House of Commons
Energy and Climate Change Committee

Fuelling the debate: Committee successes and future challenges

Tenth Report of Session 2014–15

Report, together with formal minutes relating to the report

Ordered by the House of Commons to be printed 3 March 2015
The Energy and Climate Change Committee

The Energy and Climate Change Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of the Department of Energy and Climate Change and associated public bodies.

Current membership

Mr Tim Yeo MP (Conservative, South Suffolk) (Chair)
Dan Byles MP (Conservative, North Warwickshire)
Ian Lavery MP (Labour, Wansbeck)
Dr Phillip Lee MP (Conservative, Bracknell)
Rt Hon Mr Peter Lilley MP (Conservative, Hitchin and Harpenden)
Albert Owen MP (Labour, Ynys Môn)
Christopher Pincher MP (Conservative, Tamworth)
John Robertson MP (Labour, Glasgow North West)
Sir Robert Smith MP (Liberal Democrat, West Aberdeenshire and Kincardine)
Graham Stringer MP (Labour, Blackley and Broughton)
Dr Alan Whitehead MP (Labour, Southampton Test)

Powers

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

Publication

Committee reports are published on the Committee’s website at www.parliament.uk/ecc and by The Stationery Office by Order of the House.

Evidence relating to this report is published on the inquiry page of the Committee’s website.

Committee staff

The current staff of the Committee are Farrah Bhatti (Clerk), Vinay Talwar (Second Clerk), Tom Leveridge (Committee Specialist), Marion Ferrat (Committee Specialist), Shane Pathmanathan (Senior Committee Assistant), Amy Vistuer (Committee Support Assistant), Niskua Igualikinya (Inquiry Assistant) and Nick Davies (Media Officer).

Contacts

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1 Introduction

1. The Climate Change Act 2008 committed the UK to reduce its greenhouse gas emissions by at least 80 percent by 2050. The 2010-2015 Parliament has been a defining period for energy and climate change policy. Three Energy Acts set the policy framework to help the UK achieve its goal. Each Act was designed to support new forms of energy generation, promote energy efficiency and protect consumers. These ambitious pieces of legislation have set the benchmark against which the progress towards providing a secure, clean and affordable energy supply will be judged.

2. The Energy and Climate Change Committee plays a central role in scrutinising and improving the Government’s policy and legislation. In section two of this report, we provide a quantitative overview of the work we have undertaken in this Parliament. In section three, we look in more detail at three case studies – electricity market reform, competition in the energy market and shale gas – each of which highlights the key role we have played in holding the Government to account and improving policy and legislation. Finally, in section four we set out our future vision for the UK energy system, based on the views and evidence provided by the wide range of stakeholders that we work with. We also explore the challenges which will need to be overcome in the next Parliament if the UK is to achieve its ambitious long-term climate and energy goals.

Figure 1: Word cloud representing the range of subjects covered in our public evidence hearings

1 Climate Change Act 2008
3. We issued a call for evidence on future challenges and received 91 pieces of written evidence, for which we are grateful. These can be found on our website. Thank you to all the people who agreed to be interviewed as part of our work on future challenges. We would like to thank E.ON UK, Centrica, British Gas, EDF Energy, Cuadrilla Resources and the United States Geological Survey for providing material to support our videos. We would also like to thank Imperial College London and the Science Museum for kindly allowing us to film on their premises.
2 Work of the Committee 2010–2015

4. Parliament is the central institution in our democracy and its Select Committees provide a forum where ideas about how the country is run can be tested. As a Committee we work hard to engage with a wide range of stakeholders, draw evidence from multiple sources, and seek out examples of good practice to inform our reports and recommendations to Government. We regularly hear from the general public, consumer groups, NGOs, academics, think tanks and businesses. We have travelled across the country and overseas to see, hear and learn directly from experts on specific subjects. We have used all of this information to test the Government’s policy proposals and hold them to account. We have also ensured that the issues we raise are debated by other Members of Parliament in the House of Commons. The graphic below shows how we have gone about this in more detail.
Figure 2: Graphic showing our activity during the 2010-2015 Parliament

- 38 Committee reports
- 10 debates on committee reports
- 31 Government responses
- 1402 pieces of written evidence
- 166 evidence hearings
- 857 witnesses
- 18 outreach & fact-finding visits
3 Committee successes

Influencing the Government’s Electricity Market Reform

5. The UK is at a turning-point in the way it produces and uses electricity. Targets to cut greenhouse gas emissions and the expected closure of nearly a fifth of old power stations by 2020 mean that the UK needs to attract investment to build new, clean and efficient power stations. The Government has seized this as a once in a generation opportunity to shift to a low-carbon, secure and affordable energy future.

6. In 2010, the Government set out a series of Electricity Market Reform (EMR) proposals, which were designed to decarbonise electricity generation and keep the lights on while minimising costs to consumers. The Government introduced four key mechanisms:

- Regulation of emissions from power stations, known as an Emissions Performance Standard (EPS), to prevent the construction of new coal-fired power stations without technology, such as carbon capture and storage, which is designed to reduce the amount of carbon they emit.
- Financial support, known as Contracts-for-Difference (CfDs), to encourage investment in low-carbon electricity generation by providing companies with a guaranteed fixed price for the power they generate.
- A Capacity Market, to support more reliable forms of power (both demand and supply side) to be available when demand for power is high.
- A carbon tax, known as the Carbon Price Floor (CPF), to make low-carbon power generation more competitive with fossil fuel power stations.

7. From the beginning of EMR to its full-blown implementation, we have scrutinised the Government’s proposals. Our first report looked at Emissions Performance Standards. We highlighted concerns that a poorly designed EPS would have a range of unintended consequences. We also urged the Government to push ahead with the wider range of EMR policies.

8. Ahead of the Government’s first detailed consultation on EMR, we launched an inquiry seeking views of stakeholders. In our subsequent 2011 report, Electricity Market Reform, we exposed weaknesses in the Government’s overly complex proposals, highlighting the lack of attention paid to energy efficiency and demand reduction. The Government White Paper on EMR and technical updates were published shortly after our report and we held follow-up hearings in January 2012.

9. We also carried out detailed pre-legislative scrutiny of the draft Energy Bill, which was published in May 2012. We influenced the draft Bill by outlining areas for improvement in the proposed CfD model and pushed Government to revert to a single counterparty model. We also repeated our concerns that the Government was still neglecting the contribution that demand-side activities could make to energy security and climate change objectives. Our scrutiny led to significant improvements to the proposals which became law in December 2013. But it was clear that more needed to be done to promote

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10. The implementation of EMR is now progressing at pace. The first CfDs have recently been awarded and the results of the first Capacity Market auction were announced early in 2015. We have continued to scrutinise the Government's work through our more recent inquiry into EMR implementation where we heard first-hand accounts from stakeholders before and after the auctions were held. Despite a challenging timetable, the Government has succeeded in rolling out its reform relatively smoothly. Now the Government needs to focus on learning lessons from the first auctions and on developing the demand-side sector. If EMR is to create a long-term secure, affordable and low-carbon energy system, it must provide a stable policy framework to give investors the confidence they need.

Improving competition and trust in the energy market

11. Energy prices rising faster than inflation have put the operations of energy companies and the energy regulator, Ofgem, in the spotlight throughout this Parliament. Seemingly coordinated price hikes between the six largest energy suppliers – the “Big Six” – led to accusations of cartel-like behaviour. Even though Ofgem found no conclusive evidence of this, many stakeholders thought that these companies, who in 2010 controlled 98% of the retail energy market, could do more to promote competition and reduce energy prices.

12. We have been championing the interests of consumers throughout this Parliament. Our report on Ofgem’s Retail Market Review, published in July 2011, looked at Ofgem’s proposals to improve competition in the energy market. We outlined grave concerns about price increases and the complexity of energy tariffs and customer bills. We exposed the practice of doorstep mis-selling of energy contracts and challenged energy companies to come clean about their activities. Within weeks, most companies suspended all doorstep sales activity. Our action potentially saved thousands of consumers from signing up to more expensive tariffs.

13. In December 2012, we published a report on Consumer Engagement with Energy...
Markets. We concluded that consumer engagement was low mainly because of the complexity and lack of transparency of the energy market with its many and varied tariffs. The result of this was low levels of competition and a high proportion of customers unlikely or unwilling to switch their energy supplier. We kick started a national debate about what more the Government, Ofgem and energy companies needed to do to improve transparency and empower customers to get the best deal.

14. By the time we published our report on Energy Prices, Profits and Poverty, in July 2013, it was clear that Ofgem and energy companies were not doing enough to tackle these issues and restore consumer confidence. At a time when people were struggling with the rising cost of energy, consumers needed reassurance that the profits being made by the Big Six were not excessive. Unfortunately, the complex vertically-integrated structure of these companies mean that working out exactly how their profits were made was virtually impossible. We argued that Ofgem was failing consumers by not taking all possible steps to improve openness and increase competition in the energy market. In June 2014, Ofgem finally referred the energy market to the Competition and Markets Authority (CMA) so that it could conduct a thorough investigation to decide once and for all whether the Big Six were exploiting customers. The CMA will publish both its interim and final reports after the 2015 general election.

15. While the CMA investigation kicked off we turned our attention in late 2014 to the impact of network costs (which cover the transmission and distribution of gas and electricity from power stations to households and businesses) on customers’ energy bills. This little scrutinised area makes up more than a fifth of the average energy bill. In our report Energy Network Costs: Transparent and Fair?, published in February 2015, we concluded that complexity on how network costs are determined means that consumers may not be getting the best deal. We recommended that Ofgem improve its scrutiny of the near monopoly companies that manage the network and keep down the costs being passed on to consumers.

16. As a result of our work, the Government has stepped up efforts to relieve the impact of high energy prices on the fuel poor and increase the number of consumers switching energy supplier. In February 2015 we were pleased to see the Government finally launch a national switching campaign designed to increase the number of customers switching their energy supplier. This campaign followed allegations made in late 2014 that some switching websites were not working in the best interests of consumers. We called in the companies involved to shine a light on their operations and concluded in our subsequent report, Protecting consumers – Making energy price comparison websites transparent, that these sites need greater regulatory oversight and that they must be much clearer about informing site users about the cheapest available deals and about the commission they make from energy suppliers.
Exploring the potential for shale gas

17. Hydraulic fracturing, also known as fracking, is a process that allows the extraction of hard-to-reach natural gas locked up in the tight pores of shale formations (a type of sedimentary rock). In America, this unconventional method has caused an energy revolution. Gas prices fell dramatically, as the United States went from importing large quantities of gas to becoming virtually self-sufficient.

18. Extracting shale gas involves very large quantities of fresh water and chemicals. In the US, millions of litres of water can be needed to extract shale gas. The fracking process also generates large volumes of waste water that has to be treated. Quite apart from potential pollution risks, the huge volumes of water required could be a problem in regions which already suffer water stress.

19. In 2011 we started investigating the prospects for shale gas in the UK at a time when it was virtually unheard of amongst the general public. We considered the risks and hazards associated with its extraction, and whether developing it as an energy source could be compatible with UK climate change targets. Our Shale Gas report concluded that provided that well casings are properly built hydraulic fracturing could be carried out safely. We recommended that the Government needed to monitor drilling activity very closely. We also emphasised the need for complete transparency and recommended that the Environment Agency insist that all companies involved in fracking declare the type, concentration and volume of all chemicals they are using. The Agency must also ensure it has the capabilities to monitor whether any of these chemicals appeared in local water supplies before it permits their use.

20. Differences between the UK and the US in terms of rock type, environmental regulations and public attitudes towards fossil fuel use meant that there was considerable uncertainty as to how much could be extracted in the UK. We concluded that until exploratory drilling for shale gas was carried out in the UK, it was too early to herald shale gas as a “game changer”, as it had been in the US.
21. In our second report *The Impact of Shale Gas on Energy Markets*, published in 2013, we assessed the potential impact of shale gas on energy markets and climate change mitigation. We concluded that the UK should learn lessons from experiences in the US, including by creating a favourable climate for companies to operate in, while ensuring environmental damage was avoided. We urged the Government to encourage exploratory shale gas operations to proceed in order to improve the accuracy of current estimates of recoverable reserves, but also to do more to persuade local communities that shale development was in their long-term interest as well as the nation's. We argued that, crucially, communities affected by shale gas development should receive a meaningful share of the material benefits of any drilling in their area.

22. If substantial shale resources do turn out to be recoverable in the UK, and if community concerns can be addressed, then shale gas could reduce the UK's dependence on imports and help in the transition to a low-carbon economy. Gas will likely be an important energy source in the short- to medium-term to heat homes and provide flexible electricity generation and shale gas could prove to be a valuable source of gas. While controversy about the environmental impacts of shale gas rages on, we have provided detailed evidence-based analysis to inform this debate. We are pleased that the Government has kept a level head and is now encouraging companies to get on and drill, while also setting a strong regulatory framework and encouraging companies to share the benefits of shale gas extraction with communities.
4  Future challenges

23. Significantly reducing greenhouse gas (GHG) emissions from the energy sector by 2030 is an essential first step towards meeting the UK’s climate change targets. A “cleaner” more efficient low-carbon energy system should be balanced with maintaining a “secure” supply of energy and ensuring the cost of energy to consumers is “affordable” – these three aims are often referred to as the energy “trilemma”.

24. As the 2010–2015 Parliament draws to an end, we wanted to show what a UK energy system that successfully tackles the energy trilemma might look like in 2030 and what challenges will need to be overcome during the next Parliament to help achieve this 2030 vision. We issued a call for evidence in November 2014 and received 91 pieces of written evidence. In this section we outline, drawing on the evidence we received, our vision of the energy system in 2030 and highlight the key challenges which will need to be overcome to help achieve it.

Our vision for the UK energy system

25. By 2030 the UK energy system is highly decarbonised. There is a diverse mix of energy sources. Low-carbon technologies such as renewables and nuclear play an integral role. As renewable energy technologies have matured, their costs have fallen, increasing the role of the market and reducing the role of the state.

26. Some fossil fuels are still used because of their relatively low cost and because the life of many assets has been extended into the 2030s. Gas, in particular, is used to heat homes and provide a flexible source of power. There is a modest amount of shale gas extraction supplementing the remaining reserves from the UK offshore production. The process of extracting shale gas is carefully regulated and the potential environmental impacts are being closely monitored. Some carbon capture and storage technology has been fitted to new and existing fossil fuel power stations. Combined Heat and Power is increasingly used to maximise the efficiency of the fuels that are used.
27. Demand-side measures have developed and this has helped to reduce the need for new supply-side infrastructure and manage the high proportion of intermittent renewables on the system. Demand-side measures have developed and this has helped to reduce the need for new supply-side infrastructure and manage the high proportion of intermittent renewables on the system. Smart meters, the smart grid, storage technologies and interconnection to Europe play an important role along with improved energy efficiency programmes. There is a significant increase in the number of communities producing their own heat and electricity.

28. A transparent energy system has empowered consumers routinely to switch energy supplier in order to find the best deals. Consumers understand the costs associated with decarbonising the energy system but have supported policies designed to facilitate this goal in light of the threat posed by climate change. The most vulnerable energy customers have been supported by cost-effective Government policies and the number of consumers in fuel poverty has fallen dramatically.

29. A significant carbon price is influencing investment decisions in favour of more low-carbon electricity and penalising the use of fossil fuels. The carbon price is set by a credible, well-functioning and widely respected EU Emissions Trading System – Europe’s main climate and energy policy instrument. A price of carbon has spread around the world to other emissions trading systems which are increasingly linked to one another in order to benefit from cheaper carbon reduction opportunities. As an early adopter of carbon pricing and low-carbon technologies, the UK is starting to reap a competitive economic advantage over other countries which have been slower to reduce their dependence on fossil fuels.

Challenges for the next Parliament

30. In order to achieve this 2030 vision, the Government will need to overcome a number of obstacles. We have outlined what we believe to be the three most important challenges.

1. Maintain political stability and leadership

31. It is critical that the Government maintains political consensus on the need to tackle climate change. This must be underpinned with a stable and consistent policy framework.

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13 Ofgem (LGY 023), National Grid (LGY 055), Energy Policy Group (LGY 056), E.ON (LGY 062), CHPA (LGY 075)
14 National Farmers Union (LGY 007), Electricity Market Services Ltd (LGY 011), Energy UK (LGY 012), Ofgem (LGY 023), UK Energy Research Centre (LGY 039), Friends of the Earth England, Wales and Northern Ireland (LGY 041), Regan Scott (IEM 045), DONG Energy (LGY 049), National Grid (LGY 055), Energy Networks Association (LGY 058), Electrical Contractors’ Association (LGY 065), University of Birmingham (LGY 068), Solar Energy in Future Societies (LGY 080), Citizens Advice (LGY 081), GDF Suez (LGY 085), Campaign to Protect Rural England (LGY 086), Institution of Mechanical Engineers (LGY 089), ScottishPower (LGY 090), Clare Moody, Jude Kirton-Darling and Theresa Griffin MEP (LGY 101)
15 Energy UK (LGY 012), CHPA (LGY 075), Green Hedge Group (LGY 082), GDF Suez (LGY 085), Campaign to Protect Rural England (LGY 086), Institution of Mechanical Engineers (LGY 089), ETI (LGY 095)
16 Energy UK (LGY 012)
17 Energy UK (LGY 012), Dr Maria Sharmina (LGY 026), WWF UK (LGY 067), The Institution of Gas Engineers and Managers (LGY 069), SSE (LGY 072), Citizens Advice (LGY 081), Centrica plc (LGY 084), OVO Energy (LGY 090), Department of Energy and Climate Change (LGY 091), ScottishPower (LGY 098), Clare Moody, Jude Kirton-Darling and Theresa Griffin MEP (LGY 101)
18 DONG Energy (LGY 049), EDF Energy (LGY 063), SSE (LGY 072), UCL Energy Institute and UCL Institute for Sustainable Resources (LGY 079), OVO Energy (LGY 090), Shell (LGY 100)
19 Grantham Institute on Climate Change and the Environment (LGY 035), Committee on Climate Change (LGY 042), EDF Energy (LGY 063), SSE (LGY 072), OVO Energy (LGY 090), ScottishPower (LGY 093), Shell (LGY 100)
20 CIWEM (LGY 013), Chartered Institution of Building Services Engineers (LGY 030), Friends of the Earth England, Wales
It is estimated that the UK will need over £100 billion of investment to achieve its energy transition. The Government must prioritise giving investors' the confidence they need to invest.\textsuperscript{21} This includes continuing to provide long-term certainty about future policy developments. The Government must, therefore, set the fifth carbon budget and ensure it has the policies required to meet it.\textsuperscript{22} We were very pleased to see the leaders of the three main political parties agree to work together to tackle climate change regardless of the outcome at the general election.\textsuperscript{23}

32. Most of the investment required to achieve the energy transition will go towards building new power generation in the form of low-carbon and renewable technologies such as wind, solar and nuclear. A lot of good work has already been done and significant amounts of investment in new projects has already been made. In order to continue to bring forward this investment, and avoid a hiatus, the Government must prioritise clarification of the future of the Levy Control Framework (LCF) and the allocations of Contracts for Difference early in the next Parliament.\textsuperscript{24} The LCF budget should be set annually on a rolling basis looking forward at least seven years to give investors better visibility. Government must also continue to incentivise a diverse energy mix, including more traditional forms of energy generation such as gas (building on maximising economic recovery of UK reserves), allowing the market to find the best solution and ensuring new companies are able to enter this market, thereby promoting value for money for the benefit of all consumers.\textsuperscript{25}

33. The UK has a proud history of helping to set the climate change agenda on the international stage. It has played a key role, alongside the EU, in negotiating the Kyoto Protocol and other international commitments. The Government must continue to provide strong international leadership on climate change. It must work hard to secure a global climate deal at United Nations Framework Convention on Climate Changes COP 21 in Paris at the end of 2015.\textsuperscript{26} This deal must stabilise greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate and Northern Ireland (LGY 041), Institution of Civil Engineers (LGY 050), Civil Engineering Contractors Association (LGY 054), Citizens Advice (LGY 081), Green Hedge Group (LGY 082), GDF Suez (LGY 085)

\textsuperscript{21} Sustainability First (LGY 005), VPI Immingham (LGY 018), Chartered Institution of Building Services Engineers (LGY 030), Friends of the Earth England, Wales and Northern Ireland (LGY 041), Institution of Civil Engineers (LGY 050), Durham Energy Institute (LGY 051), Civil Engineering Contractors Association (LGY 054), Energy Policy Group (LGY 056), E.ON (LGY 062), EDF Energy (LGY 063), Green Hedge Group (LGY 082), GDF Suez (LGY 085), Aldersgate Group (LGY 093), Oil & Gas UK (LGY 096)

\textsuperscript{22} Ofgem (LGY 023), Dr Maria Sharmina (LGY 026), Met Office (LGY 036), UK Energy Research Centre (LGY 039), Friends of the Earth England, Wales and Northern Ireland (LGY 041), DONG Energy (LGY 049), WWF UK (LGY 067), Centrica plc (LGY 084), Campaign to Protect Rural England (LGY 086), The Anaerobic Digestion and Bioresources Association (LGY 087), Department of Energy and Climate Change (LGY 091), Carbon Tracker Initiative (LGY 092), Shell (LGY 100)

\textsuperscript{23} BBC News, Party leaders make joint climate commitment, 14 February 2015

\textsuperscript{24} Sustainability First (LGY 005), Energy UK (LGY 012), MHI Vestas Offshore Wind (LGY 025), Carbon Capture and Storage Association (LGY 033), Professors of Civil Engineers (LGY 038), Scottish Carbon Capture and Storage (LGY 047), DONG Energy (LGY 049), Institution of Civil Engineers (LGY 050), Renewable Energy Systems (LGY 052), Chartered Institution of Building Services Engineers (LGY 054), RenewableUK (LGY 060), RWE (LGY 070), SSE (LGY 072), Imperial College Centre for Energy Policy (LGY 074), Professor Jon Gibbins (LGY 076), UCL Energy Institute and UCL Institute for Sustainable Resources (LGY 079), Green Hedge Group (LGY 082), Centrica plc (LGY 084), Department of Energy and Climate Change (LGY 091), Carbon Tracker Initiative (LGY 092), Aldersgate Group (LGY 093), British Wind (LGY 094), ESI (LGY 095), ScottishPower (LGY 098)

\textsuperscript{25} National Oceanography Centre (LGY 010), Electricity Market Services Ltd (LGY 011), Ofgem (LGY 023), UK Petroleum Industry Association (LGY 024), Chartered Institution of Building Services Engineers (LGY 030), Carbon Capture and Storage Association (LGY 033), IES (LGY 040), Institution of Civil Engineers (LGY 050), Durham Energy Institute (LGY 051), The Institution of Gas Engineers and Managers (LGY 069), CHPA (LGY 075), Citizens Advice (LGY 081), Centrica plc (LGY 084), GDF Suez (LGY 085), Aldersgate Group (LGY 093), Northern Gas Networks (LGY 099)

\textsuperscript{26} Renewable Energy Systems (LGY 052), WWF UK (LGY 057), Professor Jon Gibbins (LGY 076), Department of Energy and Climate Change (LGY 091), E.ON (LGY 062), Solar Energy in Future Societies (LGY 080), Aldersgate Group (LGY 093)
system. This is currently defined as “keeping global average temperatures below 2°C”. If
the Government wishes the UK to continue its lead on climate policy it must recognise
the growth in the UK’s consumption-based emissions. In addressing the challenge
of stabilising greenhouse gas emissions, the Government must address the impact of
embedded emissions, which have previously been of concern to the Committee.27

34. The UK also played a key role in establishing the world’s first and largest carbon
emissions trading system, the EU ETS. It has demonstrated that it is possible to operate
an international market in carbon emissions allowances. However, the oversupply of
allowances has seen the carbon price stabilise at a level too low to encourage investment in
low-carbon technology, incentivise emissions reductions and decarbonise the economy. It
is therefore imperative that the Government pushes hard for the EU ETS to be reformed
as soon as possible.28

2. Support and promote new technologies

35. So far demand-side measures, such as energy efficiency, demand-side response
(DSR) and electricity demand reduction (EDR), have been the Cinderella of energy policy.
This is despite being one of the most cost-effective ways of reducing carbon emissions.
The Government’s efforts to kick start an energy efficiency market, through the Green
Deal, have largely failed. Similarly, companies developing DSR and EDR technologies are
justifiably concerned that the Government is not treating them equally with supply-side
technologies. The Government must bring about a step-change in energy efficiency by
adopting a policy that genuinely engages the consumer and drives down energy demand.29
It must also develop policies which give equal weight to demand-side measures alongside
supply-side measures so that they can compete on a level playing field.30

36. The next generation of technologies has the potential to revolutionise the energy
system. The high cost involved in researching and developing these technologies
means that companies often require support from Government. The Government must
support R&D in innovative technologies as well as in existing renewable and low-carbon
technologies such as nuclear and CCS to ensure that they can effectively contribute to the
energy transition.31 The Government must be careful, however, that it does not base policy
decisions on the assumption that these technologies will be commercially viable in time to contribute significantly to meeting the UK’s climate targets.32 This is particularly the case with CCS.

3. **Build consumer trust**

37. Consumer trust in the energy market is low. There is a perception that energy companies, network operators and even some switching sites are profiting at the expense of their customers. This could undermine the Government’s efforts to move to a low-carbon energy system. The Government needs to build greater trust in both its policies and the energy companies that will deliver it. It needs to be honest about the costs and benefits of decarbonising the energy system to ensure consumer buy-in. Without this trust the vision of a cleaner, more affordable and secure energy system could be jeopardised.33

**Conclusion**

38. In order to ensure that our 2030 vision, of a highly decarbonised energy system, is realised it will be critical that the Government seek to address the three challenges we have outlined — maintaining political stability and leadership, supporting and promoting new technologies, and building consumer trust. We hope that the next Energy and Climate Change Committee will find this report helpful and take a close interest in these issues over the course of the next Parliament.

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32 National Oceanography Centre (LGY 010), Ofgem (LGY 023), UK Hydrogen and Fuel Cell Association (LGY 029), Carbon Capture and Storage Association (LGY 033), Cold & Power (LGY 034), Committee on Climate Change (LGY 042), The Geological Society (LGY 043), GRP UK (LGY 046), National Grid (LGY 055), Electrical Contractors’ Association (LGY 065), The Institution of Engineering and Technology (LGY 066), University of Birmingham (LGY 068), The Institution of Gas Engineers and Managers (LGY 069), Imperial College Centre for Energy Policy (LGY 074), Professor Jon Gibbins (LGY 076), OVO Energy (LGY 090), Department of Energy and Climate Change (LGY 091), Aldersgate Group (LGY 093), Oil & Gas UK (LGY 096), Shell (LGY 100), Clare Moody, Jude Kirton-Darling and Theresa Griffin MEP (LGY 101)

33 Energy UK (LGY 012), VPI Immingham (LGY 018), UK Energy Research Centre (LGY 039), Friends of the Earth England, Wales and Northern Ireland (LGY 041), National Grid (LGY 055), University of Birmingham (LGY 068), RWE (LGY 070), CHPA (LGY 075), The Institution of Gas Engineers and Managers (LGY 069), Professor Jon Gibbins (LGY 076), Citizens Advice (LGY 081), Institution of Mechanical Engineers (LGY 089)
Tony Cocker
Chief Executive Officer - E.ON UK

Sara Bell
CEO and Founder - Tempus Energy
Andrew Buglass
Co-Chair - Low Carbon Finance Group

Tim Yeo MP
Chair - Energy and Climate Change Select Committee
Formal Minutes

Tuesday 3 March 2015

Members present:

Sir Robert Smith, in the Chair

Dr Phillip Lee
Mr Peter Lilley
Christopher Pincher

Graham Stringer
Dr Alan Whitehead

The Committee noted the nine videos, as approved by the Chair (pursuant to the Order of the Committee of 16 December 2014), that will accompany the Report online.

Draft Report (Fuelling the debate: Committee successes and future challenges), proposed by the Chair, brought up and read.

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

Paragraphs 1 to 32 read and agreed to.

Paragraph 33 read.

Amendment proposed, at the end of the paragraph, to add “The consequences of the embedded carbon is that the UK’s carbon footprint is increasing. This is a perverse outcome.”—(Graham Stringer.)

Question put, That the Amendment be made.

The Committee divided.

Ayes, 2
Mr Peter Lilley
Graham Stringer

Noes, 3
Dr Phillip Lee
Christopher Pincher
Dr Alan Whitehead

Amendment accordingly negatived.

Paragraph agreed to.

Paragraphs 34 to 38 read and agreed to.

Motion made, and Question put, That the Report be the Tenth Report of the Committee to the House.
The Committee divided.

Ayes, 3

Dr Phillip Lee
Christopher Pincher
Dr Alan Whitehead

Noes, 1

Mr Peter Lilley

Question accordingly agreed to.

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

[Adjourned till a time and a date to be fixed by the Chair]
Published written evidence

The following written evidence was received and can be viewed on the Committee’s inquiry web page at www.parliament.uk/ecn. LGY numbers are generated by the evidence processing system and so may not be complete.

1. Air Products (LGY0016)
2. Aldersgate Group (LGY0093)
3. British Wind (LGY0094)
4. Campaign to Protect Rural England (LGY0086)
5. Carbon Capture and Storage Association (LGY0033)
6. Carbon Tracker Initiative (LGY0092)
7. Centrica Plc (LGY0084)
8. Chartered Institution of Building Services Engineers (CIBSE) (LGY0030)
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The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

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