



DEBATE PACK

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Cost of the Dieter Helm energy review

This pack has been produced ahead of the debate to be held in Westminster Hall on Tuesday 24 April 2018 from 2.30-4pm on the Cost of the Dieter Helm energy review. The debate will be opened by Graham Stringer MP.

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The House of Commons Library prepares a briefing in hard copy and/or online for most non-legislative debates in the Chamber and Westminster Hall other than half-hour debates. Debate Packs are produced quickly after the announcement of parliamentary business. They are intended to provide a summary or overview of the issue being debated and identify relevant briefings and useful documents, including press and parliamentary material. More detailed briefing can be prepared for Members on request to the Library.

Summary

This briefing covers the cost, background for, conclusions of, and comment on, Dieter Helm's review for the Government on the 'Cost of Energy'.

In August 2017, the Department for Business, Energy and Industrial Strategy launched an independent review into the cost of energy, led by Professor Dieter Helm, an economist specialising in energy based at the University of Oxford.¹ The review was published in October 2017.

In November 2017, the Government disclosed the cost of Dieter Helm's review. Professor Dieter Helm was paid £500 per day, for 30 days work. Members of the advisory panel were not paid. The Department also reimbursed the travel costs of the reviewer and advisory panel members, which amounted to £410.²

The Government say the report built on the Government's Industrial Strategy Green Paper, published in January 2017, to recommend ways to keep energy prices as low as possible.³

Further information on the review is provided below.

1. Dieter Helm Cost of Energy Review

1.1 Background

In August 2017, the Department for Business, Energy and Industrial Strategy launched an independent review into the cost of energy, led by Professor Dieter Helm, an economist specialising in energy based at the University of Oxford.⁴

The terms of reference for the review stated that the Government's ambition to deliver decarbonisation and energy security in the most cost-effective way was the motivation for the review:

The government has the ambition for the UK to have the lowest energy costs in Europe, for both households and businesses.

The UK was the first country in the world to set a long-term, legally binding target for emission reduction. The Climate Change Act commits the UK to reduce emissions by at least 80% by 2050, and sets a framework for the setting of rolling five-year carbon budgets. Parliament has recently approved the 5th carbon budget, for the period 2028-2032, at a 57% reduction on 1990 levels.

The carbon targets need to be met, whilst concurrently ensuring security of supplies of energy, in the most cost-effective way. The rapid closure of coal, the aging of the existing nuclear fleet, the

¹ Department for Business, Energy and Industrial Strategy Press Release, [Independent review to ensure energy is affordable for households and businesses](#), 6 August 2017

² PQ [111460](#) [on Cost of Energy Independent Review], 13 November 2017

³ Department for Business, Energy and Industrial Strategy Press Release, [Independent review to ensure energy is affordable for households and businesses](#), 6 August 2017

⁴ Department for Business, Energy and Industrial Strategy Press Release, [Independent review to ensure energy is affordable for households and businesses](#), 6 August 2017

intermittency of some renewables, the scope for demand management and new storage, the coming of electric vehicles and the timing of future nuclear capacity coming on stream will be taken into account in considering how best to meet the overall objective of system security of supply.

The specific aim of this review is to report and make recommendations on how these objectives can be met in the power sector at minimum cost and without imposing further costs on the exchequer. In that context the review will consider the implications of the changing demand for power, including from industry, heat and transport.⁵

It was reported that the review was set in the context of rising energy bills for consumers. For example, a BBC article from August 2017 referred to the fact that days before the launch of the review, British Gas had cited rising policy costs as a reason for increasing its electricity prices by 12.5%.⁶

The Government's press release states that the review was part of the Government's [Industrial Strategy Green paper](#), published in January 2017:

Professor Dieter Helm, one of Britain's leading energy experts, will look specifically at how the energy industry, government and regulators can keep the cost of electricity as low as possible, while ensuring the UK meets its domestic and international climate targets.

This ambitious review builds on the commitment made in the [Industrial Strategy green paper](#) and will consider the whole electricity supply chain – generation, transmission, distribution and supply. It will look for opportunities to reduce costs in each element and consider the implications of the changing demand for electricity, including the role of innovative technologies such as electric vehicles, storage, robotics and artificial intelligence.⁷

In a parliamentary question in November 2017, Jim Cunningham asked the Government how much the review had cost the public purse. The Minister for Clean Growth Claire Perry replied:

The reviewer, Professor Dieter Helm, was paid £500 per day, for 30 days work. Members of the advisory panel were not paid. The Department also reimbursed the travel costs of the reviewer and advisory panel members, which amount to £410. A small team in BEIS supported the reviewer in the conduct of the review, in particular by providing publicly available information.⁸

1.2 Findings of the review

The [Cost of Energy review](#) took two months to complete and was published on 25 October 2017.⁹ Dieter Helm concluded:

This review has two main findings. The first is that the cost of energy is significantly higher than it needs to be to meet the

⁵ Gov.uk, Cost of energy: independent review, [Terms of reference](#), 6 August 2017

⁶ BBC news, [Energy review examining household and environmental costs](#), 6 August 2017.

⁷ Department for Business, Energy and Industrial Strategy Press Release, [Independent review to ensure energy is affordable for households and businesses](#), 6 August 2017

⁸ PQ [111460](#) [on Cost of Energy Independent Review], 13 November 2017

⁹ Dieter Helm, [Cost of energy review](#), 25 October 2017

government's objectives and, in particular, to be consistent with the Climate Change Act (CCA) and to ensure security of supply. The second is that energy policy, regulation and market design are not fit for the purposes of the emerging low-carbon energy market, as it undergoes profound technical change.¹⁰

The review proposed a number of recommendations to reduce the cost of energy for consumers. These included:

- a carbon price to ensure the externalities of climate change are included in the costs of production;
- combining previous renewable electricity subsidies (which Helm criticises) into a 'legacy bank' and making them a clearly separate aspect of bills;
- replacing FITs and CfDs with an equivalent firm power auction where the costs of intermittency are included;
- creating a default tariff to replace standard variable tariffs based on an index of wholesale costs, other costs, and a supplier profit margin that would be capped.
- reforming the regulation of transmission and distribution focusing on the role of system operators at the national and local levels, and replacing the separate licences for distribution, supply and decentralised generation with a general licence.

There were a number of other suggested changes, aimed at simplifying the interventions in the energy market and minimising the role of the state.

The Government responded to Helm's report by launching a call for evidence to assess views on the report's findings and recommendations.¹¹

2. Commentary on the Cost of Energy Review

Dieter Helm's report received a mixed review. An overview of the different opinions on the key suggestions is available from the policy blog Carbon Brief.¹²

In his Financial Times Column, energy commentator Nick Butler said the report was "intelligent" with "radical proposals" and states "it will be intriguing to see if the government has the nerve to implement them".¹³

Richard Black, Director of the Energy and Climate Change Intelligence Unit (a non-profit providing information on UK environmental issues) said there was not much evidence for the report's claims and proposals:

¹⁰ Dieter Helm, [Cost of energy review](#), 25 October 2017, para 1

¹¹ Gov.uk, [Cost of energy review: call for evidence](#), 7 November 2017

¹² Jocelyn Timperley, [Reaction: Dieter Helm's 'least cost' ideas for meeting the UK's climate targets](#), *Carbon Brief*, 27 October 2017

¹³ Nick Butler, [Lessons from Britain's broken energy market](#), *Financial Times*, 6 November 2017

The 242 pages of the Helm Review contain a plethora of ideas on a multitude of issues – regulatory models, profit margins, policy complexity, and much much more.

One thing they don't contain much of, curiously, is evidence.¹⁴

Mr Black says, “there is much to like” about the review but criticises the evidence for rising energy costs over time, the cost of wind and solar compared to gas, and the achievability of a carbon price in practice.¹⁵

The Committee on Climate Change (an independent statutory body who advise the Government on climate change) published a mixed response:

There's a lot which chimes with previous CCC recommendations; from greater emphasis on letting the various technologies compete, including wind and solar; to the benefits of simplifying the system of regulation and incentives; to moving towards wider application of a carbon price. In other areas such as the call for a 'unified capacity auction' more consideration of the potential costs and risks, as well as the benefits, is required.

Specifically on the cost of energy, the Committee say:

It is increasingly apparent that renewables do or will offer the lowest cost of electricity over their lifetime of all generating options. With suitable long-term contracts they can be deployed without subsidy beyond the application of a carbon price to fossil fuel generation. That points to growing challenges around managing intermittency, whilst breakthroughs in smart technologies and storage offer new opportunities for flexibility. The Committee has previously emphasised the need for markets to fully reflect the system value of flexibility without unnecessary complexity in the rules. Professor Helm puts forward some interesting ideas in this area, which we will consider in due course.¹⁶

The UK's Energy Research Council (UKERC) response said that important distinctions needed to be made from the findings of the review:

First, whilst the review title focuses on the cost of energy, this is misleading. The terms of reference and the Review report make it clear that the main focus is electricity rather than energy in general.

[...]

Our second comment is that there are important distinctions between prices, costs and bills. Whilst much of the debate focuses on prices, the costs of energy for consumers also depends on their energy consumption. Therefore, it is also important to consider energy efficiency of buildings, appliances and industrial processes since these are a key determinant of costs.

Our third comment is that costs need to be considered for the electricity system as a whole. Whilst the separate questions in the Call for Evidence about generation, networks and retail supply are understandable, costs to consumers partly depend on interactions

¹⁴ Richard Black, [Helm Review: 'Show your working, please'](#), *Energy and Climate Intelligence Unit*, 26 October 2017

¹⁵ Richard Black, [Helm Review: 'Show your working, please'](#), *Energy and Climate Intelligence Unit*, 26 October 2017

¹⁶ Mike Thompson, [Five reflections on Dieter Helm's Cost of Energy Review](#), Committee on Climate Change, 31 October 2017

between these components of the electricity system. This compartmentalised approach to the evidence base could mean that some of these systemic interactions are missed.¹⁷

Examples of wider commentary on the review, with a range of views, include statements from:

- Renewable UK ([press statement](#) from the Chief Executive Hugh McNeal on 25 October 2017);
- The Grantham Institute of the London School of Economics ([press statement](#) from Bob Ward, policy and communications director, on 25 October 2017);
- The Global Warming Policy Foundation ([report](#) from Trustee of the Foundation, Peter Lilley).

¹⁷ UKERC, [UKERC response to the Cost of Energy Review](#), 4 January 2018

3. News items

Business Green

Claire Perry announces formal review of capacity market 'later this year'

20 March 2018

<https://www.businessgreen.com/bg/news/3028844/claire-perry-announces-formal-review-of-capacity-market-later-this-year>

Clean Energy News

BEIS seeks cost of energy evidence following Helm review

7 November 2017

<https://www.cleanenergynews.co.uk/news/solar/beis-seeks-cost-of-energy-evidence-following-helm-review>

Business Green

Dieter Helm's cost of energy review calls for government to 'radically simplify' energy system

25 October 2017

<https://www.businessgreen.com/bg/news/3019837/dieter-helms-cost-of-energy-review-calls-for-government-to-radically-simplify-energy-system>

Utility Week

Helm cost review urges radical energy overhaul

25 October 2017

<https://utilityweek.co.uk/helm-cost-review-urges-radical-energy-overhaul/>

The Economist

Is Britain's energy system broken?

19 October 2017

<https://www.economist.com/news/britain/21730454-it-may-be-less-sickly-politicians-claim-britains-energy-system-broken>

BBC News Online

Energy review examining household and environmental costs

6 August 2017

<http://www.bbc.co.uk/news/uk-40839433>

FT

UK launches independent energy review

Government looks to assuage concerns over cost and supply

6 August 2017

<https://www.ft.com/content/6785e4a8-79ff-11e7-9108-edda0bcbc928>

4. Press releases

Imperial College London

Policy oversimplification not the answer to cheaper energy, say researchers

09 January 2018

In a submission to a Government call for evidence on energy costs, a team from Imperial College London argues that cutting red tape is not a cure-all.

Late last year Dieter Helm published his [independent review on the cost of energy](#). Commissioned by the UK Government, the report puts forward proposals on how to reduce costs in the power system in the long-term whilst ensuring the UK meets its climate change targets.

In November the Government the opened [a call for evidence on the report's conclusions](#). In response researchers from the Energy Futures Lab and [the Grantham Institute – Climate Change and the Environment](#) have submitted [a joint response](#) laying out their views on the report's recommendations.

The Helm Review is a wide reaching document and one of its arguments is for a streamlining of the country's energy policy and that this will help lower costs for consumers. It is this point in particular the team disagrees with.

We believe that the Helm Review has provided a focus for discussions in government about the cost of energy and the impact energy policy has,

says Dr Aidan Rhodes, one of the authors of the response,

However we don't agree that there is a clear link between policy complexity and consumer price increases.

The team's response includes a range of suggestions that they feel could make energy policy more transparent while also ensuring that the Government can meet all its objectives. These include subsidy-free Contract for Difference agreements or a different way of allocating system-wide costs to reduce the impact of increased renewables on customers' bills.

The key for us is that all these issues require detailed analysis to determine what changes would actually decrease household energy bills,

explains Dr Rob Gross, Director of Policy at Energy Futures Lab and co-author,

I think the government's own modelling expertise is a vital tool to test and improve our policy mix and therefore we do not support the recommendation in the Review that it is scaled back.

The response does not solely focus on these points. The team agrees with the Helm Review's view that auctions can reduce the costs of both

capacity and low carbon contracts. However, the team were not convinced that merging the two forms of support is the best way to minimise the system costs associated with variable renewables.

Another issue that the team feel needs to be tackled is innovation and support for new technologies.

For me support for testing and early stage deployment of new technology is key, it is essential to cost effective decarbonisation,

says Alyssa Gilbert, Director of Policy and Translation at the Grantham Institute,

Having such policies in the UK provide opportunities for emerging technologies to enter the market in general and the UK market in particular.

The response from the team is available to [download and read as a PDF](#). It was compiled by [Dr Aidan Rhodes](#) and [Dr Robert Gross](#) of Energy Futures Lab; [Alyssa Gilbert](#), [Dr Ajay Gambhir](#) and [Dr Jeff Hardy](#) of the Grantham Institute; and Ian Temperton, an Independent Expert on Low Carbon Finance.

UK Energy Research Centre

UKERC response to the Cost of Energy Review

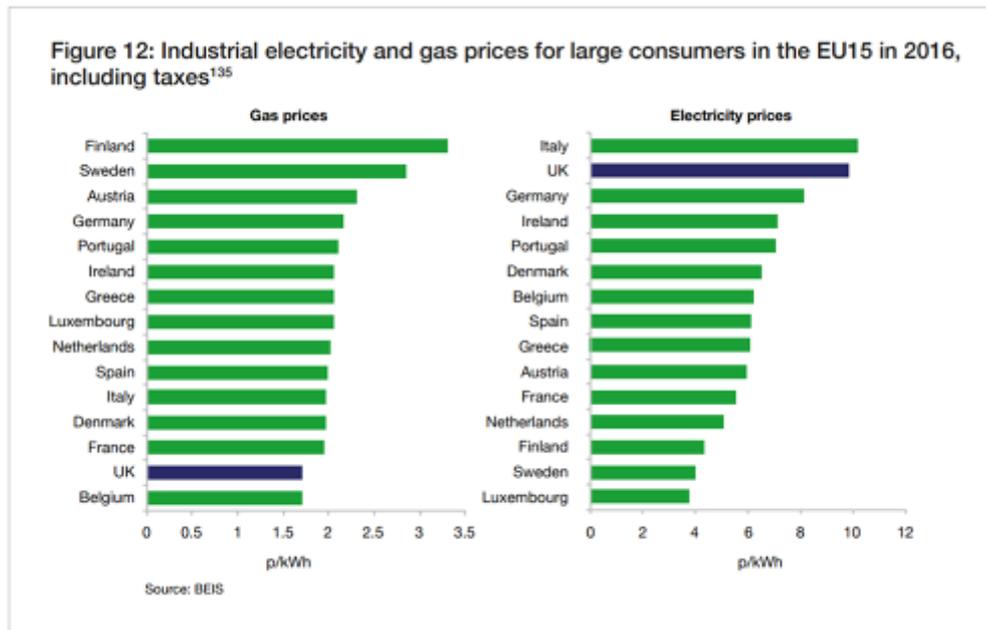
4 Jan 2018

[Open document](#)

We welcome the opportunity to comment on the findings of the Cost of Energy Review, conducted by Professor Dieter Helm. In our response, we address most of the questions set out in the Call for Evidence from BEIS. Before turning to these specific questions, we have three general observations about the Review and the Call for Evidence.

First, whilst the review title focuses on the cost of energy, this is misleading. The terms of reference and the Review report make it clear that the main focus is electricity rather than energy in general.

This distinction is important since the data shows significant differences in the position of UK electricity and gas costs when compared to costs in other countries. There are also differences between relative costs for households and relative costs for business energy consumers. UK electricity prices are higher up the European league table than prices for gas. As shown in the figure below, electricity prices for energy intensive industries in the UK are particularly high.



Source: HM Government (2017) The Clean Growth Strategy.

Our second comment is that there are important distinctions between prices, costs and bills. Whilst much of the debate focuses on prices, the costs of energy for consumers also depends on their energy consumption. Therefore, it is also important to consider energy efficiency of buildings, appliances and industrial processes since these are a key determinant of costs.

Our third comment is that costs need to be considered for the electricity system as a whole. Whilst the separate questions in the Call for Evidence about generation, networks and retail supply are understandable, costs to consumers partly depend on interactions between these components of the electricity system. This compartmentalised approach to the evidence base could mean that some of these systemic interactions are missed.

Confederation of British Industry

CBI'S RESPONSE TO THE BEIS COST OF ENERGY REVIEW CALL FOR EVIDENCE

January 2018

Commissioned by the government in 2017, Professor Dieter Helm's Cost of Energy Review considered how to keep electricity costs as low as possible. The CBI's response, published in January, to the government's subsequent call for evidence welcomed the review, and urged a sustained period of policy consistency to maintain business confidence.

Energy costs remain high on the agenda for both households and businesses, and is a core part of the government's Industrial Strategy

alongside clean growth. With that in mind the CBI welcomed the government's decision to commission an independent Cost of Energy Review, which was undertaken by Professor Dieter Helm and published in October 2017. The review sought to understand how the objectives of delivering secure, affordable and low-carbon energy could be met at the lowest cost, considering all aspects of the electricity supply chain.

The CBI responded to the Department for Business, Energy and Industrial Strategy's (BEIS) Call for Evidence following the review's publication, welcoming Professor Helm's work as a positive step towards considering the challenge of how the UK can best achieve its decarbonisation and security of supply objectives at the lowest cost to consumers.

The Cost of Energy Review rightly highlighted the complexity of the current policy landscape, and the impact this has on consumers. The review also identified some key principles – system efficiency and simplicity, a market-led and technology-enabling approach and greater transparency – which align with those identified in the CBI's 2017 report, [Stepping up to the challenge](#).

Sustained policy consistency

The CBI's response argued that Professor Helm's review should not be considered in isolation, but in the context of a fast-changing policy and political environment, including the publication of the Clean Growth Strategy and Industrial Strategy, the introduction of legislation to cap domestic energy bills and new controls on low-carbon incentives set out in the 2017 Autumn Budget.

As such, the CBI urged the government, in considering the review, to take an approach of continual, incremental improvement, providing policy consistency to maintain business and investor confidence. Specifically, the response called on the government to:

- Continue with the current regime of competitive auctions for low-carbon power and back-up capacity through Contracts for Difference and the Capacity Market, ensuring all cost-effective technologies can compete.
- Work with business to consider a long-term post-Brexit carbon pricing regime which works for all parts of the economy
- Build on progress and recommendations within the Smart Systems and Flexibility Plan before considering further changes to the electricity networks
- Ensure that any intervention to electricity supply is carefully designed to improve transparency and engagement, and allow for continued competition and innovation

A broader view of energy costs

The Cost of Energy review focused, in line with its Terms of Reference, largely on the component parts of the unit price of electricity. However, when looking at the overall cost of energy to consumers, both business and domestic, it is important to consider the volume of energy used, as

well as the price per unit. To this end, the CBI's response urged the government to give significant attention to the role of energy efficiency in helping to manage energy costs into the future.

To ensure successful outcomes for all consumers, a 'whole system' approach that considers where improvements in energy efficiency can be made, as well as the role of technology in delivering a smarter, more flexible and decentralised system will be key.

Department for Business, Energy and Industrial Strategy

Call for evidence on how to reduce the cost of energy launched

7 November 2017

Groups are being called upon to submit their views on how the cost of energy can be cut, following the publication of Professor Dieter Helm CBE's review

A call for evidence on reducing the cost of energy has been launched by the government today, following the independent review by Professor Dieter Helm CBE.

On 25 October, Professor Helm concluded his independent review which outlines recommendations on how to reduce costs in the power system, whilst ensuring the UK meets its climate change targets.

Building on the government's Industrial Strategy Green Paper, Professor Helm was asked to consider the whole electricity supply chain of generation, transmission, distribution and supply, and recommend how to reduce costs in each part.

The Government [is now calling on industry, businesses and consumer groups to give their opinions](#) on Professor Helm's recommendations to government.

Business and Energy Secretary Greg Clark said:

Energy bills are too high for consumers. We have been clear that we are committed to bringing down costs, both for households and for businesses.

I commissioned this review to start a debate about the future of our energy markets. Now I am opening up that debate, asking everyone with an interest to give us their views on Professor Helm's ideas for bringing down the cost of energy for consumers.

The Committee on Climate Change

Five reflections on Dieter Helm's Cost of Energy Review

31 October 2017

Mike Thompson

At over 200 pages, Professor Dieter Helm's [review of the cost of energy](#) to UK businesses and households is wide-ranging. It covers many issues that fall firmly within our remit here at the Committee on Climate Change (such as the costs of decarbonising the UK's electricity supply) and others that don't (such as electricity network regulation and energy retail tariffs). The review makes a number of recommendations, some specifically for the CCC.

There's a lot which chimes with previous CCC recommendations; from greater emphasis on letting the various technologies compete, including wind and solar; to the benefits of simplifying the system of regulation and incentives; to moving towards wider application of a carbon price. In other areas such as the call for a 'unified capacity auction' more consideration of the potential costs and risks, as well as the benefits, is required.

Assessing the full review will take time. For now, here are five early reflections:

1. One of Helm's key conclusions is that energy bills are much higher than they need to be – gas prices and renewable costs have fallen yet bills have risen. In fact, this is a high level summary of a complicated picture (we unpacked this in detail in our 2017 report on [Energy Prices and Bills](#)). At least three distinctions are important:

- Whilst energy prices have risen, energy bills are actually down since the Climate Change Act was passed in 2008. That reflects improved energy efficiency which is reducing the amount of energy we use.
- The relationship between renewable costs and energy prices goes in both directions. The more complete story here is that there has been a period of investment (in the UK and across Europe and the world) in renewables at a time of high costs, which has led on the one hand to higher energy prices and on the other to (much) lower renewable costs. It is generally recognised that without this expensive deployment, costs could not have fallen as they have, although the benefits of that will only appear in future bills.
- Timescales matter. Whilst wholesale gas prices fell quickly from 2013 to 2016, that followed rises since 2009. Overall we are roughly back where we were in 2009 and above levels from the late-1990s and early-2000s.

2. In terms of the strategy for cutting greenhouse gas emissions overall, the CCC approach aligns with Professor Helm's conclusion that this must be a cross-economy strategy that goes well beyond the power sector. That is why power is just one of seven chapters in our report on

the [Sectoral scenarios for the Fifth Carbon Budget](#) and makes up only 5 of the 30 recommendations in our [progress report to Parliament](#) this year. CCC scenarios are carefully constructed to identify the lowest-cost path to meeting the UK carbon targets right across the economy. Effective action must cover all sectors, including agriculture, where the Committee commissioned [one of the first assessments](#) of opportunities to reduce emissions from this sector and has [consistently emphasised](#) the need for a [stronger set of policies](#) to deliver these much needed reductions. Far from ignoring potential for reducing emissions from transport, the Committee has been consistently ambitious, with electric vehicles accounting for 60% of new car and van sales in 2030 in our 'central scenario', a figure that has remained unchanged since our [Fourth Carbon Budget](#) advice in 2010 (when electric cars made up less than 0.01% of UK sales). Current sales (2%) are right on track with this trajectory and it is great that others' assessments of potential are now catching up.

3. We use scenarios to monitor progress and to satisfy ourselves that carbon budgets are achievable while meeting the requirements of the Climate Change Act. They are not intended to be prescriptive paths. Building scenarios for emissions reduction requires assumptions about the costs of technologies (both high-carbon and low-carbon) and the realistic rates of deployment that can be achieved. We have always been clear that there is considerable uncertainty around such assumptions, and our scenarios have been designed to be robust across these uncertainties. Some things have progressed more quickly than we assumed, some more slowly. For example:

- The costs of renewable power generation have fallen far more quickly than the Committee assumed. In our 2011 [Renewable Energy Review](#) we projected costs for offshore wind of £52-124/MWh for 2040, but recently offshore wind projects have signed contracts at £57.50/MWh for delivery from 2022. At the same time, projected costs for new nuclear power have increased, while the deployment of carbon capture and storage (CCS) has not yet begun in the UK.
- Battery costs have also fallen more quickly than we assumed, although the speed of electrification of transport has to date been slightly slower. The speed of electrification of heating has also been slower than in our scenarios.
- Wholesale gas prices for 2016 were below the projections we have used, though on average over 2008-2015 they were marginally above the central projection we used in 2008. We will continue to use the full range of scenarios published by the Government when building our scenarios.

In the face of these changes, we review and update our scenarios on a regular basis.

4. Successfully deploying new technologies at scale requires that these first undergo stages of R&D, demonstration and deployment. All of these stages are important on the way to commercialisation and cost

reduction. Furthermore, many energy technologies have long 'asset lives' and require supporting infrastructure and extensive supply chains to deploy at scale even once fully commercialised. Given the limited time to 2050, this implies that options likely to have a major impact on meeting the UK's 2050 target are likely to need some deployment before 2030.

[Research by the UK Energy Research Centre](#) (UKERC) in 2015 supported our advice on the [Fifth Carbon Budget](#). The research found that for a set of new technologies (both energy and non-energy) the average time for invention, development and demonstration was 19 years, with a further 20 years on average for market deployment and commercialisation. Many technologies (e.g. solar photovoltaics) that have recently deployed very quickly have benefited from a long history of earlier development first.

5. It is increasingly apparent that renewables [do or will](#) offer the lowest cost of electricity over their lifetime of all generating options. With suitable long-term contracts they can be deployed without subsidy beyond the application of a carbon price to fossil fuel generation. That points to growing challenges around managing intermittency, whilst breakthroughs in smart technologies and storage offer new opportunities for flexibility. The Committee has previously emphasised the need for markets to fully reflect the system value of flexibility without unnecessary complexity in the rules. Professor Helm puts forward some interesting ideas in this area, which we will consider in due course.

The principles of competition, inclusion of all available low-carbon technologies and simplification all make good sense. For now, the priorities are to develop flexibility markets and to continue with competitive allocation of long-term contracts open to as wide a range of technologies as possible.

Engineering Employers' Federation

Helm Review: UK cost of energy is too high

27 Oct 2017

This week saw the launch of the independent Energy Review by Professor Dieter Helm. The Review, promised in the Industrial Strategy green paper published by the government earlier this year, is the first step towards understanding how the government can meet its ambition for the UK to have the lowest energy costs in Europe, for households and businesses. EEF Chief Executive, Terry Scuoler, was part of the Independent Advisory Panel for the Review, drawing on his understanding of the challenges that UK business consumers have faced on energy costs.

Helm's review, published this week, confirms what domestic and business consumers experience, particularly in the past few years, that

the UK cost of energy is too high. Helm has found that not only are energy costs too high, they are higher than necessary to meet the targets in the Climate Change Act and the carbon budgets. He concludes that the excessive costs are an unnecessary burden on households and businesses, and need to be addressed urgently to provide much-needed relief to households and industrial consumers.

Government knows it faces the 'energy trilemma', of balancing security of supply, cost, and achieving carbon reductions in the UK economy. The review demonstrates the challenge of this balancing act, and ensuring that decarbonisation of the power sector and the wider economy is achieved in the most affordable way possible. Helm's recommendations are wide ranging, from urgent actions to reduce the energy cost burden in a short term, to setting out a clear roadmap to achieve a simpler and more competitive energy market in the longer term.

Government, the energy industry, businesses and consumer groups will now be digesting the 242-page Review. Government will be seeking views from stakeholders before it responds formally to the findings and recommendations. We will be engaging with our members to understand their perspectives on the findings from the Review.

Government also committed to developing a Roadmap to Minimizing Business Energy Costs in its Industrial Strategy Green Paper, which we hope builds firmly on this Energy Review and sets out clear steps to achieve internationally competitive energy prices for the UK economy. In the post-Brexit world, and as the Industrial Strategy is developed, government needs to make sure that it has the fundamentals right to ensure UK firms can compete internationally. Getting the price of energy right for UK businesses is one of those fundamentals.

Department for Business, Energy and Industrial Strategy

Independent review to ensure energy is affordable for households and businesses

6 August 2017

An independent review into the cost of energy led by Professor Dieter Helm CBE will recommend ways to keep energy prices as low as possible.

The review will consider the whole electricity supply chain – generation, transmission, distribution and supply.

An independent review into the cost of energy led by Professor Dieter Helm CBE will recommend ways to keep energy prices as low as possible as part of the Industrial Strategy, Business and Energy Secretary Greg Clark announced today.

Professor Dieter Helm, one of Britain's leading energy experts, will look specifically at how the energy industry, government and regulators can keep the cost of electricity as low as possible, while ensuring the UK meets its domestic and international climate targets.

This ambitious review builds on the commitment made in the [Industrial Strategy green paper](#) and will consider the whole electricity supply chain – generation, transmission, distribution and supply. It will look for opportunities to reduce costs in each element and consider the implications of the changing demand for electricity, including the role of innovative technologies such as electric vehicles, storage, robotics and artificial intelligence.

The ambition is for the UK to have the lowest energy costs in Europe, for both households and businesses.

Business and Energy Secretary Greg Clark said:

All homes and businesses rely on an affordable and secure energy supply and the government is upgrading our energy system to make it fit for the future. We want to ensure we continue to find the opportunities to keep energy costs as low as possible, while meeting our climate change targets, as part of the Industrial Strategy.

The review will consider how we can take advantage of changes to our power system and new technologies to ensure clean, secure and affordable supplies over the coming decades. Professor Helm will bring invaluable expertise to the review, and I look forward to seeing his recommendations.

Professor Helm is one of Britain's leading energy experts, a Professor of Economic Policy at the University of Oxford and a Fellow in Economics at New College Oxford, and a former member of the Council of Science and Technology, advising the UK Prime Minister from 2004 to 2007.

Professor Dieter Helm CBE said:

I am delighted to take on this Review. The cost of energy always matters to households and companies, and especially now in these exceptional times, with huge investment requirements to meet the decarbonisation and security challenges ahead over the next decade and beyond. Digitalisation, electric transport and smart and decentralised systems offer great opportunities. It is imperative to do all this efficiently, to minimise the burdens. Making people and companies pay excessively for policy and market inefficiencies risks undermining the objectives themselves.

My review will be independent and sort out the facts from the myths about the cost of energy, and make recommendations about how to more effectively achieve the overall objectives.

The government is already taking action, and has [asked the regulator to come forward](#) with proposals to extend the price protection currently in place for some vulnerable energy consumers to more people on the poorest value tariffs. This builds on action taken to cap the price for 4 million pre-payment meter customers which came into force on 1 April 2017.

There are also a number of schemes in place to reduce energy bills by improving energy efficiency, such as the [Energy Company](#)

[Obligation](#) which will upgrade 200,000 homes each year and help tackle fuel poverty. For business, the package of relief for [energy intensive industries](#) was worth £260 million last year and there are financial incentives to switch to cleaner fuels and processes.

This review will consider the electricity system as a whole and make recommendations on how to deliver affordable energy over the coming decades. It follows the plan set out in July by government and Ofgem for a [smarter energy system](#) and the commitment to ensure Britain's energy costs are as low as possible.

An advisory panel will support the reviewer by providing expert insights in a personal capacity:

- Terry Scuoler CBE, Chief Executive of EEF, the Manufacturers' Organisation
- Nick Winser CBE, Chairman of the Energy Systems Catapult
- Laura Sandys, Chief Executive of Challenging Ideas
- Isobel Sheldon, Engineering & Technology Director of Johnson Matthey Battery Systems
- Richard Nourse, Managing Partner of Greencoat Capital LLP

Notes to editors:

The commitment to review the cost of energy was set out on page 94 of the [Industrial Strategy Green Paper](#)

Ofgem figures show the main costs of supplying a typical domestic customer are 4% lower than at January 2015.

The Terms of Reference of the Review are set out below:

- The government has the ambition for the UK to have the lowest energy costs in Europe, for both households and businesses.
- The UK was the first country in the world to set a long-term, legally binding target for emission reduction. The Climate Change Act commits the UK to reduce emissions by at least 80% by 2050, and sets a framework for the setting of rolling five-year carbon budgets. Parliament has recently approved the 5th carbon budget, for the period 2028-2032, at a 57% reduction on 1990 levels.
- The carbon targets need to be met, whilst concurrently ensuring security of supplies of energy, in the most cost-effective way. The rapid closure of coal, the aging of the existing nuclear fleet, the intermittency of some renewables, the scope for demand management and new storage, the coming of electric vehicles and the timing of future nuclear capacity coming on stream will be taken into account in considering how best to meet the overall objective of system security of supply.

- The specific aim of this review is to report and make recommendations on how these objectives can be met in the power sector at minimum cost and without imposing further costs on the exchequer. In that context the review will consider the implications of the changing demand for power, including from industry, heat and transport.
- The review will report on the full supply chain of electricity generation, transmission, distribution and supply, and consider the opportunities to reduce costs in each part, taking into account the roll-out of smart meters and the work already underway to underpin the transition to a smarter energy system.
- The review will set out options for a long term road map for the power sector, and consider how technological change in the wider economy, as well as in the energy sector, may transform the power sector, and how energy policy can best facilitate and encourage such developments, consistent with the overall objectives of decarbonisation and security of supply, and with its industrial strategy.
- The review will consider the options for enhancing and extending the scope for auctions and other competitive mechanisms, and for reducing the complexity across the full supply chain of electricity generation.
- The review will consider the key factors affecting energy bills, including but not limited to energy and carbon pricing, energy efficiency, distributed generation, regulation of the networks, and innovation and R&D. The review will not propose detailed tax changes.
- The review will focus on system issues and will not comment on the status of individual projects.
- The review will provide recommendations as to how best minimise the costs of energy consistent with the overarching objectives, taking account of the costs and benefits of the recommendations. It will set out options for developing and enhancing energy policy. Where the issues the review covers fall to other players, for example Ofgem, it will make recommendations about how government can best work with them to reduce costs.
- The review will report at the end of October 2017.

The final report will be published on the [Cost of energy: independent review](#) page.

[Professor Dieter Helm - declaration of interest](#) (PDF, 10KB, 1 page) .

5. Parliamentary material

Debate

Domestic Gas and Electricity (Tariff Cap) Bill

Commons Second Reading

HC Deb 6 March 2018 | Vol 637 cc205-

[https://hansard.parliament.uk/Commons/2018-03-06/debates/CC8390CB-EEFD-43D9-8E35-805EE8EA9072/DomesticGasAndElectricity\(TariffCap\)Bill](https://hansard.parliament.uk/Commons/2018-03-06/debates/CC8390CB-EEFD-43D9-8E35-805EE8EA9072/DomesticGasAndElectricity(TariffCap)Bill)

PQs

[Energy: Prices](#)

Asked by: Lord Donoughue

To ask Her Majesty's Government what assessment they have made of the findings by Dieter Helm, in his report Cost of Energy Review, commissioned by the Department for Business, Energy and Industrial Strategy, that (1) the legacy costs from the Renewables Obligation Certificates, the feed-in tariffs, and low carbon contracts for difference are a major contributor to rising final prices, and (2) energy prices should be falling, and they should go on falling into the medium and longer terms.

Answering member: Lord Henley | Department: Department for Business, Energy and Industrial Strategy

Professor Helm conducted an independent review. The Government will now take time to assess its findings carefully. We have launched a Call for Evidence to gather views from the energy industry, academics, businesses, consumer groups and other stakeholders.

HL Deb 30 November 2017 | PQ HL3573

[Nuclear Power](#)

Asked by: Lord Fox

To ask Her Majesty's Government what recommendations, if any, of the Cost of Energy Review will be included within the nuclear sector deal.

Answering member: Lord Henley | Department: Department for Business, Energy and Industrial Strategy

The nuclear industry, under the leadership of Lord Hutton, is developing a range of proposals to put to Government for consideration as part of a Nuclear Sector Deal.

The Cost of Energy review conducted by Professor Dieter Helm is independent and we will now carefully assess its findings. We have launched a Call for Evidence to gather views from stakeholders.

HL Deb 17 November 2017 | PQ HL3081

[Cost of Energy Independent Review](#)

Asked by: Cunningham, Mr Jim

To ask the Secretary of State for Business, Energy and Industrial Strategy, what estimate he has made of the cost to the public purse of the preparation and publication of the independent report, entitled Cost of energy, published on 25 October 2017; and if he will make a statement.

Answering member: Claire Perry | Department: Department for Business, Energy and Industrial Strategy

The reviewer, Professor Dieter Helm, was paid £500 per day, for 30 days work. Members of the advisory panel were not paid. The Department also reimbursed the travel costs of the reviewer and advisory panel members, which amount to £410. A small team in BEIS supported the reviewer in the conduct of the review, in particular by providing publicly available information.

HC Deb 13 November 2017 | PQ 111460

[Cost of Energy Independent Review](#)

Asked by: Lucas, Caroline

To ask the Secretary of State for Business, Energy and Industrial Strategy, pursuant to the Answer of 24 October 2017 to Question 107371, who drafted the document entitled Professor Dieter Helm - declaration of interest.

To ask the Secretary of State for Business, Energy and Industrial Strategy, pursuant to the Answer of 17 October 2017 to Question 107371, on the Cost of Energy Independent Review, what steps he has taken to assess the completeness and accuracy of the information set out in the document entitled Professor Dieter Helm - declaration of interest.

To ask the Secretary of State for Business, Energy and Industrial Strategy, pursuant to the Answer of 17 October 2017 to Question 107371, on the Cost of Energy Independent Review, whether officials of his Department who drafted the document entitled Professor Dieter Helm - declaration of interest had access to Professor Helm's personal financial records.

To ask the Secretary of State for Business, Energy and Industrial Strategy, pursuant to the Answer of 17 October 2017 to Question 107372, on the Cost of Energy Independent Review, if he will publish

the well-established principles for transparency and accountability for declarations of interest referred to in that Answer.

To ask the Secretary of State for Business, Energy and Industrial Strategy, with reference to the document, entitled Professor Dieter Helm - declaration of interest, published by his Department on 6 August 2017 in relation to the cost of energy review, if he will list any financial interests Professor Helm might have in companies that are active in the UK energy sector.

To ask the Secretary of State for Business, Energy and Industrial Strategy, pursuant to the Answers of 24 October 2017 to Questions 107371, 107372 and 107373, on the Cost of Energy Independent Review, what assessment he has made of the potential merits of restricting Professor Helm from (a) advising companies working in the UK energy sector and (b) altering any financial interests he might have in companies working in the UK energy sector until after Ministerial decisions informed by the cost of energy review have been implemented; and if he will make a statement.

To ask the Secretary of State for Business, Energy and Industrial Strategy, pursuant to the Answers of 24 October 2017 to Questions 107371, 107372 and 107373, on the Cost of Energy Independent Review, whether he is satisfied that Professor Helm has fully disclosed his interests in relation to energy companies.

To ask the Secretary of State for Business, Energy and Industrial Strategy, pursuant to the Answers of 24 October 2017 to Questions 107371, 107372 and 107373, on the Cost of Energy Independent Review, what steps he has taken to ensure that Professor Helm's business and investment interests do not represent a conflict of interest in relation to the cost of energy review; and if he will make a statement.

Answering member: Claire Perry | Department: Department for Business, Energy and Industrial Strategy

The independent Cost of Energy Review was carried out by Professor Dieter Helm and published on 25 October.

Professor Helm has been subject to the [Nolan Principles](#) of conduct in public life throughout the conduct of his review, and committed to not advise clients in the energy sector throughout, and to not make changes to relevant financial interests until fourteen days after he submitted the report.

All evidence shared by the Department for Business, Energy and Industrial Strategy (BEIS) with Professor Helm is in the public domain. BEIS does not hold non-public information on any of Professor Helm's financial interests.

This was an independent review. The Government will consider Professor Helm's recommendations and will shortly be seeking the views of industry, academics, businesses and consumer groups on the review.

Given the long-term nature of the issues considered in the review, and the steps set out above, it would not be proportionate to restrict Professor Helm's future activities.

HC Deb 31 October 2017 | PQ 109477; PQ 109428; PQ 109428; PQ 109426; PQ 109383; PQ 109382; PQ 109381; PQ 109380

[Cost of Energy Independent Review](#)

Asked by Caroline Lucas

To ask the Secretary of State for Business, Energy and Industrial Strategy, with reference to the document entitled Professor Dieter Helm - declaration of interest, published by his Department on 6 August 2017 in relation to the Cost of Energy Review, whether Professor Helm drafted that document.

Answered by: Claire Perry | Department for Business, Energy and Industrial Strategy

No.

The declaration of interest was published in accordance with well-established principles for transparency and accountability, typical of this kind of independent review.

HC Deb 24 October 2017 | PQ 107371

6. Useful links and further reading

BEIS *Cost of Energy: Independent Review* – Terms of reference, and report published 25 October 2017

<https://www.gov.uk/government/publications/cost-of-energy-independent-review>

Call for Evidence, 7 November 2017

<https://www.gov.uk/government/consultations/cost-of-energy-review-call-for-evidence>

House of Commons Business, Energy and Industrial Strategy Select Committee inquiry: *Dieter Helm's independent review on the Cost of Energy*

<https://www.parliament.uk/business/committees/committees-a-z/commons-select/business-energy-industrial-strategy/inquiries/parliament-2017/dieter-helms-cost-of-energy-review-inquiry-17-19/>

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