

# Climate Check

## An analysis of the government's delivery of its low carbon commitments

---

September 2011

---

A report by Christian Aid, Greenpeace, Green Alliance, RSPB and WWF.



## Climate Check: an analysis of the government's delivery of its low carbon commitments

---

Drafted and edited by Amy Persson and Hannah Kyrke-Smith, Green Alliance, in conjunction with Christian Aid, Greenpeace, RSPB and WWF.

September 2011

### Acknowledgements

---

A range of people and organisations helped compile this report, in particular the members of our steering group: Ruth Davis and Doug Parr, Greenpeace; Harry Huyton and Laura MacKenzie, RSPB; Alison Doig and Sol Oyuela, Christian Aid; and Margaret Ounsley, WWF. Many other policy staff from these organisations also contributed their time and expertise to this report.

Thanks also for support and advice from Richard Hebditch at the Campaign for Better Transport and Paul Arwas, independent consultant.

Thanks also to the civil servants, advisers and ministers who we met with or spoke to in the course of preparing this assessment, including representatives of the following departments: Department for Energy and Climate Change; Department for Environment, Food and Rural Affairs; Department for Communities and Local Government; Department for Transport; Department for International Development; Foreign and Commonwealth Office; Her Majesty's Treasury; UK Trade and Investment; Export Credits Guarantee Department; and the Office for Low Emission Vehicles.

Designed by Howdy and printed by Park Lane Press

ISBN: 978-1-905869-44-2

£5



creative commons

Green Alliance's work is licensed under a Creative Commons Attribution-NonCommercial-No derivative works 3.0 unported license. This does not replace copyright but gives certain rights without having to ask Green Alliance for permission.

Under this license, Green Alliance's work may be shared freely. This provides the freedom to copy, distribute and transmit this work on to others, provided Green Alliance is credited as the author and text is unaltered. This work must not be resold or used for commercial purposes. These conditions can be waived under certain circumstances with the written permission of Green Alliance. For more information about this license go to <http://creativecommons.org/licenses/by-nc-nd/3.0/>

Green Alliance  
36 Buckingham Palace Road, London, SW1W 0RE  
020 7233 7433  
[ga@green-alliance.org.uk](mailto:ga@green-alliance.org.uk)  
[www.green-alliance.org.uk](http://www.green-alliance.org.uk)

Green Alliance is a registered charity (1045395) and a company limited by guarantee (3037633).



GREENPEACE



# Contents

Executive summary	2
Summary of sectoral progress	6
Introduction	8
International climate change action	10
The Green Investment Bank and financial products	17
Energy markets	19
Energy efficiency	23
Renewables	30
Low carbon transport	35
Green taxation	41
References	44

# Executive summary

This report is an assessment of the Coalition's progress against the low carbon commitments set out in its programme for government 16 months ago (the Coalition programme).<sup>1</sup> The analysis has been undertaken and produced by five of the UK's leading environment and development organisations.

The low carbon section of the Coalition programme begins with recognition of the scale and urgency of the challenge and a commitment to an ambitious response:

“

The government believes that climate change is one of the gravest threats we face, and that urgent action at home and abroad is required. We need to use a wide range of levers to cut carbon emissions, decarbonise the economy and support the creation of new green jobs and technologies. We will implement a full programme of measures to fulfil our joint ambitions for a low carbon and eco-friendly economy.”<sup>2</sup>

This is followed by some very significant commitments to the UK's low carbon transition, which lie at the heart of the government's promise to be 'the greenest ever' and should increase the UK's economic resilience by decreasing the nation's dependency on fossil fuels. The scale of the climate challenge and the UK's increasing vulnerability to fossil fuel price volatility means that new policies will be required during the course of this parliament, but this analysis restricts itself to an assessment of existing policy.

The report assesses both the quality of the policies that underpin the government's low carbon commitments in the Coalition programme, and the timeliness of their delivery. Overall performance is plotted on a quadrant which is divided into three colour zones:

**Green = good progress – the government is delivering good quality policies at an appropriate speed**

---

**Amber = moderate progress – the government is making some progress but this is at risk of being undermined by poor policies and/or delays**

---

**Red = failing – the government is failing to make any progress or is designing policies so poorly they will not deliver against the stated commitments**

---

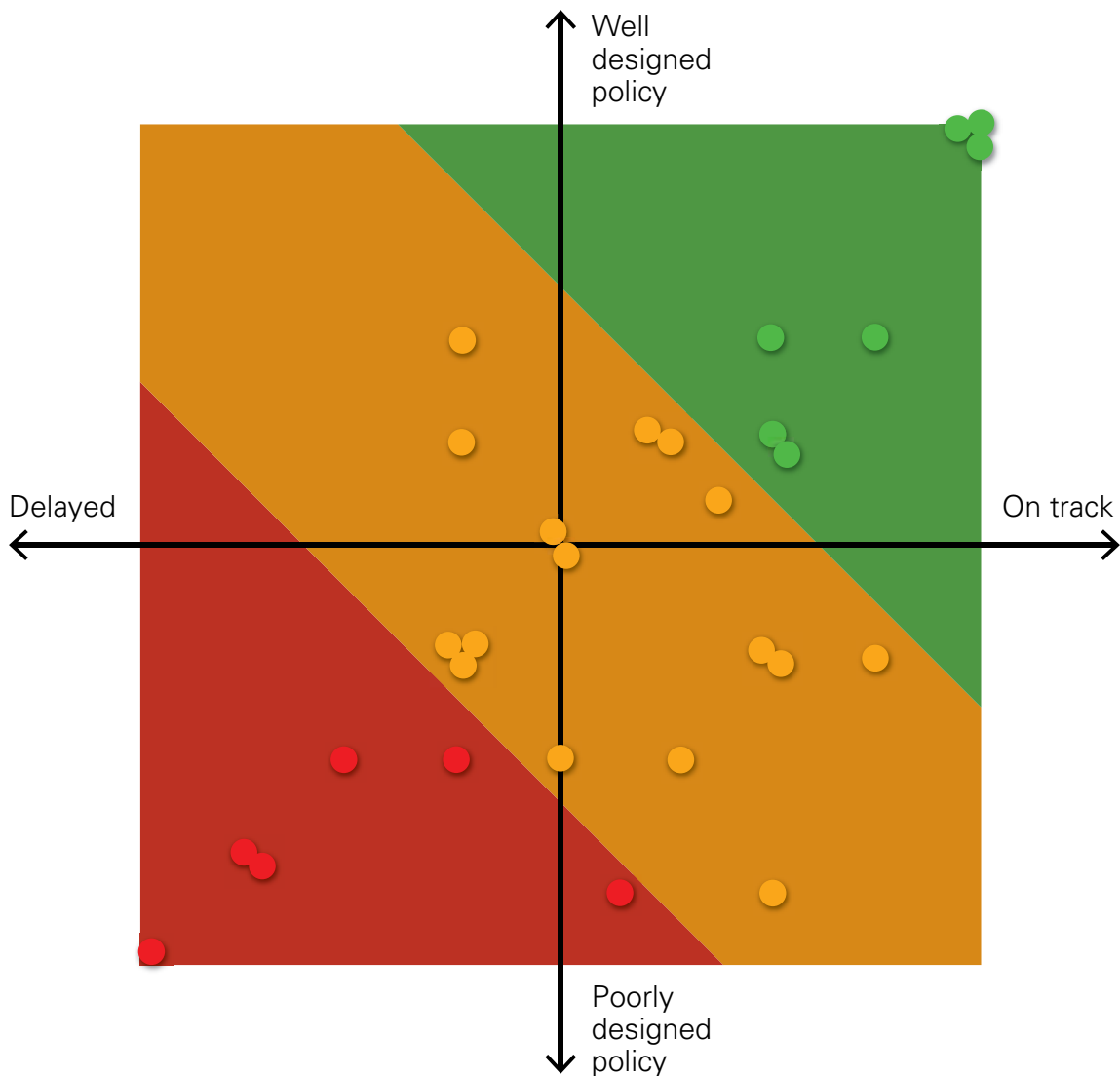
## The results

### Overall government progress

● = 6      ● = 16      ● = 7

Our assessment finds that there are seven policies which have either been delivered successfully or where good progress is being made. Moderate progress has been made for the majority (16) of the Coalition programme's low carbon commitments.

Nine of these are at risk of not being delivered effectively because of poor policy design or lack of ambition and five have been delayed. Government has failed on six policies which have either been dropped or where no significant progress has been made.



## **Green – good progress: 7 commitments**

---

The government has delivered good progress on seven of its 29 low carbon commitments. Some very good decisions underpin this progress and have been taken by the Coalition government in challenging economic circumstances. They include: the government's acceptance of the Committee on Climate Change's (CCC) fourth carbon budget recommendation; the introduction of the Renewable Heat Incentive; positive engagement on moving the EU to a 30 per cent emissions reduction target by 2020; good progress on supporting aspects of low carbon transport; and the cancellation of the third runway at Heathrow.

One decision in particular is worth expanding on. On 17 May 2011 the government accepted the CCC's recommendation to reduce UK emissions by 50 per cent (from 1990 levels) during the fourth carbon budget period (2023-2027).<sup>3</sup> This was a historic decision, which means the UK has the most ambitious legislated emissions reductions targets anywhere in the world, will reduce its exposure to fossil fuel price volatility, and can influence global climate negotiations from a position of domestic strength.

The fourth carbon budget decision was a key moment and should have sent a strong signal about the UK government's commitment to the low carbon transition. The decision was undercut, however, by the very public interdepartmental battle that preceded it which made the resistance of ministers in Her Majesty's Treasury (the Treasury) and the Department for Business, Innovation and Skills (BIS) to stretching emissions reductions targets very clear. Ultimately the Prime Minister intervened but the perception of divisions within government over the importance of the low carbon transition remains. This perception is reinforced by the significant number of commitments that are being delivered with moderate or no progress.

## **Amber – moderate progress: 16 commitments**

---

Sixteen commitments fall into the moderate progress category. Across the broad spectrum of policy areas the Coalition is missing opportunities to deliver good progress primarily because of a lack of cross-

government commitment to the low carbon transition. The Green Deal scheme to promote greater energy efficiency, for example, is being hampered by poor design and a lack of cross-government buy-in to develop an appropriate set of regulatory and/or financial incentives to support its uptake. Despite its great promise, the Green Investment Bank falls in the moderate progress category because of Treasury insistence on delays to its borrowing powers.

Moderate progress is being made on three out of five of the UK government's commitments on the international climate agenda. The government's efforts to move the EU to a 30 per cent carbon emissions reduction target are strong but a lack of engagement by the Coalition's leadership means the importance of the transition to a low carbon economy is not being reflected as a priority of the government's wider foreign policy, trade and development agendas.

Our analysis indicates that nine out of the 16 commitments are achieving moderate progress because of poorly designed policies and a lack of ambition. They are at risk of ending up in the red 'failing' category without urgent intervention to boost the level of cross-government co-operation on delivery and raise the level of ambition of the policy response.

## **Red – failing: 6 commitments**

---

The government is failing to deliver on six of its low carbon commitments, three of which Treasury has responsibility for. The ruling out of green financial products to provide individuals with opportunities to invest in green infrastructure; the failure to reform aviation taxation by moving to a per-plane duty; and the absence of any sign of a significant green tax shift, raise questions about whether the Treasury is fully signed up to the Coalition programme.

## **Conclusion**

---

The government has shown real commitment to the low carbon agenda by making some good decisions in challenging economic times. However, the absence of a strong low carbon transition strategy and narrative from senior ministers is hampering the overall delivery of the Coalition programme. The government will have

to raise the level of cross-government ambition if it is to reduce the risk of failing to deliver the majority of the Coalition's low carbon policies, or delivering poor policy. We make recommendations which could build on the government's progress and address the structural weaknesses in its programme.

We found little evidence of divisions along party lines. Rather, Liberal Democrat and Conservative proponents of the low carbon transition are being held back by their peers in other departments who don't see this as a priority and who, in some cases, are actively working against it. The Treasury and BIS stand out for curbing (or attempting to curb) the government's ambition at crucial moments or causing unnecessary delays. Without stronger direction from the Coalition's leadership these departments will continue to hold back progress and the government's overall performance will be weak.

We find that positive outcomes on some high profile decisions are being undercut by poor design of other important policies because of a lack of support across the government. The very public inter-departmental battles over decisions such as the acceptance of the fourth carbon budget and the Green Investment Bank convey the perception that core departments have to be dragged over the low carbon line, and undermine investor confidence.

Our view is that with stronger leadership the government could turn the UK into a world leading destination for green investment, and achieve greater public benefit from the significant public expenditure being invested in the low carbon transition. At present, moderate (rather than good) progress is being delivered on too many policies to achieve this.

We are committed to working with the government to help deliver its low carbon commitments and continue to build public support for a low carbon future for the UK. Throughout this report we make recommendations about how performance on individual policies can be improved. We also make three high level recommendations below which tackle the major barriers to better performance. They involve increasing the level of cross-government accountability for decisions that impact on its low carbon programme and increasing the Prime

Minister's engagement with the major opportunities the low carbon transition presents for the UK economy.

### Three high level recommendations

---

#### **Low carbon in the Star Chamber**

The government should establish a cross-government process, led by the Prime Minister or Deputy Prime Minister, to review departmental performance on the low carbon agenda and drive cross-government thinking and action. Ministers should have to report to the Star Chamber on progress made on the Coalition low carbon programme and justify decisions that work against it. This should also ensure its low carbon programme is at the heart of the government's plan for growth.

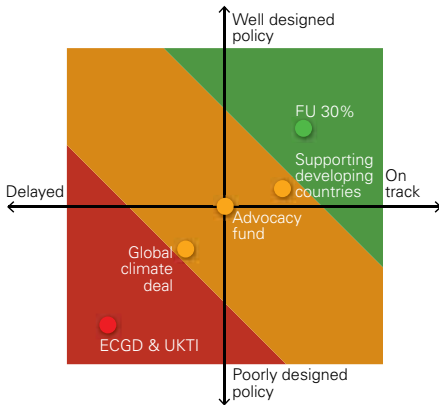
#### **Step up international engagement**

The UK has a proud history of international leadership when it comes to climate change. This is currently at risk. The government should increase the momentum for a low carbon transition in the European Union by pushing for a redirection of spending on climate and clean energy as a result of a reformed EU budget, and driving policies that will stimulate green economic growth. The UK's reputation for high level political interventions in the global climate negotiations should be reclaimed through the Prime Minister supporting ministers' and diplomatic efforts towards delivery of an ambitious binding climate deal and long term climate finance.

#### **Set out a high profile green economy vision**

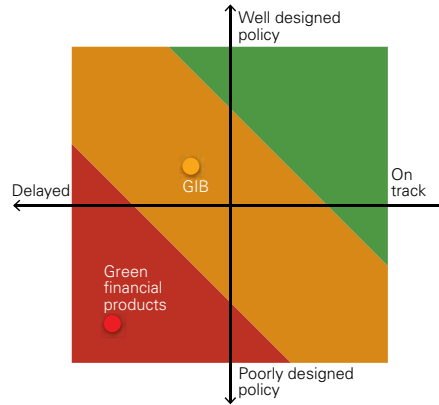
During March-April 2012 London will host the next G20 Clean Energy Ministerial meeting. This is a key opportunity for the Prime Minister to lay out his vision for the UK to be a clean energy leader. The Prime Minister should use this opportunity to launch the Green Investment Bank, accompanied by a decision to bring forward its borrowing powers to make the Bank central to the UK's Plan B for economic recovery. The Prime Minister needs to send an unequivocal statement to his party, parliament, business and the public that the UK will be part of the vanguard of developed countries that are decarbonising their economies.

# Summary of sectoral progress



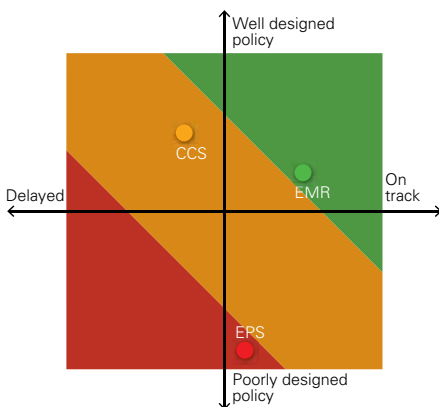
## International climate change action

A strong performance on the EU 30 per cent carbon emissions reduction agenda and effective engagement by Chris Huhne at DECC and William Hague at the FCO has been weakened by a lack of high level political support on key international issues; for example agreement on mechanisms to generate long term climate finance. The lack of progress in other areas, such as reforming the UKTI and the ECGD, is preventing the government from performing strongly on international climate action.



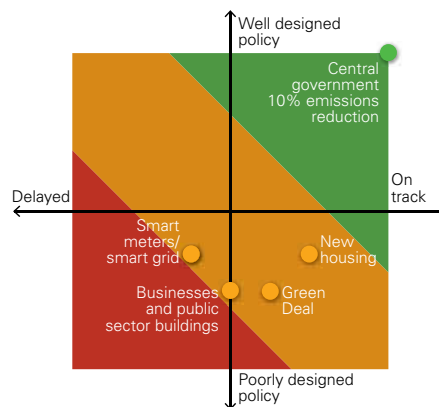
## The Green Investment Bank and financial products

The establishment of the Green Investment Bank (GIB) should have been a highlight of the government's first 12 months. However, the government has limited its progress by preventing the GIB from having any borrowing powers in this parliament. No progress has been made on developing green financial products for consumers.



## Energy markets

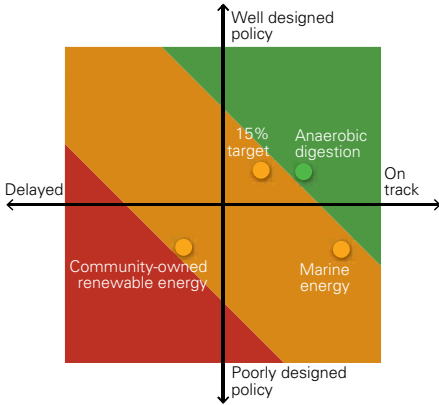
The electricity market reform white paper contains a number of positive elements and paves the way for a much needed restructure of the UK's electricity system. However there have been delays in confirming the funding mechanism for carbon capture and storage demonstration projects two to four and the proposed introduction of a weak emissions performance standard.



## Energy efficiency

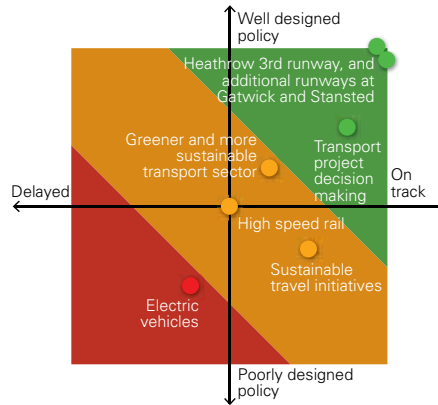
The government is currently not going far enough or fast enough on its energy efficiency commitments. Good progress has been made on meeting targets on its own estate, but it has not demonstrated the same drive on policies affecting the wider building stock. Key policies lack ambition, policy development and implementation is not properly co-ordinated across government, and the government's flagship energy efficiency policy, the Green Deal, risks under-delivering because of its weak design.





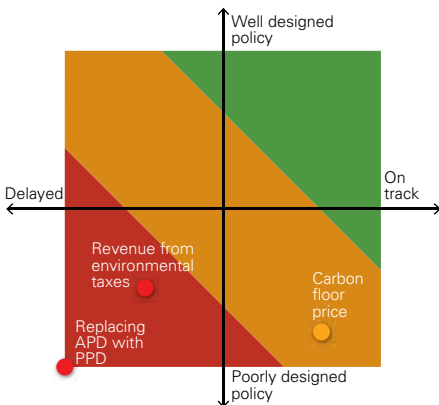
**Renewables**

The picture on renewables support is mixed. The introduction of the Renewable Heat Incentive and good progress on anaerobic digestion are highlights. However, the early review and subsequent reduction in the solar feed-in tariff has had a negative impact on investor confidence. The government has missed opportunities to make good progress on encouraging marine energy and community-owned renewables.



**Low carbon transport**

The cancellation of the third runway at Heathrow and the reform of how transport project decisions are made are good progress. Cuts to funding for buses and the prospect of planning reforms that will increase congestion, however, weaken the overall picture.



**Green taxation**

The government is failing to deliver its green taxation commitments. While the proportion of total revenue from green taxes is forecast to marginally increase above the proportion inherited by the last government over the course of this parliament, there is no evidence from current policy that the government is seeking to make a significant shift in the burden of tax onto pollution. The Coalition commitment to reform aviation taxation by replacing air passenger duty with per-plane duty has been dropped.

# Introduction

The May 2010 election led to the formation of a Conservative and Liberal Democrat Coalition government. As part of negotiations to form government, the parties developed a shared set of commitments and policies that they would deliver over their five year term, detailed in the Coalition programme. The programme includes a number of significant low carbon commitments.

For the low carbon transition to be credible in the eyes of business, investors, the environment and development communities, and the public, it is essential the government delivers its commitments through well-designed policies and with suitable speed, making meaningful progress over the course of this parliament.

Our organisations have come together to conduct an interim assessment of the government's progress on delivering its low carbon commitments, and to make recommendations as to where it should most urgently focus its efforts.

## Methodology and diagrams

---

The assessment has been guided by criteria developed for each commitment. The criteria were shared with the government and used as the basis for a range of discussions with ministers, special advisers and civil servants on how commitments are being delivered. We are grateful for the time people have taken to engage in this process and we have taken into account their feedback when writing our assessment. Our analysis has also been informed by discussions with experts from a range of different organisations as well as through extensive research.

The approach we have taken measures both the quality of the policies that underpin government's low carbon commitments, as well as the timeliness of their delivery. The quality and timeliness of policies is displayed using a quadrant diagram, with the vertical axis indicating how well designed a policy is, and the horizontal axis measuring timeliness. Different zones have been allocated different colours, which mean the following:

**Green = good progress – the government is delivering good quality policies at an appropriate speed**

---

**Amber = moderate progress – the government is making some progress but this is at risk of being undermined by poor policies and/or delays**

---

**Red = failing – the government is failing to make any progress or is designing policies so poorly they will not deliver against the stated commitments**

---

The combination of quality and timeliness determines the overall impact the government is having in different policy areas. This is important framing because, for example, there might be a range of policies in place to deliver against a stated commitment but if they are poorly designed, of low ambition, or suffering from poor implementation they will be insufficient to meet the commitment. So we would conclude that progress is only moderate or even failing. In short, proof of activity does not automatically guarantee the progress being made will deliver the stated commitments.

In terms of timeliness, we recognise the Coalition programme is a five year programme and that the delivery of different commitments will happen at varying speeds over this period. Where departmental business plans provide reasonable timeframes for delivery we have used them to guide our analysis of whether commitments are on track. Otherwise, we have made judgements based on what could reasonably be expected during the first 16 months of government.

We have assessed two commitments from departmental business plans: 1) “we will support developing countries’ climate adaptation and low carbon growth” (DFID);<sup>4</sup> and 2) “we will drive deployment of renewable energy across the UK to ensure that at least 15 per cent of UK energy comes from renewable sources by 2020” (DECC).<sup>5</sup> We have done this to examine DFID’s role on climate change in more depth than the Coalition programme commitments allow and to examine properly the government’s progress on delivering its core renewable energy target.

## Report structure

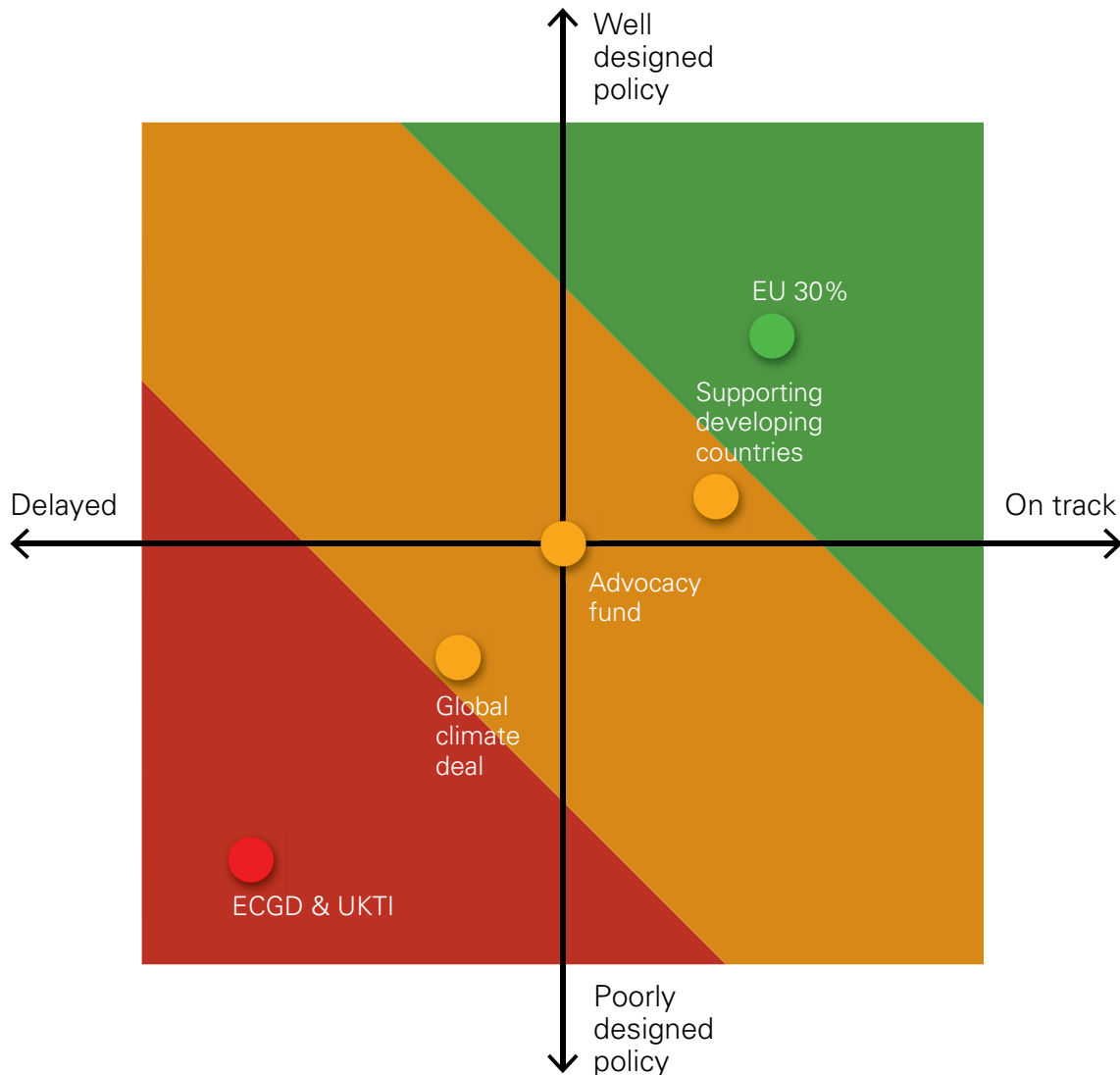
---

We have grouped the low carbon commitments in the Coalition programme into the following areas, each of which has a separate chapter in this report:

- > International climate change action
- > The Green Investment Bank and financial products
- > Energy markets
- > Energy efficiency
- > Renewables
- > Low carbon transport
- > Green taxation

Each chapter includes brief analysis of overall progress on the area as a whole, followed by analysis of each individual commitment. We look at what the government has delivered since May 2010, and then give our ‘climate check’, i.e. our analysis of progress. Where necessary, we make specific recommendations on how government could improve its performance and we highlight where we feel commitments were weak or flawed from the start. In addition, we have made three overarching recommendations on how the government can address the systemic problems we identify in this report, which we believe are the greatest barriers to meeting its commitments and to the low carbon transition as a whole. These are given in the executive summary (p.5).

# International climate change action



## Overall progress

At present, good work by the Department for Energy and Climate Change (DECC) and the Foreign and Commonwealth Office (FCO) risks being undermined by lack of ambition and engagement from the centre of government. For example, the almost exclusive priority being given to containing the size of the EU budget and securing the UK rebate militates against a more proactive approach to securing greater ambition on climate. At the same time, little attention has been given to international climate negotiations by the Prime Minister and Deputy Prime Minister. We recognise that these are difficult times for UN negotiations on a global deal but, to secure progress, the Coalition

leadership needs to maintain the UK's reputation as a significant diplomatic force and find new strategies to engage.

Going forward, the government as a whole needs to put more effort into securing low carbon spending as part of the EU budget negotiations; achieving agreement on mechanisms to generate long term international climate finance; and delivering a second commitment period of the Kyoto Protocol, as part of a strategy to secure a comprehensive legally binding agreement by the middle of this decade.

In a July 2011 letter to the Australian Prime Minister praising the Australian government's plans to introduce a carbon tax, David Cameron wrote: "Climate change is one of the most pressing threats we face and we need to take urgent action to reduce emissions and put economies on a more sustainable low carbon footing".<sup>6</sup> We welcome this intervention and would encourage continued engagement with other heads of state and government in support of accelerated domestic and international efforts.

**Commitment: We will push for the EU to demonstrate leadership in tackling international climate change, including by supporting an increase in the EU emission reduction target to 30% by 2020.**

---

What government has delivered:

Delivery of this commitment has been led by the Secretary of State for Energy and Climate Change, Chris Huhne, who has put significant effort into coalition building with other EU member states and made a convincing case for greater EU ambition on numerous platforms. One of Huhne's earliest interventions was a joint letter with climate change ministers from France and Germany which set out the economic case for a move to 30 per cent.<sup>7</sup> This sent a strong signal that the government was serious about pursuing this agenda.

Huhne has had some political support from other ministers. William Hague is actively pursuing this agenda and Andrew Mitchell, David Liddington, David Cameron and Nick Clegg have all publicly affirmed the UK's commitment to pushing for more ambition from Europe. Apart from Hague's contributions, however, these interventions appear to be reactive and piecemeal rather than part of a concerted strategy.

Officials in DECC and the FCO are clearly committed to pushing the benefits of 30 per cent in capital cities across Europe, with UK delegations visiting a range of European countries to promote the target. Arranged by the FCO, delegations to Berlin, Paris and Rome have shared UK analysis of the economic and political benefits of moving to 30 per cent and involved key departments such as DECC, BIS and the Treasury.

The other major way the government can push the EU to demonstrate leadership on climate change is by calling for the EU to prioritise spending on climate and energy. The March 2011 *Carbon Plan* includes a commitment to seek more low carbon spending from the EU budget,<sup>8</sup> and a recent BIS paper on priorities for the EU research programme recommends a focus on 'grand challenges' including climate, energy, food and water security.<sup>9</sup> Public calls for prioritising spending on climate and energy however have not featured in the high level political interventions on EU budget negotiations made by the Chancellor or the Prime Minister.



Let me be absolutely clear that we are committed to the 30% target and nothing is going to change that.”

Prime Minister David Cameron, June 2011<sup>10</sup>

What we say – climate check:

**Good progress**

---

The government is making good progress on this commitment. Efforts by Chris Huhne to make the positive case for an increased level of ambition from the EU, and hard work from officials in DECC and the FCO, both in the UK and European capital cities, are the reasons behind this.

To continue making good progress, the push for 30 per cent needs greater support from the Prime Minister and the Chancellor over the next 12 months. The Prime Minister should ensure that responsibility for delivery is shared more widely across the Cabinet and the Prime Minister himself needs to find ways to engage. The Prime Minister's intervention ahead of July's European Council vote on 30 per cent, aimed at stopping Conservative MEPs voting against an increase in ambition, was welcome (albeit largely unsuccessful) and is hopefully a sign of increasing engagement.

Senior Cabinet ministers, particularly the Chancellor, should broaden the scope of their interventions on the EU budget beyond calls to keep spending increases as minimal as possible. Until securing a 30 per cent target

is articulated as a priority at the heart of government, there is a risk it will be forgotten about or traded away during wider negotiations. As debate over the EU budget continues throughout 2012, we expect to see the government supporting the European Commissioner for Climate Action, Connie Hedegaard, who is arguing for a boost in climate-related spending from around five to seven per cent of the current EU budget to at least 20 per cent to transform Europe into a clean, competitive low carbon economy.<sup>11</sup>

Given that pushing the EU to take a leadership position on climate change is more effective if the UK is leading by example at home, the government's acceptance of the Committee on Climate Change's domestic fourth carbon budget recommendation is positive.

**Commitment: We will work towards an ambitious global climate deal that will limit emissions and explore the creation of new international sources of funding for the purpose of climate change adaptation and mitigation.**

---

What government has delivered:

The government's work towards this commitment is being led by Chris Huhne and William Hague. This is supported by officials in DECC and the FCO who are very actively involved in the full spectrum of international processes. Chris Huhne in particular has clearly articulated the case for a binding multilateral deal under the UN as the only effective, long term strategy for tackling climate change. However, there has been little or no engagement from the Prime Minister on this commitment, and very little from other senior Cabinet ministers.

Work towards an ambitious global climate deal comprises a number of elements, including ambitious domestic and EU emissions reductions (see above); delivering new climate finance for developing countries; and securing a comprehensive and fair legal form for any new deal, including a second commitment period of the Kyoto Protocol.

The Comprehensive Spending Review committed £2.9 billion over the spending review period (2011-12 to 2014-15) to the International Climate Fund (ICF). Of the £2.9 billion, 50 per cent is currently earmarked for adaptation, 30 per cent for low carbon development and 20 per cent for forests (REDD+). The ICF will deliver £1.5 billion in fast start finance for climate change between 2010 and 2012, with £568 million approved for 2010-11.<sup>12</sup>

In terms of exploring the creation of new international sources of funding for climate change adaptation and mitigation, Chris Huhne was part of the Advisory Group on Long Term Finance (AGF), tasked with developing ways to achieve the Copenhagen commitment to mobilise \$100 billion per year of public and private finance. The AGF's report was published in November 2010 and outlined a range of mechanisms to achieve the Copenhagen commitment, including raising finance from schemes to tackle emissions in the international aviation and shipping sectors. Following the publication of the report, however, there has not been any public UK support for specific measures.

The issue of 'legal form', i.e. the nature and extent of the legal instruments implementing the United Nations Framework Convention on Climate Change, is central to achieving a meaningful global deal on climate and is also highly contentious. During the negotiations in Cancun, Huhne played a constructive role in brokering an interim deal on this issue, in the face of entrenched opposition from the Japanese government.



Side-lining the push for a legally binding deal on curbing emissions in favour of a voluntary approach is about as useful for the climate as a chocolate tea pot. Pledges without the seriousness of a legal commitment are only a stop gap.”

Rt Hon Chris Huhne MP, Secretary of State for Energy and Climate Change, July 2011<sup>13</sup>



Today we've taken a significant step in the quest for an ambitious climate change deal. Raising the \$100bn of climate finance needed by 2020 will be crucial to help developing countries deal with the impacts of climate change and to put their economies on a low carbon footing... But we acknowledge this isn't the end game and the real challenge lies ahead as developed and developing countries work together to ensure concrete proposals are delivered in time for the climate talks in Cancun this year and South Africa next year.”  
Rt Hon Chris Huhne MP, Secretary of State for Energy and Climate Change, November 2010<sup>14</sup>

## What we say – climate check

---

### Moderate progress

---

We commend the efforts of Chris Huhne whose public support for a binding global deal has been a fundamental aspect of UK international climate leadership. In the current political context, where key parties to the international negotiations are advocating a voluntary approach to curbing global emissions, the UK and EU's voices are particularly important.

However, whilst the government is delivering on its international financial obligations through the ICF, a June 2011 report from the Environmental Audit Committee (EAC) found that “transparency of the arrangements surrounding the ICF has been poor”.<sup>15</sup> The £2.9 billion allocated to the ICF will also be counted as Official Development Assistance (ODA), despite strong arguments that climate finance should be additional to existing aid commitments.<sup>16</sup> These weaknesses are compounded by the lack of progress in securing innovative sources of finance to support a global deal.

To improve its delivery of this commitment the UK must take the lead on promoting one or more innovative sources, including (but not exclusive to): finance derived from managing the emissions from international shipping and aviation; and from financial transaction taxes and related instruments.

The government should also make clear that it remains committed to securing a second commitment period of the Kyoto Protocol as part of a strategy to achieve broader progress towards a comprehensive legally binding global agreement. Political leadership from the Prime Minister in the run up to the international negotiations in Durban in November will be fundamental to securing this outcome. The Prime Minister should engage with his European counterparts (especially in France and Germany) to secure this position within the EU, and deliver much needed progress in this contentious area.

Finally, the EAC report indicates concern about the significant percentage of the UK's climate finance commitments delivered through the World Bank. We agree with the EAC that the World Bank's current lending to support fossil fuel-powered energy generation is undermining the UK's efforts to reduce carbon emissions. The World Bank should not remain the predominant route for UK spending on climate finance while it continues to fund so many high carbon projects.

### **Commitment: We will explore ways of helping the very poorest developing countries to take part in international climate change negotiations.**

---

#### What government has delivered:

---

The detail of the government's proposed Advocacy Fund is expected in September 2011. DFID has indicated the Advocacy Fund will cover assistance to the very poorest developing countries to take part in both climate and trade negotiations.

The climate change component of the Advocacy Fund will be managed independently by an existing organisation with experience of working in this area but DFID will retain an oversight role. The Fund will be demand-led and is expected to work with groups of countries where possible. The Fund will not be delivered directly to civil society which means civil society can only access funds if this is part of the plan of the developing country's government. A percentage of the Fund will be independently evaluated on impact and value for money.



The Fund will provide access to legal, technical and logistical support to the poorest and most vulnerable countries – countries whose full participation is essential if we are to achieve an equitable deal.”

Rt Hon Andrew Mitchell MP, Secretary of State for International Development, November 2010<sup>17</sup>

What we say – climate check:

---

### Moderate progress

---

The Advocacy Fund will hopefully make a significant difference to the level of participation of people from the poorest developing countries in international climate change negotiations. The Fund’s impact will rest on its size, how many countries can access it and how the Fund’s impact and value for money will be assessed. As the Fund will not directly support civil society to engage in national or global negotiations, DFID should be clear on how they will support civil society through other means.

### **Commitment: We will support developing countries’ climate adaptation and low carbon growth (DFID business plan).**

---

What government has delivered:

---

The government has committed to support developing countries’ climate adaptation and low carbon growth via the £2.9 billion allocated to the International Climate Fund (ICF). DFID has committed to 50 per cent of this fund being allocated to adaptation, but this is subject to review.<sup>18</sup> So far DFID has produced a draft ICF implementation plan which sets out strategic objectives, guiding principles for expenditure and a set of indicators to measure impact and results.

DFID has also committed to mainstream climate and environment in all country plans,<sup>19</sup> and has been piloting strategic programme reviews to help facilitate country offices to “mainstream climate change into existing programmes and identify new areas for engagement on climate change”.<sup>20</sup>

DFID has also introduced a requirement that a business case is prepared for each new intervention (bilateral and multilateral), setting out the rationale for choosing a particular project. This includes a new climate and environment assessment, which replaces the previous Environmental Screening Note, and which must take place at an early stage in project planning and design.<sup>21</sup>

The government is supporting the Climate Investment Funds, which are “trust funds that aim to deliver large-scale finance to support at least 45 developing countries in realising their plans for low carbon, climate resilient development”.<sup>22</sup> The government is also supporting the Climate and Development Knowledge Network (CDKN) with £46 million over five years, including some Fast Start funding prior to 2020. The CDKN links poor countries with a network of experts who can provide easy access to research and policy information.<sup>23</sup>

What we say – climate check:

---

### Moderate progress

---

The funding allocated to support developing countries’ low carbon growth and adaptation through the ICF is positive. However, for the government to deliver good progress several issues need to be addressed over the next 12 months.

In assessing the success of the ICF, account must be taken of the long term sustainability impact of spending, including the delivery of long term resilience, as well as the immediate, quantifiable outcomes of the ICF in terms of the numbers of people and ecosystems made less vulnerable to climate change. We will closely examine the final implementation plan for the indicators to track impact and value for money on adaptation, low carbon development and forests.

The new climate and environment assessment is promising, especially as it applies to all expenditure over £400, but how it works is yet to be proven. The government should make sure the new assessments are clear on how programmes will be modified as a result and how the process will work for projects not being implemented by DFID itself.



We accept that DFID is working to climate-proof its development approach. Overall, however, the department is not putting climate change at the heart of its programme. For example, while DFID has said it broadly supports the new World Bank energy strategy, which includes a ban on funding for coal power in middle income countries and more rigorous reporting of greenhouse gas emissions from energy investments, we have not found evidence that ministers are using their political influence at the World Bank to support this. There is also little evidence of DFID ministers influencing issues across government where they have a clear interest, such as the reform of the Export Credits Guarantee Department (ECGD); the development of innovative sources of climate finance (though they are involved in the governance of the Green Climate Fund); or ensuring that long term climate finance is not dependent on ODA.

Over the next 12 to 18 months DFID can improve its efforts by more actively championing ambitious climate change policies that will drive the low carbon transition both in the UK and in key developing economies.

**Commitment: We will ensure that UK Trade and Investment and the Export Credits Guarantee Department become champions for British companies that develop and export innovative green technologies around the world, instead of investment in dirty fossil-fuel energy production.**

---

What government has delivered:

---

In a letter to Green Alliance dated 20 July 2011, the Chief Executive's Office of the ECGD explains: "The Government is still considering how it should implement this commitment. Currently, no specific timetable has been established for its implementation but work is being undertaken to address the practicalities of doing so. When Ministers decide how it should be implemented, an announcement is expected to be made".<sup>24</sup>

The most significant recent change in how the ECGD actually operates occurred just prior to the general election and resulted in standards actually slipping. In

April 2010 the ECGD replaced their Environmental, Sustainability and Human Rights (ESHR) rules known as the 'Business Principles' with the Organisation for Economic Co-operation and Development's (OECD) guidelines, known as the 'Common Approaches'.<sup>25</sup> The OECD guidelines mean that the ECGD no longer has to screen projects of a value under SDR 10 million (Special Drawing Rights), or when the repayment term is less than two years, for any sort of environmental impact.<sup>26</sup> These changes came into effect on 1 May 2010 and have been endorsed by the current government.

In May 2011 UK Trade and Investment (UKTI) published a strategy document called *Britain open for business* which commits UKTI to carrying out a green export campaign. UKTI claims this will position the UK as a leading provider of low carbon solutions in markets where it is clear it can gain advantage, and help to create an export pipeline of innovative green technologies and services.<sup>27</sup> The vehicle for delivering this is the 'UK Know How' campaign which the UKTI says "positions the UK to compete for the growing international opportunities in energy and resource efficiency".<sup>28</sup>

On 24 June 2011 UKTI also published a brochure called *UK oil and gas: world class capabilities*, which highlights the benefits of the UK's gas and oil industries, including its expertise in the exploration of extreme environments such as the North Sea and the Arctic.<sup>29</sup>

“

Our mainstream stuff is oil and gas, aerospace and defence.”

Steve Roberts-Mee, Director of Communications, Export Credits Guarantee Department, November 2010<sup>30</sup>

## What we say – climate check:

---

### **Failing**

---

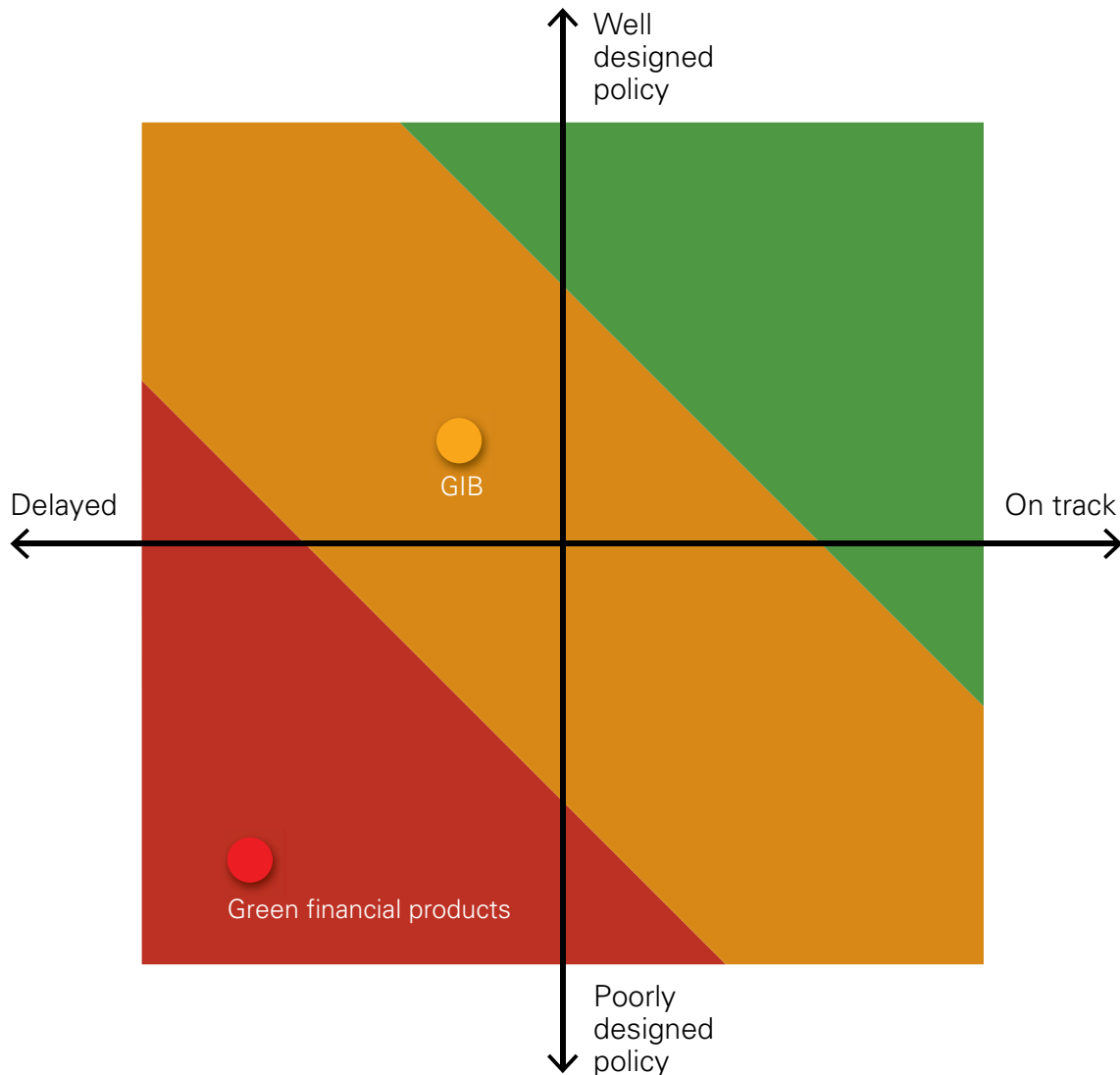
The definition of dirty fossil fuel energy production is central to whether progress is being made on this commitment. Our view is that for this commitment to be met, dirty fossil fuel energy production should include oil and gas transportation, coal, oil and gas extraction projects, power generation and energy projects which involve the use of fossil fuels but exclude petrochemical projects, which was the definition used by the previous government.<sup>31</sup> In response to a question on this issue in parliament however, Under-Secretary of State for BIS, Ed Davey, confirmed that the definition used by BIS is that ‘dirty’ fossil fuel power generation means “unabated coal-fired power stations. It would therefore consider any other form of fossil fuel power generation to be clean”.<sup>32</sup> The ECGD has not supported projects involving unabated coal-fired power stations for many years,<sup>33</sup> so the government’s definition effectively means it thinks no change is required to fulfil this commitment. The narrowness of the government’s definition signals an intention to do the bare minimum.

It is the absence of any real change that is most notable here. The Coalition’s commitment to reform the ECGD and UKTI has not led to any significant changes in how they operate and there is no plan or strategy being developed to do so.

There are some signs that both the ECGD and UKTI are taking more interest in the low carbon sector but there are no substantial new commitments, such as the strengthening of financial support for green technologies or a strategy to identify the best prospects for low carbon export sectors. Instead UKTI, for example, is pursuing an active strategy to support the UK’s oil industry.

Our view is that the government is failing to deliver any meaningful progress on this commitment. For the ECGD and UKTI to demonstrate a move away from dirty fossil fuel production they would be adopting and enforcing stronger environmental standards for projects qualifying for support and annually reporting on the carbon emissions of those projects. For the government to deliver this commitment effectively, it urgently needs to make real changes to how both departments operate.

# The Green Investment Bank and financial products



## Overall progress

Figures from Ernst & Young are sobering: £450 billion is needed in energy investment in the UK over the next 15 years but only £50-80 billion is expected from traditional capital sources.<sup>34</sup> There were high expectations that a fully functioning Green Investment Bank (GIB) was the solution to addressing this gap but the delay in setting up a bank with real impact has dampened those expectations.

Overall progress has been hampered by the Treasury which was instrumental in preventing the GIB from having any borrowing powers during the course of this parliament. The ability of the GIB to leverage private investment will therefore be decreased. This is a prime example of a major decision the government essentially got right, but its impact is limited because of a lack of cross-government support.

## **Commitment: We will create a green investment bank.**

---

### What government has delivered:

The government committed in the 2011 Budget to fund the GIB with £3 billion over the period to 2015. In May it announced the GIB will evolve over three phases:

- > incubation from 2012 to State Aid approval; government will make direct investments;
- > establishment as a stand-alone institution, set up by legislation, following approval; and
- > full borrowing powers from 2015, subject to public sector net debt falling as a percentage of GDP.<sup>35</sup>

The government has established an advisory group that will be replaced by a board once state aid approval is granted by the European Commission.<sup>36</sup>



The GIB's mission will be to accelerate private sector investment in the UK's transition to a green economy. Its initial remit will be to focus on green infrastructure assets. It will work to a 'double bottom line' of both achieving significant green impact and making financial returns. It will also operate independently and at arm's length from Government.”

Rt Hon Vince Cable MP, Business Secretary, May 2011<sup>37</sup>

### What we say – climate check:

#### **Moderate progress**

---

The government has kept its promise and committed to an independent bank with substantial initial capitalisation and full borrowing, in the future and only if public sector debt is falling as a percentage of GDP. It is this caveat that is the problem. Delaying the Bank's borrowing powers until 2015 means the current low carbon investment hiatus will continue longer than it needs to. A bank that can support the transition to a

low carbon economy at the scale and speed required to deliver the targets in the Climate Change Act would ideally be up and running much sooner.

## **Commitment: As part of the creation of a green investment bank, we will create green financial products to provide individuals with opportunities to invest in the infrastructure needed to support the new green economy.**

---

### What government has delivered:

There has not been any progress on this commitment. The Treasury's current position is that the development of green financial products is a matter for the GIB and that it will not be able to offer any sort of savings product until 2015 at the earliest.<sup>38</sup>

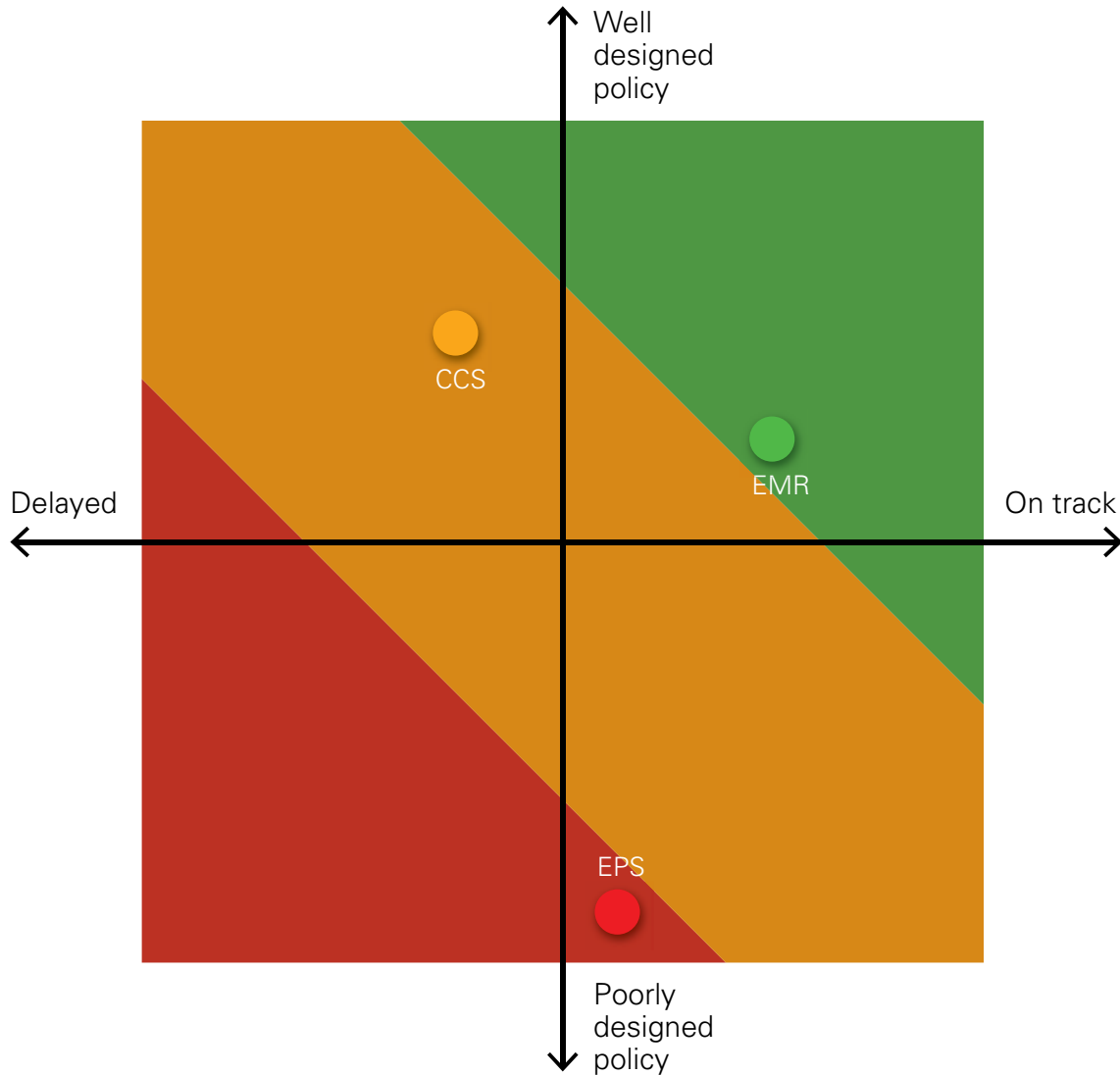
### What we say – climate check:

#### **Failing**

---

Green ISAs were first suggested by George Osborne in opposition.<sup>39</sup> The government's failure to deliver this commitment is a major setback and, once again, indicates a lack of support for the low carbon agenda from the Treasury. This is an important way to engage consumers in the building of the low carbon economy and another missed opportunity due to Treasury timidity.

# Energy markets



## Overall progress

The government's commitment to the CCC's recommended fourth carbon budget effectively means the power sector must be decarbonised by 2030. All eyes were on the electricity market reform (EMR) white paper to see whether the government was prepared to put in place the reforms necessary to firm up investor certainty in the low carbon energy space and put the UK on track for the fourth budget period.

The result here is mixed. There is no doubt the government has acted swiftly to tackle a reform process that previous governments were not prepared to take on. The white paper is a good first step but has left a number of big questions unanswered which are explored below.

To complete market reform in a way that will deliver a decarbonised power sector by 2030, the government needs to:

- > give demand reduction an equal footing with generation;
- > clarify the amount of carbon the electricity sector can emit over the next two decades to be compatible with our carbon budgets; and
- > set volume targets for renewables to ensure the private sector invests in a supply chain that will generate green growth and cut the cost of decarbonisation.

## **Commitment: We will reform energy markets to deliver security of supply and investment in low carbon energy, and ensure fair competition including a review of the role of Ofgem.**

---

### What government has delivered:

---

The EMR white paper, 'Planning for our electric future', outlines the most significant reform of the electricity system since electricity privatisation.<sup>40</sup> The government has delivered a package of price support through the carbon floor price and Contract for Difference (CfD) feed-in tariffs,<sup>41</sup> and a regulatory backstop in the form of an Emissions Performance Standard (EPS), which it believes will be sufficient to deliver appropriate levels of investment.

In July 2011 the government announced the full conclusions of its review of Ofgem.<sup>42</sup> This review sought to clarify the strategic policy framework in which Ofgem operates; to achieve policy coherence from Ofgem with this framework; and to improve regulatory certainty. The review concluded that the government should communicate its energy goals more clearly and define the areas in which Ofgem is expected to deliver on these goals. Ofgem is taking forward proposals to address liquidity issues.<sup>43</sup>

“

We are exceeded in our paucity of delivery only by Malta and Luxembourg. This is the legacy we have inherited. The essential legacy is pretty damn poor. We have got massive catch up [to do]. We will be the fastest improving country on renewables in the EU between now and 2020. I'm absolutely determined about that and it will happen.”

Rt Hon Chris Huhne MP, Secretary of State for Energy and Climate Change, January 2011<sup>44</sup>

### What we say – climate check:

---

#### Good progress

---

The government has moved quickly to reform the electricity market. The EMR white paper contains a series of positive measures, including CfD feed-in tariffs which should significantly reduce investment risk in low carbon energy once a CfD is secured by a developer. Perhaps more significantly, the white paper sets a clear direction of travel for the electricity market: it needs to provide the lion's share of decarbonisation which the government committed to in the fourth carbon budget in May. The government is therefore making good progress, but there are four significant areas that need to be addressed over the next 12 months if they are to maintain this status.

First, while there are positive indications of the recognition of the effect the fourth carbon budget will have on the power sector, the government should be more specific about the 2030 endpoint: an electricity sector which produces power at less than 50g/kWh by 2030. It has an opportunity and an obligation to do this toward the end of this year in the forthcoming *Carbon Plan*.<sup>45</sup> This is crucial for increasing the level of investor certainty in the low carbon sector.

Second, the lack of a volume target for renewables significantly reduces investor certainty about the total size of the market. In contrast to the government's view that the white paper provides “a toolkit that can be used to achieve any desired level of decarbonisation”,<sup>46</sup> our assessment is that cost-effective decarbonisation will require a commitment to minimum volume targets for renewables in line with the government's ambition in the *Renewable energy roadmap*.<sup>47</sup> This is because investor uncertainty about the total funding available for CfDs may make manufacturers cautious about large capital cost investments to serve a market that may be significantly smaller than expected due to changes in government funding.

Third, the white paper is overly focused on incentivising the building of new power stations to deliver security of supply. The government has committed to looking further into demand response

and absolute demand reduction as part of its technical update to the white paper, and we are encouraged by the creation of an Office for National Energy Efficiency dedicated to the task of demand reduction.<sup>48</sup> Bold measures will be needed to ensure that the cheapest, most secure, and cleanest option – reducing energy demand – is equally incentivised through electricity market reform. Options open to the government include recycling revenues from the carbon floor price for energy efficiency measures; preferentially contracting for demand response as part of the government’s proposed capacity mechanism; and extending the CfD framework to provide a feed-in tariff for demand reduction measures.

Finally, the mechanisms set out in the government’s white paper will only work if there is a highly liquid wholesale electricity market which new entrants, required to help finance and deliver the transition to a decarbonised power sector, can count on to sell their low carbon electricity. Increased market liquidity will be central to the ability of the government to deliver investment in low carbon power.

**Commitment: We will establish an emissions performance standard that will prevent coal-fired power stations being built unless they are equipped with sufficient carbon capture and storage to meet the emissions performance standard.**

---

What government has delivered:

---

The emissions performance standard (EPS) outlined in the EMR white paper, to be enforced in planning policy through the energy National Policy Statements, is proposed to be 450gCO<sub>2</sub>/kWh for non-CCS (Carbon Capture and Storage) demonstration plants larger than 50MW.<sup>49</sup>

What we say – climate check:

---

### Failing

---

The EPS proposed by the government will not prevent the construction of coal-fired power stations and, therefore, fails to uphold the Coalition agreement commitment. Because the EPS is set as an annual-equivalent limit, a new unabated coal-fired power station emitting around 1000gCO<sub>2</sub>/kWh could meet the EPS by running at a 45 per cent load factor. Over the past five years, coal power stations have averaged a 45 per cent load factor.<sup>50</sup> The weak drafting of this policy means that the proposed new largely unabated Scottish coal plant at Hunterston could meet the current limit easily, despite the fact that it will have net emissions of 820gCO<sub>2</sub>/kWh.<sup>51</sup>

In light of the limits set by the fourth carbon budget level, the EPS should be designed to send a firm regulatory signal about the role of fossil fuel generation in a power sector which operates within these limits. Such an EPS would provide confidence to investors in renewables and CCS and ensure that owners of current and future unabated gas plant understand that their plants will either be restricted to a peaking role or will need to fit CCS in the mid-2020s. The current EPS does not deliver this.

A credible EPS should limit grandfathering for existing and future fossil fuel plants to ensure there is no perception that relatively high-emissions plant will be able to continue to run in an unconstrained manner in the 2020s. It should also be restrictive about the conditions in which the EPS would be relaxed in response to short or long term security of supply emergencies.

### **Commitment: We will continue public sector investment in carbon capture and storage (CCS) technology for four coal-fired power stations.**

---

#### What government has delivered:

---

The government made £1 billion available for a first CCS demonstration project in the 2010 Comprehensive Spending Review,<sup>52</sup> and opened the competition to gas-fired power stations.<sup>53</sup> The funding mechanism for demonstration projects two to four is still unclear; however, the EMR white paper proposes that CCS should be able to receive CfD feed-in tariffs.<sup>54</sup>

#### What we say – climate check:

---

### **Moderate progress**

---

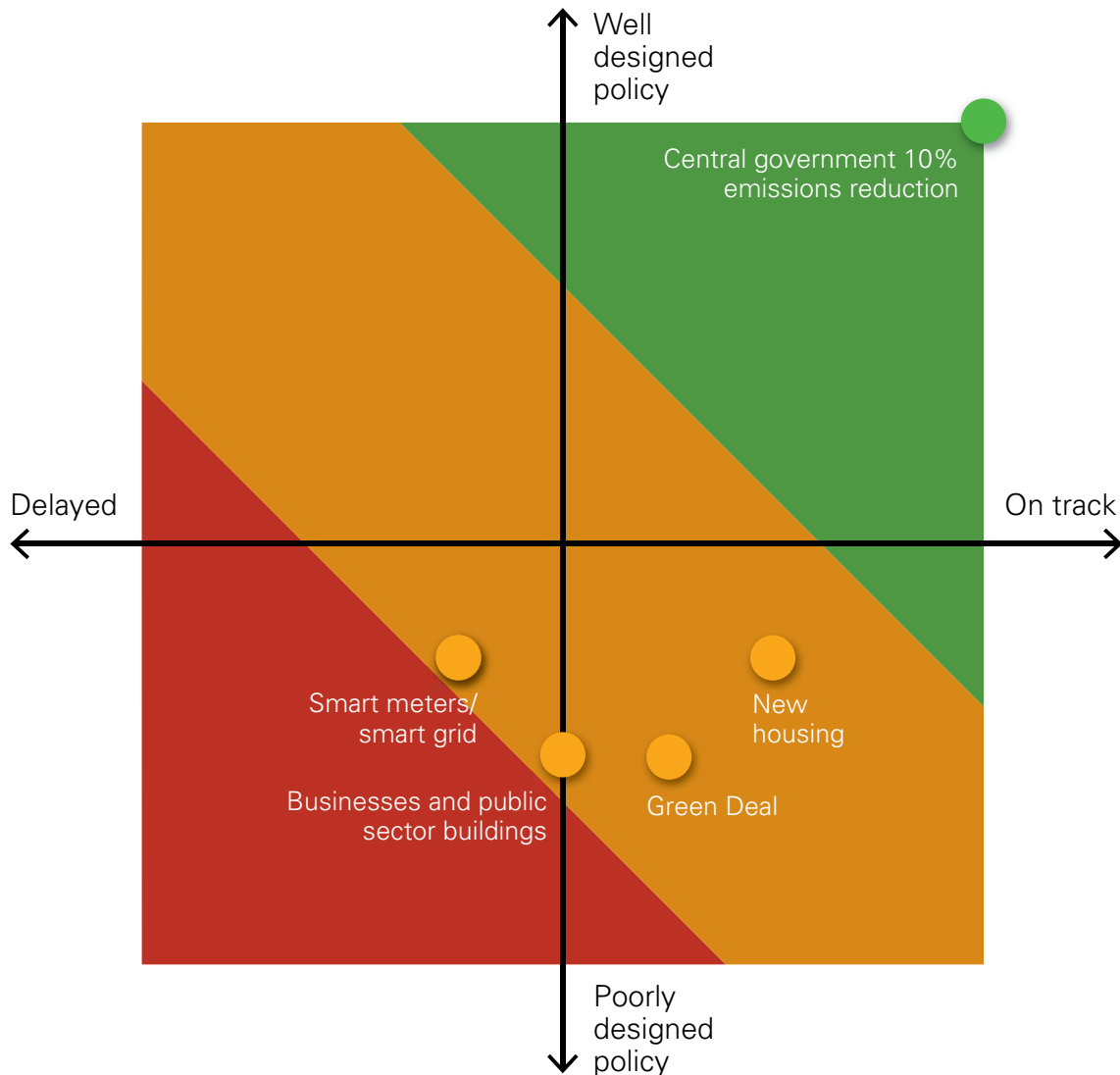
Committing £1 billion to fund the first CCS demonstration project is a big step forward in delivering a technology which will be crucial for UK and global power sector decarbonisation. The funding provides the UK with a real opportunity to develop expertise in a sector that will be critical to green economic growth over the next 20 years. The fact that this has been followed by the announcement that CCS will be eligible for CfD funding post-demonstration has put in place the bones of a wider delivery framework, which will need to be detailed in the forthcoming CCS roadmap.

However, the removal of the previously agreed CCS levy and subsequent continued absence of an agreed funding mechanism for projects two to four means overall delivery of this commitment is delayed. The timetable for UK funding for these needs to be urgently accelerated if UK projects are to be ready in time to capitalise on European-level funding on offer through NER300.<sup>55</sup> Without this, there will not be a credible package of funding for CCS demonstration. In addition, the government should investigate wider policies which could reduce the cost of the eventual rollout of CCS by considering clustering power stations and large industrial CO<sub>2</sub> emitters to enable them to share CCS equipment, and using strategic planning to reduce the potential impact and cost of future CCS pipelines.

Overall the government has made a good start but urgently needs to clarify funding for the remaining three demonstration projects and pursue the measures outlined above to reduce the long-run cost of retrofitting CCS.



# Energy efficiency



## Overall progress

Demand reduction measures will play a critical role in the UK's low carbon transition. The potential for reducing energy use in the UK is huge. A recent Committee on Climate Change (CCC) analysis suggests that there is scope for a 35 per cent reduction in buildings emissions and a 16 per cent cut in industry emissions by 2020, primarily through improvements in energy efficiency and increased deployment of renewable heat.<sup>56</sup>

The government is not going far enough or fast enough on energy efficiency policy. While progress has been made on meeting targets on its own estate, the

government has not demonstrated this drive on policies affecting the wider building stock. Key policies lack ambition; policy development and implementation is not properly co-ordinated across government; and the government's flagship environmental policy, the Green Deal, is at risk of failing because of its weak design.

Overall current policies will not deliver the energy savings necessary for the UK to meet its carbon budgets. Urgent action over the next 12 months is needed if the government is to deliver green jobs, carbon reduction, energy savings and cuts in household fuel bills.

## **Commitment: Through our ‘Green Deal’, we will encourage home energy efficiency improvements paid for by savings from energy bills.**

---

### What government has delivered:

---

The Green Deal is the government’s national plan to improve the energy efficiency of houses and businesses. From autumn 2012 it will make private sector finance available for homeowners and businesses to make energy efficiency improvements to their buildings at no upfront cost. The framework of the Green Deal is established in the Energy Bill which is currently being considered by parliament.<sup>57</sup> More detail will be set out in secondary legislation in early 2012.

The proposed ‘cap’ on the finance available to homeowners has been increased since the scheme was originally launched, from £6,500 to £10,000.<sup>58</sup> The loan is linked to the energy meter in the property rather than the individual or property owner, and only measures that will result in financial savings on energy bills over and above the amount to be repaid on the finance will qualify (the ‘golden rule’).<sup>59</sup> In cases where the golden rule will not be met but where the government wishes to support more costly energy efficiency measures, the main mechanism of support will be a new Energy Company Obligation (ECO).<sup>60</sup> This will replace the Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP), and will require energy companies to deliver energy efficiency improvements for fuel poor households and hard-to-treat homes, as well as subsidising more costly measures to be taken out alongside the Green Deal.<sup>61</sup>

Briefing papers published by DECC at the end of May outlined the proposed measures that will be eligible for Green Deal finance (subject to consultation),<sup>62</sup> and set out the proposed plans for consumer protection.<sup>63</sup> The papers outlined the Green Deal code; the setting up of a Green Deal advice line; and an independent body to ensure that Green Deal assessors and installers meet certain standards.

The Energy Bill includes an obligation on private landlords to meet minimum energy efficiency standards for their rented properties from 2018. This provision means that it would be illegal to rent out F and G-rated properties.<sup>64</sup>

A new design for Energy Performance Certificates (EPCs) will be launched from April 2012. The changes include making the potential financial savings of increased energy efficiency clear on the first page, as a way to motivate individuals to make changes.<sup>65</sup>

“

[The Green Deal is] a radical, game changing, way of improving energy efficiency in all properties affordable to all. By creating a new market opportunity for private sector finance we will provide another major opportunity for growth and employment with tens of thousands of jobs likely to be created in the home insulation market alone by 2020.”  
Greg Barker MP, Minister of State for Climate Change, September 2010<sup>66</sup>

### What we say – climate check:

---

#### **Moderate progress**

---

The government is certainly designing a scheme that will enable home energy efficiency improvements paid for by savings from energy bills. Big questions remain, however, over the level of expected take-up and whether it will deliver the scale of change needed to meet the UK’s carbon budgets.

To deliver this commitment successfully the government must put a policy framework in place that is capable of delivering emissions reductions from the housing sector in line with what is required to meet the UK’s carbon targets. This is supported by the CCC’s recent 3rd progress report: “In order to provide confidence over the scale of delivery, the government’s energy efficiency programme and the ECO should cover the full range of measures at a level of ambition commensurate with that required to achieve carbon budgets”.<sup>67</sup> This means the Green Deal and ECO should be aligned with the ambition to insulate all lofts and cavity walls by 2015, as well as 2.3 million solid walls by 2022.<sup>68</sup>

The government is not working to this end. The programme is not being designed to deliver on a scale consistent with CCC indicators of what is required to meet carbon budgets.<sup>69</sup> During the passage of the Energy Bill, the government rejected specific legislative amendments designed to ensure this alignment.<sup>70</sup>

Interdepartmental disputes over central policy decisions needed to make the Green Deal work are undermining efforts to put in place something transformative. This area is a prime example of where much greater cross-government support is needed if the policy framework is to have much impact. Treasury, CLG and BIS all have significant roles to play in making the Green Deal a success, but there is no mention of the policy in their business plans and no evidence that these departments view it as a priority.

In terms of the current design of the scheme, our primary concerns are also supported by the CCC, and include:

- > **The delivery model:** current proposals don't provide confidence that whole house and area-based approaches, considered important for incentivising uptake, will be implemented.<sup>71</sup>
- > **Funding and financing:** at present, solid wall insulation is unlikely to meet the golden rule; Green Deal financing should be combined with mortgage financing to help reduce costs; the £10,000 cap is unlikely to be sufficient; ECO funding may be restricted under limits on DECC spending.<sup>72</sup>
- > **Lack of additional fiscal incentives:** there is ample evidence that reducing the up-front cost of energy efficiency measures is not enough and that other measures are required.<sup>73</sup> At present, there is no clarity as to whether the government will introduce additional incentives such as stamp duty rebates to encourage uptake.<sup>74</sup>

Finally, the decision to regulate the private rented sector is welcome but considering it will reach the very worst energy performers, and that there is a high incidence of fuel poverty in this sector,<sup>75</sup> there is a strong case for bringing current plans forward from 2018. The private rented sector has some of the worst energy efficiency standards in the UK,<sup>76</sup> but has long

suffered from misaligned incentives where neither the occupier nor landlord has an incentive to improve the fabric of the home.

Without fairly urgent changes to the Green Deal including a scaling up of the government's level of ambition and cross-departmental co-ordination; changes and improvements to the means of financing to make sure solid wall insulation can be included; bringing forward the regulation of the private rented sector; and a package of measures designed to ensure uptake, the Green Deal is at risk of failing. At a time when energy prices are rising, maximum effort should be going into helping households reduce their energy bills. Without significant progress on energy efficiency during this parliamentary term the UK will fail to meet the indicators set out in its carbon budgets.<sup>77</sup>

### **Commitment: We will require continuous improvements to the energy efficiency of new housing.**

---

#### What government has delivered:

In July 2010 the government announced it would continue to support the existing policy that all new homes would be 'zero carbon' by 2016.<sup>78</sup> In the government's *Plan for growth*, however, the definition of 'zero carbon' was changed from one which included both regulated and unregulated energy use within the home to one that only took regulated energy into account.<sup>79</sup> This means carbon emissions produced by cooking and electrical appliances, which together account for about a third of a home's total emissions,<sup>80</sup> are no longer included.

In October 2010 revisions were made to Part L of the building regulations so they now include a minimum standard for fabric energy efficiency. The new regulations introduced a 25 per cent improvement on 2006 carbon emissions standards.<sup>81</sup> They are due to be revised again in 2013 and every three years thereafter.

The code for sustainable homes was updated in November 2010, to align it with the standards for energy efficiency in the revised building regulations, and to make the process required to meet the standards easier for house builders.<sup>82</sup>



We have delivered on our commitment to nail down a definition for zero carbon homes. This is an historic turning point in our drive to slash carbon emissions and tackle climate change. It paves the way for the green transformation of Britain's homes – making them warmer and more comfortable to live in, and at the same time cheaper to run.”

Grant Shapps MP, Minister of State for Communities and Local Government, May 2011<sup>83</sup>

What we say – climate check:

---

### Moderate progress

---

The government's progress falls in the moderate zone because we accept it is delivering continuous improvements to the energy efficiency of new housing. It has failed to achieve good progress however, because the level of improvement is less ambitious than previously envisaged and the quality of the policies being delivered is poor. The new definition of 'zero carbon', announced without consultation alongside the Budget, dilutes the previous standard by a third. This has potential implications for carbon budgets, as it will mean that new homes may have additional electricity capacity requirements, in contrast to assumptions made in the CCC's fourth carbon budget report.<sup>84</sup> By shifting the goal posts, the government has also sent a damaging signal to companies that have planned investments based on the original policy.

### **Commitment: We will reduce central government carbon emissions by 10% within 12 months.**

---

What government has delivered:

---

In July 2011 the government announced that the average emissions reduction across government from May 2010 to May 2011 was 13.8 per cent, with all departments exceeding the ten per cent target.<sup>85</sup> The government estimates that this has cut energy bills across Whitehall by £13 million.

The targets were met through a range of measures to reduce emissions (minimising heating, cooling and lighting; reducing the number of servers in use; installing green technologies), as well as through engaging staff with behaviour change activities (switching off monitors and computers; using stairs instead of lifts). In addition, real time data displays were installed in all Whitehall buildings, and the data was made available to the public online to increase transparency.<sup>86</sup>

The Prime Minister has committed the government to further reductions, setting a goal of 25 per cent emissions reductions across government by 2015, from a 2009-10 baseline. This will take into account emissions from government buildings as well as business-related travel by ministers and civil servants. This is supported by a target to cut the number of domestic business travel flights by 20 per cent by 2015, from a 2009-10 baseline.<sup>87</sup>



A 13.8% cut in emissions in just one year is a great result and the civil service should be very proud of this achievement. But to be the greenest government ever we need to do more to stamp out energy waste in Whitehall, and make it easier for people and business to use energy more efficiently. That's why I'm committing the Government to go further by reducing emissions by 25% by 2015.”  
Prime Minister David Cameron, July 2011<sup>88</sup>

What we say – climate check:

---

### Good progress

---

The fact that all departments met this target, as opposed to an average across government, is very positive. A reduction of emissions of nearly 14 per cent shows the government leading by example, and demonstrates that it is possible to reduce emissions through relatively straightforward measures and changes in behaviour. Critically, the government has also ensured this success will be built on by establishing a 2015 target.

## **Commitment: We will also take measures to improve energy efficiency in businesses and public sector buildings.**

---

### What government has delivered:

There is a range of policies being implemented or under consideration that can be classed as measures to improve energy efficiency in businesses and public sector buildings.

#### **Businesses**

Defra has recently consulted on options for carbon reporting by businesses and is expected to announce the government's preferred approach in late 2011. The consultation outlined one voluntary option and three mandatory options.<sup>89</sup>

In its *Carbon Plan*, the government stated it is "currently developing options for extending Display Energy Certificates (DECs) from public buildings to commercial buildings and working with industry on their take-up".<sup>90</sup> This work is on-going, due to be completed in 2012.

The government's 'zero carbon homes by 2016' commitment will apply to commercial buildings from 2019.<sup>91</sup> The definition of zero carbon that will apply has not yet been decided, but it is expected that a similar framework to the one used for residential buildings will be used.

Green loans are available for businesses, through the Carbon Trust and Siemens. These loans were announced in March 2011, and will total £550 million. The loans are available to support energy efficiency measures and equipment, with money saved from energy bills used to repay the loans.<sup>92</sup>

The Carbon Reduction Commitment Energy Efficiency Scheme (CRC) is a mandatory carbon emissions reporting and pricing scheme that covers large non-energy intensive companies and public sector organisations. Recent changes to the scheme mean that the money raised from the sale of allowances will be retained by the government rather than recycled back to CRC participants.<sup>93</sup>

#### **Public sector buildings**

As discussed above, the government is committed to achieving 25 per cent emissions reductions across the central government estate by 2015. The CRC also applies to large public sector organisations.

A Memorandum of Understanding (MoU) was signed between DECC and the Local Government Group earlier this year which sets out how central and local government will work together to encourage local councils to reduce their emissions.<sup>94</sup>

Display Energy Certificates are currently mandatory for public buildings with over 1,000m<sup>2</sup> of floor space.<sup>95</sup>

### What we say – climate check:

---

#### **Moderate progress**

---

While there is a range of policies being developed or implemented to improve energy efficiency in businesses and public sector buildings, there is no clear strategy or overarching level of ambition to reduce emissions from either. Instead there is a combination of ad hoc initiatives and voluntary approaches that do not add up to the level of action needed from these sectors to meet carbon budgets.

Over the next 12 months there is a range of opportunities for the government to improve its performance:

- > EPCs and DECs should be fully rolled out across the non-residential sector to provide more comprehensive information on energy performance and actual consumption, and to incentivise emissions reductions;<sup>96</sup>
- > carbon reporting by businesses should be made mandatory to help improve businesses' understanding of emissions and to incentivise energy efficiency measures;
- > the MoU between DECC and local government should be strengthened to include specific emissions reductions targets that reflect the level needed to meet carbon budgets; and

- > the new '25 per cent reduction by 2015' commitment should be expanded to apply to the public sector estate.

### **Commitment: We will establish a smart grid and roll out smart meters.**

---

What government has delivered:

---

#### **Smart meters**

On 30 March 2011 the government and Ofgem published the *Smart metering implementation programme: response to prospectus consultation*.<sup>97</sup> The document sets out the overall strategy and implementation timetable for the smart meter rollout, the benefits that smart meters should provide for consumers and the energy industry, and the strategy for establishing the communications needed to support the national rollout.

The rollout strategy confirmed plans to use a supplier-led rather than a regional approach and proposed certain obligations on suppliers' licences.<sup>98</sup> Consultation documents recently released by DECC on the first tranche of regulations include: a proposed code of practice governing how the installation of smart meters should be carried out; restrictions on sales and marketing activity on energy efficiency products during the installation process; and a proposed completion date of early 2019.<sup>99</sup>



This programme will directly affect us all. For Great Britain, it provides a platform to help us meet those challenges of energy security and climate change. For our industry, it will change the way in which we operate, the goods and services we use and how we use them. And as individuals – all of us will see smart meters installed in our homes or where we work, and we will need to act to realise the benefits that they can offer.”

Charles Hendry MP, Minister of State for Energy, March 2011<sup>100</sup>

#### **Smart grid**

Smart grids suffer from definitional inconsistencies so for the purpose of this report we will use the definition developed in the Electricity Networks Strategy Group's (ENSG) *Smart grid vision* in 2009: “A smart grid is part of an electricity power system which can intelligently integrate the actions of all users connected to it – generators, consumers and those that do both – in order to efficiently deliver sustainable, economic and secure electricity supplies”.<sup>101</sup>

In early 2011, Ofgem and DECC established the Smart Grid Forum (SGF) to provide leadership and momentum for the development of smart grids in the UK.<sup>102</sup> Included in the SGF's draft work programme is a work stream to ‘consider the key value drivers for a smarter network’,<sup>103</sup> and a framework for understanding and evaluating these drivers will be included in their spring 2012 report.<sup>104</sup>

The recent EMR white paper also committed the SGF to identifying ways to overcome the barriers to smart grid deployment. It committed the government to developing its electricity systems policy next year (which includes the development of a smarter grid).<sup>105</sup> DECC is working with the Energy Networks Association (ENA) to develop a framework for smart grid standards which will focus on cyber security issues,<sup>106</sup> as covered in a recent ENA report.<sup>107</sup> The government has also committed to refresh the analysis produced by the ENSG and extend its scope to 2030.<sup>108</sup>

A number of funding initiatives for smart grids were established under the previous government, including the Low Carbon Network Fund,<sup>109</sup> Innovation Funding Incentive,<sup>110</sup> and the Low Carbon Innovation Fund.<sup>111</sup> These initiatives are continuing under the current government.

What we say – climate check:

---

### **Moderate progress**

---

Many governments have stalled at the first hurdle when considering smart meters and those which have pursued a rollout have found it beset by problems, so we commend the government for a thorough process that has created momentum and buy-in to smart meter rollout plans.

However, although energy efficiency is stated as being the number one objective of the rollout,<sup>112</sup> with the resulting financial savings to consumers constituting 40 per cent of the scheme's business case, this has not led the design of the process. So far the government has focused primarily on the technical and practical issues of installing such a technology rather than maximising energy savings, which the National Audit Office has heavily criticised.<sup>113</sup> This is the primary reason why the government is only achieving moderate progress in this area.

The decision to use a supplier-led rollout means a missed opportunity to engage with communities through a street-by-street approach, which evidence suggests is the most effective way to engage householders with their energy use.<sup>114</sup> It also means additional problems have surfaced such as how to make sure consistent advice is delivered; how to integrate community action; and how to ensure the inter-operability and compatibility of technologies. Efforts to secure the benefits of a regional approach in a supplier-led context are still weak, voluntary and vaguely worded.

Finally, there has been little link-up between the rollout of smart meters and other efficiency policies such as the Green Deal and small scale renewables which, given the similar aims of these policies and concurrent timing, is a missed opportunity to maximise collective impact.

The government should urgently prioritise work on the consumer engagement programme, which has only just started, and integrate maximising energy savings into all of DECC's different smart meter working groups. While we accept it would be difficult to

completely revise the number of installation visits required at this point in the programme, the current code of practice should be amended to include sufficient detail on what energy efficiency advice suppliers must provide and how they can do this adequately without straying into the territory of 'marketing' which the government wants to prohibit.

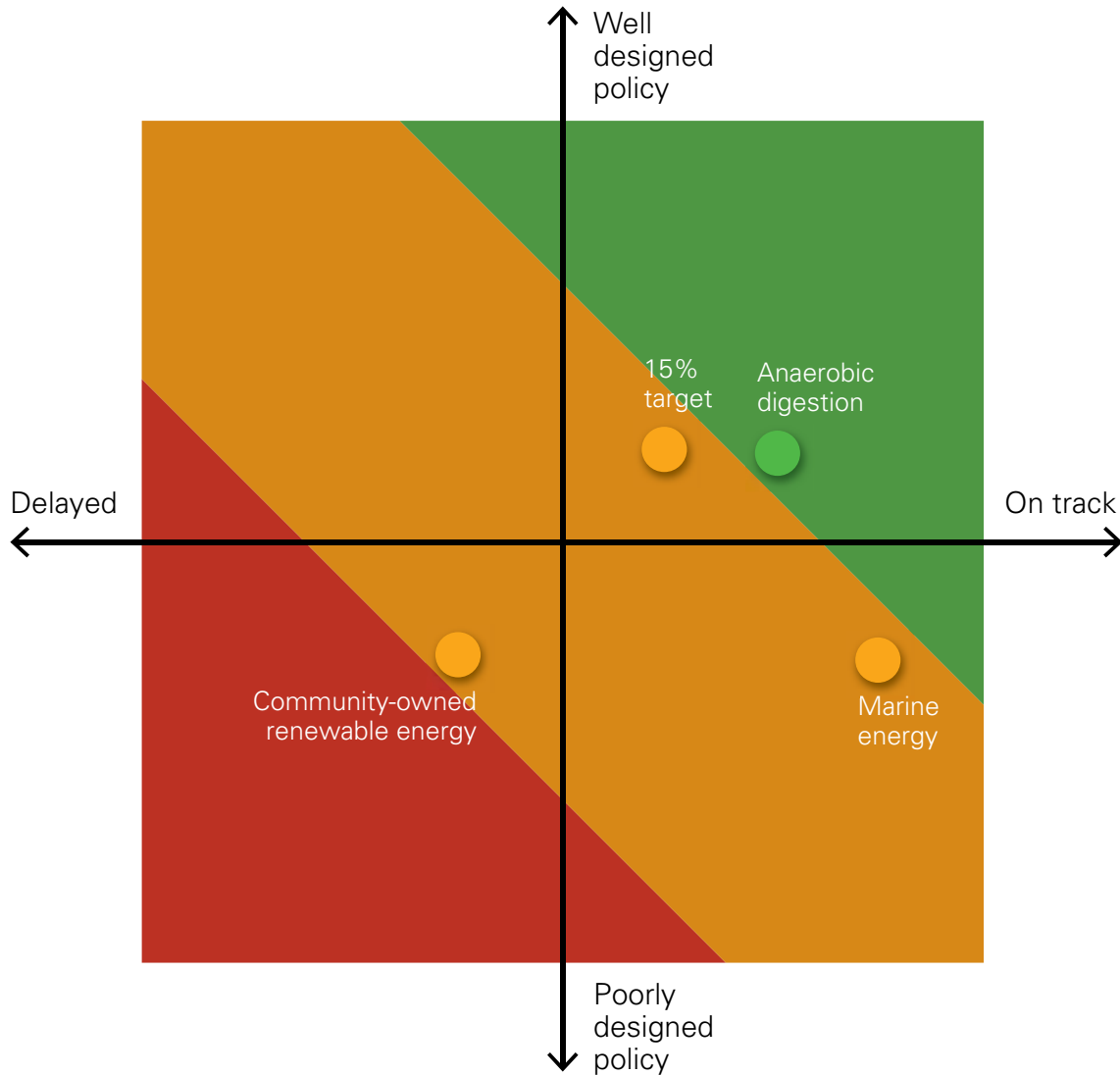
On smart grids, whilst there was momentum with the development of the ENSG vision and roadmap under the previous government, much of the initiative has since been left with industry to come forward with proposals for innovation through various existing funding initiatives. It is too early to say whether the current incremental approach will work, but we are not convinced that DECC is playing a sufficient oversight role to ensure that individual business-led initiatives add up to more than a sum of their parts, or that the network can keep pace with the innovation of the technology that will be connecting to it.

The government's recent commitment to refresh the analysis produced by the ENSG and extend its scope is promising and we welcome the formation of the SGF, but it is early days for these processes and their outputs and influence remain to be seen.

In developing their plans, the government should bear in mind the additional policies that will impact on smart grids, such as the complementary role that smart meters will play. Many of the issues described above for smart meters will have a significant impact on grid development, such as the type of data collected by smart meters and how that data is shared. Incomplete street information resulting from a supplier-led smart meter rollout will not provide reliable or suitably comprehensive network data for effective network management.

Finally the government still needs to make clear who will be doing the 'managing'. If it is to be District Network Operators (DNOs) this will be a substantial departure from their current role, and so will need new legislation in the very near future.

# Renewables



## Overall progress

Highlights include the introduction of the Renewable Heat Incentive (RHI) and new measures to encourage an increase in anaerobic digestion. Low points include missed opportunities to make progress on measures to encourage community-owned renewable energy schemes where local people benefit from the power produced, and the early review and subsequent reduction in the solar feed-in tariff (FiT), which had a negative impact on investor confidence.

A range of major decisions are due over the next 12 months which have the potential to dramatically impact on the government's performance. These include: decisions on the delivery of the grid; the role of the Green Investment Bank in helping to speed up investment in renewables; a further review of the FiT; adequacy of financing available through the Renewables Obligation (RO) and new large-scale FiTs; and reform of the planning system.



**Commitment: We will drive deployment of renewable energy across the UK to ensure that at least 15% of UK energy comes from renewable sources by 2020 (DECC business plan).**

---

What government has delivered:

It is difficult to assess the current government's progress on deployment given the relatively short time it has had to influence construction of new generating capacity and the amount of time it takes for projects to gain approval and connect to the grid. What we can assess is the policy framework being put in place to support the deployment of renewable energy so that the UK meets its '15 per cent by 2020' target.

The 2010 Comprehensive Spending Review allocated £200 million to support the development of low carbon technologies over the spending review period,<sup>115</sup> of which £60 million has been earmarked for offshore wind manufacturing infrastructure at port locations; £20 million to marine renewables such as tidal and wave devices; and £30 million to reduce the costs of offshore wind components.<sup>116</sup> This leaves £90 million so far unallocated.

The government has brought forward its Renewables Obligation Certificate (ROC) banding review to this year to provide clarity on the long term level of support for renewables and enable project developers to plan more effectively, although this raises the prospect of potential cuts in support.<sup>117</sup> As mentioned previously, the government has also provided some clarity on the longer term funding regime in the EMR white paper through contracts for difference (CfD).<sup>118</sup>

Small-scale renewables are still being funded through the small-scale FiTs scheme which was introduced by the previous government. The scheme was reviewed in February 2011 and cuts were made to medium to large-scale solar PV funding by 40 to 70 per cent.<sup>119</sup> A full review is expected imminently.

The government announced details of the RHI on 10 March 2011, which will be opened to large heat users in September 2011, and extended to households in October 2012. £860 million is available under the scheme.<sup>120</sup>

The government has designated energy National Policy Statements (NPSs),<sup>121</sup> which govern the planning process for renewables above 50MW onshore and 100MW offshore. According to Charles Hendry, the NPSs aim to "give industry the confidence to invest in much needed new energy infrastructure".<sup>122</sup> At the same time, government is in the process of reforming the planning system for sub-50MW onshore renewables through its draft National Planning Policy Framework (NPPF), which was published in July 2011.<sup>123</sup>

The *UK renewable energy roadmap* was released alongside the EMR white paper in July 2011. It outlines how the government will reach its 2020 target and the actions it will take to reduce barriers to delivery.<sup>124</sup> Key announcements include: a strong signal to offshore wind developers that up to 18GW of offshore wind is achievable by 2020, with significant increases beyond this; confirmation that risks from oil and gas development will be managed by the government; a clear message that much of the onshore wind which will be required by 2020 is in the planning pipeline; and that there is very large potential for biomass, subject to significant uncertainty about the availability of sustainable biomass feedstock.

What we say – climate check:

**Moderate progress**

---

The introduction of an RHI puts the UK at the forefront of global efforts to decarbonise heat and is a very welcome step forward in an area neglected by governments for a long time. The EMR white paper is positive in that it sets the reference price for CfD FiTs to the 'day-ahead' electricity price, and underwrites revenue risk for renewable power generation. This is welcome because it should reduce uncertainty for renewable developers. The EMR white paper is also strong on the transition from the RO to CfD FiTs, which should ensure that there will not be a hiatus in investment at precisely the time when renewables need to be delivered at an accelerated rate.

The ROC banding review will have a significant effect on the post-2017 funding level for renewables as it is likely to set the reference price for CfDs prior to 2020.

The banding review needs to deliver a credible level of subsidy if the UK is to meet its 2020 targets, and for the government to move into the good progress zone on this commitment. A major risk is that under-delivery in both on and offshore wind will leave the UK reliant on high levels of large scale electricity-only biomass, which would represent an inefficient use of scarce bioenergy resources that could be better used in decarbonising other sectors of the economy.

The early review of small scale FiTs and ensuing reduction in solar subsidy shook the confidence of some investors, and means the government's market reform has to restore the confidence of existing investors as well as attracting new infrastructure capital to the UK.

Delivery of this commitment is also dependent on an effective planning system. Some aspects of the reformed planning process for nationally significant infrastructure projects are positive, such as streamlined consenting and a clear timetable for major projects. The offshore wind grid remains a concern and needs to be designed and planned in a strategic way to reduce the cost and the onshore impacts. It is likely that the loss of spatial planning will mean that smaller projects will struggle to gain consent.

It was widely hoped that the NPPF would both address the complexity of the current planning system and establish a local-level framework to replace the regional targets and spatial strategies. The draft NPPF, however, fails to set a strong framework for renewables. Furthermore, its single-minded focus on short term economic growth is likely to undermine wider public support for the planning system, and further slow renewable developments.

**Commitment: We will encourage community-owned renewable energy schemes where local people benefit from the power produced. We will also allow communities that host renewable energy projects to keep the additional business rates they generate.**

---

What government has delivered:

---

In its 'Microgeneration Strategy' published in June 2011, the government committed to holding a roundtable on community energy in order to "work through the key barriers and identify, where possible, solutions and who has responsibility for taking these forward".<sup>125</sup> This roundtable has since taken place. The government also committed additional money for a CLG-funded initiative called PlanLoCaL,<sup>126</sup> which promises to assist communities in understanding how best to plan for local renewable energy. The strategy commits to identifying EU funding streams which might be available to community groups and local authorities and to encourage the investment community to provide "project investment and debt finance that meets community needs".<sup>127</sup>

The second aspect of this commitment, keeping additional business rates, is being taken forward by the Local Government Resource Review, led by CLG. A July 2011 consultation document states that business rate revenues from new renewable energy projects will be kept by local authorities to maximise the community benefit.<sup>128</sup> This commitment is explored in more detail in a technical paper on renewable energy which accompanies the consultation document.<sup>129</sup>

What we say – climate check:

---

### **Moderate progress**

---

So far, little has been done to support community-owned renewable energy schemes, apart from a set of largely ambiguous commitments in the 'Microgeneration Strategy' and the hosting of a stakeholder roundtable. It is for this reason that progress on this policy is assessed as delayed.

While the government has determined that local authorities will retain additional business rate revenues, it is not planning to provide any guidance on how local authorities should redistribute this revenue to make sure a community feels the benefit of hosting a renewable energy project. At a time when local authority budgets are being cut, the risk is that additional revenues will be used for essential services rather than projects designed to enhance community support for a renewable energy project in their local area.

To improve its performance, the government should consult on a set of guidelines for how local authorities should spend the additional business rates, with the aim of boosting the appeal of local community energy projects. We suggest such guidelines make clear that the community in the immediate vicinity of the project feels some of the benefit; consideration be given to channelling some of the revenue into projects with an environmental benefit such as local public transport solutions or energy efficiency measures; and that local authorities are required to communicate directly to communities how additional revenues are being spent.

**Commitment: We will introduce measures to promote a huge increase in energy from waste through anaerobic digestion.**

---

What government has delivered:

---

The 'Anaerobic Digestion (AD) Strategy and Action Plan' was published in June 2011 and is the government's attempt to address the non-financial barriers to an increase in AD. According to the document, "the Action Plan should help ensure there are no unnecessary obstacles to the development of AD, by addressing the barriers that have been identified by industry representatives during this process. There may also be some separate adjustments to the incentive regimes. Together, this should increase the growth rate of AD".<sup>130</sup>

Key actions in the document include:

- > guidance on the cost and benefits of AD to developers and local authorities;
- > evidence on the value of digestates;
- > developing skills and training for AD operators; and
- > highlighting 'best practice' projects that deliver community benefits.<sup>131</sup>

The government has also increased the level of financial incentives available for AD. From August 2011, smaller AD plants capable of producing up to 250kW of electricity will receive 14p per kWh, while plants that produce between 250kW and 500kW will receive 13p per kWh. This is an increase on current levels where every AD power plant up to 500kW receives 12.1p/kWh. The level for large plants between 500kW and 5MW remains unchanged at 9p/kWh.<sup>132</sup>

What we say – climate check:

---

**Good progress**

---

The government has made good progress against this commitment through raising the level of financial incentives available and a focus on addressing the non-financial barriers facing the industry. While some industry players expressed disappointment that the level of increase in financial incentives was insufficient,<sup>133</sup> others welcomed the increase at a time when support for other technologies was being cut back.<sup>134</sup>



Industry response: "The AD Strategy and Action Plan has been the product of a vast amount of work between government and industry. While we would have liked to see a clearer strategy to prioritise source-segregated food waste for AD, the actions which have been identified – many of which ADBA will be leading on – should help make it easier to grow the industry."

Charlotte Morton, chief executive of the AD and Biogas Association, June 2011<sup>135</sup>

## **Commitment: We will introduce measures to encourage marine energy.**

---

### What government has delivered:

The government has set up a new UK Marine Energy Programme which is aimed at developing a coherent set of cross-government policies to enable the marine energy sector to move from prototype testing to commercial deployment over the next five years.<sup>136</sup>

Greg Barker chairs the Marine Energy Programme Board, a stakeholder group that will advise on the direction of the programme. The Board has been tasked with coming up with ideas on how to develop Marine Energy Parks, which Barker argues could help attract additional investment.<sup>137</sup>

In terms of financial support, the government has replaced the £42 million Marine Renewable Deployment Fund with £20 million from DECC's low carbon technology budget for pre-commercial demonstration of wave and tidal energy devices.<sup>138</sup>

Financial support is also provided through the Renewables Obligation (the banding review is currently underway). The Technology Strategy Board also awarded £7 million in July 2010 to nine projects developing wave and tidal technologies.<sup>139</sup>



It seems to me quite bonkers that in this island nation of ours – surrounded by seas and ocean, with our great marine heritage and genius for advance engineering coupled with the threat of climate change and dwindling traditional domestic energy resources – we haven't done more to exploit this abundant resource. This has to change.”

Greg Barker MP, Minister of State for Climate Change, March 2011<sup>140</sup>

### What we say – climate check:

#### **Moderate progress**

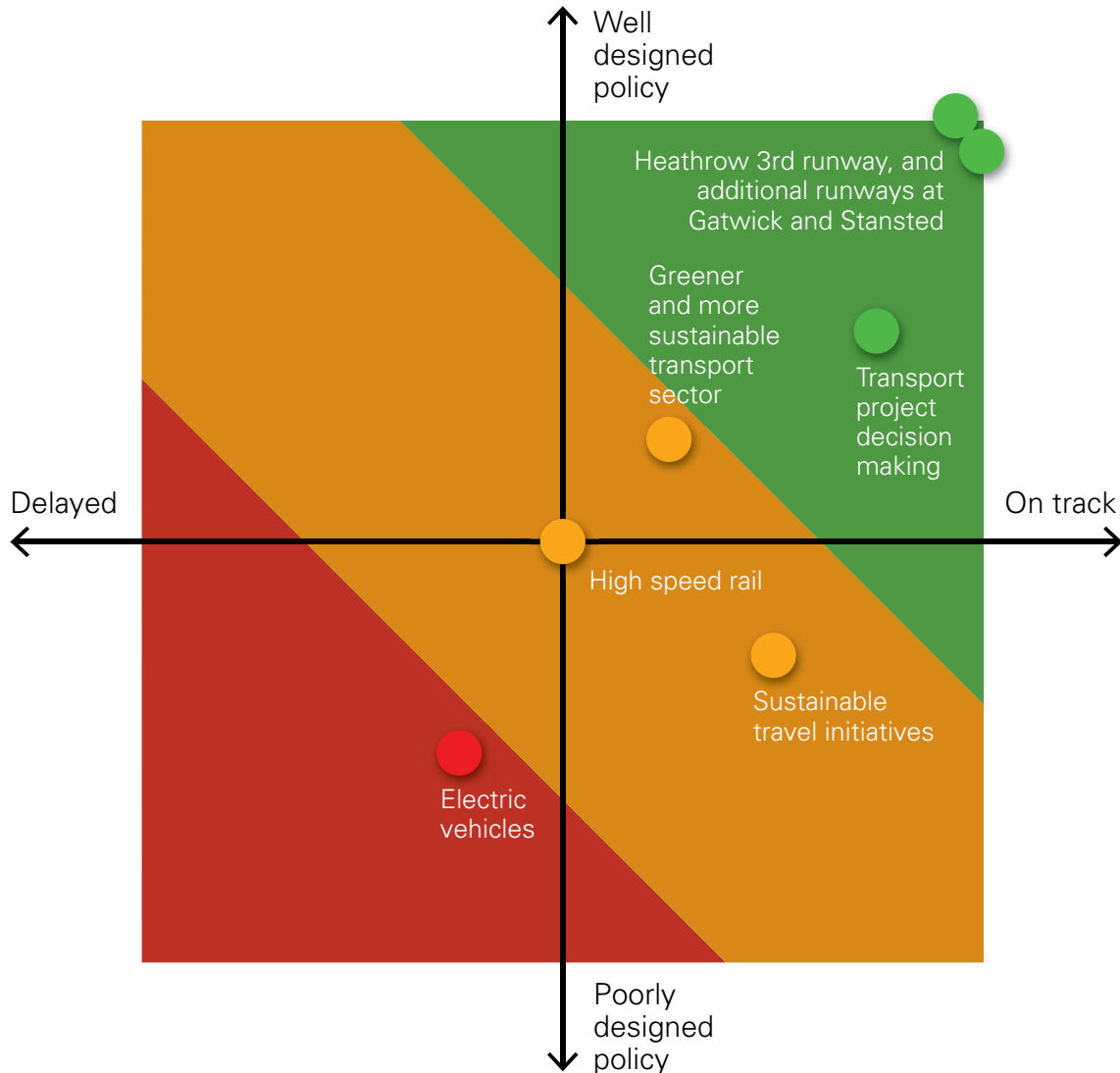
---

While Greg Barker's enthusiasm for marine energy is clear and the Marine Energy Programme has real potential, the effective delivery of this commitment is being held back by a lack of financial support for the development and deployment of this technology. While the flaws in the previous government's Marine Renewable Deployment Fund are widely acknowledged, the £20 million made available by this government falls considerably short of what the industry claims is needed: £70 million from DECC's Low Carbon Innovation Fund and £60 million from the proposed Green Investment Bank.<sup>141</sup>

We accept the current fiscal environment is extremely constrained but given the Carbon Trust's analysis that the marine energy sector could be worth £76 billion to the economy and support 68,000 jobs by 2050,<sup>142</sup> the government is missing a major opportunity to drive low carbon jobs and growth. It should scale up the financial support available for the development of this technology if it is to deliver good progress on this commitment over the next 12 months. A major test will be the outcome of the ROC banding review, where an increase in support for marine technologies in England and Wales to match Scottish levels of support will be needed.

Furthermore, the government needs to address the significant uncertainty faced by developers with regards to marine biodiversity impacts by speeding up the designation of marine protected areas and efforts to gather comprehensive and shared survey data.

# Low carbon transport



## Overall progress

The government is doing reasonably well in delivering its low carbon transport commitments. Highlights include the cancellation of the third runway at Heathrow and the reform of how transport project decisions are made. Low points include cuts to fuel duty at the same time as allowing rapid rises in public transport fares and the failure to mandate electric vehicle charging points in new homes and buildings.

The planning reforms currently proposed may undermine the carbon benefits of the good progress in low carbon transport. The Campaign for Better Transport has called the draft NPPF, “a manifesto for sprawl and congestion” which “lacks an overall vision of the development pattern which planning policy should foster in order to promote sustainable transport patterns”.<sup>143</sup> These issues must be urgently addressed for the government to boost its performance.

**Commitment: We will cancel the third runway at Heathrow.**

---

What government has delivered:

---

One of the first actions by the Coalition was to cancel plans for a third runway at Heathrow.

What we say – climate check:

---

**Good progress**

---

The government delivered this commitment quickly and definitively. The cancellation of the third runway was the culmination of a long campaign by a broad alliance of NGOs, local residents and MPs and the decision was widely welcomed.

**Commitment: We will refuse permission for additional runways at Gatwick and Stansted.**

---

What government has delivered:

---

At the same time as announcing the cancellation of Heathrow's third runway, the government also said it would refuse permission for further runways at Stansted and Gatwick.

What we say – climate check:

---

**Good progress**

---

This was a welcome commitment and again, it was delivered quickly and definitively.

**Commitment: We need to make the transport sector greener and more sustainable, with tougher emission standards and support for new transport technologies.**

---

What government has delivered:

---

The 2010 Comprehensive Spending Review included £400 million to support the development of the ultra-low emission vehicles market.<sup>144</sup> This includes support for transport users to purchase low carbon

vehicles through an incentives scheme (the plug-in car grant) which offers up to £5,000 towards the cost of a range of ultra-low emissions vehicles from January 2011. It also includes funding for research and development programmes delivered through the Technology Strategy Board and continued investment in electric vehicle recharging infrastructure through the government's Plugged-In Places scheme.

In October 2010 the government committed an additional £15 million to the existing Green Bus Fund,<sup>145</sup> which helps local authorities and bus operators buy hybrid and electric buses. In March 2011, BIS announced that the Engineering and Physical Sciences Research Council would provide £10 million for three low carbon vehicle R&D projects.<sup>146</sup>

Making the transport sector greener and more sustainable involves more than support for new technologies. It also means decreasing the attractiveness of high carbon transport options. The March 2011 Budget, however, delivered a reversal of planned fuel duty rises, cancelling the fuel duty escalator for the rest of the current parliament and immediately reducing fuel duty by 1p.<sup>147</sup>

In terms of pursuing tougher emissions standards, the UK operates within an EU framework so has limited scope to act unilaterally. The latest emissions standards for new cars were adopted in 2009, and have been agreed for the period up to 2015.<sup>148</sup> However, there is scope for the government to influence the 2020 target which is currently under review and set to be agreed in 2013, to make sure it is more robust than current proposals and will drive longer term investment in cleaner vehicle technology.

“

[The Green Bus Fund] will help us deliver our commitment to build a low-carbon economy which will boost economic growth as well as help meet our ambitious climate change targets. By placing ourselves at the forefront of the green technology revolution we will encourage future manufacturing success, generate new jobs and over the long run create new export opportunities.”

Mark Prisk MP, BIS Minister, July 2010<sup>149</sup>

What we say – climate check:

---

### **Moderate progress**

---

In terms of supporting low carbon transport options, the government has made progress by committing significant funding to new technologies. However, there has been a regression in measures designed to decrease the attractiveness of high carbon transport options, such as the cancellation of the fuel duty escalator. This is of concern considering it has come at a time when public transport fares are increasing. To reduce the carbon impact of the transport sector more attention will need to be paid to displacing high carbon transport options and making sure people have access to affordable and reliable public transport.

**Commitment: We will support sustainable travel initiatives, including the promotion of cycling and walking.**

---

What government has delivered:

---

In January 2011 the government published a local transport white paper, 'Creating growth, cutting carbon: making sustainable local transport happen', which "sets out the Government's vision for a sustainable local transport system that supports the economy and reduces carbon emissions".<sup>150</sup> The white paper included details on the Local Sustainable Transport Fund (LSTF), to which government has allocated £560 million for the four year period to 2014-15.<sup>151</sup> The fund is available for local authorities to develop sustainable travel initiatives including the promotion of walking and cycling, car clubs, car sharing and improving public transport.

The 2010 Comprehensive Spending Review included cuts to the Bus Service Operators Grant (BSOG), the fuel tax rebate for buses, which come into effect in April 2012.<sup>152</sup> These cuts are likely to mean reduced services in operation and the withdrawal of a number of concessionary fare schemes.

The current redesign of the planning system impacts on this commitment because of planning policy's potential to support or hinder sustainable travel initiatives such as walking and cycling. A draft of the

new National Planning Policy Framework (NPPF) was published in July, which cites two objectives of transport policy: facilitating economic growth and supporting reductions in greenhouse gas emissions and congestion.<sup>153</sup> However, the proposals give developers the opportunity to argue that ensuring housing estates have good public transport and walking or cycling routes to shops and workplaces is not reasonable or practical.

“

The establishment of the LSTF reflects the importance the Government attaches to helping build locally a strong economy and addressing at a local level the urgent challenge of climate change and the commitment made in the Coalition Agreement to promoting sustainable travel initiatives.”

Norman Baker MP, Minister of State for Transport, December 2010<sup>154</sup>

What we say – climate check:

---

### **Moderate progress**

---

The allocation of significant resources to the LSTF constitutes a ramping up of support in comparison to the previous government, but progress is being undermined by the potentially negative impact of proposed planning reforms.

The government will only achieve good progress on this commitment if it uses the proposed planning reforms to promote walking and cycling. Public transport and walking and cycling routes should remain a priority for developers looking to build new housing estates, and public transport services should be integrated to bring economic and environmental benefits to a region.

It should be noted that cuts to local authority budgets are impacting on the transport services and programmes they can provide. The cut to the BSOG is particularly significant and unless it is replaced by other incentives, it risks driving people out of buses and into cars, increasing carbon emissions and congestion.

## **Commitment: We will mandate a national recharging network for electric and plug-in hybrid vehicles.**

---

### What government has delivered:

The electric vehicle charging infrastructure strategy was published on 30 June.<sup>155</sup> It claims to offer support for plug-in vehicle infrastructure through:

- > ensuring Britain's smart meter rollout is implemented so that cars can recharge when it is cheapest for the consumer;
- > making it easier for private enterprise to provide recharging infrastructure by removing regulatory barriers; and
- > proposing the inclusion of policy on plug-in vehicle infrastructure in the National Planning Policy Framework.<sup>156</sup>

The strategy does not mandate a national recharging network or charge points in new domestic and work place developments. Instead, it includes a 'permitted development right', which allows charge points to be installed in car parking areas without the need for planning permission.

The government has also committed £30 million to install charging infrastructure in eight regions around the UK by March 2013 through its Plugged-In Places scheme.<sup>157</sup>



This Strategy will help maintain the UK as a global leader in the design, production and use of electric and ultra-low emission cars and at the forefront of efforts to decarbonise motoring.”

Rt Hon Phillip Hammond MP, Secretary of State for Transport, June 2011<sup>158</sup>

### What we say – climate check:

#### **Failing**

---

The government has not mandated a national recharging network. Instead it has delivered a strategy that falls significantly short of meeting this commitment and missed a good opportunity to increase the attractiveness of electric and hybrid cars at a time when consumers are finally being offered more choice.

We accept, to an extent, DfT's argument that a government sponsored public recharging network would stifle private sector innovation, particularly given the announcement by Ecotricity that it will build a network of public recharging points at motorway services up and down the country.<sup>159</sup>

The real missed opportunity here is the government's failure to introduce any regulatory measures to back up its assertion that electric vehicle owners will recharge their cars at home or in the workplace. The government's strategy promotes rather than mandates a recharging network in these places, with no intention to make changes to building regulations unless the provision of domestic recharging does not keep pace with the trajectory of plug-in vehicle uptake.

To improve the delivery of this commitment the government should amend the draft NPPF so that it mandates charging points in all new homes and commercial buildings.



**Commitment: We will reform the way decisions are made on which transport projects to prioritise, so that the benefits of low carbon proposals (including light rail schemes) are fully recognised.**

---

What government has delivered:

---

In April 2011 Transport Secretary Phillip Hammond announced the reform of the way decisions are made on transport proposals so that the benefits of low carbon are fully recognised.<sup>160</sup> Changes include using higher values for carbon, as published by DECC, which Hammond said tends to improve the benefit/cost ratios (BCRs) of schemes that reduce carbon emissions and weaken the BCRs of schemes that result in higher carbon emissions. The perverse treatment of fuel duty receipts as a negative cost was also removed.

What we say – climate check:

---

### **Good progress**

---

Hammond's announcement was very positive and means the government is making good progress. The real test is how these changes are put into practice. Decisions on DfT funding support for a range of transport proposals put forward by local authorities are due at the end of the year and we will closely examine the extent to which they are properly assessed against the new business case.

**Commitment: We will establish a high speed rail network as part of our programme of measures to fulfil our joint ambitions for creating a low carbon economy.**

---

What government has delivered:

---

The government has proposed a new high speed rail line linking London and Birmingham with Manchester and Leeds (HS2), launching a consultation on the first phase of this proposal in February 2011.<sup>161</sup> The proposals refer to high speed rail's potential to provide a low carbon form of transport but acknowledge that the potential impact of the proposed routes varies widely from significant carbon savings to significant new emissions, depending on a range of variables including the mode shift from other forms of transport, especially aviation, and the source and efficiency of electricity generation.<sup>162</sup>

The consultation document states that HS2 will increase rail capacity to meet the rising demand for long distance rail travel. In terms of mode shift, the proposals say that HS2 will decrease train journey times and therefore reduce demand for internal UK flights. It says that international high speed rail services could also lead to reduced short haul aviation and reduce congestion at airports as well as on roads.

Whilst acknowledging that construction of HS2 would produce considerable emissions, the government argues this would be offset by the reductions in emissions possible through the numbers of passengers attracted from other modes of transport and from emission reductions elsewhere under the EU ETS.

The consultation closed in July and the government will make a decision on how it will proceed by the end of 2011.



The urgent need to support economic growth and to decarbonise our economy means that the time for high speed rail in Britain has come... We will show how High Speed Rail can transform the face of Britain's economy – with more growth, more jobs and more prosperity.”

Rt Hon Phillip Hammond MP, Secretary of State for Transport, February 2011<sup>163</sup>

Current proposals fall well short of delivering this package and recent increases in rail fares will not help encourage the mode shift to rail. If the government does decide to go ahead with HS2, we would encourage DfT to put much more time and effort into examining the policies needed to accompany HS2 so that it can be part of delivering a low carbon economy.

What we say – climate check:

---

### Moderate progress

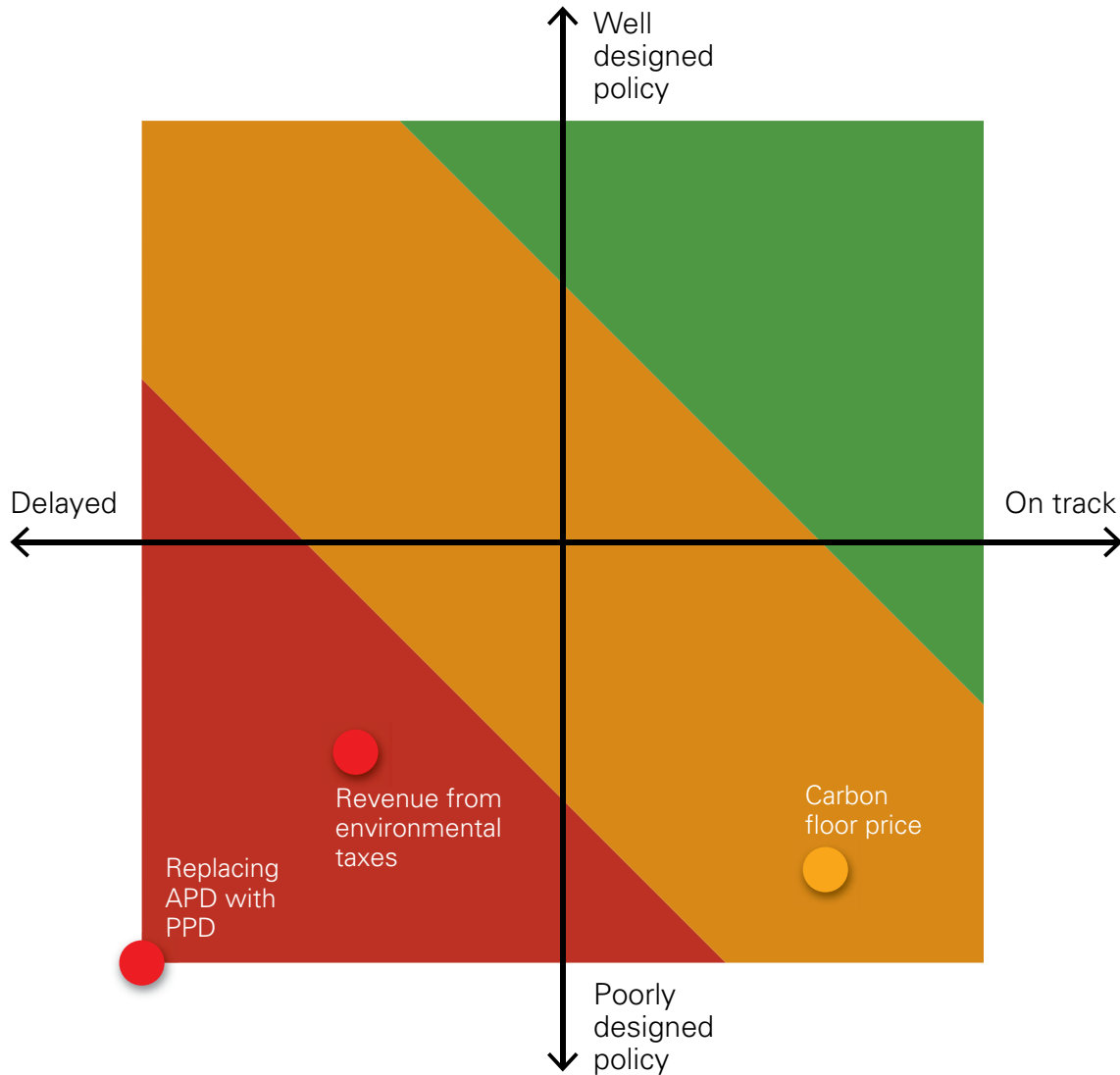
---

It is obviously very early days to assess the delivery of this commitment. At this point, it is not clear whether HS2 plans have been designed to generate new journeys or if they are aimed at shifting existing journeys from road and air to rail. As such it is difficult to assess whether the proposals will actually deliver low carbon benefits. Figures from DfT are not promising: the likely mode shift from cars and planes will account for just 13 per cent of passengers on HS2.<sup>164</sup>

We agree with Campaign for Better Transport's view that HS2 must be part of a package that reduces carbon emissions and protects biodiversity and landscape. This means the government should:

- > prioritise investment in existing public and local transport and ensure that high speed rail does not abstract funding from these;
- > use high speed rail to shift existing trips from planes and cars, not generate new ones;
- > use pricing to encourage people to choose rail; lower train fares and increased taxes on short distance flights are needed;
- > include a moratorium on airport expansion and major road development;
- > integrate the high speed line with wider planning and regeneration; and
- > avoid or, if absolutely necessary, mitigate impacts on environmentally sensitive sites and protect tranquil areas.<sup>165</sup>

# Green taxation



## Overall progress

The government is failing to deliver its green taxation commitments. There is no sign at this point of a serious green tax shift over the course of this parliament and the government has dropped its commitment to replace air passenger duty with a per-plane duty. It is delivering a carbon floor price but one that is poorly designed and unlikely to achieve any significant environmental outcomes.

### **Commitment: We will increase the proportion of tax revenue accounted for by environmental taxes.**

Note: By environmental taxes, we include road fuel duty, vehicle excise duty, climate change levy, landfill tax, aggregates tax, carbon floor price support and aviation taxes.<sup>166</sup>

#### What government has delivered:

The Coalition inherited two significant green tax escalators from the previous government. Under the previous government's public finance forecasts, landfill tax and road fuel duty were due to increase over and above inflation by £8 per tonne and 1p per litre respectively. The increases in landfill tax have remained in place, but the anticipated increases in road fuel duty were cancelled in the 2011 Budget.<sup>167</sup> The fuel duty changes will have a significant revenue effect, with £1.9 billion of revenue lost in 2011-12, rising to £2.1 billion in 2014-15.<sup>168</sup>

The Coalition has introduced a new green tax measure, the carbon floor price, which will be an additional tax on electricity generation, alongside the introduction of auctioning for EU Emissions Trading Scheme (ETS) permits in 2013.<sup>169</sup> This will raise £740 million in 2013-14.<sup>170</sup>

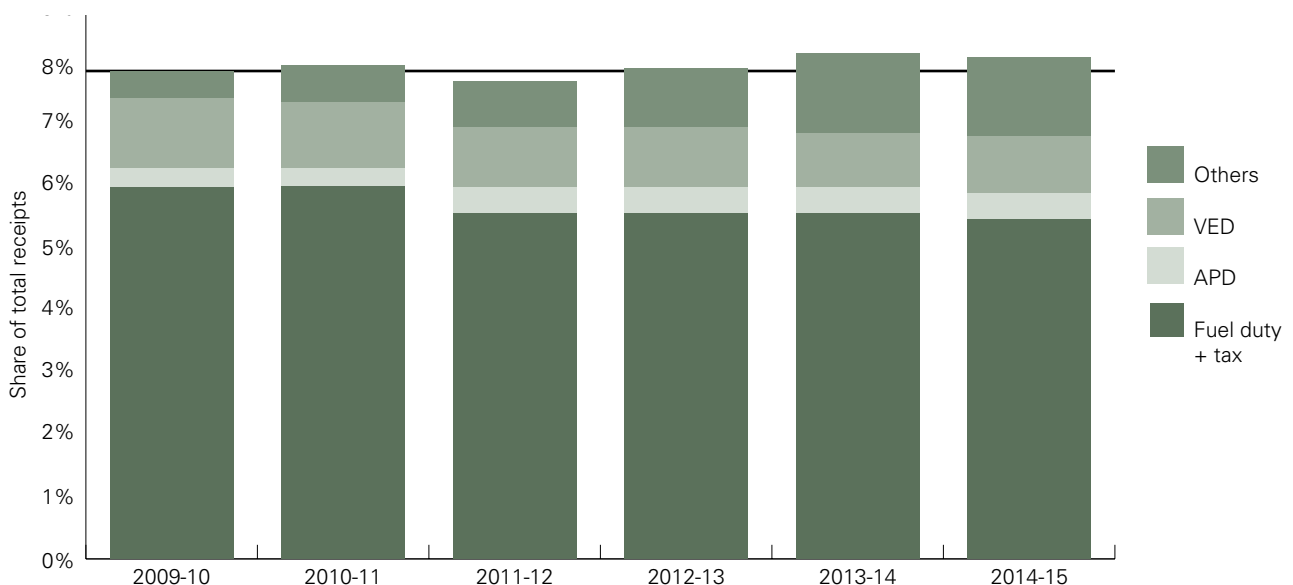
The timing of these measures means that the proportion of total revenue from green taxes is projected by the Institute for Fiscal Studies (IFS) to have fallen by 2012, but may increase to marginally above the proportion inherited by the last government by the end of this parliament (see IFS graph below). The margin of error, however, means this cannot be guaranteed.

#### What we say – climate check:

### **Failing**

The proportion of total revenue from green taxes is forecast to marginally increase above the proportion inherited by the last government, but there is no evidence that the government is seeking to make a significant shift in the burden of tax onto pollution and away from labour and income. In fact, recent figures from the Office for National Statistics show that green taxes fell as a proportion of the UK tax burden in 2010.<sup>172</sup> The decision to abandon planned fuel duty increases also runs directly counter to this commitment.

### **Projected proportion of total revenue from green taxes. Graph source: IFS<sup>171</sup>**



### **Commitment: We will replace air passenger duty with a per-plane duty.**

---

#### What government has delivered:

The March 2011 Budget revealed that air passenger duty (APD) would not be changed due to concerns about the legality and feasibility of introducing a per-plane duty (PPD) under current international rules. However, the government did commit to starting “a programme of intensive work with our international partners to build consensus for a PPD in the future”.<sup>173</sup> It was also announced that APD would be frozen for 2011-12.<sup>174</sup>

At the same time, a consultation on proposals for the reform of APD was launched and is expected to be completed in the autumn. The aim of the consultation is to: “simplify APD in a way that improves the efficiency and fairness of the tax. The consultation also seeks stakeholder responses to Government plans for extending aviation tax to ‘business jets’”.<sup>175</sup> The consultation document re-states the government’s current position on replacing APD with PPD.

#### What we say – climate check:

### **Failing**

---

The government has not delivered on this commitment and has no plans to do so in the near future.

We do not accept the case the government has put forward to justify abandoning this commitment. Whilst it is undoubtedly true that some US airlines would seek to mount a legal challenge to a per-plane duty, both Swedish and Swiss airports have regulations setting charges for emissions and noise levels for flights which are based on the plane type.<sup>176</sup> There is, therefore, international precedent for some form of plane-based levy. In their recent report on environmental taxes, the Environmental Audit Committee also said that the proposed changes to APD will “do nothing to make it a more effective environmental tax”.<sup>177</sup> The government appears to have given up on delivering this commitment in the face of intensive lobbying by sections of the aviation industry.

### **Commitment: We will introduce a floor price for carbon.**

---

#### What government has delivered:

The Treasury announced a carbon price support mechanism in December 2010,<sup>178</sup> and used the March 2011 Budget to confirm a starting price of about £16 per tonne, rising steadily to £30 per tonne by 2020.<sup>179</sup> This mechanism is intended to give greater certainty to investors about the carbon price and incentivise low carbon investments.

#### What we say – climate check:

### **Moderate progress**

---

Certainty about the cost of carbon will help to address one of the major challenges of the EU ETS: price volatility driven by over-allocation of permits at the European level. However, the way the Treasury has implemented the carbon floor price creates a number of problems.

First, it gives windfall profits to existing low carbon generators, i.e. mostly existing nuclear power stations, of approximately £1 billion.<sup>180</sup> This windfall will not result in additional investment in low carbon technology or reduce carbon emissions. Instead, it simply raises consumer bills to fund profits for a small group of energy generators.

Second, the carbon floor price has been promoted by the government as a green tax but the revenues will not be used to fund green initiatives or reduce the impacts of rising fossil fuel prices on consumers. Instead, the revenues will simply be absorbed by the Treasury.

Overall, the design of the carbon floor price is weak. It has some benefits but very significant drawbacks which the government should address by imposing a windfall tax on existing nuclear operators and by directing these funds to pay for energy demand reduction measures for vulnerable groups. More widely, it could recycle the revenue from the floor price to provide funding for the Green Deal, which would be nine times more cost-effective at cutting carbon than simply imposing the floor price.<sup>181</sup>

# References

- 1 HM Government, 2010, *The Coalition: our programme for government*
- 2 HM Government, 2010, *The Coalition: our programme for government*, p.16
- 3 See Department of Energy and Climate Change, 17 May 2011, Fourth Carbon Budget: oral ministerial statement by Chris Huhne, [www.decc.gov.uk/en/content/cms/news/cb\\_oms/cb\\_oms.aspx](http://www.decc.gov.uk/en/content/cms/news/cb_oms/cb_oms.aspx). This entails a commitment that that net emissions over the fourth carbon budget period (2023-2027) should not exceed 1950 million tonnes of carbon dioxide equivalent, which represents a 50 per cent reduction from 1990 levels.
- 4 Department for International Development, 2011, *Business plan 2011 – 2015*
- 5 Department for Energy and Climate Change, 2011, *Business plan 2011 – 2015*
- 6 Louise Gray, 31 July 2011, 'David Cameron supports Australian carbon tax', in *The Telegraph*, [www.telegraph.co.uk/news/worldnews/australiaandthepacific/australia/8673736/David-Cameron-supports-Australian-carbon-tax.html](http://www.telegraph.co.uk/news/worldnews/australiaandthepacific/australia/8673736/David-Cameron-supports-Australian-carbon-tax.html)
- 7 Department of Energy and Climate Change, 15 July 2010, joint EU climate change article by Chris Huhne and Dr Norbert Röttgen and Jean-Louis Borloo, [www.decc.gov.uk/en/content/cms/news/EU\\_CC\\_article/EU\\_CC\\_article.aspx](http://www.decc.gov.uk/en/content/cms/news/EU_CC_article/EU_CC_article.aspx)
- 8 HM Government, 2011, *Carbon Plan*, p.61
- 9 Department for Business, Innovation and Skills, 2011, *Funding for EU research and innovation from 2014: a UK perspective*, p.9
- 10 Prime Minister David Cameron, 22 June 2011, Prime Minister's questions, [www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110622/debtext/110622-0001.htm](http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110622/debtext/110622-0001.htm)
- 11 EurActiv, 11 July 2011, 'The EU budget: lean and green', [www.euractiv.com/en/climate-environment/eu-budget-lean-green-analysis-506457](http://www.euractiv.com/en/climate-environment/eu-budget-lean-green-analysis-506457)
- 12 Environmental Audit Committee, 2011, *The impact of UK overseas aid on environmental protection and climate change adaptation and mitigation*, Written evidence submitted by DFID, Ev 113
- 13 Rt Hon Chris Huhne MP, in *The Guardian*, 15 July 2011, 'Sir David King: world should abandon Kyoto protocol on climate change', [www.guardian.co.uk/environment/2011/jul/15/david-king-abandon-kyoto-protocol](http://www.guardian.co.uk/environment/2011/jul/15/david-king-abandon-kyoto-protocol)
- 14 Department for Energy and Climate Change, 5 November 2010, The Advisory Group on Long Term Finance (AGF) report launch, [www.decc.gov.uk/en/content/cms/tackling/international/icc\\_news/cms\\_news\\_pages/finance\\_group/finance\\_group.aspx](http://www.decc.gov.uk/en/content/cms/tackling/international/icc_news/cms_news_pages/finance_group/finance_group.aspx)
- 15 Environmental Audit Committee, 2011, *The impact of UK overseas aid on environmental protection and climate change adaptation and mitigation*, p. 24
- 16 Ibid.
- 17 Rt Hon Andrew Mitchell MP speech, Department for International Development, 18 November 2010, at a Climate and Development Knowledge Network event at British Council on 18 November 2010, [www.dfid.gov.uk/Media-Room/Speeches-and-articles/2010/Climate-change/](http://www.dfid.gov.uk/Media-Room/Speeches-and-articles/2010/Climate-change/)
- 18 Rt Hon Alan Duncan MP, Department for International Development, 8 June 2011, House of Commons debates: 'International Development – Climate Change', [www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110608/debtext/110608-0001.htm](http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110608/debtext/110608-0001.htm)
- 19 Department for International Development, 2011, *Business plan 2011-2015*, Action 6.3: 'Make DFID programmes more climate smart', p.18
- 20 Department for International Development, 2011, *Departmental Adaptation Plan update* (May 2011), p.3
- 21 Environmental Audit Committee, 2011, *The impact of UK overseas aid on environmental protection and climate change adaptation and mitigation*, p.15
- 22 HM Government, 2011, *Carbon Plan*, p.71
- 23 Ibid.
- 24 Letter from the Chief Executive's Office of the Export Credits Guarantee Department to Green Alliance, 20 July 2011
- 25 Export Credits Guarantee Department, 1 April 2010, 'Final response published on the business principles consultation', [www.ecgd.gov.uk/news-and-events/news/fin-resp-bus-principals](http://www.ecgd.gov.uk/news-and-events/news/fin-resp-bus-principals)
- 26 Ibid.
- 27 UK Trade and Investment, 2011, *Britain open for business*, p.56
- 28 UK Trade & Investment, 2011, *UK know how in low carbon*, [www.ukti.gov.uk/export/lowcarbon.html](http://www.ukti.gov.uk/export/lowcarbon.html) (last accessed 25 August 2011)
- 29 UK Trade & Investment, 2011, *UK oil and gas: world class capabilities*
- 30 Bloomberg, 18 November 2010, 'U.K. government guarantees English soccer TV sale to rulers of Abu Dhabi', [www.bloomberg.com/news/2010-11-18/u-k-government-guarantees-english-soccer-tv-sale-to-rulers-of-abu-dhabi.html](http://www.bloomberg.com/news/2010-11-18/u-k-government-guarantees-english-soccer-tv-sale-to-rulers-of-abu-dhabi.html)
- 31 Ian Pearson MP, Department for Business, Enterprise and Regulatory Reform, 22 April 2009, House of Commons – Written Answers: 'Fossil Fuels: government assistance', [www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090422/text/90422w0001.htm](http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090422/text/90422w0001.htm)
- 32 Rt Hon Edward Davey MP, Department for Business, Innovation and Skills, 8 March 2011, House of Commons – Written Answers: 'Fossil fuels', [www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110308/text/110308w0003.htm](http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110308/text/110308w0003.htm)
- 33 Environmental Audit Committee, 2011, *The impact of UK overseas aid on environmental protection and climate change adaptation and mitigation*, p.28
- 34 Ernst & Young LLP, October 2010, *Capitalising the green investment bank: key issues and next steps*, p.4
- 35 Department for Business, Innovation and Skills, 2011, *Update on the design of the green investment bank*, p.8
- 36 Department for Business, Innovation and Skills, 2011, *The green investment bank: the advisory group*
- 37 Department for Business, Innovation and Skills, 2011, *Update on the design of the green investment bank*, p.5
- 38 Communicated to Green Alliance at a meeting with Treasury officials, 26 July 2011

- 39** Rt Hon George Osborne MP speech, 24 November 2009, 'A sustainable Government; a sustainable economy', [www.conservatives.com/News/Speeches/2009/11/George\\_Osborne\\_A\\_sustainable\\_Government\\_a\\_sustainable\\_economy.aspx](http://www.conservatives.com/News/Speeches/2009/11/George_Osborne_A_sustainable_Government_a_sustainable_economy.aspx)
- 40** Department of Energy and Climate Change, 2011, 'Planning our electric future: a white paper for secure, affordable and low-carbon electricity'
- 41** See Energy and Climate Change Committee, 2011, *Electricity Market Reform: fourth report of session 2010-12* – "FIT with a Contract for Difference (CfD): is a long term contract with the agreed "strike" price set at a fixed level, where payments are made to "top up" the difference between the average market price and the agreed price. The FIT payment would be made in addition to the generator's revenues from selling electricity in the market. According to DECC, the CfD could work both ways, so that generators would be obliged to return money if electricity prices are higher than the agreed tariff."
- 42** Department of Energy and Climate Change, 2011, *Ofgem review: final report*
- 43** Ofgem, 2011, *Ofgem's retail market review – update and next steps (liquidity proposals)*
- 44** *The Guardian*, 3 January 2011, 'Chris Huhne promises Britain will speed up switch to green energy', [www.guardian.co.uk/business/2011/jan/03/renewables-green-energy-huhne](http://www.guardian.co.uk/business/2011/jan/03/renewables-green-energy-huhne)
- 45** The Climate Change Act 2008 requires government to set out how it will meet carbon budgets. The *Carbon Plan*, due to be published in October, will need to explain how the power sector will contribute to the fourth carbon budget.
- 46** Energy and Climate Change Committee, 2011, *Electricity market reform: government response to the committee's fourth report of session 2010-12*
- 47** Department of Energy and Climate Change, 2011, *UK renewable energy roadmap*
- 48** Department of Energy and Climate Change, 2011, *Review of DECC's delivery landscape*, p.4
- 49** Department of Energy and Climate Change, 2011, 'Planning our electric future: a white paper for secure, affordable and low-carbon electricity', p.51
- 50** Department of Energy and Climate Change, 2011, *Digest of UK energy statistics* Chapter 5: 'Electricity', p.146
- 51** The plant at Hunterston is planned as an 1800MW plant, of which only 300MW will be abated, making its net emissions around 820gCO<sub>2</sub>/kWh. Hunterston could meet the emissions performance standard by running at 55 per cent load factor, ten per cent higher than the load factor for all coal plants, and nearly the 60 per cent load factor for all gas plants. See Ayrshire Power proposals, [www.ayrshirepower.co.uk/our-proposals](http://www.ayrshirepower.co.uk/our-proposals) (last accessed 25 August 2011)
- 52** HM Treasury, 2010, *Spending review 2010*
- 53** Department of Energy and Climate Change press release, 8 November 2010, 'Government opens up carbon capture and storage demonstration to gas', [www.decc.gov.uk/en/content/cms/news/pn10\\_117/pn10\\_117.aspx](http://www.decc.gov.uk/en/content/cms/news/pn10_117/pn10_117.aspx)
- 54** Department of Energy and Climate Change, 2011, 'Planning our electric future: a white paper for secure, affordable and low-carbon electricity', p.50
- 55** For background on NER300 see the NER300 website, [www.ner300.com](http://www.ner300.com)
- 56** Committee on Climate Change, 2010, *The fourth carbon budget – reducing emissions through the 2020s*, p.195
- 57** UK Parliament website, 2011, 'Energy Bill [HL] 2010-11', <http://services.parliament.uk/bills/2010-11/energyhl.html> (last accessed 25 August 2011)
- 58** Rt Hon Chris Huhne MP, Department of Energy and Climate Change, 10 May 2011, 'Energy Bill second reading', [www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110510/debtext/110510-0002.htm](http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110510/debtext/110510-0002.htm)
- 59** Department of Energy and Climate Change, 2010, 'The Green Deal: a summary of the government's proposals', p.5
- 60** Department of Energy and Climate Change, 2011, 'Extra help where it is needed: a new Energy Company Obligation'
- 61** Department of Energy and Climate Change, 2011, 'Energy Bill: Energy Company Obligation'
- 62** Department of Energy and Climate Change, 2011, 'What measures does the Green Deal cover?'
- 63** Department of Energy and Climate Change, 2011, 'Consumer protection in the Green Deal'
- 64** Department of Energy and Climate Change press release, 10 May 2011, 'Huhne gets tough on landlords of draughty homes', [www.decc.gov.uk/en/content/cms/news/pn11\\_40/pn11\\_40.aspx](http://www.decc.gov.uk/en/content/cms/news/pn11_40/pn11_40.aspx)
- 65** Department of Energy and Climate Change press release, 6 July 2011, 'Whitehall exceeds PM's 10% carbon target', [www.decc.gov.uk/en/content/cms/news/pn11\\_059/pn11\\_059.aspx](http://www.decc.gov.uk/en/content/cms/news/pn11_059/pn11_059.aspx)
- 66** Department for Energy and Climate Change, 1 September 2010, Greg Barker's article in *The Times* 'Low Carbon Business' supplement, [www.decc.gov.uk/en/content/cms/news/barker\\_times/barker\\_times.aspx](http://www.decc.gov.uk/en/content/cms/news/barker_times/barker_times.aspx)
- 67** Committee on Climate Change, 2011, *Meeting carbon budgets – 3rd progress report to parliament*, p.119
- 68** Committee on Climate Change, 2011, *Meeting carbon budgets – 3rd progress report to parliament*, p.99
- 69** WWF, 8 July 2011, 'Energy Bill delayed – time to deal with Green Deal failings', [www.wwf.org.uk/wwf\\_articles.cfm?newsid=5080](http://www.wwf.org.uk/wwf_articles.cfm?newsid=5080)
- 70** Expressed in letter from Gregory Barker MP, Minister of State, DECC to WWF-UK – dated 21 July 2011 and received 27 July 2011
- 71** Committee on Climate Change, 2011, *Meeting carbon budgets – 3rd progress report to parliament*, p.116-117
- 72** *Ibid.*
- 73** Oxera, 2006, *Policies for energy efficiency in the UK household sector*, report prepared for Defra; Environment, Food and Rural Affairs Committee, 2007, *Climate change: the "citizen's agenda"*, *Eighth report of session 2006-07*; Committee on Climate Change, 2009, *Meeting carbon budgets – the need for a step change*, Chapter 5: 'Reducing emissions in buildings and industry'.
- 74** Rt Hon David Gauke MP, HM Treasury, 28 February 2011, House of Commons Written Answers: 'Stamp duty land tax: carbon emissions', [www.theyworkforyou.com/wrans/?id=2011-02-28b.41850.h&s=stamp+duty+rebate#g41850.q0](http://www.theyworkforyou.com/wrans/?id=2011-02-28b.41850.h&s=stamp+duty+rebate#g41850.q0); HM Government, 2011, *The Green Deal*
- 75** Committee on Climate Change, 2011, *Meeting carbon budgets – 3rd progress report to parliament*, p.116

## References

- 76** Department for Communities and Local Government, 2011, *English housing survey: headline report 2009-10*, p.34
- 77** Committee on Climate Change, 2011, *Meeting carbon budgets – 3rd progress report to parliament*, p.104
- 78** Rt Hon Grant Shapps MP, Department for Communities and Local Government, 27 July 2010, House of Commons Written Ministerial Statements: 'Zero carbon homes', [www.publications.parliament.uk/pa/cm201011/cmhansrd/cm100727/wmstext/100727m0001.htm](http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm100727/wmstext/100727m0001.htm)
- 79** HM Treasury, 2011, *The plan for growth*, p.117 (Note: this was published alongside the Budget in March 2011)
- 80** NHBC Foundation, 2009, *Zero carbon homes – an introductory guide for housebuilders*, p.3
- 81** HM Government, 2010, *The building regulations 2000 – L1A Conservation of fuel and power in new dwellings*, 2010 edition, p. iv
- 82** Department for Communities and Local Government press release, 11 November 2010, Grant Shapps: 'New common sense to build greener homes', [www.communities.gov.uk/news/corporate/1766271](http://www.communities.gov.uk/news/corporate/1766271)
- 83** Department for Communities and Local Government, 17 May 2011, 'Grant Shapps sets out practical solution to cut emissions from new homes', [www.communities.gov.uk/news/newsroom/1905496](http://www.communities.gov.uk/news/newsroom/1905496)
- 84** Committee on Climate Change, 2011, *Meeting carbon budgets – 3rd progress report to parliament*, p.121
- 85** HM Government, 6 July 2011, 'Government reduces its carbon emissions by 13.8% in 12 months', [www.data.gov.uk/departamental-performance-co2-emissions-reduction-date](http://www.data.gov.uk/departamental-performance-co2-emissions-reduction-date)
- 86** Ibid.
- 87** Department of Energy and Climate Change press release, 6 July 2011, 'Whitehall exceeds PM's 10% carbon target', [www.decc.gov.uk/en/content/cms/news/pn11\\_059/pn11\\_059.aspx](http://www.decc.gov.uk/en/content/cms/news/pn11_059/pn11_059.aspx)
- 88** Ibid.
- 89** Department for the Environment, Food and Rural Affairs, 2011, *Measuring and reporting of greenhouse gas emissions by UK companies: a consultation on options*, p.9-13
- 90** HM Government, 2010, *The Carbon Plan*, p.31
- 91** Rt Hon Grant Shapps MP, Department for Communities and Local Government, 17 May 2011, House of Commons Written Answers: 'Building and the Environment', [www.theyworkforyou.com/wms/?id=2011-05-17a.7WS.4&s=grant+shapps+carbon+footprint#g7WS.5](http://www.theyworkforyou.com/wms/?id=2011-05-17a.7WS.4&s=grant+shapps+carbon+footprint#g7WS.5)
- 92** The Carbon Trust press release, 4 March 2011, 'The Carbon Trust and Siemens launch a new green finance deal worth £550 million to green businesses in the UK', [www.carbontrust.co.uk/news/news/press-centre/2011/Pages/financingscheme.aspx](http://www.carbontrust.co.uk/news/news/press-centre/2011/Pages/financingscheme.aspx)
- 93** The Carbon Trust, 2011, 'CRC energy efficiency scheme', [www.carbontrust.co.uk/policy-legislation/business-public-sector/pages/carbon-reduction-commitment.aspx](http://www.carbontrust.co.uk/policy-legislation/business-public-sector/pages/carbon-reduction-commitment.aspx) (last updated July 2011)
- 94** Department of Energy and Climate Change, 2011, 'The role of local government – DECC and local government working in partnership to tackle climate change', [www.decc.gov.uk/en/content/cms/tackling/saving\\_energy/what\\_doing/local\\_councils/local\\_councils.aspx](http://www.decc.gov.uk/en/content/cms/tackling/saving_energy/what_doing/local_councils/local_councils.aspx) (last accessed 25 August 2011)
- 95** Department for Communities and Local Government, 2008, *Improving the energy efficiency of our buildings: a guide to display energy certificates and advisory reports for public building*, p.7
- 96** Note: similar recommendations have been made by industry groups, including the CBI and Carbon Trust; also see Committee on Climate Change, 2011, *Meeting carbon budgets – 3rd progress report to parliament*, p.123
- 97** Department of Energy and Climate Change / Ofgem, 2011, *Smart meters implementation programme: response to prospectus consultation*
- 98** Department of Energy and Climate Change / Ofgem, 2011, *Smart meters implementation programme: response to prospectus consultation*, p.19
- 99** Department for Energy and Climate Change, 2011, *Smart metering implementation programme: licence conditions for a code of practice for the installation of smart electricity and gas meters*, p.19-24; Department for Energy and Climate Change, 2011, *Smart metering implementation programme: a consultation on draft licence conditions and technical specifications for the rollout of gas and electricity smart metering equipment*, p.15
- 100** Department of Energy and Climate Change / Ofgem, 2011, *Smart meters implementation programme: response to prospectus consultation*, foreword by Charles Hendry MP, minister of state for energy
- 101** Electricity Networks Strategy Group (ENSG), 2009, *A smart grid vision*, p.5
- 102** Ofgem, 2011, DECC/Ofgem Smart Grid Forum, [www.ofgem.gov.uk/Networks/SGF/Pages/SGF.aspx](http://www.ofgem.gov.uk/Networks/SGF/Pages/SGF.aspx) (last accessed 25 August 2011)
- 103** Ofgem/Department of Energy and Climate Change, 2011, Ofgem/DECC Smart Grid Forum 'Draft work programme', p.3
- 104** Department of Energy and Climate Change, 2011, 'Planning our electric future: a white paper for secure, affordable and low-carbon electricity', p.104
- 105** Department of Energy and Climate Change, 2011, 'Planning our electric future: a white paper for secure, affordable and low-carbon electricity', p.97-110
- 106** Department of Energy and Climate Change, 2011, 'Networks strategy and regulation – smart grid policy in the UK', [www.decc.gov.uk/en/content/cms/meeting\\_energy/network/strategy/strategy.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/network/strategy/strategy.aspx) (last accessed 25 August 2011)
- 107** Energy Networks Association, 2011, *UK smart grid cyber security*
- 108** Department of Energy and Climate Change, 2011, 'Planning our electric future: a white paper for secure, affordable and low-carbon electricity', p.99
- 109** Ofgem, 2011, 'Low Carbon Networks Fund', [www.ofgem.gov.uk/networks/elecddist/lcnf/pages/lcnf.aspx](http://www.ofgem.gov.uk/networks/elecddist/lcnf/pages/lcnf.aspx) (last accessed 25 August 2011)
- 110** Ofgem, 2011, 'Innovation', [www.ofgem.gov.uk/Networks/Techn/NetwrkSupp/Innovat/Pages/Innvation.aspx](http://www.ofgem.gov.uk/Networks/Techn/NetwrkSupp/Innovat/Pages/Innvation.aspx) (last accessed 25 August 2011)
- 111** Low Carbon Innovation Centre, 2011, 'Low carbon innovation fund', [www.lowcarbonfund.co.uk/LCIF/](http://www.lowcarbonfund.co.uk/LCIF/) (last accessed 25 August 2011)



- 112** Department of Energy and Climate Change, 2011, *Smart meter rollout for the domestic sector (GB): impact assessment*, p.12 – “Objective 1 = To promote cost-effective energy savings, enabling all consumers to better manage their energy consumption and expenditure and deliver carbon savings”
- 113** National Audit Office, 2011, *Preparations for the roll-out of smart meters*, p.11
- 114** IPPR, 2011, *Green streets, strong communities*, p.28; Committee on Climate Change, 2009, Meeting carbon budgets – the need for a step change: a pocket guide, p.8
- 115** HM Treasury, 2010, *Spending review 2010*, p.24
- 116** Department of Energy and Climate Change, 2011, ‘DECC’s innovation funding’, [www.decc.gov.uk/en/content/cms/funding/funding\\_ops/innovation/innov\\_fund/innov\\_fund.aspx](http://www.decc.gov.uk/en/content/cms/funding/funding_ops/innovation/innov_fund/innov_fund.aspx) (last accessed 25 August 2011)
- 117** Department of Energy and Climate Change press release, 8 December 2010, ‘Faster review of support for renewable electricity to provide investor certainty’ [www.decc.gov.uk/en/content/cms/news/pn10\\_126/pn10\\_126.aspx](http://www.decc.gov.uk/en/content/cms/news/pn10_126/pn10_126.aspx)
- 118** Department of Energy and Climate Change, 2011, ‘Planning our electric future: a white paper for secure, affordable and low-carbon electricity’, p.37-48
- 119** Department of Energy and Climate Change, 2011, ‘FITs review’, [www.decc.gov.uk/en/content/cms/meeting\\_energy/renewable\\_ener/feedin\\_tariff/fits\\_review/fits\\_review.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/renewable_ener/feedin_tariff/fits_review/fits_review.aspx) (last accessed 25 August 2011)
- 120** Department of Energy and Climate Change, 2011, ‘Renewable Heat Incentive’, p.12; Note: the £860 million for the RHI was originally announced in the Comprehensive Spending Review, 20 October 2010
- 121** Department of Energy and Climate Change, 19 July 2011, ‘National policy statements for energy infrastructure’, [www.decc.gov.uk/en/content/cms/meeting\\_energy/consents\\_planning/nps\\_en\\_infra/nps\\_en\\_infra.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/consents_planning/nps_en_infra/nps_en_infra.aspx)
- 122** Department of Energy and Climate Change press release, 19 July 2011, ‘Energy planning reforms approved by parliament’, [www.decc.gov.uk/en/content/cms/news/pn11\\_063/pn11\\_063.aspx](http://www.decc.gov.uk/en/content/cms/news/pn11_063/pn11_063.aspx)
- 123** Department for Communities and Local Government, 2011, ‘Draft national planning policy framework’
- 124** Department of Energy and Climate Change, 2011, *UK Renewable Energy Roadmap*
- 125** Department of Energy and Climate Change, 2011, ‘Microgeneration strategy’, p.46
- 126** Ibid.
- 127** Department of Energy and Climate Change, 2011, ‘Microgeneration strategy’, p.47
- 128** Department for Communities and Local Government, 2011, *Local government resource review: proposals for business rates retention – consultation*, p.25
- 129** Department for Communities and Local Government, 2011, *Local government resource review: proposals for business rates retention – technical paper 8: renewable energy*
- 130** Department for Environment, Food and Rural Affairs / Department of Energy and Climate Change, 2011, ‘Anaerobic digestion strategy and action plan’, p.3
- 131** Department of Energy and Climate Change, 14 June 2011, ‘Anaerobic digestion launched’ statement by Greg Barker, [www.decc.gov.uk/en/content/cms/news/gb\\_anaerobic/gb\\_anaerobic.aspx](http://www.decc.gov.uk/en/content/cms/news/gb_anaerobic/gb_anaerobic.aspx)
- 132** Department of Energy and Climate Change press release, 9 June 2011, ‘New feed-in tariff levels for large scale solar and anaerobic digestion announced today’, [www.decc.gov.uk/en/content/cms/news/pn11\\_046/pn11\\_046.aspx](http://www.decc.gov.uk/en/content/cms/news/pn11_046/pn11_046.aspx)
- 133** Jessica Shankleman, 10 June 2011, ‘Anaerobic digestion sector slams ‘disappointing’ feed-in tariff rise’, *Business Green*, [www.businessgreen.com/bg/news/2077911/anaerobic-digestion-sector-slams-disappointing-feed-tariff-rise](http://www.businessgreen.com/bg/news/2077911/anaerobic-digestion-sector-slams-disappointing-feed-tariff-rise)
- 134** Gaynor Hartnell, chief executive of the Renewable Energy Association, 10 June 2011, quoted in ‘Anaerobic digestion sector slams ‘disappointing’ feed-in tariff rise’, *Business Green*, [www.businessgreen.com/bg/news/2077911/anaerobic-digestion-sector-slams-disappointing-feed-tariff-rise](http://www.businessgreen.com/bg/news/2077911/anaerobic-digestion-sector-slams-disappointing-feed-tariff-rise)
- 135** ADBA website, 14 June 2011, ‘Strategies welcome but should prioritise AD – ADBA’, [www.adbiogas.co.uk/ta\\_news\\_item.asp?Id=62](http://www.adbiogas.co.uk/ta_news_item.asp?Id=62)
- 136** Department of Energy and Climate Change, 2011, ‘UK marine energy programme’, [www.decc.gov.uk/en/content/cms/meeting\\_energy/wave\\_tidal/uk\\_marine\\_ener/uk\\_marine\\_ener.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/wave_tidal/uk_marine_ener/uk_marine_ener.aspx) (last accessed 25 August 2011)
- 137** Department of Energy and Climate Change, 2011, Greg Barker’s speech to the RUK Wave and Tidal Conference, QEII conference centre – 2 March 2011, [www.decc.gov.uk/en/content/cms/news/gb\\_rukspeech/gb\\_rukspeech.aspx](http://www.decc.gov.uk/en/content/cms/news/gb_rukspeech/gb_rukspeech.aspx)
- 138** Department of Energy and Climate Change press release, 27 June 2011, ‘Money to move marine machines to mainstream’, [www.decc.gov.uk/en/content/cms/news/pn2011\\_055/pn2011\\_055.aspx](http://www.decc.gov.uk/en/content/cms/news/pn2011_055/pn2011_055.aspx)
- 139** Technology Strategy Board press release, 23 July 2010, ‘UK’s wave and tidal stream technology companies receive £7m to boost innovation’, [www.innovateuk.org/content/press-release/uks-wave-and-tidal-stream-technology-companies-rec.ashx](http://www.innovateuk.org/content/press-release/uks-wave-and-tidal-stream-technology-companies-rec.ashx)
- 140** Department for Energy and Climate Change, 2 March 2011, Greg Barker’s speech to the RUK Wave and Tidal Conference, QEII conference centre, [www.decc.gov.uk/en/content/cms/news/gb\\_rukspeech/gb\\_rukspeech.aspx](http://www.decc.gov.uk/en/content/cms/news/gb_rukspeech/gb_rukspeech.aspx)
- 141** RenewableUK, 2011, *Sea power: funding the marine energy industry 2011-2015*, p.2
- 142** Carbon Trust, 2011, *Marine renewables green growth paper*, p.1
- 143** Campaign for Better Transport, 2011, *What the draft national planning policy framework means for sustainable transport – a briefing from Campaign for Better Transport*, p.1
- 144** HM Government, 2011, *Carbon Plan*, p. 36
- 145** Department for Transport press release, 14 October 2010, ‘£15 million for green buses to reduce CO<sub>2</sub>’, <http://nds.coi.gov.uk/content/Detail.aspx?ReleaseID=415979&NewsAreaID=2>
- 146** Department for Business, Innovation and Skills press release, 15 March 2011, ‘£10m funding for three low carbon vehicle R&D projects’, <http://nds.coi.gov.uk/content/Detail.aspx?ReleaseID=418592&NewsAreaID=2>
- 147** HM Treasury, 2011, *Budget 2011*, p.38
- 148** EurActiv, 2007, ‘Euro5 emissions standards for cars’,

## References

[www.euractiv.com/en/transport/euro-5-emissions-standards-cars/article-133325](http://www.euractiv.com/en/transport/euro-5-emissions-standards-cars/article-133325) (last accessed 25 August 2011)

**149** Department for Transport press release, 5 July 2010, '£15m Government funding for green buses', [www.dft.gov.uk/news/press-releases/dft-press-20100705-2](http://www.dft.gov.uk/news/press-releases/dft-press-20100705-2)

**150** Department for Transport, 2011, 'Creating growth, cutting carbon – making sustainable local transport happen', [www2.dft.gov.uk/pgr/regional/sustainabletransport/](http://www2.dft.gov.uk/pgr/regional/sustainabletransport/) (last accessed 25 August 2011)

**151** Department for Transport, 2011, 'Creating growth, cutting carbon – making sustainable local transport happen', p.30

**152** HM Treasury, 2010, *Spending review 2010*, p.46

**153** Department for Communities and Local Government, 2011, 'Draft national planning policy framework', p.21-23

**154** Department for Transport, 13 December 2010, 'Local Sustainable Transport Fund', [www.dft.gov.uk/news/statements/baker-20101213](http://www.dft.gov.uk/news/statements/baker-20101213)

**155** Department for Transport, 2011, 'Making the connection: the plug-in vehicle infrastructure strategy'

**156** Department for Transport press release, 30 June 2011, 'Taking charge', [www.dft.gov.uk/news/press-releases/dft-press-20110630](http://www.dft.gov.uk/news/press-releases/dft-press-20110630)

**157** Department for Transport, 2011, 'Making the connection: the plug-in vehicle infrastructure strategy', p. 6

**158** Department for Transport, 30 June 2011, 'Taking charge', [www.dft.gov.uk/news/press-releases/dft-press-20110630](http://www.dft.gov.uk/news/press-releases/dft-press-20110630)

**159** Ecotricity press release, 27 July 2011, 'Ecotricity launches the electric highway', [www.ecotricity.co.uk/news/ecotricity-launches-the-electric-highway](http://www.ecotricity.co.uk/news/ecotricity-launches-the-electric-highway)

**160** Rt Hon Philip Hammond MP written statement, Department for Transport, 27 April 2011, 'Review of decision making in the Department for Transport', [www2.dft.gov.uk/press/speechesstatements/statements/hammond20110427.html](http://www2.dft.gov.uk/press/speechesstatements/statements/hammond20110427.html)

**161** Rt Hon Philip Hammond MP speech, Department for Transport, 28 February 2011, 'High speed rail', [www.dft.gov.uk/news/speeches/hammond-20110228](http://www.dft.gov.uk/news/speeches/hammond-20110228)

**162** Department for Transport, 2011, *High speed rail: investing in Britain's future – consultation*, p.52-53

**163** Department for Transport, 28 February 2011, 'High speed rail', Philip Hammond speech, [www.dft.gov.uk/news/speeches/hammond-20110228](http://www.dft.gov.uk/news/speeches/hammond-20110228)

**164** Department for Transport, 2011, *Economic Case for HS2: The Y network and London – West Midlands*, p.18

**165** Campaign for Better Transport, 2011, *Briefing on white paper on high speed rail: high speed rail – white paper response*, [www.bettertransport.org.uk/campaigns/trains/high-speed-white+paper#5](http://www.bettertransport.org.uk/campaigns/trains/high-speed-white+paper#5) (last accessed 25 August 2011)

**166** Note 1: HM Treasury does not count fuel duty as an environmental tax but the Environmental Audit Committee thinks it should – see Environmental Audit Committee, 2011, Budget 2011 and environmental taxes: 'transport taxes', p.19-20; Note 2: aviation taxation is dealt with separately in this chapter, as part of our assessment of the commitment to replace a per passenger duty with a per plane duty. Aviation taxation levels however are included in our overall analysis of total revenue from green taxation.

**167** HM Treasury, 2011, *Budget 2011*, p.62-64

**168** Institute for Fiscal Studies, 2011, *Indirect and environmental taxes*, p.3

**169** HM Treasury, 2011, *Budget 2011*, p.63-64

**170** Environmental Audit Committee, 2011, *Budget 2011 and environmental taxes*, p.26-27

**171** Institute for Fiscal Studies, 2011, *The IFS green Budget*, Chapter 11.3 'Fiscal Policy and the environment', p.248

**172** Office for National Statistics, July 2011, *Social trends: environment*, p.28

**173** HM Treasury, 2011, *Budget 2011*, p.39

**174** Ibid.

**175** HM Treasury, 2011, 'Reform of air passenger duty: a consultation'

**176** Swiss International Airports Association, 2009, *Aircraft emissions charges at Swiss airports*

**177** Environmental Audit Committee, 2011, *Budget 2011 and Environmental Taxes*, p.3

**178** HM Treasury, 2010, *Carbon price floor: support and certainty for low-carbon investment*

**179** HM Treasury, 2011, *Budget 2011*, p.32

**180** Rt Hon Justine Greening MP, HM Treasury, 9 May 2011, House of Commons written answers: 'Nuclear Power Stations: Environment Protection', [www.theyworkforyou.com/wrans/?id=2011-05-09a.52152.h&s=carbon+price+floor+speaker%3A11771#g52152.r0](http://www.theyworkforyou.com/wrans/?id=2011-05-09a.52152.h&s=carbon+price+floor+speaker%3A11771#g52152.r0)

**181** Richard Cowart, 2011, *Prices and policies: carbon caps and efficiency programmes for Europe's low-carbon future*, p.19, The Regulatory Assistance Project





Printed by the environmental Waterless  
Offset process using vegetable-oil based  
inks on totally chlorine free paper using at  
least 51% post consumer waste.