.ifs.org.uk/bns/bn8.pdf). See http://www.ifs.org.uk/publications/5503 on the real terms fall in fuel duty over much of the period since 2000.

[15] See Citizens Advice and Campaign for Better Transport report Transport, Social Equality and Welfare to Work http://www.bettertransport.org.uk/system/files/Transport_social_equality_welfare_work.pdf

[16] Pre-budget report speech, November 1999. See http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/prebud_pbr99_speech.htm

[17] See http://www.bettertransport.org.uk/system/files/BetterTransport-Bizjets-fuel-tax-report-Mar10.pdf for information on emissions from private jets.

[18] Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen, DfT, January 2011

seem to consider that these are in opposition and that facilitating economic growth requires the removal of measures in the planning system which can protect the environment. There are three particular concerns.

3.2 Firstly, the effect of the presumption in favour of sustainable development could have a negative impact on the environment but will depend very much on the new National Planning Policy Framework (NPPF). An important purpose of the planning system, as presumably it will be of the NPPF, is to mediate between competing interests, such as:

- Different commercial interests.
- Private / commercial and public interests.
- Short and long term interests (particularly long-term need to cut carbon and address long-term rises in energy and fuel costs).
- Local benefits or costs and those that are spread over a wider area (for instance the costs arising from traffic and congestion elsewhere from a decision to approve an out-of-town business park which may be thought to create jobs in the local area).

3.3 It is essential that the NPPF should underline the strong connection between transport and planning and that it should attach the highest importance to reducing carbon and other environmental impacts and to tackling congestion. The Government has said in the Coalition Agreement that it needs to use a wide range of levers to cut carbon emissions, decarbonise the economy and support the creation of new green jobs. The planning system is one of the strongest levers at its disposal. The NPPF should require that development be sustainable, making clear that sustainability requires reduced carbon emissions and reduced energy consumption and that development should be planned for the long term not just to obtain short term benefits.

3.4 The second concern is that the proposed Enterprise Zones will repeat from the mistakes of the past. The locations should not be out of town office or retail centres which can suck the economic life away from city and town centres. The prospectus for enterprise zones published by CLG included the recommendation that Enterprise Zones should be based on "clean" sites which have few or no current businesses and under the ownership of one landowner. This will mean that many Enterprise Zones will be located on greenfield sites.

3.5 It is also proposed that planning in Enterprise Zones can be simplified through the use of local development orders (LDOs) which would exempt certain classes of development from the planning system. The prospectus suggests that an LDO can be approved in just two months but this appears to be based on the shortest possible consultation and runs against guidance on LDOs which calls on local authorities to carry out informal consultation in the first instance, and then to consult on a draft for a minimum of six weeks, followed by revisions to produce a final LDO.

3.6 Finally, the Plan for Growth also suggests changes to policies to localise planning to give private companies a greater role. This includes the suggestion that for the purposes of developing a neighbourhood plan, a private company could be considered as a neighbourhood group. This risks subverting proposals to give communities greater say in the planning system which would discredit the process.

21 April 2011

Written evidence submitted by the Aldersgate Group

EAC Inquiry

The Environmental Audit Committee (EAC) is launching an inquiry into the environmental impact of Budget 2011 and green taxes. The Committee will examine how well green taxes are being used to deliver environmental goals and aid the transition to a low carbon economy, and whether Budget 2011 strikes the right balance between these aims and broader economic objectives. The Committee also wishes to examine sustainable development and environmental protection aspects of "The Plan for Growth" published alongside the budget.

Aldersgate Group (AG)

The AG is an alliance of leaders from business, politics and society that drives action for a sustainable economy. The views expressed in this document can only be attributed to the AG and not individual members.

Summary

- The UK requires a comprehensive green growth strategy that goes beyond reducing the budget deficit and drives a dynamic economic recovery. The UK is losing momentum in the green economy race and there is only a small window of opportunity to assert leadership in the years ahead. A strong regulatory and fiscal framework that is credible, consistent and bankable will be vital for success.

— In this context, the 2011 Budget and corresponding growth strategy is a missed opportunity and there will be only a marginal impact to the development of the green economy relative to international competitors. The Roadmap to a Green Economy, to be published shortly, should adopt a more comprehensive approach.

— The key measurable for "increased investment in low carbon technologies" in the Plan for Growth is being achieved by the majority of G20 nations and should be a relative target as opposed to an absolute target.

— The AG supports the Government objective to introduce a carbon floor price to provide more stability to carbon prices. Further consideration needs to be given to making the trajectory of the floor price more credible with investors, such as through contractual obligations. Measures to avoid windfall profits for low carbon projects that pre-date this measure should also be considered.

— Carbon regulation should be streamlined to move towards alignment of carbon prices that apply to different sectors of the economy.

— Well-designed regulation can spur growth, innovation and competitive advantage. As such, the regulatory reform framework needs to advocate and articulate what is good regulation and focus on removing bad regulation. The general portrayal of regulation as anti-growth in the 2011 Budget is misguided.

— The sectoral growth reviews should incorporate an explicit *greening* element and future growth reviews should focus on sectors that must play a leading role in the transition to a sustainable economy.

— The changes in the zero carbon homes policy risk undermining not only the confidence in firms that have developed innovative solutions to deliver what was a progressive policy, but wider investor confidence in early markets supported by ground breaking green policies. Additional policy is required to reduce significantly non-regulated emissions (where the agents of the emissions are the occupiers rather than the housebuilders) and encourage industry leaders to build homes that are truly capable of being carbon neutral.

— The additional funds for the GIB are welcome but the date the bank can borrow should be brought forward to maximise private sector leverage. A fully independent, accountable and enduring institution must be established in statute in 2011–12 with a clear low carbon investment mandate.

— The Government needs to clarify its commitment to increase green taxes as a proportion of total tax revenues, such as adopt a target for at least 10% by 2015.

— The Fair Fuel Stabiliser is a missed opportunity to reduce taxes on income rather than petrol.

— The announcements on additional apprenticeships and strengthening STEM skills are welcome but there is no explicit strategy to prioritise the skill needs to drive the economy through the environmental transition.

— It is welcome that the Plan for Growth is committed to use "the £236 billion pubic procurement power to drive new markets in green products and services" but there is a significant disconnect between this objective and the current policy environment where the short-term, lowest cost solution dominates. Further clarification is required on how the Government seeks to achieve its aim.

— The National Planning Policy Statement must introduce robust criteria for "sustainable development" in the planning process. This announcement puts a great deal at stake in getting this definition to be demanding and robust, to avoid the environment suffering at the hands of inappropriate development.

AG Response

1. On 1 March 2011, the AG launched a report entitled *Greening the Economy: A strategy for growth, jobs and success*. The report sets out the case for a comprehensive green growth strategy that goes beyond reducing the budget deficit and drives a dynamic economic recovery. The UK is losing momentum in the green economy race and there is only a small window of opportunity to assert leadership in the years ahead. A strong regulatory and fiscal framework will be vital for success, combined with a concerted push to get behind those sectors that have competitive advantages.

2. This response to the EAC inquiry summarises the main points from *Greening the Economy* and outlines to what extent the 2011 Budget announcements meet the AG's recommendations.

Background

3. *Greening the Economy* argues that how each nation addresses the challenges of a resource constrained world will increasingly determine its future economic competitiveness. Economies must be transformed to provide rising prosperity to citizens, strengthening new growth sectors and modernising traditional sectors. UK policy should focus on three core elements: building a globally competitive green economy, stimulating export growth and attracting inward investment from foreign based firms.

4. Policies to enable the transition to a sustainable economy will generally require investment in the short term to maximise returns in the long term. Not only is the scale of the task enormous and the timetable challenging, but the pressure on public finance is considerable. Nonetheless early mover advantage is essential to drive success and a number of interventions have the potential to raise significant funds for the public purse.

5. The world is engaged in a green economy race and acting early will ensure that the UK is well positioned to attract global investment, stimulating job creation and export growth. While the UK's economy has strong green foundations on which to build, it is rapidly losing ground to developing nations and other competitors. This trend is directly related to aggressive regulatory and fiscal policy packages that countries are putting into place, not least China's new Five Year Plan that seeks to underpin a "clean revolution" in its economic development and India's National Action Plan on Climate Change that is projected to stimulate US$1 trillion of investment over the next decade.

6. To lay the foundations for a more resource efficient and competitive economy, the UK needs an intelligent and dynamic policy framework that corrects market failures. Otherwise green investments will flow to more attractive markets or develop at too slow a pace. The most effective policies will provide as much certainty as possible by being:

— **Credible**. Legal, enforceable, fully deliverable and supported by an overarching vision.

— **Consistent**. Providing confidence that a policy direction will be maintained, implementing progressive, and avoiding retrospective, changes.

— **Bankable**. Risk and reward levels are attractive over clear investment timeframes, with no shocks to damage early investors.

Growth Strategy

7. The Plan for Growth,[19] published alongside the 2011 Budget, recognises that "Britain has lost ground in the world's economy, and needs to catch up". It states that "if we do not act now, jobs will be lost, our country will become poorer and we will find it difficult to afford the public services we all want. If we do not wake up to the world around us, our standard of living will fall, not rise." Although this is intended to be a general statement, the AG believes that it is particularly relevant to addressing environmental challenges and the opportunities presented by the green economy.

8. The Chancellor made clear that last year's emergency Budget was about "rescuing the nation's finances" and the 2011 Budget was focused on creating "enduring growth and jobs in the future". However, "the green energy revolution and our determination to be the greenest government ever" has been shown to be only marginal to the Government's overall growth strategy and this is a missed opportunity. The Roadmap to a Green Economy, to be published shortly, should adopt a more comprehensive approach.

9. To be successful, green growth measures need to be incorporated into all policy decisions. A number of the policy announcements, such as the sectoral growth reviews and introduction of enterprise zones could have incorporated a greening element without changing the overall policy direction significantly. There must be greater recognition of the role of regulation to drive new markets and stimulate innovation. Furthermore, the level of overall ambition must match the green growth strategies that are being implemented around the world. At best, there will be incremental development in the green economy relative to competitors and not the step change that is required.

Driving Growth in Green Technologies

10. An important aspect of the green economy is a flourishing low carbon and environmental goods and services (LCEGS) sector, including renewables, waste management, energy management, water management and low-carbon vehicles.

11. While the industrialised world has been the mainstay of the green economy over the past decade, the UK and EU are losing momentum to competitors. Many developing countries are winning market share and increasing their carbon productivity, driven by the high proportion of green spending in stimulus packages and a strong turnaround from the global recession.

12. Ernst & Young's analysis of the relative attractiveness of countries for renewable energy investments demonstrates that "a new world order is emerging in the cleantech sector with China now the clear leader in the global renewables market".[20] The research finds that manufacturers in the West need to be particularly innovative if they are to preserve their share of the market, and are likely to need a greater proportion of Asian product to remain cost competitive.

13. HSBC predicts that the share of the three largest industrialised low carbon markets (EU, USA and Japan) will fall from 60% in 2009 to 53% in 2020, while the share of the three leading major emerging markets (China, India and Brazil) will grow from 25% to 34%. Its research also suggests that the market will primarily

[19] HM Government (March 2011) *The Plan for Growth.*

[20] Ernst & Young (November 2010) *Renewable Energy Country Attractiveness Indices.*

be driven by energy efficiency themes, notably low carbon vehicles such as plug-in hybrid and full electric vehicles, that will surpass low carbon power as the major investment opportunity.[21]

14. Green growth is directly related to aggressive regulatory and fiscal policy packages that countries are putting into place around the world. The market in 2011 is fiercely competitive as businesses strive to achieve first mover advantages. In the words of Barack Obama; “nobody in this race is standing still”. The UK must ensure it has the right policy framework in place to deliver growth, innovation and decent jobs in the markets of the future.

15. It is therefore welcome that “increased investment in low carbon technologies” is a measurable benchmark to meet the Government’s ambitions to encourage investment and exports as a route to a more balanced economy. It is likely that the five actions outlined in the low carbon section, including energy market reform, the creation of the Green Investment Bank and support for CCS demonstrations, will be sufficient to meet this objective. However, the target of “increased investment” is lacking in ambition. Almost every country in the G20 increased its investment in clean energy in 2010 and this trend is forecast to continue over the next decade. The bar should be raised so that the target is a *relative* measure rather than an *absolute* measure. It should be noted that the Plan for Growth uses relative measures to ascertain the UK’s overall competitiveness and export growth.

16. In comparison to international competitors, the UK is losing ground in the green economy and policy uncertainty is damaging investor confidence. A report published after the 2011 Budget by the Pew Charitable Trusts on the global green economy race finds that investment plummeted in the UK in 2010 relative to competitors. After achieving a fifth-place ranking for clean energy investments in 2009, it finds that the United Kingdom dropped out of the top 10 in 2010. It states that:

> *“Investment levels in 2009 were driven by large volume financings for offshore wind energy and the government’s commitment to strong action on climate change. But 2010 brought a new government to Great Britain, and investors appear to believe that there is a high level of uncertainty about the direction of clean energy policymaking in the country.”*[22]

17. *Greening the Economy* argues that an important element of policy certainty is “consistency” and ensuring that “a policy direction will be maintained, implementing progressive, and avoiding retrospective, changes.” A lack of consistency in one policy area can damage investor confidence in another area by increasing policy risk.

18. For example, the Government’s recent announcement that it will reduce feed-in tariff (FIT) support for large solar projects from August risks damaging investor confidence significantly. The AG considers this to be a retrospective change that penalises investors, as projects are generally expected to take around eighteen months to complete but were given less than a six month deadline to register. This is compounded by the Budget announcement that FIT businesses will be excluded from tax reliefs afforded by Venture Capital Trusts (VCT) and the Enterprise Investment Scheme (EIS). This comes at a time when, according to Pew Charitable Trusts, “purchases of small-scale, distributed, clean energy technologies were a new and important force driving clean energy investment to record levels in 2010. Investment in small-scale projects among G-20 members grew by 100%, doubling annual investment to $56.4 billion. A massive surge in rooftop solar energy projects in Germany accounted for more than half of all smallscale investments. Significant investment in small-scale and residential projects also occurred in Japan, the European Union (especially France and Italy) and the United States”.[23]

19. The Budget commitment that all four CCS demonstrations will be funded by general taxation is welcome and, if enacted effectively, will help drive competitive advantage for the UK in this area. According to AG member Matthew Spencer, Director of Green Alliance, this “will create more certainty, and raises the chances that the UK can win the lion’s share of EU CCS funding.” The review of CCS needs to consider a wider role for industries beyond fossil fuel power plants.

20. There is also a strong case for the Government investment target in the Plan for Growth to go “*beyond carbon”* by seeking to promote and assist the whole LCEGS sector. The Environmental Industries Commission’s 2011 Policy Manifesto argues that “by focusing on ‘low carbon’ growth and not the other, equally important, environmental and sustainability issues, we risk forfeiting a large share of the £3 trillion global environmental marketplace”. It recommends that “an overall strategic approach to green jobs and skills must address issues related to water pollution, air quality, land contamination and soil quality, and the efficient use of resources.”[24]

Transforming the Whole Economy

21. Building a more competitive economy is not just a question of establishing a flourishing environmental technologies sector. Primarily, it is concerned with modernising the entire economy and transforming conventional business models. To ensure success, the Government’s regulatory and fiscal framework should

[21] HSBC (September 2010) *Sizing the Climate Economy.*
[22] Pew Charitable Trusts (March 2011) *Whose Winning the Clean Energy Race?*
[23] Pew Charitable Trusts (March 2011) *Whose Winning the Clean Energy Race?*
[24] Environmental Industries Commission (April 2011) *Policy Manifesto 2011: Driving Growth and Competitiveness in the UK’s Green Economy.*

adopt a broad approach. The entire economy must be made more sustainable with greater prioritisation given to energy efficiency and technological innovations for improving the processes of established industries. This must:

- Ensure that prices reflect environmental realities;
- Adopt a regulatory approach that prioritises long-term value;
- Embed sustainability across public policy;
- Incorporate a lifecycle approach to resource use;
- Address climate and resource risks; and
- Enable a socially just transition.

Pricing externalities

22. Current prices are a long way off providing a sufficient incentive for investments at the pace and scale required to meet environmental challenges. This can most clearly be illustrated by the inadequacy of current policy to create a sufficiently stable, high and credible carbon price, primarily through the EU ETS.

23. The AG supports the Government objective to introduce a carbon floor price to provide more stability to carbon prices. Further consideration needs to be given to making the future trajectory of the floor price bankable, especially as it rises to 2020 and beyond. One option would be to distance the price from government control by giving the Committee on Climate Change the power to set the floor price, according to progress towards meeting the statutory carbon budgets, in a similar way to the process by which the Monetary Policy Committee sets interest rates. Another mechanism would be if the carbon floor price commitment was embedded with a contractual obligation.[25] As a result of the increase in energy bills, some of the revenues from the carbon floor price should be directed to alleviate fuel poverty and/or increase take up of the Green Deal. Measures to avoid windfall profits for low carbon projects that pre-date this measure should also be considered.

24. More widely, the carbon floor price will add further complexity to the regulatory framework that has resulted in a wide range of carbon prices that apply to different sectors of the economy. The AG recommends that these should be streamlined to ensure that climate mitigation is undertaken in the most efficient way. For example, the AG believes that the regulatory burden on both businesses and the public sector could be eased by more considered design of the different schemes for reporting and reducing emissions. Organisational boundaries, scope rules, period of reporting and evidence/audit requirements should be unified as far as possible. The delay in the CRC Energy Efficiency Scheme (CRC) Phase 2 offers an opportunity to achieve this (at least for the CRC scheme and for mandatory GHG reporting) so that organisations can collate data once for multiple reporting purposes. Such streamlining should be designed in such a way as to maintain or increase projected carbon emission reductions, protect revenues to HM Treasury and provide stronger signals for good performance (by building in a reward system above the threshold for the revenues that are directed to HM Treasury).

25. The Chancellor also announced that the Government are "extending the Climate Change Agreements (CCAs) to 2023, and increasing the Climate Change Levy discount on electricity for those who sign up from 65% to 80% from April 2013… (to) help our most energy intensive industries." This move clearly acknowledges the value of incentives and the government must use the review of the CRC to give a similar differential advantage to top performers, for example by increasing the price of allowances and providing the opportunity for participants to receive that increase back for good performance. This could be constructed in stepped rebates and would re-activate the larger energy efficiency investments which have stalled since the CRC was reduced to a single rate tax. Consideration of amalgamating the CRC with the CCA should be addressed in the consultation on proposals to simplify the CCAs that will be published in summer 2011.

26. The current policy framework to drive carbon prices may be developing, but we have only started to scratch the surface in terms of accurately pricing other resources. In a world where the efficiency of resource use matters more and more, this is critical. The AG's *Beyond Carbon* report notes that there are significant political and economic difficulties in pricing externalities even when we think we understand them, but that there are also many externalities which are poorly understood. A major international research effort on the economics of ecosystems and biodiversity (TEEB) draws attention to the long-term costs and benefits of ecological systems but we are a long way from being able to calculate or allocate the external costs accurately.

27. There is significant scope for the taxation system to protect and increase stocks of natural capital. For example, the tax system could reward those businesses delivering environment goods such as new native woodland creation as actions such as this deliver on both climate change mitigation (carbon absorption) and adaptation through the creation of habitats for wildlife. However, the justification for such taxes should not be based on the idea that prices can accurately and comprehensively internalise the external cost. Taxation policy should be informed by the general knowledge that natural capital is valuable and seek to protect natural capital stocks effectively and efficiently.

[25] Climate Change Capital (March 2011) *The UK Carbon Price Floor: How to enhance its credibility with investors.*

Regulation

28. Pricing policy alone is not sufficient to drive investment in environmental technologies and resource efficiency. As a result, a regulatory approach that prioritises long-term value is required that addresses the full range of barriers and does not "lock in" existing technologies or practices.

29. The AG is concerned with the general portrayal of regulation as anti-growth in the 2011 Budget and the lack of flexibility in the Government's regulatory reform proposals. For example, the Plan for Growth states that the "burden" of regulation is damaging the competitiveness of the UK economy and justifies this with a crude measure of the cumulative additional cost to business of new regulations introduced since 1998 at £90 billion a year. "A lower domestic regulatory burden" is a key measurable to make the UK one of the best places in Europe to start, finance and grow a business.

30. A more informed debate on regulatory reform is required which makes a distinction between:

- Outdated regulations that have not kept up with changing cultural attitudes and technological developments; and
- Addressing fundamental market failures that protect society and the economy from systemic risks (such as in the areas of finance and the environment).

The Government believes that climate change, for example, is one of the "gravest" challenges we face. It is widely recognised that the costs associated with addressing this challenge effectively will rise and that in these fiscally constrained times, regulation will increasingly be the most effective way to change behaviour, provide certainty and encourage investment. Therefore, an overly rigid regulatory reform framework alongside the objective of "a lower domestic regulatory burden" risks hampering the Government's environmental objectives and damaging UK competitiveness in the long-term. The debate on regulatory reform should not be presented as a trade off between markets and regulation but how each work in mutual support with aligned objectives to deliver sustainable outcomes.[26]

31. This point is illustrated by recent media reports that the provisions to introduce mandatory carbon reporting in the Climate Change Act may not be enacted due to the Government's drive to reduce the regulatory burden. This is despite significant support from the business community, including the Aldersgate Group, and the CBI. Such a framework would help companies to identity cost savings and lead to a level playing field, allowing investors and consumers to make meaningful comparisons. A final decision on mandatory carbon reporting should be made on reflection of the perceived costs and benefits of the policy, rather than due to restrictions in the introduction of new regulations.

Lifecycle approach

32. The AG argues that physical accounting for the use of key resources on an economy wide basis, alongside monetary accounting, would help to make more balanced and robust decisions. This would systematically track the flow of materials through the economy with the associated environmental impacts (including an analysis of embodied carbon).

Dynamic Sectors

33. The most effective way to stimulate green investment is on a sectoral basis due to the large number of specific barriers and solutions that each sector faces. This will be crucial to deliver the Prime Minister's vision for a new economic dynamism that seeks to create the right framework for business investment. It will drive growth in those industries where Britain enjoys competitive advantages, making it easier for new companies and innovation to flourish.

34. The lack of an explicit *greening* element to the sectoral growth reviews in the Plan for Growth demonstrates a lack of a joined-up approach to accelerate the transition to a sustainable economy. For example, the Government could have provided incentives to promote innovation for green technologies in advanced manufacturing, strong policy frameworks to drive demand for green ICT in the digital and creative industries, adopt a number of recommendations from the IGT report by Paul Morrell to drive opportunities in low carbon construction and instigate measures to incentivise eco-tourism. The Government should address how each of the growth sectors can address environmental challenges to drive UK competitive advantage and ensure that future sectoral growth reviews adopt a *greening* element from the outset.

35. The Government must also ensure that future growth reviews focus both on sectors that must play a leading role in the transition to a sustainable economy (such as automotive, aerospace, the built environment and farming) and the LCEGS sector (such as offshore wind, CCS, wave and tidal technologies and water treatment). In the LCEGS sector, demand side policy must be matched by the development of the supply side. For offshore wind, this includes the explicit development of UK-based engineering and construction capacity. A failure to do this effectively over the past decade has meant that only 10–20% of the investment for recent UK offshore wind projects (such as the London Array and Thanet) has gone to British based firms. It is envisaged that benefits for UK firms will be increased through a recent package of measures, such as the commitment for public investment in port infrastructure in the 2010 Spending Review, that has been rewarded

[26] CIWEM (September 2010) *Regulation for a Sustainable Water Industry.*

with a number of turbine manufactures committing to a UK presence (such as Siemens, Clipper, Mitsubishi and GE).

Zero carbon homes

36. Before the 2011 Budget, construction was one area where the UK had a pioneering policy instrument, zero carbon homes, which put the UK in the lead globally. The Plan for Growth announced the regulatory requirements for zero carbon homes. It outlined that the Government will hold housebuilders accountable only for those carbon dioxide emissions that are covered by Building Regulations (which are associated with the energy use through heating, fixed lighting, hot water and building services). They do not cover emissions related to energy use from cooking or from plug-in electrical appliances such as computers, "as these are beyond the influence of housebuilders and will be addressed by other policies, for example the EU Emissions Trading Scheme".

37. The changes in the zero carbon homes policy risk undermining not only the confidence in firms who have developed innovative solutions to deliver what was a progressive policy, but wider investor confidence in early markets supported by ground breaking green policies. Just two weeks before the Budget, the Carbon Plan stated "the government is committed to ensuring that new-build homes are zero carbon from 2016 and do not add extra carbon dioxide emissions to the atmosphere".[27] This will no longer be the case.

38. It is also questionable if the policy changes "ensure that it remains viable to build new houses" as the projected costs of the zero carbon homes policy were falling significantly (and were set to fall further by 2016) and there was considerable support for a more ambitious definition within the industry. For example, AG member Paul King, Chief Executive of the UK Green Building Council, said:

> *"In the space of two weeks, this government has gone from a firm commitment on zero carbon homes, to a watered down policy. A zero carbon home will no longer do what it says on the tin. The world leading commitment that new homes would not add to the carbon footprint of our housing stock from 2016 has been scrapped despite a remarkable consensus between industry and NGOs in support of it… Low carbon construction has been one of the few sectors showing genuine green shoots of growth. This U-turn will result in loss of confidence leading to lower investment, less innovation, fewer green jobs and fewer carbon reductions."*

39. The announcement on zero carbon homes must be accompanied by additional measures to ensure that emissions that fall outside the scope of the definition (which are the responsibility of the occupier rather than the housebuilder) are reduced effectively. Policy must be designed to promote low-carbon choices by occupiers and make renewable technologies economically attractive. In addition, there must be the ability to distinguish leading-edge home design through the Code for Sustainable Homes so that the market can reward builders who also seek to eliminate non-regulated emissions.

Addressing Barriers to Growth

40. There are a number of market or system failures that are holding back the transition to a more sustainable economy. The Government must examine fully the barriers to growth and set out what it will do to address these in a way that is credible, consistent and bankable. While each sector will face its own particular set of barriers that need to be addressed on an individual basis, the most common barriers across the economy that stakeholders identified are as follows:

- Finance;
- Taxation;
- Skills;
- Innovation;
- Public procurement; and
- Planning

Finance

41. The shift to a green economy generally involves higher upfront capital costs and lower operating costs. Following the credit crunch, capital and private equity investment in environmental sectors has fallen dramatically and long term finance remains scarce. The funding gap between business-as-usual and what is required to meet environmental targets is becoming ever more stark, with Ernst & Young estimating that the UK funding gap for low carbon technologies alone to 2025 is approximately £330–£360 billion.[28]

42. To address this immense financing challenge, the UK must seek to reduce risks and mobilise finance at scale from institutional investors. The government commitment to create a Green Investment Bank (GIB) is welcome and the Bank must be designed to make a transformational impact. In the global green economy race, there will be competitive advantage for the countries that are able to cut the costs of capital. For example,

[27] HM Government (March 2011) *Carbon Plan.*
[28] Ernst & Young (October 2010) *Capitalising the Green Investment Bank: Key issues and next steps.*

KfW in Germany has a long track record with many decades' head start. It provided €19.8 billion of investment in environment technologies in 2009—up 12.5% on the previous year.[29]

43. It is welcome that the Budget confirmed the Government's commitment to the GIB with the intention for the institution to be a driving force for the economic recovery in the Plan for Growth. The £3 billion initial capitalisation represents a significant improvement from the £1 billion announced in the Spending Review but is still short of the £4 billion that the AG recommended in our report *Financing the Future.* As the Government predicts that £3 billion will leverage in £15 billion additional private sector investment, an extra £1 billion would leverage another £5 billion private sector investment using the same ratio.

44. The GIB would be able to leverage significantly more private sector investment if it was not prevented from borrowing until 2015 at the earliest and on the condition that "the target for debt to be falling as a percentage of GDP has been met". This means that the bank will be a fund for the duration of this Parliament. In order to be more effective and make a transformational impact, the 2015 date should be brought forward, and the condition that the budget deficit must be eliminated first must be dropped. Responding to the Government announcement on budget day, Andrew Raingold, Executive Director of the AG, said:

> *"Public banks are driving the economic recovery around the world. This is leading to growth in jobs and not deficits. We welcome the additional finance for the Green Investment Bank but it must have the power to borrow from day one. This would put the bank at the heart of the Chancellor's plan for growth."*

45. The detailed proposals for the GIB, due to be published in May, must ensure that the power to borrow is enshrined in the constitution. A fully independent, accountable and enduring institution must be established in statute in 2011–12 with a clear low carbon investment mandate.

Taxation

46. A strong driver for the transition to a sustainable economy is a green tax shift, reducing taxes on income and increasing taxes on pollution. An extensive research project by the Green Fiscal Commission demonstrates that this will be vital to put the UK on a sustainable trajectory; help develop the new industries that will provide competitive advantage for the UK in the future; and contribute to restoring UK fiscal stability after the recession.[30]

47. *Greening the Economy* recommended that the 2011 Budget should be the first to set out a clear framework for a far-reaching green tax shift. While this was not undertaken, the Chancellor did reaffirm that "green taxes will increase as a proportion of our total tax revenues, as we promised." Moving forward, further clarity is required. HM Treasury have been undertaking an initiative on opportunities to green the tax base and using fiscal measures to drive behaviour change. The outcomes must be suitably ambitious to ensure the UK meets its environmental targets, including statutory carbon budgets.

48. Before the 2011 Budget, the Institute of Fiscal Studies demonstrated that "in 2009–10, total receipts were £513.8 billion, of which green taxes made up £40.7 billion or 7.9%. In 2014–15, total receipts are forecast to be £698.0 billion, of which green taxes are £57.9 billion or 8.3%. This would allow the government to meet its objective (of increasing the proportion of green taxes) with around £2.6 billion to spare." Taking into account the measures announced at the Budget, the Institute for Fiscal Studies now estimates that this difference will fall to £1.4 billion. This demonstrates that while the Government is on course to meets its pledge to increase the proportion of green taxes, much greater ambition is required. For example, the Liberal Democrats' 2010 party conference passed a motion calling for the share of receipts to reach 10% by 2014–15 and the Green Fiscal Commission recommends a target of 15–20% by 2020.

49. In this context, the Fair Fuel Stabiliser announced by the Chancellor is a missed opportunity. The revenue generated from the increase in taxation on oil and gas production should not have been used to fund a decrease in fuel duty in order to accelerate the transition towards, in the words of Chris Huhne, "getting off the oil hook… (to) make our economy more independent, more secure and more stable".[31] Instead, income tax or National Insurance contributions could have been reduced (thus incentivising employment) and providing additional support for fuel efficient vehicles or public transport.

50. With the Government committed to increase the proportion of green taxes, it is counterproductive to cap the cost of policies funded through energy bills (which is considered a green tax by the Office for National Statistics) and further clarification of an approximate level is required. The Plan for Growth states that "Government is introducing a new framework to cap the impact of levy-funded support on energy bills… to ensure that costs to energy consumers of climate and energy policies continue to be controlled in the future." The cost of policies funded through energy bills should not be dictated by an artificial cap but a robust cost-benefit analysis, particularly if this leads to significant cost-savings for energy consumers in the long-term.

51. To illustrated this point, DECC Secretary of State, Chris Huhne, recently said: "If we relied on oil and gas, and their prices were around $80 a barrel and its equivalent for gas, then consumers would pay more under our policies—about an extra 1% on their bills by 2020. But the oil price reached $100 a barrel in January, which just happens to be the point at which our economists calculate the British consumer breaks even. And

[29] The Climate Bonds Initiative (June 2010) *Green Investment Bank: Experiences from France, Germany, Spain and a few others.*
[30] Green Fiscal Commission (October 2009) *The Case for Green Fiscal Reform.*
[31] Chris Huhne (3 March 2011) *A blueprint for our energy future.*

the oil price, as we see, could well be higher. In the medium term, the US Department of Energy forecasts $108 a barrel by 2020. If oil prices continue on this trend, and gas prices rise to meet them, then our consumers will be winning hands down. Paying less through low carbon policies than they would pay for fossil fuel policies."[32]

Skills

52. A crucial component of the transition a green economy is the development of new skills in rapidly growing environmental markets (mainly building on existing skill sets) and sustainable literacy skills in all sectors and businesses (such as project management and communication skills). Strong evidence suggests that the UK does not have the necessary skills to make the transition at the pace required, or the training arrangements in place to fill the gap.

53. It is welcome that "to create a more educated workforce that is the most flexible in Europe" is one of the four priorities for the Plan for Growth, and that the Budget announced funding for additional apprenticeships. The AG also welcomes the measures in the Plan to Growth to strengthen the STEM skills of young people through improving career guidance, increasing the number of industry-school visits, improving teaching and strengthening STEM promotion activities. However, there is no explicit strategy to prioritise the skill needs to drive the economy through the environmental transition. The Government cannot rely on the market to respond to environmental targets at the required scale and urgency, and it is vital that all major environmental policies, such as the Green Deal or offshore wind subsidies, are accompanied with a corresponding skills strategy. An extensive research project by the International Labour Office and Cedefop urges Europe's policy-makers to ensure that their support for skills and training matches the focus and ambition of their strategies for promoting investment in green innovation and infrastructure. It finds that France is the most advanced in this respect with the publication of a mobilisation plan for green jobs.[33] Government funding for up to 1,000 Green Deal apprenticeships in March is a positive development but this programme needs to be expanded in order to meet the Government ambitions for 100,000 new jobs in home refurbishment by 2015.

Innovation

54. The competitive advantage of the UK in the green economy will depend on companies commercialising innovative goods and services and adopting novel resource efficient practices. *Greening the Economy* recommended, in line with Committee on Climate Change, that current levels of public expenditure for RD&D in environmental sectors should be regarded as a minimum and any cuts would be detrimental to the achievement of the UK's climate goals and the Government's objective to build a green economy. No significant budget cuts were announced in the 2011 Budget. However, the AG is concerned with the impact of the grant reduction for the Carbon Trust (such as 40% for 2011–12) which will constrain its support for low carbon technology development and R&D.

55. A further concern is the withdrawal of funding from sector based activities such as the Accelerator Programme and the Aggregate Levy Sustainability Fund. These sector based programmes have been aimed at:

— Making sectors more dynamic in their ambition to develop and deploy new technologies;

— Helping overcome skills gaps by pooling expertise and spreading the cost of any external expertise;

— Creating UK jobs as new technologies and services are developed for UK and overseas markets; and

— Reducing the risks associated by innovation by pooling experience.

There is no free market mechanism for achieving these advantages and the benefits to the economy are considered to outweigh the funding commitment required for their re-instatement.

Public procurement

56. One of the most direct ways that Government could stimulate demand for more sustainable goods and services is by exemplary action as the UK's largest purchaser. It is therefore welcome that the Plan for Growth states that the Government will seek to leverage "the £236 billion public procurement power to help drive new markets in green products and services". However, there is a significant disconnect between this objective and a policy environment where the short-term, lowest cost solution dominates. Further clarification is required on how the Government seeks to achieve its aim. To date, *greening* public procurement has been a relatively low priority and, for example, was not included in the remit of the recent government spending efficiency review by Sir Philip Green. Practices such as Forward Commitment Procurement (FCP) need to become mainstream and objectives in this area will only be achievable if civil servants have the relevant skills and in-house expertise by providing more extensive training, real opportunities in terms of career progression and strengthening links between the public and private sectors through secondments.

[32] Ibid.

[33] Aldersgate Group (November 2009) *Mind the Gap: Skills for the transition to a low carbon economy.*

Planning

57. The UK planning system has historically been a major barrier to investments in green technologies. At the same time, the planning system must provide the right balance between fostering economic growth, protecting the environment and achieving fairness and social justice. The Chancellor announced that the Government will "introduce a new presumption in favour of sustainable development, so that the default answer to development is 'yes'." It is essential that the National Planning Policy Statement introduces robust criteria for "sustainable development". In their Budget reaction, AG member Friends of the Earth state that "if new housing development is granted without proper planning and new communities spring up without linked services, there could be extreme pressure on schools, hospitals, doctor's services and public transport in the area. Without a decent planning system, essential services will get stretched, Britain's roads will get ever more choked, and our climate change problems will get worse."[34]

26 April 2011

Written evidence submitted by HM Treasury

What is the Treasury's definition of environmental taxes?

1. Work is in progress to confirm the Government's thinking on what it classifies as an environmental tax. The Government is developing a workable definition of an environmental tax that will be based on the following broad principles:

- The tax is explicitly linked to the Government's environmental objectives; AND
- The primary objective of the tax is to encourage environmentally positive behaviour change; AND
- The tax is structured in relation to environmental objectives, for example: the more polluting the behaviour, the greater the tax levied.

2. Taxes that meet all three of these principles could therefore be classified as being an environmental tax. The following taxes meet all these principles:

- Climate Change Levy.
- Aggregates Levy.
- Landfill Tax.
- EU Emissions Trading System (EU ETS).
- Carbon Reduction Commitment.
- Carbon Price Support.

3. These taxes may then form the baseline for the proportion of tax revenues from environmental taxes, against which the Government will be assessed on it's commitment to increase this proportion.

4. In addition, the Government believes that the design and structure of other taxes also play a significant role in achieving the Coalition commitment to be the greenest Government ever. These are taxes and fiscal instruments which are primarily designed to raise revenue or to achieve other objectives, and therefore would not qualify as environmental taxes on the basis of the Government's principles above.

5. Further work is underway to assess the principles of environmental tax. The Government will confirm its definition of environmental taxes once it has completed its assessment.

What is the Treasury's ambition for environmental taxation, including the forecast extent of environmental taxation as a proportion of all taxes, in the light of announcements made in Budget 2011?

6. The Government is committed to being the greenest Government ever. A simple efficient and cost effective policy framework will meet environmental objectives while supporting growth and maintaining sound public finances. Market-based solutions to price carbon are at the heart of this approach, achieving objectives at the lowest possible cost.

7. The Government will increase the proportion of tax revenue accounted for by environmental taxes. Tax policy will be developed in the context of wider Government levers (such as voluntary agreements and regulation) and overlap of policy instruments will be avoided.

8. The Government has already engaged extensively with a wide range of stakeholders ranging from small business and industry, academics, environment agencies, charities and non government bodies. The Treasury workshops have been helpful in focusing on how green our existing tax base is, and what additional opportunities there may be to go further, using tax and fiscal measures where appropriate to drive behaviour change and meet the Government's environmental objectives. The workshops were themed around environmental behaviour change at home, work and for travel.

[34] Friends of the Earth (March 2011) *Budget 2011: Reaction.*

9. Further work is underway to assess the principles of environmental tax. The Government will confirm its definition of environmental taxes once it has completed its assessment and will mark itself against this baseline when taking action to increase the proportion of tax revenue accounted for by environmental taxes.

What is the Treasury's strategy for "increasing the proportion of tax revenue accounted for by environmental taxes"? (para 1.111 of the Budget 2011 report)

10. The Government is committed to increasing the proportion of tax revenue accounted for by environmental taxes. Tax policy will continue to be developed in the context of wider Government levers (such as voluntary agreements and regulations) and overlap of policy instruments will be avoided.

11. The Government will continue to explore opportunities to further green the tax system over the Parliament. There are a number of environmental priorities which could be pursued through the tax system including:

— Climate change mitigation; carbon reduction; energy efficiency.

— Climate change adaptation; water efficiency, water quality in the environment (diffuse pollution), flood mitigation.

— Environmental protection and improvement: waste reduction, protection of virgin resource, biodiversity, air quality.

12. Options considered will be done so within the context of the fundamental priority of deficit reduction and strategic aim of simplification.

13. Budget 2011 announced the following which play a significant role in achieving the Government commitment to increase the proportion of environmental tax revenue:

— **Carbon Price Support:** a floor price for carbon in the power sector from 1 April 2013 to target a price for carbon of £30 per tonne of carbon dioxide in 2020. The floor will start at around £16 per tonne of carbon dioxide and the carbon price support rates for 2013–14 will be equivalent to £4.94 per tonne. Carbon Price Support will raise £0.7 billion revenue from 2013–14 and £1.4 billion in 2015–16.

— **The Carbon Reduction Commitment:** Allowances will be priced at £12 per tonne of carbon dioxide. The Government will publish draft regulations to implement allowance sales later in 2011. The CRC raises 0.7 billion in 2011–12 and £1.0 billion in 2015–16.

— Revenue will also increase due to the Budget 2011 announcements to increase rates of **landfill tax and aggregates levy** over the Parliament.

In addition:

14. **The EU Emissions Trading System** (EU ETS) which is at the heart of UK Government policy to tackle climate change and covers sectors responsible for around half of the UK's carbon dioxide emissions, moves into phase III which runs from 2013 till 2020, and includes carbon intensive sectors (including aviation from 2012). During this time the auctioning of allowances will dramatically increase. The EU ETS will raise 0.3 billion in 2011–12 and £2.2 billion in 2015–16.

What is the Government's assessment of the environmental impacts from announcements made in the Budget, including specifically the environmental impacts of the changes announced to fuel duty and air passenger duty?

15. As set out above, Budget 2011 announced a number of positive environmental measures which contribute towards achieving a low carbon economy and also wider environmental benefits.

16. The record pump prices place additional burden on motorists. To ease this burden Government announced a cut in fuel duty by 1 penny per litre from 6pm on Budget day, abolished the fuel duty escalator and replaced it with a fair fuel stabiliser. The 2011–12 inflation only increase in fuel duty will be deferred to 1 January 2012. The 2012–13 increase will be implemented on 1 August 2012.

17. Fuel consumption is influenced by total price at the pumps. Whilst we have removed additional burden from the motorist due to taxation, the record pump prices due to the high price of oil continue to act as an incentive to use fuel more efficiently. Removing the fuel duty escalator and cutting duty by 1pence per litre could result in a small increase in CO2 emissions in 2011–12 of 0.4Mt. However, in addition to above, the emissions from road transport are forecast to be approximately 1% lower than current levels by 2015–16 owing to underlying trends in vehicle efficiency.

18. A consultation was launched at Budget to examine options for reforming the structure of APD. The aim is to deliver a simple, fair and efficient tax system for air travel from April 2012. Any changes to APD will be introduced on a broadly revenue-neutral basis and are not expected to have a significant effect on environmental emissions. The entry of aviation into the EU ETS from January 2012 represents an internationally co-ordinated and least-cost approach to limiting the carbon impact of aviation across Europe in future.

Whether Budget 2011 furthers the Government's green objectives, including the impact of the cut in fuel duty on greenhouse gas emissions and air pollution

19. Budget 2011 announced a number of measures that will contribute further towards a low carbon economy and in achieving wider environmental benefits.

20. Following consultation, Budget 2011 announced the introduction of a carbon price floor from April 2013. The floor will start at around £16 per tonne of carbon dioxide (tCO2) and follow a linear path to target £30 per tonne of carbon dioxide (both in 2009 prices). The carbon price support rates in 2013–14 will be equivalent to £4.94/tCO2. Indicative rates for 2014–15 and 2015–16 are £7.28/tCO2 and £9.86/tCO2 respectively. Providing greater support and certainty to the carbon price will create a credible long-term framework to incentivise investment in low-carbon electricity generation by reducing revenue uncertainty for generators and improving the economics of low-carbon investment.

21. The Government is legislating for the £8 per tonne increase in the standard rate of landfill tax to £64 per tonne on 1 April 2012 that was announced in the June Budget. Landfill tax drives progress on the Government's objective of diverting waste away from landfill and provides certainty for local authorities and businesses to invest in alternative waste management facilities.

22. This Budget also announced an increase in the value of the landfill communities fund to £78.1 million in line with inflation. Increasing the value of the landfill communities fund will provide additional resource for projects to improve the environment in the vicinity of landfill sites.

23. This Budget announced that the initial capitalisation of the Green Investment Bank (GIB) will be £3 billion, building on the £1 billion of funds allocated from departmental budgets in the Spending Review with an with an aim to achieve a further £2 billion through asset sales. This will include the £775 million net proceeds already received from the sale of High Speed I, ensuring that the funding is in place to allow GIB investments from 2012–13. The Government will enable the GIB to have borrowing powers from 2015–16 and once the target for debt to be falling as a percentage of GDP has been met.

24. The Budget reaffirmed the Government's commitment to the Green Deal through which households and businesses will be able to improve their energy efficiency at no upfront cost, and commits to act to encourage uptake.

25. See also answer to Question 4.

Approaches to shifting the burden of taxation from "goods" (eg labour) to "bads" (eg emissions) and factors that need to be considered when designing and introducing green taxes

26. As the recent review of the tax system by Professor Mirrlees shows, there are sound economic reasons for wanting to shift the burden of taxation from "goods" to "bads". Across the economy, there are a wide range of activities that generate undesirable "externalities" which can be mitigated through the tax system. Examples include environmental emissions from production and transport, road congestion and waste disposal. Taxing these sorts of activities can help improve the efficiency of the tax system, whilst enabling other distortionary taxes, such as taxes on labour income, to be reduced. The Government is therefore committed to shifting the burden of taxation from "goods" to "bads".

27. However, the Government also recognises that it is not possible to transform the tax system overnight. Badly designed taxes can do more harm than good, reducing economic output and harming the UK's long-term growth prospects. Environmental and other taxes on economic "bads" must therefore be carefully considered against the available evidence, and designed in ways that ensure the benefits to the UK are delivered at minimum cost. The Government also recognises the degree of public scepticism regarding taxes that have been labelled as "green" but with little actual direct environmental benefit. Greater understanding of this area of tax will better enable consumers to decisions on, for example, modes of transport.

28. We must also recognise that many of the economic "bads" that we seek to control are global in nature. This is especially true of environmental emissions like CO2. Tackling these economic "bads" requires internationally co-ordinated action to achieve the desired outcome at least cost to the UK economy. The Government is also keen to stress its overarching principles in the design of the tax system, which call for taxes to be as simple, fair and efficient as possible.

29. The Government's approach to tax policy making is designed to support its ambition for a more predictable, stable and simple tax system.

30. As a result the main thrust of Budget reforms to date has been to shift tax towards a macro focus, aiming for a more balanced and less distortive tax system as way of providing confidence and certainty for investment and growth with a longer term goal of shifting the burden of taxation, in the longer term the Government is committed to increasing the proportion of revenue accounted for by environmental taxes.

31. The Government is committed to shifting the burden of taxation from "goods" to "bads" as part of its efforts to address pressing environmental problems and to ensure that the UK has a competitive tax system that has a reputation for predictability, stability and simplicity.

32. A simple efficient and cost effective policy framework will meet environmental objectives while supporting growth and maintaining sound public finances. In designing green taxes the Government will consider the efficiency of the taxes and extent to which they minimise distortions, the sustainability of the tax base and the fit with other environmental policy levers.

33. Taxes or fiscal measures can be one way of incentivising or driving behaviour change. The Government must also consider whether regulation, public spending or influence would be more efficient and affordable ways of achieving the same aim.

The scope for the tax system to create a "modal shift" from high carbon transportation to low carbon alternatives, including Fuel Duty, Vehicle Excise Duty, and Air Passenger Duty and issues the Government should consider when developing strategies for sustainable aviation and motoring

34. Motoring taxes have a key role in incentivising the development and purchase of electric and ultra low carbon vehicles and supporting sustainable biofuels, in addition to raising revenue for the Exchequer.

35. Electric vehicles are not subject to fuel duty and are exempt from VED and Company car tax (CCT). The capital allowances regime provides 100% first-year allowance for business expenditure on electric vehicles. The 2010 Spending Review also announced provision of over £400 million for the lifetime of this Parliament to promote the uptake of ultra-low carbon vehicle technologies. The Government has also committed to mandating a national network of recharging points for electric and plug-in hybrid vehicles. The £30 million Plugged in Places Programme supports the strategic development of vehicle recharging infrastructure in key locations. In addition, fuel duty and VED also support the take up of more fuel efficient vehicles.

36. The Department for Transport is consulting on implementing the EU Renewable Energy Directive and the Fuel Quality Directives that are aimed at increasing the use renewable sources of energy and reducing greenhouse gas emissions in the transport sector. This will enhance the Renewable Transport Fuel Obligation (RTFO), by expanding its scope to cover new modes of transport and tightening eligibility criteria to ensure only highly sustainable sources of biofuels are supported.

37. The main objective for APD is to raise revenues for the Exchequer in a simple, fair and efficient way. The entry of aviation into the EU ETS from January 2012 represents an internationally co-ordinated and least-cost approach to limiting the carbon impact of aviation across Europe in future.

38. The EU ETS provides an incentive for aviation to shift from high carbon to low carbon alternative technologies. The Department for Transport has also recently announced a scoping exercise to build a new sustainable framework for UK aviation, which offers scope to examine these issues further.

The scope for the taxation system to protect and increase stocks of natural capital and the possible role of proposed "natural accounts"

39. Natural capital represents the value of a habitat or natural system principally due to the services it provides—for instance purifying drinking water or providing space for leisure and recreation.

40. An economic value for natural capital can be calculated but this will always be an estimate as natural capital is often excluded from market values. In the absence of a simple and robust way of attaching value to natural capital it is unlikely the taxation system could be used to *directly* protect and increase stocks of natural capital—there is a strong risk of high costs and challenge.

41. However natural capital stocks are affected by other economic activities such as water abstraction or land-use change. The taxation system can be an effective way to alter behaviour on the level and conduct of such activities *indirectly* protecting and increasing stocks of natural capital. Indeed a number of existing taxes already act in this way:

- The Landfill Tax encourages recycling, reuse and energy recovery, helping reduce the demand for raw materials and protect natural capital stocks.
- Likewise, the Aggregates Levy protects natural capital stocks by encouraging use of recycled aggregates rather than raw material.

42. Taxes or fiscal measures can be one way of incentivising or driving behaviour change. The Government must also consider whether regulation, public spending or influence would be more efficient and affordable ways of achieving the same aim.

43. "Natural accounts" can mean a number of things including incorporating natural value in National Accounts and enhanced corporate reporting through initiatives such as the Prince of Wales' Accounting for Sustainability or sustainability reporting requirements for Government departments.

44. In their own right "natural accounts" may therefore encourage companies and policy-makers to pay closer attention to the value of nature and hence make better use of natural capital stocks. In addition they could improve the robustness of the value attached to natural assets making it technically more feasible to take measures to directly protect and increase natural capital value and stocks.

45. The UK National Ecosystems Assessment (NEA) will report this year and provide the first analysis of the UK's natural environment in terms of the benefits it provides to society and continuing economic prosperity. The NEA will help decision-makers properly value nature in the choices they take. This is consistent with the Treasury's Green Book guidance on policy-making and appraisal which sets out that choices should be made on the basis of a full social cost-benefit analysis.

The impact of the taxation system in general on sustainable development

46. Returning the UK economy to sustainable economic growth is the Government's overriding priority. The Government's aim is to create the conditions that enable UK businesses to be successful. This means making the necessary decision now to realise our vision of stimulating economic growth and tackling the deficit, maximising wellbeing and protecting the environment.

47. This Government has made a number of announcements and policy decisions which will support delivery of the transition to a green economy—including the Green Deal, a carbon price floor, greater support for export of clean technologies and the review of waste policies. The Budget also announced that the initial capitalisation of the Green Investment Bank (GIB) will be tripled to £3 billion and that it will start operation in 2012–13, a year earlier than previously anticipated. By stimulating private finance, this Government investment should mean there is in the region of an additional £18 billion of investment in green infrastructure by 2014–15 as a result of the GIB.

How policy proposals in "The Plan for Growth" will affect sustainable development and environmental protection (ie planning, green growth, low carbon investment, regulations etc); and

48. Returning the UK economy to sustainable economic growth is the Government's overriding priority. The Plan for Growth sets out how Government will achieve strong, sustainable and balanced growth that is more evenly shared across the country and between industries. The aim is to create the conditions that enable UK businesses to be successful.

49. The Budget announced that the Government will reduce the main rate of corporation tax by a further 1% on top of the rate cuts announced last year. This is about creating the right conditions for business investment and growth. The strength of the private sector is critical to the economic recovery and tackling the deficit, and improving the competitiveness of the UK corporation tax system will benefit both large and small businesses across the economy.

50. The Government will maximise the opportunities and minimise the costs of transition to a green economy and the Plan for Growth included a number of announcements and policy decisions which will support delivery of the transition to a green economy:

- The initial capitalisation of the Green Investment Bank will be £3 billion. The new institution will make a radical new contribution to financing green infrastructure;
- Government will introduce a floor price for carbon for electricity generation from 1 April 2013;
- Government will not introduce a levy on electricity bills to pay for future Carbon Capture and Storage demonstration plants; and
- The Government will cap the cost of policies funded through energy bills.

51. The Plan for Growth also set out Government's aim of lowering the domestic regulatory burden, including through pushing the European Commission to bear down on the overall impact of new legislation, and through a moratorium on new domestic regulation for micro-businesses and start-ups over the next three years. By reducing the costs to business and consumers of environmental protection, better regulation can support sustainable development.

52. The Government will make radical changes to the planning system to support job creation and growth. The new presumption in favour of sustainable development will mean that the default answer to development and growth is "yes". This will need to be in line with key sustainable development principles set out in the new National Planning Policy Framework, which will be developed between Government Departments and consulted on this summer. The Plan for Growth also committed that reforms in the Plan for Growth do not affect the Government's commitment to maintain the greenbelt, Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty and other environmental designations.

53. The Budget announced a series of actions to reduce red tape on businesses to free up business resources in order to allow businesses to focus on growing their business and taking on more employees. The Government has already taken action to bear down on the cost of business regulation, and to bring new approaches to how regulation is enforced by introducing a "One In—One Out" system to minimise burdens.

The announcement in Budget 2011 on the Green Investment Bank

54. The Budget announced that the initial capitalisation of the Green Investment Bank (GIB) will be tripled to £3 billion and that it will start operation in 2012–13, a year earlier than previously anticipated. By stimulating private finance, this Government investment should mean there is in the region of an additional £18 billion of investment in green infrastructure by 2014–15 as a result of the GIB.

55. Budget also announced that Government will enable the GIB to have borrowing powers from 2015–16 and once the target for debt to be falling as a percentage of GDP has been met.

16 May 2011

Supplementary written evidence submitted by Campaign for Better Transport

Thank you for your letter. In answer to the question, we do not believe that the Government is doing enough to encourage alternatives to high carbon road transport. Aside from the taxation options such as feebates and variable vehicle duty for vans, which I think we covered at the Committee, we believe that there are a number of actions the Government could be taking:

- revisit the planned increases in regulated rail fares of RPI+3% per year for the next three years, which will significantly increase the cost of rail travel, especially against the background of higher inflation and reductions in real household income;
- revisit planned cuts in Bus Service Operator Grant, recent changes in the reimbursement of concessionary fares and reductions in local transport revenue funding for local authorities, which together have led to reductions in local bus services and increases in fares;
- change the planned lorry road user charging scheme from a time-based vignette scheme to a distance-based scheme with incentives for adopting lower emission vehicles and eco-driver training (as in many other countries including Germany, France and now Spain).
- increase the tax-free car-sharer allowance to promote more car sharing for journeys in the course of work

Above all, as I mentioned briefly at the Committee session, the Government needs to ensure that the reforms to the planning system within the Localism Bill and the proposed National Planning Policy Framework retain the ability to reject traffic generating and car-based development. The proposals from the Government's advisory group on the NPPF published last week (www.nppfpractitionersadvisorygroup.org) would weaken these controls in a number of ways, including requiring a planning authority to prove that it is practical to insist on non-car access. We reject the assertions made in the Treasury's "Plan for Growth" that reduced planning controls will increase efficiency of businesses and general UK competitiveness. There is good evidence that a permissive planning regime increases external costs, both to businesses in increased congestion and services costs, and to the wider community in terms of pollution and social exclusion.

On your other points, we think that some earmarking of revenues from motoring taxes to pay for alternatives would be helpful in terms of both promoting behaviour change and in public support. I have mentioned already the Government's policy of raising rail fares: the Government has now committed to reviewing rail fares in the wake of the Rail Value for Money review published last week—we would like to see this review consider the impact on carbon emissions of rail fares policies and, as noted already, the planned increases of RPI+3%. Revenues from taxes could also pay for an expansion of the Local Sustainable Transport Fund, which we support and which has already had a large number of applications from local authorities for funding for sustainable travel projects.

On speed limits, the Government has discussed raising rather than reducing speed limits as the Spanish government is doing. It now seems that the Government is planning to produce guidance on the factors to be considered when setting speed limits: we think this guidance or toolkit should give significant weight to the carbon benefits of lower speeds and limits, including the indirect benefits of increased walking and cycling for shorter journeys resulting from the reduced speed of traffic making roads feel safer.

25 May 2011

Supplementary written evidence submitted by HM Treasury

What is the Treasury's general definition of a subsidy, and in what specific ways does the policy of no subsidy for nuclear deviate from that Treasury definition?

The definition of subsidy in relation to new nuclear was set out by the Secretary of State for DECC to Parliament on 18 October.

> *"To be clear, this means that there will be no levy, direct payment or market support for electricity supplied or capacity provided by a private sector new nuclear operator, unless similar support is also made available more widely to other types of generation.*
>
> *New nuclear power will, for example, benefit from any general measures that are in place or may be introduced as part of wider reform of the electricity market to encourage investment in low-carbon generation...*
>
> *...Arguably, few economic activities can be absolutely free of subsidy in some respect, given the wide ranging scope of state activity and the need to abide by international treaty obligations. Our 'no subsidy' policy will therefore need to be applied having regard to proportionality and materiality."*

What are the results of any Government analysis of the costs of environmental damage caused by motoring, and how that compares with the tax revenues collected?

DECC data estimates that road transport accounted for approximately 20% of UK greenhouse gas emissions in 2009. The Government raised approximately £26.2 billion from fuel duty and £5.6 from VED in 2009–10.

The primary role of motoring taxes is to contribute to the sustainability of the public finances over the medium term. In addition, it is important that motoring taxes support the economy and respond to economic conditions such as record pump prices. By contributing to public finances they can also play a role in incentivising the development and purchase of electric and ultra low carbon vehicles and supporting sustainable bio-fuels.

It would also be useful if the Treasury could provide the figures for the percentage of total tax revenues that are forecast to be collected by environmental taxes (and workings) in each of years 2010–11, 2011–12, 2012–13, 2013–14 and 2014–15 [counting "environmental taxes" as the six taxes detailed in paragraph 2 of the Treasury's memorandum to the Committee of 12 May].

Table C3 in the Budget 2011 Document shows the outturn for the years 2010–16 for the six taxes mentioned in our written evidence (Climate Change Levy, Aggregates levy, Landfill Tax, Carbon Price Floor, Carbon Reduction Commitment and EU ETS).

Figures for Landfill tax and Aggregates Levy:

Landfill tax

2009–10	£842m
2010–11	£1,111m
2011–12	£1,067m
2012–13	£1,252m
2013–14	£1,340m
2014–15	£1,437m
2015–16	£1,504m

Aggregates Levy

2009–10	£275m
2010–11	£294m
2011–12	£342m
2012–13	£365m
2013–14	£383m
2014–15	£400m
2015–16	£423m

The Climate Change Levy line in Table C3 also includes the revenue for Carbon Floor Price.

Does the Treasury conducts any economic or other modelling of the environmental consequences, wider than just CO_2 emission levels, of changes to tax rates, and if so what do the results show?

Work is carried out with other Government Departments on the wider environmental impacts of relevant taxes to ensure that we have robust data to form our assumptions.

In addition to your questions above, we have also provided answers to the oral questions asked at the hearing and clarified a factual matter on Energy Company Obligations.

Clarification to Questions 82 and 83

The Energy Company Obligation (ECO) was not set as a policy within the levies control framework at the Spending Review. Decisions on the classification of ECO will be for the ONS. If classified as imputed tax and spend, it would fall within the framework. How new policies are accommodated within the framework will be determined on a case-by-case basis.

Question 77: *Dr Whitehead on DECC levy spending. "What is the total over the spending period on that?"*

DECC's levy-funded spending cap is set at £2.1 billion/£2.6 billion/£3.2 billion/£3.9 billion over the Spending Review period (2011–12 to 2014–15). This currently covers the Warm Homes Discount, Feed-In Tariffs and the Renewables Obligation (for which figures are based on an agreed HM Treasury-DECC methodology for the total support provided through the Renewables Obligation (RO). This differs from the Office of Budget Responsibility's (OBR) tax and spend forecasts as the OBR follows the Office of National Statistics (ONS) methodology for calculating tax and spend through the RO, which gives a lower figure. (The ONS is currently reviewing its methodology.)

Guidance on how the control framework operates is available on both Treasury and Department for Energy and Climate Change websites. The links to both documents are provided below.

http://www.hmtreasury.gov.uk/psr_controlframework_decc.htm

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/renewable.aspx

Question 112: *Green Investment Bank and State Aid*

We have spoken to BIS and they will send an update direct to the clerk.

2 June 2011

Supplementary written evidence submitted by the Aviation Environment Federation

1. *What should the Government be doing to cut demand for air travel and reduce emissions?*

The previous Government introduced a UK aviation target to ensure that carbon emissions from the sector in 2050 are no higher than 2005 levels. The Committee on Climate Change advised that this would be sufficient to achieve the UK's commitment to making an 80% reduction in emissions by 2050, providing other sectors deliver a 90% reduction in their emissions over the same period.

This Government is expected to reply to the CCC's advice in July but, to date, it has not confirmed its support for the retention of the existing aviation target. Given the target's favourable treatment of aviation when compared to the emission reduction burden placed on other sectors, we believe that this is the minimum level of stringency that should be applied to UK aviation emissions, and one that will need to be revised when clearer information emerges on the magnitude of aviation's non-CO2 impacts on climate change.

Retaining the target is essential. It plays a vitally important role in the formulation of a sustainable aviation policy and creates an environmental safeguard against the uncertainty surrounding the extent and timing of industry's contribution to mitigating the problem. By measuring the likely future contribution of technology, operational efficiency improvements and alternative fuels against the target, any projected shortfall defines the necessity for Government to apply measures and policies. The CCC undertook this assessment and reported in December 2009 (*Meeting the UK aviation target—options for reducing emissions to 2050*). Under the CCC's likely scenario, the report concluded that "*.. an increase in ATMs of around 55% relative to 2005 levels would be compatible with the target of ensuring that 2050 CO2 emissions did not exceed the 2005 level of 37.5 MtCO2. Given increasing load factors over time, an increase in passengers of around 60% on 2005 levels by 2050 would be possible, taking total annual passenger numbers from 230 million to around 370 million"*. Given that unconstrained passenger forecasts are in excess of this figure (the DfT's 2009 forecasts suggest 465 million passengers per annum as soon as 2030), the need for Government action is unequivocal, either in the form of capacity constraint or through the use of regulation and economic instruments to manage demand.

While we have supported the introduction of aviation into the EU emissions trading scheme from the start of 2012 as an interim step, the UK target allows for absolute reductions only. We support this focus on reducing emissions from within the sector, especially given the uncertainty of the long-term performance of the carbon markets when available allowances could become a scarcity.

In relation to additional steps to be taken by Government, we look forward to the results of the report it has commissioned on a marginal cost abatement curve for aviation emission reductions. However, in advance of this work, there are already some clear messages: in our oral evidence, we commented that the cost increase associated with the EU ETS is unlikely to lead to a significant reduction in in-sector emissions, while APD does little to incentivise environmental performance. Coupled with the fact that emissions trading will only partially cover aviation's climate costs (as the majority of allowances are distributed free and the non-CO2 effects are excluded), and our view that APD largely offsets the tax advantages afforded to the industry ensuring it makes a fair contribution to public spending, there is a clear rationale for examining the further role of smart, environmental levies. But such an approach needs to be combined with effective management of airport capacity, and in our view, the level of capacity available today already allows for growth to a level that is close to the maximum level consistent with achieving the UK aviation target. For this reason we believe that Government is right to not consider new runways at the three major airports serving London, and we urge it to adopt a similar position in the regions.

Is the Government doing enough to encourage use of alternatives to aviation?

Business travel needs are changing as identified in WWF's recent report *Moving On* (wwf.org.uk/movingon). The key findings of this report on travel patterns by the FTSE 500 companies were:

- in the past two years, 47% of companies have reduced their business flying, on average by 20%;
- of those companies who have cut their flying, 85% do not want to return to BAU levels of flying;
- instead of flying, companies are increasing their use of all types of conferencing technologies and making more use of rail travel; and

— the biggest obstacles to changing business travel practices in favour of alternatives are client insistence on face-to-face meetings (often requiring air travel), problems with using videoconferencing and the cost/inconvenience of rail travel.

The report went on to ask businesses what they want from Government to help them reduce their reliance on air travel. The answers included:

— providing nationwide high-speed broadband networks;

— improving the existing rail network;

— lowering the cost of rail travel;

— providing tax incentives for purchasing videoconferencing equipment;

— investing in high speed rail;

— removing "benefits in kind" taxation for rewarding green behaviour such as greater use of videoconferencing; and

— supporting the development of a public network of videoconferencing facilities.

To maximise the environmental advantages of a shift from air to rail (for both business and leisure passengers), Government needs to focus on making improvements to the rail network, investing in high-speed rail, and reducing the cost of train travel.

2. *Has the Government consulted enough on environmental issues when setting aviation taxes?*

We feel that there has been a reasonable level of consultation with HM Treasury in relation to the methodological issues underpinning Air Passenger Duty (APD), and wider consultation generally by Government on issues such as the EU emissions trading scheme. However, we do not feel we have had the opportunity to discuss fully the purpose and rationale behind APD. This has led to public uncertainty about its role, and has often curtailed the discussion on future reform (for example, over the legality of a move to a per plane tax). Furthermore, the current consultation focuses on the inclusion of business aviation, a welcome move, but does not continue the debate about air freight.

From a methodological standpoint, extending the duty to air freight is relatively straight forward: the industry standard figure for the mass of an average passenger plus baggage is 100kg. Based on current rates of APD and distance bands, an equivalent price per tonne can be calculated. It is also possible to consider "space occupied" as a metric rather than weight as airlines often charge on the basis of "dimensional weight". Our calculations show that, based on current volumes of freight at UK airports, a freight duty could raise between £138 million and £977 million annually.

We would welcome further discussion with Treasury on the policy implications of such a move. While Government appears to fear industry claims that a duty may see it relocate outside of the UK, it must be stressed that from an environmental point of view DEFRA's figures show that the impact of dedicated freighters per tonne km is up to 10 times that of road and 43 that of rail.

3. *Do you think the Government has got the balance right between stimulating economic growth and balancing environmental concerns?*

From an aviation perspective, this question can only be answered when Government publishes its aviation policy (scheduled for March 2013). Although the scoping study (published in March) recognises that the economy, local impacts and climate change are the key issues, it is not clear how Government plans to reconcile growth with a reduction in noise and emissions. As outlined above, we believe that retention of the UK aviation carbon target provides an effective framework to ensure a compatible outcome, and this approach should be extended to aircraft noise.

This approach allows for sustainable economic and environmental goals to be promoted simultaneously and in harness. In no instances, should environmental protection be traded off for economic growth and neither should aviation be used to stimulate economic recovery through favourable policies.

27 May 2011

Supplementary written evidence submitted by the Federation of Small Businesses

Does the Plan for Growth, published alongside the budget, do enough to help businesses to take opportunities offered by climate change to grow their business?

The FSB's view is that the Plan for Growth represents more stock take of existing measures rather than an introduction of new policy initiatives. The document lacks the necessary ambition and the joined up thinking needed to make going green make business sense for small businesses.

We welcome the addition £2 billion of capitalisation for the Green Investment Bank yet we feel this is still an inadequate level of funding needed to kick-start the necessary level of private sector investment in national low carbon infrastructure. We are also concerned that the Green Investment will only be able to borrow from 2015–16 which means its effectiveness will be limited.

In relation to the Carbon Price, we welcome any initiative that will increase investor confidence in the low carbon economy yet we are wary of fossil fuel power generators simply passing the levy onto consumers. We would also question whether the intention of the introduction of the Carbon Price is really aimed at stimulating investment in renewable infrastructure as opposed to nuclear infrastructure.

What is most lacking from the Plan for Growth is the long terms sense of direction that is necessary to give would-be investors the confidence to invest in low carbon infrastructure. Whilst there are many differing strategies for how to achieve the transition to a low carbon economy, greening the nation's building stock and shifting from high carbon to low carbon road use are fundamental to meeting the UK's carbon reduction targets and there is an urgent need for Government to set out a long term strategy as to how they plan to achieve these objectives.

Do you think the Government has got the balance right between stimulating economic growth and balancing environmental concerns?

The two shouldn't be mutually exclusive. When "going green" makes business sense to a business owner both environmental as well as growth opportunities can be harnessed.

The Government's Green Deal energy efficiency initiative is a good example of how both environmental and economic objectives can be met. Small businesses are resource constrained and often don't have the access to upfront capital necessary to "green" their buildings. The Green Deal is attractive to small businesses since it overcomes this need for upfront capital, it has the potential to stimulate the low carbon building sector as well as reduce carbon emissions from the building stock.

We would like to see the further development of schemes that can achieve both environmental and economic objectives. The need to shift behaviour away from high carbon to low carbon road will be achieved quicker if it makes financial sense for a business owner to purchase low carbon vehicles since they are cheaper to run or there are government incentives that make the purchase of such vehicles more attractive than high carbon vehicles.

What are you expecting from the forthcoming Green Economy Roadmap?

In the forthcoming green economy roadmap we would like to see government set out a clear direction of travel for the UK's transition to a low carbon economy.

Government needs to give clear long term policy signals as to the nature of the investment needed matched by public support where necessary. There should be strategic approach to supporting specific sectors that cuts across government departments, whether it's dealing with planning, skills or public support for R&D, to give potential investors the necessary confidence.

Access to major renewable supply chains

Major renewable wind and marine projects are key to ensuring the UK can meet its renewable energy targets. However, we need to ensure that the benefits of undertaking such projects trickledown through the whole economy.

The Green Investment Bank will be capitalised with £3 billion of public money to be match by private funding to achieve the investment needed to fund major wind and marine projects.

Given the significant level of public funding and the need to ensure a trickledown effect of investment in the low carbon economy, we believe Government needs to give careful consideration to ensuring UK SMEs have access to major renewable project supply chains and financing from the GIB in order to ensure they are able to compete for renewable supply chain procurement contracts.

This would not only ensure economic growth is spread across the economy but also to make sure that essential skills and technological knowledge is spread throughout the supply chain.

Public procurement

The UK public procurement budget amounts to around £150 billion per annum (equivalent to 13 per cent of UKGDP) and public procurement has an increasingly important role to play in promoting sustainability in our economy.

A greater emphasis on public bodies procuring locally, where appropriate, can bring significant benefits to local economies and sustainability. Procurement from regionally based businesses can lead to reduced greenhouse gas emissions whilst also boosting local economic and social aspects of sustainability. An example of this is procuring food locally which would cut down on "food miles" and thus lowering carbon emissions whilst also contributing to the sustainability of local economies.

The rush for public procurement efficiency has led to less emphasis on sustainability considerations and the FSB believes that public procurement should be applied through a "whole life costing" basis where sustainability is given at least as much emphasis as cost efficiencies. This outcome based tendering approach to public procurement can not only offer benefits for the environment but also for our small firms as well.

Innovation and R&D

Small businesses are currently eligible to claim the Small & Medium Enterprise scheme which allows them corporation tax relief on research and development. To qualify for the relief small businesses have to satisfy a strict definition of research and development.

Whilst the scheme supports technological and scientific advancement it does not take account of the growing need to green existing products and processes.

The move to a green economy will not only necessitate the need to develop new green technologies but also the need to look at how we can make exiting products more sustainable. Remanufacturing/modifying existing products and services is just as important to the low carbon economy as developing new technologies and the R&D system needs to reflect that.

The definition of R&D for the small and medium enterprise scheme needs to reflect the need to green existing products and services.

There is also a real need to improve and expand the SME R&D tax credit system to allow small businesses to access it more easily and to give them the financial incentive to innovate and meet the demands of a low carbon economy.

The current scheme is seen by many small businesses as a windfall which is received at the end of the innovation process rather than a financing tool that can help a firm during the course of the process and actually help it achieve its innovation objective. The Government must look at methods of changing the delivery process and timeline of relief for those eligible.

Many thanks for giving the FSB the opportunity to give evidence during the inquiry.

1 June 2011

Printed in the United Kingdom by The Stationery Office Limited
07/2011 012001 19585