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**An interview with Mark Simmonds MP, Parliamentary Under Secretary of State  
for Foreign and Commonwealth Affairs**

**The German *Energiewende* in uncertain times** Dr Joachim Hein, Federation of German Industries (BDI)

**Switzerland's "Energy Strategy 2050"** Dr Igor Perrig and Peter Quadri, swisselectric

**International action on climate change** Reg Platt, IPPR

# ENERGY FOCUS



## The Western United States: Energy breadbasket for America

Utah Governor Gary R. Herbert explains the Western States' practical, bipartisan Energy Vision on page 4

The journal of the  
Parliamentary Group  
for Energy Studies





## The Parliamentary Group for Energy Studies

Established in 1980, the Parliamentary Group for Energy Studies remains the only All Party Parliamentary Group representing the entire energy industry. We champion cross-sector energy research and development. The Group's membership is comprised of over 190 parliamentarians, 130 associate bodies from the private, public and charity sectors and a range of individual members.

Published three times a year, *Energy Focus* records the Group's activities, tracks key energy and environmental developments through Parliament, presents articles from leading industry contributors and provides insight into the views and interests of both parliamentarians and officials.

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# CHAIRMAN'S FOREWORD



2013 has been a turbulent year for energy in the UK. There have been fracking protests, renewable rows, debates over domestic energy prices, and of course the ongoing passage of the Energy Bill, which is edging ever closer to being granted Royal Assent.

With that in mind, this issue we round off 2013 by looking towards the international energy stage to ponder what we can learn from foreign markets. From the “10 Year Energy Vision” of the Western Governors’ Association in the United States, to Germany’s drastic “energy turnaround” and Switzerland’s “Energy Strategy 2050”, policymakers around the world are grappling with similar issues in unique ways.

I am delighted at the array of distinguished international contributors who have agreed to act as our guides on this round-the-world trip. These include:

- **Governor Gary R. Herbert, State of Utah in the US looks at why the US West is best in energy generation and policy making (page 4).**
- **Dr Joachim Hein from the Energy and Climate Change Policy Unit at the Federation of German Industries (BDI), asks what the future EU climate and energy policy framework will look like (page 6).**
- **Dr Igor Perrig and Peter Quadri, Public Affairs Managers at swisselectric take stock as Switzerland prepares for “all change” on the energy front in 2014 (page 8).**
- **Reg Platt, Senior Research Fellow at IPPR, looks at emissions trading in the City of London (page 10)**
- **An interview with Mark Simmonds MP  
The Parliamentary Under Secretary of State catches up with us about his role in energy at the Foreign and Commonwealth Office (page 12)**

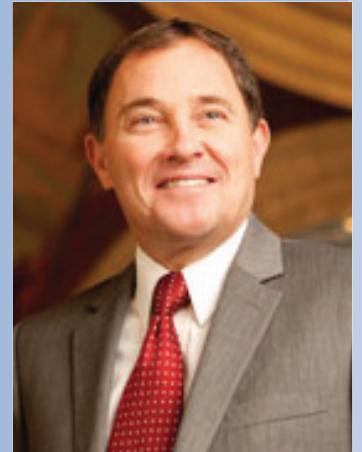
I hope you enjoy this edition, please do share your thoughts with us by emailing Sophie Fernandes, editor, at [sophiefernandes@pges.org.uk](mailto:sophiefernandes@pges.org.uk)

In the meantime, have a wonderful Christmas and New Year. See you in 2014!

**Ian Liddell-Grainger MP**  
**Chairman of the Parliamentary Group for Energy Studies**

# THE WESTERN UNITED STATES: ENERGY BREADBASKET FOR AMERICA

Utah's Governor Gary R. Herbert tells us about the Western Governors' Association's "10 Year Energy Vision"



**Upon ascending to the position of Chair of the Western Governors' Association (WGA), Utah's Governor Gary R. Herbert determined his number one priority was to create a "10 Year Energy Vision". The goal of the project was to provide an overview of the resources and technologies used in the Western United States, the role of energy efficiency in energy planning, environmental impact associated with energy use, and the contribution and prospects for economic growth associated with energy industry activities.**

The "10 Year Energy Vision" identified the overarching goals of Western energy policy: energy security, affordability and reliability, environmental protection, a robust energy delivery system, and educational and technological development. It also emphasised the critical importance of having an effective federal-state partnership in all aspects of energy development, lands management, and environmental protection.

In coordination with the Western Governors, and the staff of the Western Governors' Association, and with the input of a broad group of stakeholders, Governor Herbert set out to create this guiding policy

document over just a matter of months. The final report was completed in late June 2013.

## **Resources of the West**

The 19 western states that comprise the Western Governors' Association region play an indispensable role both in meeting the United States' (US) energy needs and the growing needs of the global energy market. Awash in conventional and renewable resources, this area is the country's energy breadbasket:

- Western coal production accounts for more than half the national total;
- The region has provided nearly 70% of the nation's natural gas and petroleum output in recent years;
- The US will become the world leader in petroleum production within the next five years, based in part on current Western regional growth (International Energy Agency, 2012).

The region's energy bounty extends well beyond fossil fuels. Renewable energy resources are distributed throughout the West in far greater abundance than in any other region in the country.

Consider this:

- Roughly 66% of America's installed wind power capacity is in the West (American Wind Energy Association, 2013);
- Southwest states have some of the world's highest solar energy resource potential with national leader California's total output nearly triple that of the next largest state (Solar Energy Industries Association, 2013);
- Geothermal power is the near exclusive province of the West, with 99.5% of all national installed capacity in 2011 (Geothermal Energy Association, 2012);
- The region accounts for 70% of national hydroelectric power generation (US Energy Information Administration, 2011).

This vast energy potential is a key driver for economic development for the US and its citizens. On the other hand, the broad array of resources located in the West also presents unique challenges. In preparing the Vision, the Governors were forced to consider ways in which western states could create a comprehensive approach to



The US will become the world leader in petroleum production within the next five years, based on current western regional growth (International Energy Agency, 2012). Together the western United States produce roughly 140,000 barrels of crude oil per month.

energy development – taking into account the tradeoffs inherent in the use of each resource – while at the same time delivering energy in a secure, affordable, and environmentally responsible way.

Every vision needs a thorough grounding in the facts. So the “State of Energy in the West” was created as a companion document that provides detailed background on energy resources and consumption in the West, while illustrating the importance of the West in securing energy independence for the United States. To add further depth, each Western Governor prepared an essay on a resource or issue of specific concern or importance to his or her state, and those documents were compiled into the “Energy Perspectives” document.

The end result is three documents which together provide not only regional perspectives, but also regional energy objectives that the Governors can adopt to ensure future energy development is done responsibly and in the best interest of the West’s citizens.

### Lessons learned

Responsible energy development in the West can drive economic growth vital to the entire country.

Whether it’s the extraction of conventional resources in states such as North Dakota and Wyoming, or renewable energy sources in California and Texas, the region’s vast energy wealth will remain critical to the economy.

Responsible development of all resources available in the West will go a long way toward achieving energy security for the US, meeting all its domestic energy needs with clean, affordable and reliable North American sources. Given the vastness of the West’s resources, reaching energy security is achievable.

Western states have long assumed a stewardship role for the natural environment, adapting model regulations, developing innovative solutions, and working across state

lines to protect air, land, wildlife, and water. Western Governors recognise it is critical to strike balance in all activities and are committed to ensuring that energy development is done in an environmentally responsible manner.

No energy policy can succeed without broad support, so it’s in the best interests of each state to educate the public about energy, employing impartial facts and scientific evidence.

The Western Governors recognise they are in a unique position to develop broad, regional energy policies, while not impeding the ability of individual states to develop energy portfolios that meet their respective needs. As the energy breadbasket of the nation, the western states have the resources to drive job creation and economic development through broad energy industry growth while also protecting the West’s vast and beautiful environment.

Finally, Western Governors consider the “10 Year Energy Vision” a model or blueprint for a national energy policy that promotes economic growth while protecting valued natural and environmental resources. The West has demonstrated that states with diverse geography, resources, and politics can identify and work together toward shared goals. The Western Governors hope national leaders will follow the West’s practical, bipartisan approach.



The Department of Defense’s presence in the western states is significant, and the military has continued to push the envelope on promising new energy technologies. This Stirling engine solar thermal installation (1.5 MWs) has just been installed at the Tooele Army Depot in Utah’s Tooele County.

# THE GERMAN *ENERGIEWENDE* IN UNCERTAIN TIMES

Dr Joachim Hein, Energy and Climate Change Policy Unit, Federation of German Industries (BDI), asks what the future EU climate and energy policy framework will look like



The *Energiewende* (translation: “energy turnaround”) refers to the process by which the German government intends to set its energy supply system on a new footing by the middle of the century (Fig. 1). It has resulted in a rapid restructuring of the domestic energy market – and numerous challenges remain:

- Nuclear power is to be phased-out by 2022;
- A reduction of greenhouse emissions by 40% of 1990 levels by 2020;
- 80% of electricity is to be generated from renewable sources by 2050;
- A reduction of primary energy consumption in buildings by 80% of 2008 levels by 2050;
- A reduction of total energy consumption by transportation by 40% of 2005 levels by 2050;
- One million electric vehicles on German roads in 2020.

Moreover, rising taxes and other surcharges mean that average electricity prices for German businesses are forecast to increase by 25% by 2020 – despite the spot price on the wholesale market set to decrease by approximately 25%, thanks to the

increasing market share in intermittent generation with very low marginal cost (mainly wind and photovoltaic (PV) energy). Electricity is an inescapable overhead for manufacturing – especially for energy-intensive industries such as those producing metals and chemicals – and electricity prices are therefore a major factor affecting German industries’ international competitiveness.

Commercial electricity prices in Germany have increased significantly compared with other countries over the last decade (at an average of 3.6% p.a.). In 2010 they averaged 10.3€cts/kWh, over twice as high as in the US

(5.1€cts/kWh), where industry customers benefited from the exploitation of large shale gas reserves, and South Korea (4.2€cts/kWh). Over the last few years, infrastructure investments for conventional power plants, renewable energy capacities and distribution grids increased prices in many European countries, but even so commercial electricity prices in Germany remained relatively high: the UK average

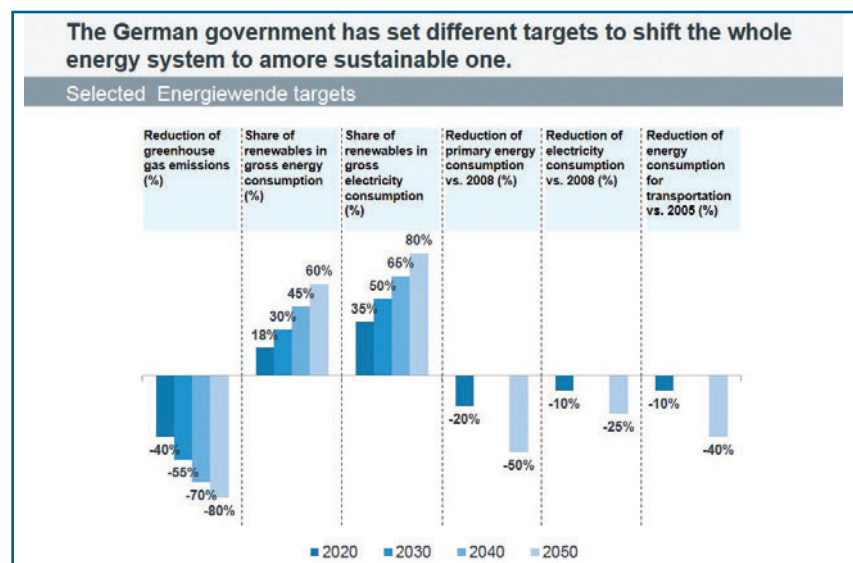


Fig. 1: Selected *Energiewende* targets

over the same period was 9.5€/cts/kWh, France's was 6.9€/cts/kWh, and Italy's 11.5€/cts/kWh.

Taking into consideration both the challenges and opportunities the *Energiewende* holds for German enterprises, some important steps need to be taken to minimise risk and reap the promised benefits. From an industry perspective, four crucial points need to be tackled.

### **Foster and accelerate the extension of the electricity grid**

In order to accommodate the fluctuations of renewable energies, and to integrate the increasing number of decentralised generation capacities, the German electricity grid has to be stabilised through extension. This process has been initiated but is currently years behind schedule.

### **Develop and implement new market design**

Currently the energy-only market in Germany is not fit to incorporate ever-increasing shares of renewable electricity. Yet, by bidding in at zero marginal cost, the renewable energies have begun to squeeze conventional generation out of the market. At present the total installed capacity for wind amounts to roughly 33 GW and the total installed PV capacity is roughly the same. Fossil-fired plants are finding it increasingly difficult to remain profitable. In extreme cases, newly built gas plants, such as Block 5 of the Irsching plant in Bavaria, are running for less than 2000 hours a year – around 60% of capacity.

A new market design is badly needed. The economic viability of conventional generation capacities – still needed in times of low sun and wind – has to be ensured, renewables and flexibility options (such as storage

capabilities and demand-side management) have to be integrated into the market, and the cost recovery for the necessary extension of the grid needs to be supported.

### **Limit the overall burden**

Besides all the opportunities the *Energiewende* is offering, it gradually becomes clearer that we might end up with higher costs than previously expected. In order to strengthen and secure the international competitiveness of German industries, every effort needs to be made to limit the overall burden on electricity consumers – industrial consumers in particular.

### **Think and act European**

The *Energiewende* is not and cannot be a strictly national issue: Germany is neither socially, politically, nor economically a closed entity. This holds true for the electricity market. Germany interacting with its European neighbors when importing and exporting electricity is reliant on other nations' will to cooperate, and vice versa, in the common interest of a secure supply and stable grids. The German *Energiewende* needs to be discussed and coordinated at international level.

EU legislation – in particular, the EU Emissions Trading System (ETS) Directive, the Renewables Directive and, more recently, the Energy Efficiency Directive – has been adopted to meet the 20-20-20 targets by 2020. These policy tools and measures have overlapping objectives and scope – but instead of mutual reinforcement, this can impose additional regulatory burdens on the affected businesses. Strong national incentives driven by the EU renewables target, for example, have not always promoted cost-effective reduction strategies, and could even be said to have made the market-based

ETS less effective in determining investment decisions in low-carbon technologies. This despite investments being badly needed for the desired low-carbon transition: the BDI's own estimates suggest the German electricity system alone will require investment in the range of €650 billion by 2050.

This was acknowledged, to some degree, in the EU Commission's March 2013 Green Paper, "A 2030 framework for climate and energy policies". It is, however, far from clear how we will arrive at a more consistent policy framework which will provide the security and reliability investors need. Unclear and unpredictable political requirements would lead to inappropriate economic decisions. Investment in new energy schemes and climate protection requires consistent instruments and targets whose interactions can be clearly understood and effectively coordinated.

From the BDI's perspective, the most appropriate way to restore investors' trust in the EU would be to only set a climate target for 2050 (and interim targets for 2030 and 2040) following in-depth dialogue with those who will bear the responsibility for achieving these reductions, and the publication of a comprehensive impact assessment.

A hiatus in EU policymaking is imminent. In the first half of 2014, both the European Commission and the European Parliament terms will end, with a new Commission and Parliament not operational until later in the year. The interim should be used by all relevant actors to have an in-depth debate about a coherent and consistent climate and energy policy – one which can be embedded in the international context and sustain the EU's international competitiveness.

# SWITZERLAND'S "ENERGY STRATEGY 2050"

Three years after major changes to its energy policy were hastily announced, Dr Igor Perrig and Peter Quadri from *swisselectric* take stock as Switzerland prepares for "all change" in 2014



**Today, approximately 55% of Switzerland's electricity comes from hydropower, and 40% from nuclear energy. Until a few years ago, there was a broad-based consensus in Swiss political and economic circles, as well as in Swiss society at large, that it was both correct and reasonable to continue down the same path for the foreseeable future. At the end of 2010, Switzerland's major electricity companies therefore submitted general licence applications for three new nuclear power plants, intended to replace older sites, to the Swiss Federal Office of Energy.**

The course changed when an earthquake-induced tsunami struck Fukushima I Nuclear Power Plant in Japan on 11th March 2011. While the earthquake and ensuing events in Japan were not physically felt here in Switzerland, they triggered a huge political tidal wave – the consequences of which are still not clear.

Just over two months after the disaster, Federal Councillor Doris Leuthard, the Swiss Minister responsible for energy, launched a new energy policy for Switzerland: "Energy Strategy 2050". In addition

to a phased exit from nuclear power, the key points of this strategy included the promotion of energy efficiency and a massive expansion of new, subsidised, renewable energy sources.

The technical and economic implications were by no means exhaustively examined; the shift was a political vision based on vague data and assumptions. But with parliamentary elections pending, the timing was certainly convenient for the government. Seizing the opportunity and anticipating pressure from the electorate – a pressure presumed and hawked by the media – parliamentarians quickly donned their green coats and got behind the new energy policy.

## **"Energy Strategy 2050": an uncertain future**

Today, Switzerland has five nuclear reactors operating in four nuclear plants. These installations fulfil all of Switzerland's stringent safety standards: they passed the EU's "stress test" with flying colours, and all five reactors have open-ended operating permits. Their economic situation, however, has been substantially impaired by political uncertainty, burdensome

regulation, and wholesale price increases in the European electricity market. In October 2013 these forces led one Swiss electricity company to announce it would decommission its nuclear power plant at Mühleberg, in operation since 1972.

If Switzerland were to renounce nuclear power, by the year 2030 approximately 40% of electricity production would have to be sourced from other technologies. And this against a background of presumed further population growth and the corresponding increase in energy consumption.

In order to fill the resulting supply gaps, hydropower is to be expanded, energy efficiency increased, and new sources of renewable energy promoted. But hydropower is at present going through a difficult time. The flood of very cheap, highly subsidised and readily available renewable energy from German wind and photovoltaic (PV) power is putting pressure on prices and dissuading investment.

Nor will a state-backed expansion of new sources of renewable energy be able to fully replace the shortfall resulting from an exit





Fig. 1: Opened in 1972, the nuclear power plant in Mühleberg will be closed in 2019

from nuclear power – the potential for these technologies is simply too small in Switzerland. The construction of conventional large installations such as gas-fired combined-cycle power plants could help, but these are undesirable from a climate policy perspective and not currently economically feasible.

This leaves one final option: importing electricity from abroad. Switzerland's "Energy Strategy 2050" policy will ultimately result in the country becoming highly dependent on foreign supplies, as is the case with oil and natural gas. Switzerland's self-sufficiency in electricity is set to decrease massively.

### Flanking measures

In order to guarantee the supply of imported electricity in times crisis, Switzerland has for the past few years been negotiating a bilateral electricity agreement with the EU. The original idea was to secure non-discriminatory market access for Switzerland to the EU's internal electricity market, but the new energy policy has made a bilateral electricity agreement an important pillar of safeguarding supply.

Negotiations with the EU are due to be completed in the first half of 2014. A final point in the discussion concerns the complete opening-up of Switzerland's electricity market. Up until now, this market has been totally liberalised for major clients only, but the EU now requires Switzerland further open its market to accommodate small-

sized and private clients. Without a totally liberalised Swiss electricity market, there will not be any agreement with the EU.

### Parliament's responsibility

In September 2013, the Government presented its "Report on the First Package of Measures concerning Energy Strategy 2050" to Parliament. The Lower House is expected to vote on the implementation of "Energy Strategy 2050" for the first time in the spring 2014 parliamentary session. Numerous factors and factions are at play, but it is highly likely that Parliament will approve the recommended measures.

On the left of the political spectrum are those who were always opposed to nuclear power, and who since Fukushima are even more firmly entrenched in their position. They seek any means to secure a renunciation of nuclear power in legislation, and are singing the praises of solar and wind energy as alternatives to nuclear power. Given that PV is increasingly losing its shine, and wind energy itself is facing a substantial headwind, they are interested in the rapid legislative enactment of the new energy policy.

In the political centre we have a conservative alliance of Green Liberals, Christian Democrats and Conservative Democrats – all of whom are in favour of an exit from nuclear power. Before the 2011 elections, all were howling for an exit from nuclear power; in the meantime it has become clear to

some that unlimited subsidisation of new sources of renewable energy is not a viable solution. If the right-of-centre conservative parties had their way, it would not be nuclear power facing a ban, but rather the subsidisation of new renewable energy projects. At present, they cannot find a majority for their position – and are instead seeking compromises with a view to securing some improvements in the draft legislation.

swisselectric wants to prevent the restriction of existing nuclear power operations, and is drafting proposals for the rapid phasing-out of subsidies of the compensatory feed-in remuneration system. Furthermore, we feel Switzerland needs to acknowledge the practical limitations of its small size, and integrate itself adroitly with the European electricity market.

The energy turnaround in Germany is a good example of how not to do things; it would be a pity if Switzerland were to repeat the same mistakes just a few years later. Responsibility for avoiding such an outcome now lies with the Swiss parliament.

*swisselectric is the umbrella organisation of Switzerland's largest producers of electricity, whose members – including Axpo, Alpiq and the BKW – produce approximately 80% of Switzerland's electricity.*



Fig. 2: At 285 metres, the Grande Dixence in the Swiss Alps is the world's highest gravity dam

# INTERNATIONAL ACTION ON CLIMATE CHANGE AND THE CITY OF LONDON

Reg Platt, Senior Research Fellow at the IPPR, looks at opportunities for the City of London

**Internationally coordinated action to reduce greenhouse gas emissions is vital for tackling climate change. But countries are increasingly choosing to act prior to agreeing a new international deal on emissions in order to gain economic advantages. A new IPPR report, "Up In Smoke", has identified substantial opportunities for the City of London from UK and EU leadership on climate change, but also how problems with the EU's carbon trading scheme are putting these opportunities at risk.**

In November, Warsaw hosted the most recent international negotiations on climate change. This was an important staging post towards the summit in Paris in 2015, by which time countries have committed to agree a new global pact that will keep temperature rises below the danger level of two degrees. The proceedings did not go well with, among other issues, the heavily coal dependent Polish government facing criticism for dragging out the negotiations.

Despite the considerable challenges facing the international process, this is not holding countries back from taking action. This is evidenced by the upward trend in global investment in clean

energy technologies and the proliferation of carbon pricing schemes around the world.

There has been a more than five-fold increase in clean energy investment from the first half of 2004 to the first half of 2013 (\$18bn to \$97bn), with the greatest level of investment in any one year, totalling \$275 billion, occurring in 2011. China and the US, often heralded as laggards when it comes to taking action on climate change, are, by a significant margin, the leading investors. Moreover, investment in China was almost double that of the US in 2012 (\$65.1 billion compared to \$35.6 billion) demonstrating how they are taking seriously the economic opportunities presented by being a leader in low carbon sectors (Fig. 1).

Alongside the substantial increases observed in clean energy investment, a large number of carbon emissions trading and carbon tax schemes have been implemented covering a significant portion of global emissions. China is again a front runner, with seven localised carbon trading pilots in place and plans to implement a nationwide scheme by 2020. The World Bank's Carbon Finance Unit



estimates that by May 2013, the total implemented and scheduled carbon pricing schemes covered at least 7 per cent of the 50 gigatonnes of carbon emissions emitted globally per year. They calculate that this has the potential to rise to 48 per cent of global emissions if all countries examining the possibility of these schemes were included.

The UK and the EU have been at the forefront of efforts to tackle climate change but the flagship EU Emissions Trading Scheme (ETS), which was established in 2005 and intended to be central to EU-wide emission reduction efforts, has encountered substantial challenges. The achievements of the ETS include how it has brought together disparate governments to set a Europe-wide cap on emissions, proven carbon trading can work and sparked the proliferation of copycat schemes internationally. But due to an over-

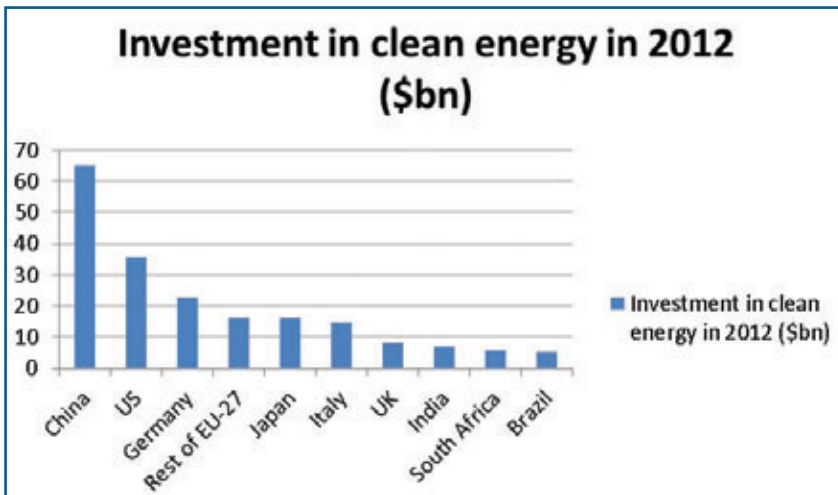


Fig. 1: Adapted from Bloomberg New Energy Finance, Global trends in clean energy investment Q2013 Fact Pack, 2013

allocation of tradable emission allowances to businesses participating in the scheme, primarily the result of the economic downturn and industry lobbying, the traded price of carbon reached a low of 2.81 Euros in April 2013. As a result, the ETS has not effectively underpinned low-carbon investment, which would require the price of carbon to be around 30 Euros. Moreover, it has put at risk opportunities from emerging carbon finance sectors for the City of London.

In 2006 a City of London Corporation report set out the “prospects for London to become the leading international provider of emissions markets services to the mushrooming industry” as it had the necessary skills and expertise and many first mover advantages. This prediction proved accurate. In 2006, the European Climate Exchange (ECX) based in London dealt with more than twice the volume of emissions trades than its nearest competitor. In September 2013, the London-based Intercontinental exchange (ICE), the ECX’s successor, had 93.5 per cent of the market and traded 27 times the volume of its closest competitor.

If carbon trading schemes around the world link with the EU scheme this will create more liquidity in the market and the prospect of more

trades for the City. Plans are already in place for such a link between the EU ETS and Australia’s carbon trading scheme. Additional opportunities for the City exist in related sectors, in particular climate-themed bonds for energy, transport and finance, where the UK is already the second biggest provider behind China, and the largely untapped area of climate risk and resilience.

However, alongside these positive developments the instability surrounding the ETS has jeopardised jobs in a number of banks and financial institutions (Fig. 2).

For the City of London to maintain a position as the world’s capital of carbon trading and climate finance, it is vital that EU leadership on climate change is maintained and reforms are implemented to salvage the EU ETS.

First, the EU must move quickly to agree an ambitious emissions target for 2030. As championed by

the UK Government, this target should be no lower than a 40 per cent cut relative to 1990 emission levels. Agreeing the new target soon would give long-term confidence to investors in the continent’s commitment to decarbonisation. Moreover, it would set a benchmark for emission reductions commitments from other countries and lay the foundation for an effective global deal in 2015.

Second, the emissions cap for the ETS should be aligned with the 2030 emissions target. This would be the most cost efficient way of achieving the required reductions.

Third, the excessive number of tradable emission allowances that have built up in the ETS over its lifetime must be permanently removed from the scheme. This will boost the price of carbon traded in the market.

Lastly, a mechanism is needed that enables the ETS to respond to exogenous shocks, such as macro-economic instability, by adjusting the quantity of allowances in the market. A Carbon Market Policy Committee, modelled on the Bank of England’s Monetary Policy Committee, should be established with the powers to manage this system.

The challenge of reaching international agreement on tackling climate change is daunting. But opportunities abound for countries that seize the initiative and press ahead with decarbonisation. The City of London in particular has much to gain from continued UK and EU leadership on this agenda.

Institution	Development
Barclays	Sold its carbon trading business to Tricon, a Swedish carbon trading company.
Camco Clean Energy	Scaled back its UK staffing.
Deutsche Bank	Closed its global carbon trading operations.
EcoSecurities	Laid off 85 per cent of its staff, many of whom were UK-based.
JP Morgan	Scaled back its environmental markets team.
Morgan Stanley	Closed its full-time carbon desk, now covered only part-time.
Nedbank	Scaled back its operation.
Sindacatum	Closed its London operations aside from one lawyer; moved everyone else to Singapore.
TFS Green	Scaled back its operation.
UBS	Closed its climate change advisory practice.

Fig. 2: Impact on banks and financial institutions

# INTERVIEW WITH MARK SIMMONDS MP

The Parliamentary Under Secretary of State for Foreign and Commonwealth Affairs talks energy security, the potential of renewable technologies in the developing world, and international action on climate change



**Can the Minister give readers a brief overview of his role and responsibilities?**

I'm the Foreign and Commonwealth Office Minister with responsibilities including the UK's relationship with Sub-Saharan Africa, the Commonwealth Caribbean and our Overseas Territories, both inhabited and uninhabited. I also have responsibility for some thematic areas, including international energy and climate change.

A key part of my role is building on the UK's existing international relationships while trying to influence foreign governments to pursue policies in our national interest. International energy security cannot be solved domestically. We want to improve security and stability, and alleviate the conflict that can be exacerbated by climate issues, while solidifying those relationships which deliver the best possible energy mix in the UK – at an affordable price to consumers.

**Could you elaborate on how the work you do influences the UK energy market?**

Part of the overall architecture of energy policy is to ensure a strong energy mix: a balance of gas, nuclear power and renewable energy. It's important we have good relationships with those countries

providing our gas – whether that be Norway, Qatar, or other supplier nations. It's also vital we persuade investors that the UK energy market is a good place to invest – this is a key part of what I do. For example, I've recently been talking to a sovereign wealth fund in Africa about investing here.

**What sort of reputation does the UK energy sector have among these investors?**

Potential investors in the UK energy market are sophisticated investors, they look for stability in the regulatory structures and legislative architecture, and a fair return on their investment. The UK has a very good reputation internationally for providing all of these, and leads the way in creating a competitive energy marketplace.

Other key aspects which boost our standing among the international investment community include the expertise we offer – in terms of research and development institutes, financing structures, and technological expertise.

**Can you say a little more about these other factors?**

We have a very high skills base, some fantastic universities and vocational training establishments.

I would like to see much stronger links forged between Higher and

Further Education establishments in the UK and universities and colleges in developing countries. Some – such as Robert Gordon University in Aberdeen and Heriot Watt University Edinburgh – already have these links. I would like to see this go much further, as building capacity in the developing world is the best way of ensuring they have the skills in-country to ensure they can deal with the challenges and opportunities of the future.

Furthermore, hydrocarbon finds in Kenya, Uganda, and off the coast of Tanzania and Mozambique, for example, could ultimately help us with our own UK domestic energy sourcing.

**Conversely, are there areas in which you feel the UK could earn from other markets?**

A recent Government-commissioned report from Sir Ian Wood found that the regulator in Norway has much greater power with regard to stimulating offshore development. In terms of renewables, this sector is set to make a significant contribution to our energy mix; we're always looking for examples of where things are being done well and how they might be applied here.

## **We've just had the Warsaw Climate Change Conference (COP19). Why was this significant?**

It is vital that countries work together to find a solution to the immense challenge of climate change. It was a "process" COP, which kept the train on the tracks as we go forward to Paris in 2015. It also built some of the – as Secretary of State for Energy and Climate Change Ed Davey neatly put it – rulebook around access to the climate funds post-2020, which is a very important part of helping the developing world both mitigate and adapt to some of the aspects of climate change.

Part of the challenge is to ensure we do not lose momentum. My responsibilities include sub-Saharan Africa, where I already see the impact of climate change: increasing desertification, lack of water and the knock-on effects on crop-growing, nutrition and migration – and all the instability this creates. It is in everyone's interests to ensure the global community understands the relationship between climate change, instability and security.

## **Is there tension over who should shoulder the responsibility?**

There's a broad range of views on this – I cannot give you a "yes" or "no". But there is a very significant understanding and a willingness to work with the UK to address the challenges. Perhaps the best example is Mexico, whose Government has virtually copied our Climate Change Act. We also work closely with China on this and other areas.

Some of these countries cover vast geographical areas, and for them any sort of "National Grid" in the way we understand it is simply not practical or applicable; renewable energy is the best solution for serving their rural communities. Along with the Department for International Development (DFID), we work through International Climate Fund (ICF) structures to provide the expertise to enable these countries to access this sort

of technology, and finance it.

## **How does the UK private sector get involved in these initiatives?**

Part of the role of the FCO, in line with our Prosperity Agenda, is to match up UK private-sector expertise with countries and governments determined to plug in to renewable energy technology. We do this through a range of ongoing programmes. My colleague Greg Barker, Minister of State for Climate Change, worked with the FCO to take a very successful renewable trade mission to East Africa last year, and we're hoping to do a similar one to West Africa next year. We invited representatives from the renewable energy sector to a recent Trade and Investment Conference in London, which focused specifically on our Overseas Territories. Recently we also facilitated a meeting between representatives of the Overseas Territories and the Environmental Audit Committee, which is currently working on a report into the Overseas Territories.

Environmental issues are a key aspect of our strategy for the UK Overseas Territories, as highlighted in our Overseas Territories White Paper – which is subtitled "Security, success and sustainability".

## **Do these principles also inform the FCO's stance on the Arctic?**

The Arctic is a very sensitive, but important, part of the environmental world. At a Royal United Services Institute (RUSI) Conference in October of this year, I launched the Arctic Policy Framework document, setting out the UK Government's priorities and focus. We must remember that we are not an Arctic state; we only have "Observer" status at the Arctic Council. As such we have to respect the decisions of the Arctic states.

I think the key challenge in the Arctic is finding a responsible balance between the importance of protecting the environment and allowing the Arctic states to regulate economic activity. There

has been economic activity – whether it be mineral extraction or hydrocarbon activity – in the Arctic Circle for 40 years; it is not a new phenomenon. Concerns are valid, and there need to be thorough regulations in place to, as far as possible, negate any possibility of environmental damage in the region.

But I would certainly like to see a more positive engagement, certainly from some of those in the environmentalist community, understanding the fact that the Arctic states have control of that area and engaging in a positive way.

## **What are your top three priorities for 2014?**

I wish there were only three! In no particular order:

1. Continuing to encourage foreign direct investment into our energy infrastructure. This is an absolutely essential part of ensuring we have modern infrastructure capable of delivering what we need and hopefully reducing the cost for consumers.
2. Using our diplomatic network to ensure our partners in the EU put the environmental agenda at the top of their priorities as we work towards Paris 2015. We want to work together to ensure potential new technologies – whether that be renewable technologies or in areas such as shale gas – are exploited; again, with the potential of reducing the cost for consumers quite significantly.
3. Making sure developing countries can access and benefit from renewable energy – not just those which don't have hydrocarbon reserves, but also those which do. Exploiting renewable technologies will allow these countries to export, rather than consume, their hydrocarbon – and use the revenue to build essential infrastructure such as schools and hospitals.

# DEMAND-SIDE RESPONSE

## OCTOBER SPEAKER MEETING:

### Address to the Parliamentary Group for Energy Studies

### By Scott Buckleton, Head of Portfolio Development (Energy), Government Procurement Service (GPS)



**The Cabinet Office is responsible for centralising all spend on common goods and services, and managing this on a once-for-government basis, as part of an ambitious programme of Commercial Reform. In 2012/13 its trading arm, the Government Procurement Service, (soon to become the Crown Commercial Service), transacted £11.4 billion of public sector spend. In doing so, it delivered price and demand savings for central government and the wider public sector of £3.8 billion for the taxpayer. Energy is one of a number of key common goods and services set to be procured and managed on a once-for government basis as part of the future operation of the Crown Commercial Service.**

#### **The size of the opportunity**

We currently manage the procurement and delivery of gas, electricity and liquid fuels for all of

central government and over 55% of the wider public sector. That equates to a total spend of £2 billion per year, making us the largest public sector buyer of energy in the UK. Savings of £109 million were delivered against this spend in 2012/13.

Focussing on central government, we see a vast and diverse energy user. Total spend on gas and electricity is over £500 million per year, this is spread over 30,000 meter points across 86 different departments, non departmental public bodies and arms length bodies. In terms of energy load, this is close to 400MW of baseload equivalent, making government the largest single electricity customer. Sites range in size and stature, from large military bases and prisons with advanced self-generation to lesser-known and smaller buildings reliant on purely mains power.

#### **How do we buy energy?**

Our professional trading team located in Liverpool ensures government gets the best prices, purchasing in the wholesale traded markets up to four years in advance of delivery.

Recently we began implementing our plans to diversify supply and reduce price risk by securing a 20-year contract with a state-of-the-art waste-to-energy generator located in Teesside, unlocking

funds and securing jobs people whilst lowering energy costs to HM Government. Investigation into phase two of this ground-breaking project is now underway.

As government, we believe that we buy energy very effectively, however we don't always make best use of it.

#### **What we do on Demand-Side Response (DSR)?**

Our first priority was to get our own organisation in order and demonstrate that DSR can deliver significant savings by exploiting an asset owned by the Cabinet Office.

Unknown to most people, deep underneath the Ministry of Defence (MoD) building off Whitehall sits a 4.4MW Combined Head and Power generator (CHP). Its role is to deliver heat to all of Whitehall and generate revenue from the power it exports. As with most, older generation assets, inefficiencies mean it does not run all the time. This, however, is an opportunity.

In early 2012 we initiated a pilot scheme for DSR with Low Carbon London, a local DSR scheme designed to help take the load off certain aging substations and transformers. A partner was successfully chosen and we were operational in time for the Olympics. Since then the generator has been used every



Fig. 1: Our energy function is focused on six inter-related elements

month, called on to generate up to 4MW with 20 minutes notice for both national and regional schemes. This generates savings in excess of £100,000 per year net of costs. This money is recycled back to the users of the system, most central government headquarters, thus lowering the overall cost of heat.

On the back of this success we put in place a DSR procurement framework following a competitive EU tender which is available to central government and the wider public sector. The framework went live in March 2013 providing access to three suppliers. This addresses one of the perceived barriers to entry to DSR schemes – EU procurement rules. Most schemes would have to go through an expensive and long Official Journal of the European Union (OJEU) process. We have removed this barrier. So far this year we have six hospitals (who lead the way in public sector demand response schemes) receiving revenue from this, mainly through Standard Operating Reserve (STOR) using standby generators to offset energy curtailment. The pipeline is getting bigger but not at the rate we would all like to see.

### Perception vs. Reality

A number of misconceptions exist about DSR. It tends to be confused with demand reduction and management or thought to be about replacing mains supply with diesel generators or simply that implementation could interfere with, and pose a risk to, critical infrastructure. However, it is not normally considered to be purely a key mechanism to support energy curtailment or demand shifting. Also, with the value of demand response falling this year, it is in danger of losing its appeal before it has even taken off! We need to do much more to get the right messages across so that benefits can be delivered through increased take-up of this untapped capability – particularly as a low-cost contracting vehicle has been put in place with suppliers to help government exploit the opportunities that exist.

### Why do we need to do this?

The MoD uses 44% of all government electricity demand. Almost every kWh is backed up in some way with resilient methods, either via standby generation, non-essential load switching or flexible Building Management Systems. It is estimated that the Royal Navy alone has up to 200MW of

generation capability. Yet not a single MoD operated site operates a demand response scheme, and only a few operate minor Triad avoidance programmes, thus avoiding the highest energy grid charges. Why, you may ask? As we have witnessed across the government estate, there is a very fragmented setup, with no single point of contact or authority figure to lead the way forward. This is in stark contrast to the US, where military base energy is typically controlled in line with local demand response schemes, flexibly enabled to get the right balance between security of supply and optimising assets.

### The future

Clearly there is a communication issue which needs addressing. But it is so much more than that. We firmly believe that government should be leading the way on DSR. Given the scale and diversity of our energy landscape, we should be piloting new ideas and using innovation to demonstrate the significant benefits.

We are hoping that we are able to deliver this model in time for Electricity Market Reform (EMR) and capacity markets, where we will inevitably see much more generation from intermittent renewable projects, coinciding with when the country will need flexible energy demand most.

We welcome ideas and thoughts as to how we can grasp the opportunity to achieve these goals. You can do this by contacting the team on

[energy-dsr@gps.gsi.gov.uk](mailto:energy-dsr@gps.gsi.gov.uk)

*Scott is Project Lead on the Government's Energy for Growth initiative, which aims to leverage government buying power to boost the UK energy industry and deliver better value for money across the entire UK public sector.*

# DEMAND-SIDE RESPONSE

## OCTOBER SPEAKER MEETING: Address to the Parliamentary Group for Energy Studies By James Napier, General Manager of Energy, Honeywell



**Demand management is gaining increasing importance in the effort to balance UK energy demand. We are seeing that the onus is increasingly being placed on the consumer rather than the previous view that the solution lies, primarily, with generators. In line with the Government's D3 strategy, we see significant benefits in decentralised generation and permanent demand reduction, but especially in demand management.**

Key to managing demand effectively is the ability to view and influence demand in real-time. Once demand is actively controllable, the appropriate balancing strategies can be invoked.

This can be done through:

### 1. Permanent Reduction

A key challenge for many of our customers is the lack of visibility of how and where they use energy. Active demand management can provide users with a detailed, real-time view of their usage profile and the base data to support investment as well as measure returns.

### 2. Smoothing

- a. Re-scheduling of non-essential activities away from peak times.  
For example, "charging" buildings with heat early in the morning and "topping up" as required during operation.
- b. Permanent re-scheduling of activities:  
In the United States some companies have changed employment contracts to concentrate production in the early morning or late evening to avoid peak charges.
- c. Intermediate storage:  
In Southern California we have a programme of freezing water overnight to cool condensers in air conditioning.

### 3. Capping

In the form of Automated Demand Response (ADR), capping allows a wide range of demand management to take place and also provides a revenue stream back to the end user.

- a. Virtual Power Plants (VPP):  
Creating a VPP of demand

reduction in buildings provides a number of users with a means of balancing their demand and supply.

- b. Low Voltage Network capacity management :  
Working with Scottish & Southern Energy on the Thames Valley Vision Low Carbon Networks Fund project, we are proving the capability to manage capacity and negate capital investment in infrastructure by capping peak demand across a local geography.
- c. Management of capacity charges:  
Offers Distribution Network Operator's (DNO) the ability to manage capacity charges and the potential to introduce interruptible electricity contracts.
- d. Balancing for traders:  
Quick and frequent balancing potential for traders to drive efficiency up and costs down.
- e. Short Term Operating Reserve (STOR):  
The ability for National Grid to use demand reduction



(negawatts) instead of additional, carbon based generation. Honeywell have recently signed a deal to create the UK's first ADR aggregator, in partnership with STORGen, which will be able to provide demand reduction directly into STOR.

f. Balancing renewable:

At scale, a VPP would provide an alternative to balancing fluctuations in renewable generation instead of continuing to provide support with carbon based generation on spinning reserve. A recent Ofgem report concluded that there is a potential to provide between 1GW and 4.5GW of balancing capacity across the UK industrial and commercial sector.

Gaining the real-time control of energy demand is the critical first step in long-term balancing. In our experience the solution has to also achieve the following to generate mass adoption and deliver benefits:

1. Demand needs to be manageable without the need for building users/owners to actively participate. Users need to positively "opt in" to demand management with known parameters but the activity then needs to happen automatically.
2. Systems needs to be simple enough so that the economics work well and sophisticated enough to ensure mission critical activities can be protected.

3. The "users" of demand response need to develop value models to determine what they are able to pay to buildings offering up their demand.
4. Government incentives should incentivise "Clean Demand Response" over "Dirty Demand Response".
5. Available investment for Distribution Network Operators (DNOs) should, in part, be aligned to driving demand response.

## OCTOBER SPEAKER MEETING: Address to the Parliamentary Group for Energy Studies Written on behalf of Peter Feehan, Partner, Pinsent Masons



**Also speaking to the Group in October was Peter Feehan, Partner at international law firm Pinsent Masons.**

Peter leads the power and carbon advisory commercial team within Pinsent Masons, advising a range of clients across the energy and utility sectors. This includes public sector clients who are becoming increasingly focused on localised heat and power solutions, as well as public sector, area-wide community energy and "green" tariff models (independently and in joint venture with the energy suppliers).

In addition, Peter has advised the public sector on the UK energy efficiency framework, and is involved in writing the UK guidance on energy efficiency projects.

When speaking to the Group, Peter highlighted the need for organisations and individuals to acknowledge the potential of Demand-Side Response to dramatically alleviate pressure on our energy network. He argued there is currently a great deal of crucial data missing – for example, on the maximum capacity of networks in different regions, or on the demand

patterns of local authorities – for this potential to be effectively harnessed. The manifest benefits of effective Demand-Side Response mechanisms will be much harder to realise in the absence of central and local government support for, and coordination of, collection and collation of this data.

# THE MINISTER'S VIEW

## NOVEMBER SPEAKER MEETING: Address to the Parliamentary Group for Energy Studies

By The Rt Hon. Michael Fallon,  
Minister of State for Business and  
Enterprise and Minister of State for  
Energy



**I am delighted to be here today, to speak at an event hosted by an important organisation - the only All Party Group representing the whole of the energy industry.**

I have now been joint Minister for both DECC and BIS for over seven months.

My time as joint minister has been eventful, yet rewarding.

I would like to talk about some of the current work being carried out at DECC, and highlight some important recent announcements in energy policy.

### **Recent achievements**

The Annual Energy Statement was published last month, setting out the Government's priorities in delivering the UK's energy policies. This was published

alongside the annual Statutory Security of Supply Report.

We have brought forward key announcements on the Electricity Market Reform (EMR) programme, which will put in place the institutional and market arrangements to secure the private sector investment needed in our energy infrastructure, as major sectors such as transport and heat are electrified.

In October the programme reached a major milestone with the launch of the consultation on detailed EMR implementation proposals, alongside key sections of secondary legislation. The documents set out implementation proposals for the key mechanisms for reform: Contracts for Difference (CfD) and the Capacity Market. These

documents build on the draft EMR Delivery Plan and draft strike prices for renewable projects, both published in the summer. The final EMR Delivery Plan, along with final strike prices are expected to be published by the end of 2013.

We now have a long-term strategy captured in the Energy Bill. The Energy Bill successfully completed Lords Third Reading yesterday [19th November], and will shortly return to the House of Commons. We expect that, subject to the will of Parliament, the Energy Bill will gain Royal Assent by the end of the year.

Draft CfD terms, which were made available in August 2013, will form the basis for the final CfD contracts. DECC has worked with developers and investors to

test the design of the CfD to ensure it provides a robust legal framework against which to secure investment in the UK. The Government intends to respond to the EMR consultation and lay secondary legislation in Parliament in late spring next year.

This progress means the UK is the first country in the world to give clarification on funding levels for low carbon generation through to 2021, and visibility of support mechanisms and prices to 2018/19 for investors. We are now starting to see the benefits of providing this certainty to investors. DECC received 23 applications, for 26 investment contracts. These covered a broad range of renewable technologies, including onshore wind, offshore wind, and biomass projects. Latest estimates suggest that at least £35 billion has been invested in new electricity infrastructure since 2010 with more in the pipeline.

And of course most recently, as you will have noticed in the news, the UK Government and EDF announced that they have reached commercial agreement on the key terms of a proposed investment contract for the Hinkley Point C nuclear power station. Once built, Hinkley Point C will provide a clean source of home-grown energy, helping to keep the lights on, cut emissions and reduce consumer bills over the long term.

### Consumer bills and prices

You will be aware of the ongoing media attention at present around energy prices, consumer bills and the review of green taxes.

We are taking action, and decisions on the Review will be taken in the context of the Autumn Statement. The Review does not cover investment incentives for renewables, such

as the Renewables Obligation, CfD and feed in tariffs, which are essential for investor confidence in the renewables sector and our commitments to a low-carbon economy.

Consumers will get the best deals when suppliers face tough competition and that is what both the Government and Ofgem are working to achieve. We've been taking action to help people and businesses struggling with their energy bills and Ofgem and the Government are taking steps to make the Retail Market simpler for consumers.

We are encouraging consumers to change their suppliers. Ofgem estimates that currently consumers can save an average of £72 and a possible maximum of £158 a year by switching to the cheapest deal in the market for their payment method.

Affordability for the consumer is at the heart of energy policy. The best way to achieve this is through an effective, competitive market in energy. By improving competition, as well as providing support to encourage greater energy efficiency, the Government is helping consumers to manage their energy bills.

The focus is on maintaining a strong and stable regulatory framework that delivers transparent and competitive markets, consumer choice and the right penalties for firms stepping out of line.

We are ready to do more to help competition. As the Prime Minister announced, we now propose to introduce annual reviews of the state of competition in the energy markets. And the first of these new competition assessments will be delivered by Spring next year. Regular market assessments, with a focus on competition, and a thorough look

at the transparency of financial reporting by the major suppliers, both to be undertaken by Ofgem, will help to build consumer trust in the energy markets.

### Conclusion

There are still real challenges ahead for Government.

We need to continue to work on unlocking investment in our energy infrastructure.

The long term vision is a decreasing role for Government and a transition to a market where low carbon technologies compete fairly on price.

We need to help consumers cut energy waste and reduce bills.

We need to make the market simpler for consumers, empowering them to choose the best deal on the energy they use.

Thank you for hosting this event and I hope you enjoy the evening.

*In March 2013, Michael Fallon MP replaced John Hayes MP as Minister of State for Energy at DECC. This role was added to his existing obligations as Minister of State for Business and Enterprise at the Department for Business, Innovation and Skills (BIS) – a position he assumed in late 2012. In a July 2013 interview with Energy Focus, the Minister highlighted the overlap between these roles: "They are both economic departments and they both cover important industrial sectors. Energy is a huge part of our growth agenda, so there is overlap right across the industry ... I was already co-chairing the Nuclear Industry Council, offshore wind industrial policy is done from BIS, so I was already [before his appointment to DECC] dealing with the oil and gas companies on a day-to-day basis anyway".*

# TACKLING THE SKILLS SHORTAGE IN THE POWER SECTOR

Ian Graves, Power Director at Costain, looks at what the energy industry can do to stave off a looming skills deficit

**The power industry is facing some big challenges over the next five to 15 years. With almost half of the UK's energy and utility workforce expected to retire by 2023, we actively need to be attracting enough younger people into the sector with qualifications in science, technology, engineering and maths (STEM) to fill the skills gap.**

But we have been struggling to do so. According to a CBI survey of education and skills carried out in 2013, while STEM skills are in widespread demand, nearly two in five firms (39%) that need employees with STEM skills and knowledge currently have difficulties recruiting staff. A similar proportion (41%) expect those difficulties to persist in the next three years. When put into the context of youth unemployment, which affects up to a million of our young people aged 16-24, these findings make depressing reading.

Recognition of this potential threat to the industry's prospects has galvanised all of us involved to find effective and sustainable solutions on a number of different levels: nationally, through industry-wide collaboration and setting up appropriate schemes in our own businesses.

## The national strategy

An important start to tackle these problems on a national scale was made in 2009, with the set up of the National Skills Academy for Power with substantial investment from employers and government.

One of its key aims has been to take a long-term view of sector needs in

close collaboration with employers, educational providers and prospective recruits. It has already had some notable success in encouraging more new talent into the industry by highlighting the careers and benefits and promoting cross-sector sharing of best practice.

## Working together

This emphasis on collaboration has led to a number of positive initiatives in the industry itself. For example, in February 2013 Costain was joined by senior figures from across industry and Government for a National Infrastructure Skills dinner at the House of Lords. There were valuable discussions about how we can inspire young people to acquire the STEM skills we want and need and also offer them more vocational routes into employment.

We followed that in September with the "Big Infrastructure Conversation", held in conjunction with Business in the Community (BITC). It was a fantastic listening exercise, bringing together students, representatives from The Prince's Trust, apprentices and an impressive array of senior business leaders to discuss the importance of STEM skills and the critical role apprenticeships can play in meeting the UK's infrastructure needs.

## Putting ideas into action at company level

At Costain we have taken these propositions to heart with a number of initiatives.

- For example, we have implemented a group-wide drive to



recruit more apprentices into a wider choice of disciplines as well as putting a sharper focus on training and leadership throughout the business and supply chain.

- In addition, we have joined forces with "plotr", an online careers service, to encourage more young people to consider joining Costain.
- I have made a personal commitment to help bring about change by becoming a STEM ambassador, a very worthwhile programme I strongly recommend to others with a science and engineering background. As ambassadors we volunteer our time and support to young learners to encourage them to embrace STEM skills in creative, practical and engaging ways.

We firmly believe that promoting STEM skills is a socially responsible thing to do. But it also makes good business sense as we can attract the best and brightest into our companies.

For more information email: [power@costain.com](mailto:power@costain.com)

Follow us on Twitter: [@CostainGroup](https://twitter.com/CostainGroup)

# EXTRACT FROM THE ANNUAL ENERGY STATEMENT

The Rt Hon. Ed Davey MP, Secretary of State for Energy and Climate Change, 31st October 2013

**Mr Speaker, this Coalition Government is putting in place the most coherent, sustainable energy policy the United Kingdom has ever had, creating one of the most competitive and attractive electricity investment markets in the world, improving our energy security, boosting home-grown clean energy and providing jobs and economic growth in the process.**

To deal with the problem of tightening electricity margins up to 2018, the government has been working with National Grid and Ofgem to develop existing safeguards to have more electricity available for the grid at peak times, including, if needed, the use of power plants currently mothballed. We are introducing to Britain a Capacity Market to ensure we attract the investment we need in new power stations. The first Capacity Market auction will take place next year - for delivery from the winter of 2018.

Britain now has a long-term strategy, encapsulated in the Energy Bill.

In the last twelve months alone, we have provided consent for seven major energy infrastructure applications worth around £20 billion, with the capacity to generate electricity to over six million homes - including, of course, last week's announcement that we have reached key

commercial terms with EDF for the first new nuclear power station in a generation at Hinkley Point C. Through the Energy Bill's Final Investment Decision Enabling programme, 23 applications for 26 investment contracts are currently being evaluated by DECC for a broad range of renewable technologies, including onshore wind, offshore wind, and biomass projects.

We've been taking action to help people and businesses struggling with their energy bills. Two million vulnerable households will get £135 off their energy bill this winter - thanks to the Government's Warm Home Discount. Around twelve and a half million pensioners will get the Winter Fuel Payment - £200 for the under eighties and £300 for those over. And of course there are Cold Weather Payments if needed, which last year delivered over £146 million to help cut bills for the most vulnerable.

We need more permanent change if we are to keep bills down, not just for 20 months, but for 20 years - and beyond. The Energy Company Obligation (ECO) is delivering such permanent change by modernising our housing stock and making it cheaper to heat our homes.

This Coalition Government has been determined to take on the Big Six for consumers, with the stick of competition. Already our measures to deregulate have seen a major



growth in the number and size of independent energy suppliers. In 2011 there were no independent suppliers with a customer base greater than 50,000. Now we have three independents with over 100,000 customers. And a further 8 companies have entered the market since May 2010.

Many have understandably been asking whether competition is working in our energy markets. As the Prime Minister announced last week, we now propose to introduce annual reviews of the state of competition in the energy markets. The first of these new competition assessments will be delivered by spring next year.

We also need to make sure the energy suppliers are open and honest about the profits they are making. So I have also asked Ofgem to deliver, again by spring next year, a full report on the transparency of financial accounts of the energy companies and ways this could be improved.

The full Annual Energy Statement can be found at [www.gov.uk/government/publications/annual-energy-statement-2013](http://www.gov.uk/government/publications/annual-energy-statement-2013)

# EXTRACT FROM THE NATIONAL INFRASTRUCTURE PLAN

The Rt Hon. Danny Alexander MP, Chief  
Secretary to the Treasury, 4th December 2013

**Our infrastructure plan is making a difference in every corner of Britain: underground, overground, on shore, off shore, wired, wireless...**

You told us you wanted a clearer picture of future work. So we created the pipeline ... the most comprehensive overview of planned and potential infrastructure investment ever produced.

It acts as a prospectus for investors, identifying key UK private and public sector infrastructure requirements for decades to come. Add the certainty that provides to the economic stability the Government is overseeing, and you can see why Britain is now ranked number one in the Nabarro Infrastructure Index for attracting investment.

The need for investment in our energy sector is enormous. The energy measures we announced at the weekend will ease the burden of gas and electricity bills on hard-pressed families over the next couple of years, without in any way undermining the support for investment in electricity generation. But those lower bills will only be sustainable if we deliver that investment in newer and cleaner sources of electricity.

Back in June, I announced the draft prices the Government will guarantee for those investing in

renewable energy. And this Plan updates and confirms the final prices we'll pay. It shows that the price we're willing to pay for onshore wind and large scale solar farms has come down.

So we can drive every penny of efficiency, and get consumers the best possible deal. It shows that we've maintained the amount we'll pay for converting coal stations to biomass, and it also shows that we'll increase what we pay for offshore wind in 2018-19.

We believe that this plan will mean delivering 10GW of offshore wind by 2020 is achievable – perhaps more if the prices come down. This protects our commitment to green energy while ensuring we get the best value for money for consumers, and ensure the huge potential of offshore wind is fulfilled.

But it's not just wind, wave and tidal power that are seeing the benefits of our policies. Just twenty minutes ago, in this very building, I signed an agreement with Hitachi and Horizon which commits us, in principle, to offering a guarantee for their Nuclear Power Station at Anglesey.

There is work to be done, and putting the financing plan together will be a commitment from both sides. But the agreement today shows that, just as we did with



Hinkley, this Government is prepared to give certainty to investors to help them make the financial decisions that are critical for our nation's infrastructure.

The power station this agreement will support is set to create around 1,000 permanent jobs once complete with a peak workforce of over 5,000 during construction. It shows that the Government is doing all it can to secure a stable, certain environment for energy investment, to create jobs, and to ensure the UK plays its full part in tackling climate change.

The full National Infrastructure Plan can be found at <https://www.gov.uk/government/speeches/danny-alexander-on-the-national-infrastructure-plan-2013>

# EXTRACT FROM THE AUTUMN STATEMENT

The Rt Hon. George Osborne MP, Chancellor of the Exchequer, 5th December 2013

**Mr Speaker, Britain's economic plan is working. But the job is not done. We need to secure the economy for the long term.**

Mr Speaker, a government that lives within its means is essential to secure the economy for the long term – but it is not sufficient. Our infrastructure needs to be overhauled.

We have to help our businesses compete. We're going to be spending more on capital as a proportion of national income on average over this decade, than over the whole period of the last government.

That's involved making tough choices about priorities in spending and sticking to them.

But that's not the most difficult decision in this area.

We have to decide whether we are serious as a country about competing in the modern world and say to people: we need the new roads, and the new railways including the Northern Hub and High Speed 2.

We have to say: we are prepared to push the boundaries of scientific endeavour, including in controversial areas, because Britain has always been a pioneer. The country that was the first to extract oil and gas from deep under the sea should not turn its back on new sources of energy like shale gas because it's all too difficult. And the country with the world's first civil nuclear programme shouldn't be a country that says we can do this no longer.

Yesterday, my Right Honourable Friend the Chief Secretary and Lord Deighton published the update to the National Infrastructure Plan.

That includes a cooperation agreement with Hitachi on the next nuclear power station in Anglesey. It includes a deal with the insurance industry to invest at least £25 billion in UK infrastructure. And we published the strike prices that support long term investment in off shore wind, and prioritise it over onshore wind.

And today we go further. A commitment to invest in quantum technology. A new tax allowance to encourage investment in shale gas that halves tax rates on early profits. And in the week in which Professor Peter Higgs travels to Stockholm to collect his Nobel Prize for Physics, we commit to build a new centre in his name at Edinburgh University.

Access to higher education is a basic tenet of economic success in the global race. So today I can announce that next year we will provide 30,000 more student places – and the year after we will abolish the cap on student numbers altogether. Extra funding will be provided to science, technology, and engineering courses. The new loans will be financed by selling the old student loan book, allowing thousands more to achieve their potential.

We're also helping families with their energy bills. Not with a transparent con by pretending that we can control the world oil



price. But instead by focussing on the thing government can and should control: the levies and charges that previous Energy Secretaries piled on bills. This week we deliver on the promise made by the Prime Minister to roll back those levies. The result: an average of £50 off family bills.

We're doing this in a way that supports the lowest income families. Reduces carbon. Supports investment in our energy infrastructure. And as the document shows, does not add a penny to the tax bill families pay.

My political philosophy is clear: instead of penalising people with more taxes and more regulation, give them incentives by reducing their taxes and their bills. As I've often said, going green doesn't have to cost the earth.

The full Autumn Statement can be found at

<https://www.gov.uk/government/speeches/chancellor-george-osbornes-autumn-statement-2013-speech>

# DEPARTMENTAL STATEMENTS

## Written and Oral Statements from the Department for Energy and Climate Change - 31st July 2013 to 5th December 2013

### **Written Ministerial Statement on Gas (Security of Supply)**

4th September 2013 – Ed Davey MP said that state intervention in the gas market could enhance the UK's gas security, but not in a cost-effective manner.

### **Written Ministerial Statement on Radioactive Waste (Site Selection)**

12th September 2013 – Ed Davey MP announced he was launching a consultation on the site-selection aspects of the Managing Radioactive Waste Safely (MRWS) programme.

### **Departmental research on Offshore Wind Structural Lifecycle Industry Collaboration**

19th September 2013 – The Department published a piece of original research into the design of future wind farms and the optimisation of existing offshore projects.

### **Written Ministerial Statement on triennial review of the Coal Authority**

8th October 2013 – Michael Fallon MP announced the start of the Triennial Review of the Coal Authority, part of the Government's commitment to ensuring that Non-Departmental Public Bodies are regularly subject to independent challenge.

### **Written Ministerial Statement on the award of Smart Meters DCC Licence**

8th October 2013 – Ed Davey MP announced that four companies

had signed contracts to establish and operate the Data and Communications Company (DCC).

### **Written Ministerial Statement on Nuclear Liabilities Financing Assurance Board Triennial Review (NLFAB)**

10th October 2013 – Michael Fallon MP said the review would examine whether there is a continuing need for NLFAB's function and its form and whether it should continue to exist at arm's length from Government.

### **Oral Statement on the agreement for a new nuclear power station at Hinkley**

21st October 2013 – Ed Davey MP informed the House that the Government and EDF had reached broad commercial agreement on the key terms of a proposed investment contract for a new nuclear power station at Hinkley Point in Somerset.

### **Oral Statement on Grangemouth Petrochemicals Complex and Refinery**

23rd October 2013 – Ed Davey MP gave a statement in response to the INEOS' announcement of the decision of its shareholders to place the Grangemouth petrochemicals plant into liquidation, putting 800 jobs at risk.

### **Written Ministerial Statement on Balance of Competences Review**

25th October 2013 – Ed Davey MP announced that the Department for Energy and Climate Change had published its call for evidence

for the energy report, due to be completed in summer 2014.

### **Annual Energy Statement 2013**

31st October 2013 – The Statement set out the Government's priorities in delivering the UK's energy policies in the near term

### **UK Renewable Energy Roadmap: 2013 update**

5th November 2013 – The Department provided its second update to the UK Renewable Energy Roadmap.

### **Written Ministerial Statement on the publication of the Chief Nuclear Inspector's Annual Report 2013**

5th November 2013 – Ed Davey MP announced the publication of the Chief Nuclear Inspector's inaugural annual report by the Office for Nuclear Regulation (ONR).

### **Written Ministerial Statement: Gas market update**

7th November 2013 – Ed Davey MP reported on his department's investigation into allegations of manipulation of the UK gas market, stating that neither Ofgem nor the FCA had found any evidence of market manipulation.



### **Written Statement on the designation of DECC's Secretary of State as competent authority for Ten-E**

18th November 2013 – Baroness Verma announced the designation of the Secretary of State for Energy and Climate Change as the national competent authority for the United Kingdom for permitting processes for Projects of Common Interest under Article 8(1) of Regulation (EU) no 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure.

### **Letter from DECC to Local Authorities**

20th November 2013 – The letter provided an update on the Department's plans for solar energy.

### **Letter to RWE on Triton Knoll offshore wind farm grid connection infrastructure**

26th November 2013 – The Government published its letter to RWE, confirming the grid connection infrastructure needed for the Triton Knoll Offshore Wind Farm will be treated as a development for which development consent is required.

### **Statement on the Warsaw Climate Change Conference**

28th November 2013 – Ed Davey MP's written statement said the UK was pleased that all nations had agreed to "start their homework" to prepare for a global climate change deal in 2015.

### **Written Ministerial Statement on awards in the 27th offshore (oil and gas) licensing round**

29th November 2013 – Michael Fallon MP announced a second tranche of offers of 52 production licences in the 27th offshore oil and gas licensing round, following environmental assessments.

### **Oral Ministerial Statement on Government action on energy bills**

2nd December 2013 – Ed Davey MP said the Government is working with Ofgem to force energy companies to justify any price rises. Baroness Verma later repeated this statement in the Lords.

### **Statement on Smart metering system and equipment testing**

2nd December 2013 – The Government outlined its position on how the Data Communications

Company (DCC) will be responsible for testing that its systems work in their own right and can interoperate with users' systems to deliver smart meter services.

### **Written Ministerial Statement on public financing of overseas coal plants**

4th December 2013 – Ed Davey MP announced the Government was ending support for public financing of new coal-fired power plants overseas, except in rare circumstances.

### **Statement on Renewable Heat Incentive: expanding the non-domestic scheme**

4th December 2013 – The Government set out its decisions and rationale for expanding the non-domestic RHI.

### **Written Ministerial Statement on Electricity Market Reform: investment in renewables**

4th December 2013 – Ed Davey MP announced the Government was publishing the Contracts for Difference (CfD) strike prices for renewable technologies.

# PARLIAMENTARY RECORD

## SELECT COMMITTEES: REPORTS AND ENQUIRIES

31st July 2013 to 5th December 2013

### House of Commons

#### Business, Innovation and Skills Committee

##### **Inquiry into Extractive Industries Sector**

19th November 2013 – The Committee heard oral evidence from, David Hargreaves, Mining Consultant and Publisher, Mining on Top, International Council on Mining and Metals, and UK Onshore Operators Group; Eddie Rich, Deputy Head, Extractive Industries Transparency Initiative; Mining Association of the UK, CBI Minerals Group, Oil and Gas UK, UK Coal, and Oil and Gas Independents Association.

26th November 2013 - The Committee continued to hear oral evidence from, amongst others, Tara Hopkins, Chief Advisor, External Affairs at Rio Tinto and Charles Watenphul, Director of Corporate Affairs at Glencore Xstrata.

#### Energy and Climate Change Committee

##### **6th Report - Local Energy - Volume I (HC180)**

6th August 2013 – The Committee published its report into what Government could do to support businesses, co-operatives, local authorities and other public sector organisations wishing to install and operate medium-sized local energy projects such as solar arrays, wind turbines and district heating systems.

##### **7th Report - Pre-appointment hearing with the Government's preferred candidate for Chair of Ofgem - Volume I (HC645)**

17th September 2013 – The Committee published a report into, and supplementary evidence in support of, the appointment of David Gray as a suitable candidate to chair Ofgem.

##### **Inquiry into the work of the Committee on Climate Change**

9th October 2013 – The Committee took evidence from The Rt Hon. John Gummer, Lord Deben, Chair, and Dr David Kennedy, Chief

Executive, of the Committee on Climate Change (CCC). Topics covered included the CCC's 2013 Progress Report to Parliament, the setting and managing of carbon budgets, and next steps on Electricity Market Reform.

##### **Inquiry into Low-carbon innovation**

15th October 2013 – The Committee announced an inquiry to examine the Government's current approach to low-carbon innovation, and ascertain what DECC's Low Carbon Innovation Coordination Group is likely to achieve.

### **Departmental overview of the Nuclear Decommissioning Authority (NDA)**

15th October 2013 – The Committee published the National Audit Office's report into the NDA.

### **Inquiry into energy prices**

22nd October 2013 – Sir Robert Smith MP said the inquiry was called "in the context of the latest wave of price increases", and the Committee has since taken evidence from senior figures at energy firms including British Gas, SSE, ScottishPower and E.ON.

### **Inquiry into IPCC 5th Assessment Review**

22nd October 2013 – The Intergovernmental Panel on Climate Change (IPCC) was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988. The inquiry will explore the latest

conclusions of the IPCC, the extent to which the conclusions are robust, and their impact on national and international policy making.

### **Inquiry into the economics of climate change**

5th November 2013 – The Committee took evidence from Professor Lord Stern, President of the British Academy and former Chief Economist at the World Bank. The session covered the current Government approach to addressing climate change and international action on climate change.

### **Inquiry into gas storage**

28th November 2013 – The Committee heard from a range of panellists, including PGES member George Grant of Stag Energy, on the role of gas storage in energy security, its impact on climate change targets and the impact of the Government's decision not to offer new subsidies.

### **Inquiry into levy control framework**

28th November 2013 – The Committee took evidence from John Fiennes, Director of Energy Strategy, Networks and Markets at DECC, on whether the Levy Control Framework (LCF) is on track to achieve its objectives, and the role of the LCF is increasing the use of low-carbon technologies to generate electricity.

### **Evidence session on Outcomes of Warsaw COP19**

10th December 2013 – Ed Davey MP, Gregory Barker MP, Peter Betts CBE and Ben Lyon from the Department of Energy and Climate Change all gave evidence in a session assessing the Warsaw conference in relation to the UK's main objectives, and analysing the key issues debated at the conference.

## **Environment, Food and Rural Affairs Committee**

### **Inquiry into water**

4th December 2013 – The Committee questioned Cathryn Ross, the new Chief Executive of Ofwat, on the regulator's priorities.

## **Environmental Audit Committee**

### **5th Report – Progress on Carbon Budgets (HC60)**

8th October 2013 – The Committee found that the UK now has one of the largest footprints in the world, and recommended that the Government, in preparation for a global deal on climate change in 2015, examine with the Committee on Climate Change the possibility of introducing a supplementary target focused on emissions 'consumption' embedded in imports, and the potential

implications of such a target for the industrial strategies recently published by BIS.

### **6th Report – Biodiversity Offsetting (HC750)**

12th November 2013 – The Committee called on the Government to improve its current proposals for biodiversity offsetting, saying the current recommended metric is overly simplistic and not transparent enough to allow for proper scrutiny.

### **7th Report – Sustainability in BIS (HC613)**

14th November 2013 – The Committee found that, while the Department itself takes a practical approach to sustainability (e.g. appointing "green champions"), analysis of specific case studies indicated that, in terms of policymaking, environmental and social aspects of sustainability are not afforded the same attention as economic factors.

### **8th Report – Code for Sustainable Homes and the Housing Standards Review (HC192)**

20th November 2013 – The Committee urged the Department for Communities and Local Government (DCLG) to rethink its plans to wind down the Code for Sustainable Homes (CSH), saying doing so would replace local choice in favour of practical, sustainable solutions with a lowest-common-denominator national standard.

### **9th Report – Energy Subsidies (HC61)**

2nd December 2013 – The Committee's report concluded that energy subsidies play an important role in alleviating fuel poverty, and that the Government should not weaken its commitment to "eliminate" it. The report also looked at whether Government support for the new nuclear power station at Hinkley Point constitutes a subsidy, concluding that it does, despite the Government's assurance otherwise.

### **Evidence Session – Green Finance**

11th December 2013 – The session examined whether the Government's programmes and policies are sufficient to achieve the required investment in Green Finance. The Rt Hon. Michael Fallon MP, Minister of State for Business and Enterprise and Minister of State for Energy (and recent PGES speaker), gave evidence.

## **Public Accounts Committee**

### **Statement from The Rt Hon. Margaret Hodge MP, Chair of the Committee of Public Accounts**

13th November 2013 - The Chair of the Committee expressed concern that £310bn worth of investment is needed to ensure that UK infrastructure needs are met. She stated her concern that the Government is taking decisions on infrastructure while expecting consumers to pay the bill, and that affordability for consumers needs to be a key driver in future Government policy.

## **Science and Technology Committee**

### **Inquiry into Climate: Public understanding and policy implications**

9th September 2013 – The Committee took oral evidence from, Dr James Randerson, Assistant National News Editor, environment, science and technology), The Guardian and Richard Black, former BBC Environment Correspondent, Catherine Brahic, News Editor: environment & life sciences, New Scientist and Fiona Harvey, Environment Correspondent, The Guardian. The session looked at the role played by and representation of climate by the media. (HC 254-iv)

11th September 2013 – Evidence was given to the Committee by, amongst others, Tony Grayling, Head of Climate Change and Communities, Environment Agency, Phil Rothwell, Head of Strategy and Engagement (Flood and Coastal Risk Management), Environment Agency. The Committee heard how communication on climate was delivered by those organisations giving evidence. (HC 254-v)

9th October 2013 – Featuring statements from independent climate analysts and the Government, the Committee heard oral evidence from Rt Hon. the Lord Deben, Chairman, and David Kennedy, Chief Executive, Committee on Climate Change; Rt Hon David Willetts MP, Minister of State for Universities and Science, Department for Business, Innovation and Skills; Rt Hon Gregory Barker MP, Minister of State for Climate Change, Department of Energy and Climate Change, Professor David MacKay, Chief Scientific Advisor, and David Warrilow, Head of Science, Department of Energy and Climate Change. (HC 254-vi)

6th November 2013 – Evidence was given by Professor Sir Mark Walport, Chief Scientific Adviser to HM Government and Head of the Government Office for Science. (HC 254-vii)

## **Welsh Affairs Committee**

### **Shale Gas in Wales**

9th December 2013 – The Committee held its third evidence session on shale gas in Wales. The witness was Ron Loveland, Energy Advisor within the Welsh Government.

# House of Lords

## Economic Affairs Committee

### The economic impact on UK energy policy of shale gas and oil

10th December 2013 – The Committee took evidence from Mr John Kersey, Lancashire Chairman at the Institute of Directors, Mr Lee Petts, Managing Director at Remsol Ltd, Mr Ian Roberts and Ms Tina Rothery from the Residents' Action on Fylde Fracking (RAFF), Mr Peter Atherton, Head of Equity Research – Utilities at Liberum Capital, Mr Philip Lambert of Lambert Energy Advisory, and Mr Peter Hughes of Peter Hughes Energy Advisory.

26th November 2013 – The Committee took evidence from Viscount (Matt) Ridley, a scientist and journalist who regularly writes on environmental and energy issues, Nick Grealy, Director of No Hot Air, an organisation dedicated to improving the public perception of shale energy, and Phelim McAleer, producer of "FrackNation", a documentary which aims to address perceived misinformation about fracking.

19th November 2013 – The Committee took evidence from Professor Dieter Helm of Oxford University, Professor Richard Davies of the Durham Energy Institute and Howard Rogers from the Oxford Institute for Energy Studies.

29th October 2013 – In its first evidence session, the Committee heard from Ken Cronin from UK Onshore Operators Group (UKOOG), Dan Lewis from Future Energy Strategies, and Professor Robert Mair CBE of Cambridge University, who oversaw the Royal Society's report, "Shale gas extraction in the UK: a review of hydraulic fracturing".

## EU Sub-Committee D – Agriculture, Fisheries, Environment and Energy

### The EU's contribution to food waste provision

23rd October 2013 – The Committee published the written and oral evidence it had received as part of its inquiry into the EU's contribution to food waste prevention. Contributions were received from environmental organisations such as the WWF and the Waste and Resources Action Programme, as well as business representatives such as the British Retail Consortium and the Food and Drink Federation. Defra provided both written and oral evidence.

## Science and Technology Committee

### Nuclear follow-up – Evidence

14th October 2013 – The Committee published its corrected oral and written evidence, which followed a one-off evidence session with the Department for Energy and Climate Change on 23rd July 2013. The witness was Professor David MacKay, Chief Scientific Adviser at the Department of Energy and Climate Change.

# PARLIAMENTARY ORAL QUESTIONS AND DEBATES

## House of Commons

### Energy Prices and Profits

Caroline Flint MP (Lab, Don  
Walley)  
4th September 2013, Col393

### Climate Change Act

David T. C. Davies MP (Con,  
Monmouth)  
10th September 2013, Col235WH

### Oil and Gas Industry (Scotland)

Mary Macleod MP (Con, Brentford  
and Isleworth)  
11th September 2013, Col967

### Energy Policy (Winter Preparations)

John Robertson MP (Lab,  
Glasgow North West)  
9th October 2013, Col79WH

### Coal: Concessions

Susan Elan Jones MP (Lab, Clwyd  
South)  
16th October 2013, Col753W

### Fracking

Paul Flynn MP (Lab, Newport West)  
16th October 2013, Col754W

### Green Deal Scheme

Luciana Berger MP (Lab Co-op,  
Liverpool, Wavertree)  
16th October 2013, Col754W

### Wind Power: Planning Permission

David T.C. Davies MP (Con,  
Monmouth)  
16th October 2013, Col755W

### Energy Costs

Huw Irranca-Davies MP (Lab,  
Ogmore)  
20th November 2013, Col1212

### Decarbonisation

Joan Walley MP (Lab, Stoke-on-  
Trent Central); Chi Onwurah (Lab,  
Newcastle upon Tyne Central);  
Karl Turner (Lab, Kingston upon  
Hull East)  
28th November 2013, Col385

### Energy Costs

Karen Lumley MP (Con, Redditch)  
28th November 2013, Col394

### Green Policies

Kevin Brennan MP (Lab, Cardiff  
West)  
28th November 2013, Col396

### Energy Security

David Rutley MP (Con,  
Macclesfield)  
28th November 2013, Col397

### Energy intensive industries

Paul Farrelly MP (Lab, Newcastle-  
under-Lyme)  
4th December 2013, Col 275WH

### Coal

Nicholas Soames MP (Con, Mid  
Sussex)  
4th December 2013, Col 686W

### Energy Prices

Nigel Dodds MP (Democratic  
Unionist, Belfast North)  
4th December 2013, Col 686W

### Fracking

Dan Jarvis MP (Lab, Barnsley  
Central)  
4th December 2013, Col 687W

### Green Deal Scheme

Jonathan Reynolds MP (Lab Co-  
op, Stalybridge and Hyde)  
4th December 2013, Col 688W

## House of Lords

### Energy: Winter Supply

Lord Ezra  
17th October 2013, Col641

### Energy: Long-term Supply

Lord Forsyth of Drumlean  
17th October 2013, Col646

### Energy: Nuclear Power

Lord Stoddart of Swindon  
23rd October 2013, ColWA177

### Energy: Nuclear Power Stations

Lord Wigley  
23rd October 2013, ColWA177

### Energy: Prices

Lord Stoddart of Swindon  
23rd October 2013, ColWA177

### Energy: Shale Gas

Lord Renton of Mount Harry  
19th November 2013, Col847

### Energy: Gas Storage

Baroness Worthington  
28th November 2013, Col1510

# LEGISLATION

1st August 2013 to 5th December 2013

## Government Bills

### Energy Bill 2012-13 to 2013-14

The Rt Hon. Ed Davey MP,  
Secretary of State for Energy and  
Climate Change

#### Commons

Carry-over motion  
18th November 2013

Programme motion  
4th December 2013

Ping Pong  
4th December 2013

#### Lords

Report: First sitting  
28th October 2013

Report: Second sitting  
4th November 2013

Report: Third sitting  
6th November 2013

Third reading  
19th November 2013

Ping Pong  
11th December 2013

### Water Bill 2013-14

Owen Paterson MP, Secretary of  
State for Environment, Food and  
Rural Affairs

#### Commons

Second reading  
25th November 2013

Committee Debate: First Sitting  
3rd December 2013

Committee Debate: Second Sitting  
3rd December 2013

Committee Stage  
5th, 10th, 12th December 2013

## Private Members' Bills

### Decarbonisation Bill

Ian Murray MP  
(Lab, Edinburgh South)

#### Commons

First reading  
3rd December 2013

### Deep Sea Mining Bill 2013-14

Sheryll Murray MP  
(Con, South East Cornwall)

#### Commons

Second reading  
6th September 2013

Ways and Means resolution  
15th October 2013

### Winter Fuel Allowance Payments (Off Gas Grid Claimants) Bill 2013-14

Mike Weir MP  
(Scottish National, Angus)

#### Commons

First reading  
27th November 2013

# A LOOK AHEAD

**After two long years, Parliamentarians will let out a collective sigh of relief as we finally enter 2014 with the Energy Bill reaching Royal Assent.**

The new year also looks to bring along a few challenges of its own, as debate continues over fracking licences, rising energy prices, the transparency of the Big Six, and of course the expected European Commission investigation into Hinkley.

With all this yet to come, all here at Energy Focus wish you a very restful Christmas and happy new year. See you in 2014!

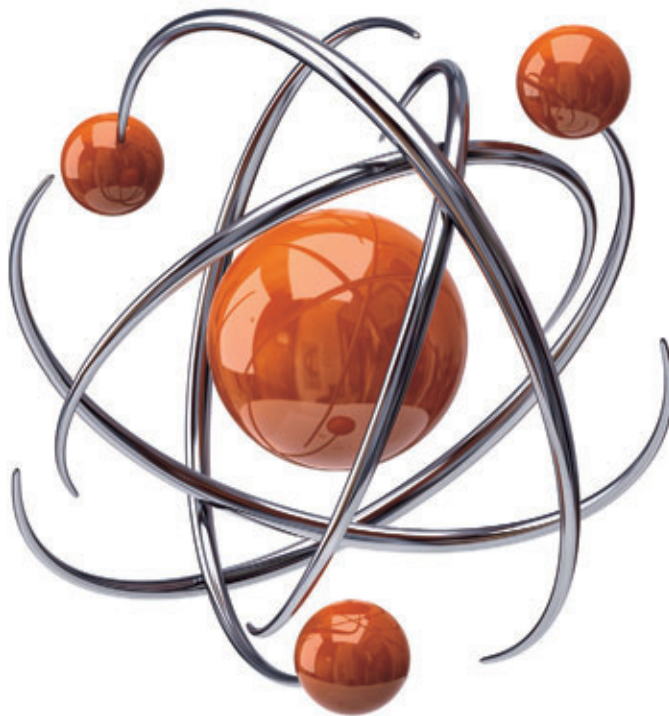
# Thinking Big, Building Small

Fluor has a 50-plus year legacy of engineering, constructing and maintaining some of the world's largest and safest nuclear power plants. Fluor's investment in NuScale Power and its unique and passively safe small modular reactor plant design provides power generators a new nuclear power option for safe, efficient, new generation.

The small modular reactor market has never been more promising.

Developed more than a decade ago with the U.S. Department of Energy's support, NuScale Power's small modular reactors produce 45 megawatts of power apiece. NuScale Power, backed by Fluor, offers customers the opportunity to install nuclear power plants on a quicker, safer and flexible, as-needed basis.

With more than 250 engineers working to bring this safe, clean technology to market, NuScale Power pushes ingenuity forward to address the challenges of unlocking nuclear power in a way that is safer and simpler than ever before.



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