

THE BRITISH ENERGY CHALLENGE



May 2013

The Challenge

The need to move to a low carbon economy is one of the most urgent issues facing the UK. Changing the way we power the country will:

- Support economic growth and keep bills down
- Ensure a secure supply of energy and keep the lights on
- Help prevent dangerous climate change

To find out more about the energy challenge and how we can tackle it, watch this short animation.

The Energy Challenge animation

Can you reduce the UK's carbon dioxide emissions by 80% by 2050? The My2050 Calculator is a fun tool that allows you to make your own choices about how the UK's future energy mix might look.

My2050 simulator



USA Today published this cartoon just before the 2009 Climate Change Conference in Copenhagen (© Joel Pett)





Economic Opportunity

The energy challenge represents a big opportunity for the country. Energy investment is larger in scale and more dispersed across the country than any other sector. Upgrading our infrastructure is key to getting our economy moving in the short term.

Treasury estimate of future planned investment £ billion (2011-12 prices)



"The choice between going green and going for growth is a false choice. Green and growth do go together, and the statistics back this up."

CBI - The 'Colour of Growth' report

The low carbon economy has undergone significant growth in recent years, carving out a £122 billion share of the global market and employing close to a million people by 2010-11 according to the CBI.

New jobs

In 2010-11 low carbon and environmental jobs across the UK comprised more than telecoms, motor trade manufacture and retail combined and almost as many as those employed in the financial services sector (Green Alliance). These jobs are spread across a range of sectors (such as manufacturing, engineering, supply, consulting, distribution, R&D, construction and maintenance) and regions.

Find out more about the transformation of our energy infrastructure by watching this short animation.



Energy and You

Significant savings can be achieved by making your home more efficient and engaging in simple energy saving behaviours.

There are things you can do to start cutting your bill now. One of the best ways to lower costs is to reduce the amount of energy we use to heat our homes.

"Be smart with your thermostat. For every degree that you turn down the thermostat, you'll save roughly 10% off your heating consumption. Put thermostats on all radiators. Make sure the heating is off when no-one is at home."

David MacKay – Chief Scientific Adviser to the Department of Energy and Climate Change

A longer-term way to reduce heat consumption is to make your house more efficient. The Green Deal supports consumers to cut waste and reduce bills by providing help to pay for and install energy efficiency measures such as insulation and double glazing. To learn more about the Green Deal, click on the icon below.

Potential Saving

Households could save £150 a year by switching supplier and switching to direct debit payments or £90 a year on average by switching to direct debit payment (DECC).

Find out more

To get further advice on reducing your energy bill, go to **gov.uk/energyhelp** or phone the Energy Savings Advice Service on **0300 123 1234**

Home energy savings (courtesy of The Guardian)





Energy Options

Should we do more to cut demand or rely more on increasing and decarbonising the energy supply? How should we produce our energy? Which technologies should we adopt?

The <u>Carbon Plan</u> is the government's response to this challenge, but the 2050 calculator lets you explore the options for yourself.

2050 Pathways Calculator



The <u>2050 calculator</u> is a more advanced version of the My2050 Calculator which allows you to really get into the detail of different energy technologies and behaviours. It also allows you to explore the implications of your energy choices in key areas such as cost, land and sea area and air quality.

Compare My Energy

Use the Compare My Energy Tool to find out how much energy you use compared to similar households and get tips on how to reduce consumption. Click on the icon below to visit the website.





The Newcastle Energy Challenge

Newcastle is playing a leading role in tackling the British Energy Challenge. The city has twice been named the most sustainable city in the UK by an influential **report** acknowledging success in promoting environmental and sustainability issues.

To find out more about what Newcastle is doing click here.

Initiatives in your area which you might like to get involved with:

- Visit the <u>Go Smarter</u> website to find out about how you can get around in a way that is cheaper, greener and healthier, from car-sharing to cycling and walking.
- Make a promise to reduce your carbon footprint on the <u>Big Green Pledge</u> website.
- Take control of your energy use by <u>renting an energy monitor</u> from Newcastle libraries. The monitor will help you identify which appliances are using the most energy and which items are still using electricity when you think they are turned off.
- Contact energy and climate change groups in your area.

Energy Efficiency for Homes

British Gas has been appointed Warm up North Provider and launched the service on Thursday 19th September. Warm up North can improve the energy efficiency of your home by:

- Making your home warmer
- Making sure you get more energy for your money
- Improving the appearance of your property

All without having to find the upfront costs!

To learn more visit www.warmupnorth.com





Get Involved

There are lots of different ways to start engaging in the British Energy Challenge.

Here are a few ideas on how you can do this:

- Start an online conversation by tweeting #britishenergychallenge
- Share this leaflet
- Encourage others to use <u>My2050</u> and to share their experience
- A My2050 schools toolkit is available for younger audiences

To find out more on the energy challenge:

- Read the **British Energy Challenge blog**
- Go to the **DECC website**

- Sign up to the monthly <u>DECC Stakeholder newsletter</u> or to get other updates
- Read DECC Chief Scientific Adviser David MacKay's Sustainable Energy Without the Hot Air. Free online at www.withouthotair.com

We would welcome any comments on this leaflet or the event to britishenergychallenge@decc.gsi.gov.uk

Available in a large text version for the visually impaired.

