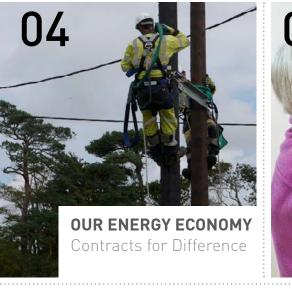


POWER THE COUNTRY, PROTECT THE PLANET









IN THE SPOTLIGHT





1 2What is shale gas and fracking?

## Annual Energy Statement

OUR ENERGY ECONOMY

### Confirms support for consumers

In delivering his 2013 statement to parliament on 31 October 2013, **Secretary of State for Energy and Climate Change, Edward Davey** stated that the key focus of the government is supporting consumers.

Mr Davey set out a number of new important measures aimed at giving consumers more control:

- Energy companies must make switching suppliers faster for consumers – with an ambition to move to switching in 24 hours (not the current five weeks) without increasing consumer bills.
- As well as energy companies now being required to tell consumers about their cheapest tariff on the front of every bill, energy companies will also be required to include a QR (Quick Response) code on energy bills, so that smartphone users can switch to the best deal through a few clicks on a mobile phone. As well as directly helping smartphone users, it will mean those giving advice on switching supplier to more vulnerable people can



instantly get the information needed to help them find the best deal on the market.

- Energy companies should be more open about how they treat credit balances in consumers' accounts, making every effort to return money to customers with closed accounts.
- DECC will work with the Post Office to signpost elderly and vulnerable people

to the 500 volunteers being trained by the **Big Energy Saving Network** to help people find ways to cut their bills.

- Building on existing reforms to make the energy markets more competitive, Ofgem will carry out a **market assessment** every year, working with the Office of Fair Trading and the new Competition and Market Authority to monitor market participants and ensure the market is working for residential and small business consumers and that all suppliers can compete fairly. The **first assessment** will **be completed by Spring 2014**.
- Financial transparency is critical for rebuilding consumer trust, so energy companies need to be much more transparent about how they report their finances. Ofgem will carry out a detailed assessment of energy suppliers' financial reporting practices and set out necessary steps to improve transparency so consumers can see where their money is going. This assessment will report in Spring 2014, alongside the first market assessment.
- Appropriate penalties for those organisations who step out of line are a crucial part of a fair market. DECC will consult on introducing criminal sanctions for those who manipulate the energy markets in the same way as manipulation of the financial markets attracts criminal penalties.

Mr Davey said, "this is our strategy for affordable energy security. A strategy to power the country and protect the planet, and to help keep bills affordable." The Annual Energy Statement fulfils the Coalition's commitment for the Government to present an annual statement of energy policy to Parliament:

It sets out the government's priorities in delivering the UK's energy policies in the near term:

- 1. Helping households and businesses take control of their energy bills and keep their costs down;
- 2. Unlocking investment in the UK's energy infrastructure that will support economic growth; and
- 3. Playing a leading role in efforts to secure international action to reduce greenhouse gas emissions and tackle climate change.

The government is working with investors partners and stakeholders, both domestically and internationally, to ensure the UK makes the transition to a thriving, low carbon economy in the most costeffective way to protect energy security and tackle climate change

Click here to read the Government's Annual Energy Statement for 2013.





# Hinkley Point C - the first new nuclear power plant in the UK in 20 years

**OUR ENERGY ECONOMY** 

A significant step towards building Hinkley Point C, the first new nuclear power station in the UK in over 20 years, was announced on 21 October following agreement on key terms of a commercial agreement between the government and EDF Group.

A 430 acre site – reducing to 165 acres once operational – will generate enough electricity to **power nearly 6 million homes**, bring **900 permanent** jobs to the area and create around **25,000 jobs** during construction. It will produce "home-grown" electricity that could power an area twice the size of London, around 7% of the UK's electricity demand when running at full capacity.

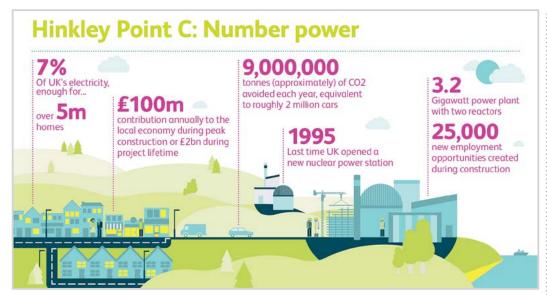
The significant investment by EDF Group and its fellow investors of £16 billion will bring benefits for the UK economy, with UK companies getting up to 57% of the work.

Secretary of State for Energy, Edward Davey said; "This is an excellent deal for Britain and British consumers. For the first time, a nuclear power station in this country will not have been built with money from the British taxpayer. It will increase energy security and resilience from a safe, reliable, home-grown source of electricity." Find out more about how this project is part

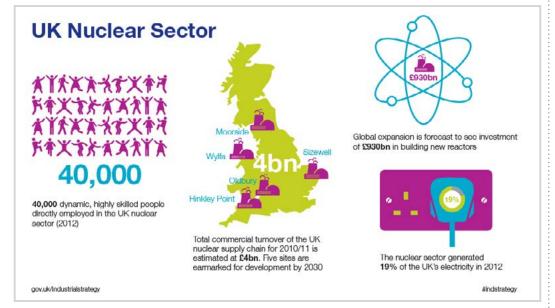
of a Nuclear Industry that provides nearly

a fifth of electricity and employs around

40,000 people in the UK here.



[EDF energy infographic showing the facts and figures related to nuclear and Hinkley Point C. Courtesy of EDF Energy. Copyright: EDF Energy]



[Contribution of the nuclear sector to the UK economy.]

### Government response to IPCC report on Climate Change 27 September 13

In their starkest warning yet, following nearly seven years of new research, the Intergovernmental Panel on Climate Change (IPCC) has presented overwhelming evidence stating, it is "unequivocal" that even if the world begins to moderate greenhouse gas emissions, warming is likely to cross the critical threshold of 2 °C by the end of this century.

It would bring serious consequences, including sea level rises, heatwaves and changes to rainfall meaning dry regions get less and already wet areas receive more.

Secretary of State for Energy and Climate Change Edward Davey conveyed the urgency of addressing the report's latest findings and said, "The message of this report is clear - the Earth's climate has warmed over the last century and manmade greenhouse gases have caused much of that global warming."

Read more on page 8 of this edition of DECC Review





### Dispute resolved at Grangemouth oil refinery and petrochemicals plant

During October, the government worked closely with the management, union, key stakeholders and the Scottish Government to help resolve the industrial dispute at Grangemouth oil refinery.

The Grangemouth complex is Scotland's largest industrial site, located on the Firth of Forth. It produces petrochemicals and supplies fuels primarily to customers in Scotland, northern England and Northern Ireland.

The dispute concerned an internal disciplinary case, the offer of revised terms and conditions at the site and changes to the pensions scheme. It led to the partial shutdown of the complex after the union called a strike. Both parties reached agreement after a vote revealed workers were split on whether to accept the terms and conditions. The management at Grangemouth, announced their intention to put the petrochemicals plant into liquidation.

Government and industry had robust contingency plans in place to minimise any impact of disruption at the Grangemouth refinery on supplies of road and aviation fuel and heating oil.

Grangemouth remains important to the Scottish economy, the UK economy and the local economy. 800 jobs have been saved by agreeing terms with workers to ensure the petrochemicals plant remains open, and both plants have restarted operations.



Grangemouth petrochemical and oil refinery plant

Secretary of State for Energy and Climate Change, Edward Davey said:

"Many people in the UK and Scottish governments have worked hard to make this happen, a clear sign of our commitment to Scotland, its economy and its people. The fuel supply industry and other stakeholders worked hard to put alternative sources of supply in place and to reassure the public that there was no short term risk to the fuel supply.

The government is further working with

the downstream oil sector to review how our demand for refined oil products is likely to be met in the coming decades. Conclusions from that review will be published in the New Year."





### Government responds to the Committee on Climate Change Meeting the Carbon Budgets

**OUR ENERGY ECONOMY** 

In their annual progress report, the Committee on Climate Change (CCC) has recognised that we are highly likely to have met our first carbon budget and that we are likely to meet the second carbon budget. The CCC have said that we will need to increase the pace of emissions reduction if we are to remain on track for delivering future carbon budgets.

The government's response, published on 10 October, welcomes the CCC's finding that good progress has been made in many areas – particularly in the deployment of certain renewable technologies and in increasing the energy efficiency of households – but agrees that a substantial challenge remains, if we are to continue to deliver emissions reductions and meet the fourth carbon budget, covering 2023-27.

The government's response set out the action we are taking across the economy to reduce greenhouse gas emissions:

- Reforming our electricity market to attract investment in low carbon electricity generation while maintaining security of supply and minimising consumer bills.
- · Encouraging the uptake of energy efficiency measures through the Green Deal and Energy Company Obligation, and providing more support to fuel poor households.

- Building a market for renewable heat through the Renewable Heat Incentive
- Publishing an energy efficiency strategy and announcing a £250 million package to ensure UK industries that are intensive users of energy can remain competitive during the shift to a low carbon economy.
- Committing over £500 million to support the switch to the latest Ultra Low Emission Vehicle technology and £37 million of funding for plug-in vehicle charging infrastructure across the UK.
- Continuing to push for the EU to raise its ambition by moving to a tighter 2020 emissions target.

Together, these measures will enable the transition to a low-carbon economy while maintaining energy security and minimising costs to consumers.



### Low-carbon energy contract terms launched

Government is reforming the UK electricity market through the Energy Bill currently passing through Parliament. These reforms will help the country keep the lights on, minimise costs to consumers and decarbonise the economy.

A new support mechanism, called Contracts for Difference, or CfDs, are longterm contracts to provide stable incentives for companies to invest in low-carbon electricity generation. They are being introduced, alongside a Capacity Market, that together will help incentivise up to £110 billion of private sector investment to 2020. This investment will renew the UK's energy infrastructure.

Available from 2014, CfDs will work by guaranteeing that generators receive a fixed price for the low carbon electricity they produce. This price is known as the 'strike price'.

Energy UK commented on the announcement "the Contracts for Difference and the Capacity Market are essential to attract the investment that this country needs and to keep the lights on."

#### **Business and Energy Minister Michael** Fallon said:

"No other sector is equal in scale to the British power market, in terms of the opportunity that it offers to investors, and the scale of the infrastructure challenge.

The key contract terms have been published in detail to provide the energy sector and investment community with further certainty. When compared to the existing system of support, the Renewables Obligation, this new support mechanism will make it cheaper to deliver low-carbon generation by around £5 billion up to 2030. This will put the UK one step ahead in the global race to develop clean technologies, and will support up to 250,000 jobs across the energy sector."

The draft Contract Terms follow on from the EMR Draft Delivery Plan which was published for consultation on 17 July. It explains the assumptions underpinning the suggested strike prices and seeks views and additional evidence from consultees. It also sets out and seeks views on a proposed reliability standard, which will guide the level of capacity that is contracted for in the Capacity Market.

The draft terms for these Contracts for Difference were published on 7 August 2013.

Confirmed strike prices are due to be published in December 2013 as part of the Delivery Plan. CfDs will initially be awarded on a first come first served basis.

For more information on contract terms for low-carbon energy generation here.





# A guide to help consumers save money this winter

**OUR ENERGY ECONOMY** 



DECC has produced a simple guide, Helping Consumers with Energy. To explain what support is available for consumers and where they can go for help on energy this coming winter.

The guide can help consumers get the best energy deal and how to save money this winter.

Many organisations and individuals contributed to this guide. We would like to thank Energy UK, National Energy Action and uSwitch for working in partnership with government to produce this guide, that supports stakeholders who advise consumers. You can download the guide here.

# Green Deal helping to make homes more energy efficient

The latest research shows that Green Deal assessments are continuing to help people in Great Britain make their homes more energy efficient. According to the latest figures, **over 100,000** households had a Green Deal assessment by October.

**81%** of people who have had a Green Deal assessment have installed, or intend to install, energy saving measures as a result of their Green Deal assessment.

This research shows a Green Deal finance plan is one option for people to pay for energy saving home improvements. Others are supported via the Energy Company Obligation (ECO) and some are using savings or regular income.

Over 310,000 measures have been installed under ECO, Cashback and Green Deal up to the end of August. [Source: Green Deal October 2013 statistics]

### **Energy and Climate Change Secretary Edward Davey said:**

"It's clear that Green Deal assessments are helping people to make their homes more energy efficient. This is hugely encouraging and exactly what the Green Deal is designed to do. With nearly a quarter of a million homes set to benefit from Green Deal and ECO

measures by the end of the year, we are nevertheless continuing to work to improve the Green Deal finance option to make it even more attractive to consumers."

For more information about the **Green Deal** and the **Energy Company Obligation** call the **Energy Saving Advice Service** on 0300 123 1234
(England and Wales) or 0808 808 2282
(Scotland)



Green Deal - Domestic Energy Assessor & Domestic Advisor

#### Minister backs the Buy Heating Oil Early campaign

Energy Minister Michael Fallon has backed the campaign to encourage heating oil users to stock up early before winter sets in. The **Buy Oil Early campaign** was launched on 11 September by **ACRE** (Action with Communities in Rural England), Citizens Advice and FPS (Federation of Petroleum Suppliers), to highlight to consumers that making early orders for heating oil, they can benefit from lower prices and prompt delivery of fuel.

Approximately 1.5 million households in the UK are reliant on oil as their primary source of heating.

### **Business and Energy Minister, Michael Fallon said:**

"I welcome the launch of this campaign. The message is simple: stock up on heating oil before the winter leaves you out in the cold. Previous severe winters show it's better to order early when suppliers have spare delivery capacity.

I also encourage households to save money on heating by using the Government's Green Deal, which offers a way to pay for energy efficiency measures such as condensing oil boilers and insulation through savings on their energy bills. Customers on a low income or in a hard-to-insulate property may be able get additional support through the Energy Company Obligation."

Since the campaign launched ACRE Network oil buying schemes have seen an increase in numbers of members who have responded to the press and radio publicity around the Buy Early campaign.

For more detail, visit ACRE's website here.



### The Smarter Way to save energy

Smart meters provide consumers near real time information on the cost of their energy use – in pounds and pence. They are an accurate way for consumers to better manage their energy use, to save money and offset price increases. The programme aims to replace **53 million** meters with smart electricity and gas meters in all domestic properties.

Four companies have now signed contracts to establish and operate the Data and Communications Company (DCC) providing the shared communications infrastructure that will be used by energy suppliers when they roll out electricity and gas smart meters. This represents a

significant milestone in the rollout of smart meters in Great Britain.

Smart metering will provide significant benefits to the GB economy. Arqiva has announced the creation of **160 job**s and Landis + Gyr will double their **600 strong** UK smart meter manufacturing workforce. British Gas plans to recruit an additional **500** smart energy experts.

Most householders will have smart meters installed by their energy company between 2015 and 2020, with some energy companies beginning to install smart meters now.



To find out more, please click here to read our Smart Metering leaflet.

### Northern Scotland to save £50million on energy bills

Householders and businesses in the North of Scotland are set to save a total of £50 million a year on their energy bills after the Government retains a scheme to help with electricity distribution costs.

The Hydro Benefit Replacement Scheme offers protection from the significantly higher distribution costs faced by electricity users in the far north of the country, when compared with other parts of the UK.

The scheme will provide a £36 reduction on an average electricity bill to the 690,000 domestic consumers in the North of Scotland. The 70,000 non-domestic consumers in the region will benefit from a share of £25 million worth of reductions.

The cost of the scheme is paid for by all domestic and non-domestic consumers across Great Britain, costing the average household approximately £1 a year.

### Secretary of State for Energy and Climate Change, Edward Davey said:

"I'm delighted we've managed to keep this important support for households and businesses in the North of Scotland. The beautiful but sparsely populated and rugged expanse of Northern Scotland means maintaining the electricity network costs much more than other parts of the UK and it is not fair that people from the area should have to shoulder the costs of this. Thanks to the size of the British energy market we have been able to spread that cost."

# Training vouchers launched to help industry install renewable heating systems

Edward Davey launched £500,000 to raise the skill set of domestic heating engineers so they can install and maintain renewable heating systems on 24 October.

The voucher scheme will be backed up by an apprenticeship initiative that will encourage people coming into the industry to develop the necessary expertise to work on these systems and gain relevant qualification credits.

### Secretary of State for Energy and Climate Change, Edward Davey said:

"In many instances not only will the engineers' advice and work reduce the environmental impact of heating our homes but reduce people's heating bills too. A winwin situation for everyone."

To find out more, please visit GTEC Training Ltd, who are administering the voucher scheme.





### £9million for new Heat Networks unit

OUR ENERGY ECONOMY



In March the government announced that it would support local authorities to develop heat networks by establishing a Heat Networks Delivery Unit with £9m of funding.

Now, the Heat Networks Delivery Unit is up and running. It comprises technical, commercial and financial experts who can support local authorities on all aspects of a heat network project.

The Unit is led by Investment Director Stephen Brooks, who has extensive experience designing and developing biomass Combined Heat and Power projects. Stephen said, "Heat networks have huge potential to provide economic, reliable and efficient heating for consumers across the UK. The Unit is about helping local authorities to unlock this potential and deliver real benefits to communities."

The Unit's support comes in two forms. Local authorities can bid for grant funding, which can be used to fund early-stage development costs. In addition, all projects that receive support will benefit from the Unit's expertise throughout to ensure the project reaches a successful conclusion.

Energy and Climate Change Minister, Gregory Barker, said "With this offer of grant funding and expert support, I would strongly encourage all local authorities to apply to the Heat Networks Delivery Unit."

You can find out more and how to apply here.

## No new Government subsidy needed for gas storage

#### - decision saves bill payers up to £750million

Bill payers will not be asked to subsidise increased investment in new gas storage facilities, saving an estimated £750 million over 10 years.

Independent analysis, shows the UK gas market continuing to **function well** in attracting gas from a range of sources to meet current and future demand, with gas storage providing only a small proportion of UK total supply (7% in 2012).

The UK has capacity to deliver twice the amount of gas required in a normal winter, and has coped well with extreme winter conditions, such as the extended cold snap this March, and the coldest December since records began in 2010.

### Business and Energy Minister, Michael Fallon said:

"The Government is committed to doing all it can to help consumers reduce energy bills, and there is no benefit in further expensive subsidies when the market is working. It is up to industry to get on and invest in building gas storage. Two gas storage facilities have recently been built and two more are under construction."





# Latest report by the Intergovernmental Panel on Climate Change (IPCC)

OUR ENERGY ECONOMY

On 27 September 2013, United Nations secretary-general, Ban Ki-moon told world leaders to act with policies to cut greenhouse gas emissions.

Introducing a major report from a high level UN panel of climate scientists, **Ban Ki-moon said**, "The heat is on. We must act."

The report has already been discussed at the UN climate negotiations in Warsaw during November.

#### **Highlights from the IPCC Fifth Assessment Report**

- Human influence on the climate system is clear. Warming in the climate system is unequivocal; temperature rise during the past century was around 0.8°C and is projected to be up to 5°C by 2100 in the absence of strong action.
- Scientists are more confident than ever that the Earth's climate is changing because of human activity; primarily from the burning fossil fuels and agriculture.
- The evidence is ever stronger rising temperatures, rising sea levels, melting sea ice and glaciers, and increasingly frequent and intense extreme events. These are likely to worsen into the future unless action is taken.
- Significant reductions in greenhouse gas emissions are required to stop climate change the longer we delay, the more dangerous and costly climate change will become.

Secretary of State for Energy and Climate Change Edward Davey conveyed the urgency of addressing the report's latest findings and said,

"The message of this report is clear - the Earth's climate has warmed over the last century and man-made greenhouse gases have caused much of that global warming. The gases emitted now are accumulating in the atmosphere and so the solutions must be set in motion today. The risks and costs of doing nothing today are so great, only a deeply irresponsible government would be so negligent.

Without urgent action to cut greenhouse gas emissions global warming will continue, with potentially dangerous impacts upon our societies and economy. This strengthens the case for international leaders to work for an ambitious, legally binding global agreement in 2015 to cut carbon emissions.

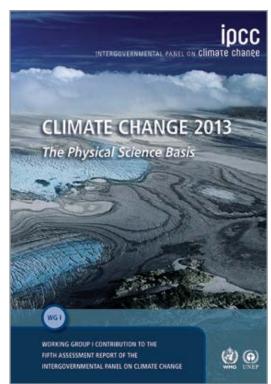
This report is the most authoritative, credible analysis of climate change science ever. It represents a huge amount of work by over 250 unpaid scientific experts drawn from universities and research institutes in 39 different countries around the world. We owe them our gratitude because this report makes clear what is at stake if we don't act."

Prof David MacKay FRS, Chief Scientific Advisor to the Department of Energy and Climate Change, said:

"One important message of this new report is that, the impact on climate is largely determined by the cumulative total of humanity's carbon emissions. This means that waiting a decade or two before taking climate change action will certainly lead to greater harm than acting now."

Read the full report here: IPCC Fifth Assessment Report (AR5): The Latest Assessment of Climate Science

The IPCC is preparing further reports on the impacts of climate change, adaptation requirements and mitigation options, which will be published during 2014.







### UK pledges low carbon co-operation with China

Energy and Climate Change Minister Greg Barker has applauded the on-going collaboration between the UK and China in working towards a low carbon future.

A joint statement, signed by Minister Barker and Zhu Xiaodan, the Governor of Guangdong - China's most populous and prosperous province- pledged to continue co-operation to promote low-carbon development, clean energy and energy efficiency technologies.

Minister Greg Barker said, "The coalition is determined to broaden and deepen our relationship with China, especially in relation to combating dangerous climate change and realising the huge commercial opportunities in the fast growing low carbon goods and services sector. International partnership is essential to both."



Minister Greg Barker and the Governor of Guangdong (People's Republic of China), Zhu Xiaodan, 27 September 2013. Photo: Sonja Brenna

China's emissions were 17% of global emissions in 2005 and 22% in 2010. [Source: EC-JRC/PBL. EDGAR 2011]

### **Baroness Verma** visits India to support low carbon growth



Climate change is one of the greatest challenges facing the world today. It demands a global response where all countries need to be part of the solution.

Baroness Verma visited India to further the UK's international engagement to support ambitious action on climate change.

Discussion focused on the benefits of tackling climate change, of improving health and improved energy access, and the economic opportunities of low carbon growth. The UK is driving collaboration with India on infrastructure, traditional and renewable energy, energy efficiency and low carbon technologies.

**Baroness Verma said:** "The UK sees green growth as the foundation of any successful globally-competitive economy.

Growing a green, low carbon economy in India is good for India and good for the UK. Both our governments and business communities have a lot of expertise, technology and experience that we can share to our mutual economic benefit.

In working together, we can enhance energy security and accelerate growth in both countries, as well as help tackle the dangerous effects of climate change."

India's emissions were 4.5% of global emissions in 2005 and 5.4% in 2010. [Source: EC-JRC/PBL. EDGAR 2011]





#### Launch of the Offshore Wind Industrial Strategy

OUR ENERGY ECONOMY



Lincs wind farm: Centrica CEO Sam Laidlaw, Secretary of State for Energy & Climate Change Ed Davey, Deputy Prime Minister Nick Clegg.

Deputy Prime Minister Nick Clegg and Energy Secretary Ed Davey launched the Offshore Wind Industrial Strategy on 1 August, at the opening of the Lincs wind farm off the coast of Lincolnshire.

The UK has more offshore wind power than the rest of the world combined. The Offshore Wind Industrial Strategy aims to grow UK supply chain manufacturing. The industry has the potential to create **30,000 jobs** in the UK and contribute **£7 billion** to the economy by 2020. Exports have the potential to add even more to these economic benefits, delivering jobs, growth and prosperity across the UK.

Investments by the government will include £20 million from the Regional Growth Fund to improve the UK wind industry's supply chain, and £46 million to join up innovation between industry, government and academia and help companies to bring new products to market.

Centrica's Managing Director Mark
Hanafin said: "My hope is that the offshore
wind industry will continue to bring important
jobs to this important town (Grimsby), and
that projects like this will give confidence
to companies that there is a thriving
renewables industry in the UK in which to
invest."

Launching the strategy, Minister
Michael Fallon said: "Step by step we are working with industry to maximise the potential of this important industry. We are determined to make sure that more of the contracts, jobs and economic benefit come to our shores and that we export more to overseas markets."

Earlier in July this year, the Prime Minister opened the London Array, the World's largest offshore wind farm.

The third offshore wind farm to open in just three months is Greater Gabbard, costing £1.3 billion and generating enough clean electricity to power over half a million homes. Greater Gabbard is the second largest offshore wind farm in the world, and

was officially opened by the Energy and Business Minister Michael Fallon on 7 August. Greater Gabbard is located off the coast of Suffolk and has 140 turbines with an installed capacity of 504MW.

Commenting on the opening Minister Michael Fallon said: "Greater Gabbard has already brought jobs and wider benefit to the local Suffolk community, with hundreds of people employed on site, and a £150,000 fund created to support local initiatives. This sector is an engine of our economy. By the end of this decade, tens of thousands of additional jobs could be created in the supply-chain for offshore wind throughout the UK."





### UK and China sign a Memorandum of Understanding on offshore wind power

The Secretary of State, Edward Davey visited China at the end of September, making stops in Chongging, Shanghai and Beijing to promote cooperation between the UK and China on energy and climate change. Edward Davey saw first hand, many of the practical steps being undertaken to combat greenhouse gas emissions during a visit to an urban regeneration project in Shanghai and a visit to an urban planning exhibition in Chongging. The Memorandum of Understanding on offshore wind cooperation with the Chinese National Energy Administration also opened talks towards a new Memorandum of Understanding on civil nuclear cooperation.

Edward Davey saw the progress China is already making on cutting its emissions, and heard from several senior figures about China's commitment to stay committed to environmental protection and transition to a low carbon economy.

You can read more here.

### The British Energy Challenge events go down a treat

Thanks to the 2000 visitors and 8 cities who welcomed The British Energy Challenge; a roadshow of regional events to discuss with communities the challenges facing Britain in powering its future. 92% of attendees are already spreading the message from The British Energy Challenge to their friends and networks that low carbon energy is relevant now not just the future.

The last event, held in Bristol, attracted Grand Design presenter Kevin McCloud and mayor, George Ferguson.

Mareike Schmidt from Bristol Council said: 'We must continue our efforts to ensure that we keep engaging with those who are not yet aware how important it is to start thinking differently about how we make and use energy.'

(To read Mareike's full blog go to: click here)

And here are some of the tweets from the other events.



Sir Richard Leese and David MacKay open The British Energy Challenge Exhibition in Manchester, September 2013. Photo: Jason Broadhurst at JPB Studios Ltd.

Carillion pld@Carillionplc15 May
Watch what happened when the 1st
British Energy Challenge roadshow visited
Liverpool @DECCgovuk #STNLatest http://
goo.gl/mJlpY

Thanks to @DECCgovuk today for #GreatBritishEnergyChallenge in #Birmingham and thx to @mark\_lynas & #DavidMacKay for lively energy live!

Well #sheffieldissuper managed a 72% score today in the #britishenergychallenge not bad but the target was 80% pic.twitter. com/eqbd1mUd0Y

Marcus du Sautoy@MarcusduSautoy30 May There is a slightly less geeky version of the 2050 Pathways Calculator here http://my2050.decc.gov.uk/ but I do like a good graph!

For more information or to feedback your comments email britishenergychallenge@decc.gsi.gov.uk.





HEADLINE NEWS

## What is fracking?

### What is Shale gas?

Shale gas is mostly composed of methane. Methane is 'natural gas' and is the gas used to generate electricity and for domestic heating and cooking.

Natural gas produced from shale is often referred to as 'unconventional gas' by contrast to 'conventional gas' produced from other kinds of rock usually sandstones or limestones.

Shale gas is produced directly from the source rock. The techniques used to extract gas and oil are essentially the same, but shales have to be systematically fractured ("fracked") to enable the gas to flow.

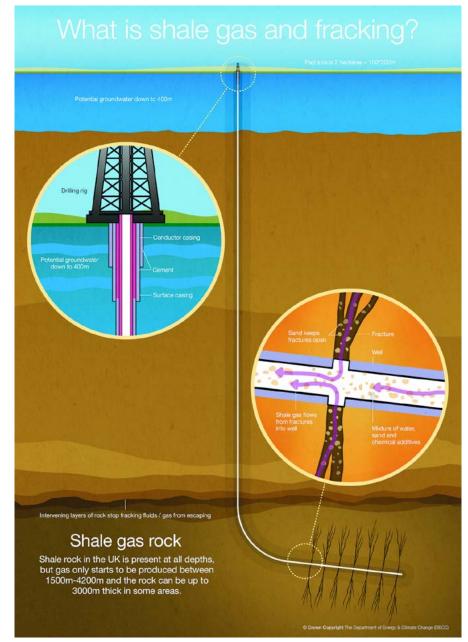
### What is Fracking?

Hydraulic fracturing or "fracking" is a technique that uses fluid, usually water, pumped at high pressure into the rock to create narrow fractures to create paths for the gas to flow into the well bore and to surface.

There are no explosives used in fracking operations. 99.75% of the shale gas fracking fluid is made up of water and sand, beyond that a very limited number of chemicals are used.

The government has been clear that wherever shale gas fracking is conducted it must be done in a safe and environmentally sound way. Some 7,300 square miles of Great Britain is already under licence, including significant areas likely to contain shale. We expect considerable interest from developers in the 14th licence round, which we plan to launch next year.

You can read a more detailed guidance document here.

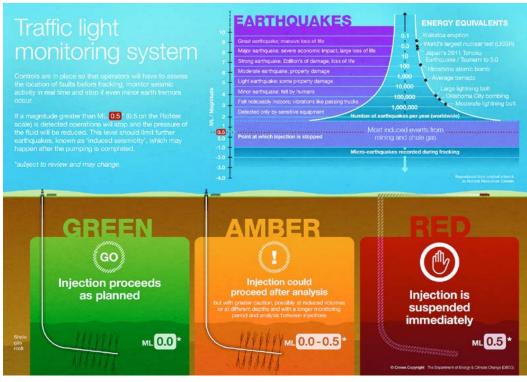


Fracking for shale gas





### Safe and responsible exploration of shale gas in the UK, in line with UK's climate change targets



OUR ENERGY ECONOMY

Infographic showing the traffic light monitoring system in place to monitor and regulate fracking-induced seismic activity

A report by DECC Chief Scientific Advisor Professor David Mackay FRS and Dr Timothy Stone, Senior Advisor to the Secretary of State, was published on 9 September 2013. It assesses the potential greenhouse gas emissions from the production of shale gas in the UK and

their impact on the UK's legislated climate change targets.

The report estimates that the carbon footprint of UK produced shale gas would likely be significantly less than coal and also lower than imported Liquefied Natural Gas.

In concluding, the report states that the effect on greenhouse gas emissions from shale gas production in the UK will be relatively small. In order to ensure that global greenhouse emissions to the atmosphere do not increase, worldwide shale gas production needs to be accompanied by additional international emissions-reduction efforts, including a global deal on emissions reductions and additional effort to develop low-carbon technologies such as Carbon Capture and Storage.

Secretary of State, Edward Davey, welcomed the report and made the case for the safe and responsible exploration of shale gas in the UK, in line with the UK's climate change targets. In a speech to the Royal Society, Davey said that if shale gas could be developed in an economically viable and environmentally friendly way, it would benefit the UK - increasing energy security, providing more jobs and tax revenues.

Read the report: 'Potential Greenhouse Gas Emissions Associated with Shale Gas Extraction and Use'.

Find out more about shale gas here.

### UK Solar PV : Roadmap to a Brighter Future

Energy and Climate Change Minister Greg Barker confirmed the Coalition's commitment to delivering the clean and reliable energy supplies that the country needs, at the lowest possible cost to consumers at Solar Energy UK 2013, in Birmingham on 8 October.

"Solar PV can play a central role in meeting this challenge. It's a genuinely exciting energy technology which has already seen rapid growth and enjoys strong public support. I want this growth to continue and to help us push further ahead in the global race – but new solar installations must be sensitive to public opinion and mindful of wider environmental and visual impacts."

The government's Solar PV roadmap, available here, sets out the guiding principles for deployment of solar in the UK, ahead of the fuller strategy to be published in Spring 2014.



Solar PV, Green Deal Bristol



### **Energy - review of the balance of competences**

Starts: 24 October 2013 Closes: 15 January 2014

The review aims to deepen public and Parliamentary understanding of the nature of our EU membership and provide a constructive and serious contribution to the national and wider European debate about modernising, reforming and improving the EU in the face of collective challenges.

The Energy review is part of that Balance of Competences review and will look at how EU competences (power for the EU to act in particular areas conferred on it by the EU Treaties) impact energy activities and operations in the UK.

We encourage all stakeholders to participate in this review and share evidence and analysis of their experiences of EU actions in the field of energy. To access the Call for evidence, see what stakeholder events are being held and to submit evidence using our online response survey please click here or email at balanceofcompetence@decc.gsi.gov.uk. Please use the same email address to register your interest if you want to attend one or more of our stakeholder workshops or for further information on the review. "

### **Consultations**

Geological Disposal Facility siting process review

Started: 12 September 2013 Closes: 5 December 2013

The Gas Act 1986 (Exemptions) (Revocations) Order 2013 Notice

Started: 11 November 2013 Closes: 20 December 2013

Renewables Obligation (RO) Grace Periods

Started: 7 November 2013 Closes: 28 November 2013

Repealing legislation prescribing the maximum temperature to which particular premises may be heated

Starts: 28 October 2013 Closes: 28 November 2013

Proposals for implementation of Electricity Market Reform

Starts: 10 October 2013 Closes: 24 December 2013 Licence conditions for non-domestic smart metering issues

Starts: 22 October 2013 Closes: 19 November 2013

Domestic market: licence conditions to implement the EU Energy Efficiency Directive provisions on consumer access to consumption and export data from smart meters

Starts: 22 October 2013 Closes: 3 December 2013

Smart meters: draft amendments to supply licence conditions for domestic and non-domestic markets

Starts: 22 October 2013 Closes: 19 November 2013

New Smart Energy Code Content (Stage 2)

Starts: 17 October 2013 Closes: 29 November 2013

Click here for more information on DECC consultations

Follow DECC.

FLICKR

TWITTER  $\Rightarrow$ 

**YOUTUBE ⇒** 

**DECC WEBSITE \$\rightarrow\$** 

**DECC BLOG**  $\Rightarrow$ 

We want your feedback, contributions and opinions on the DECC Review.

**Email: Editorial team** 

**Editor: Samantha Lavender** 

If you are not on our mailing list you can register online which allows you to manage your subscriptions to our newsletters in a secure manner.

For further information on this and other events, contact us.

