



THE BRITISH ENERGY CHALLENGE



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)

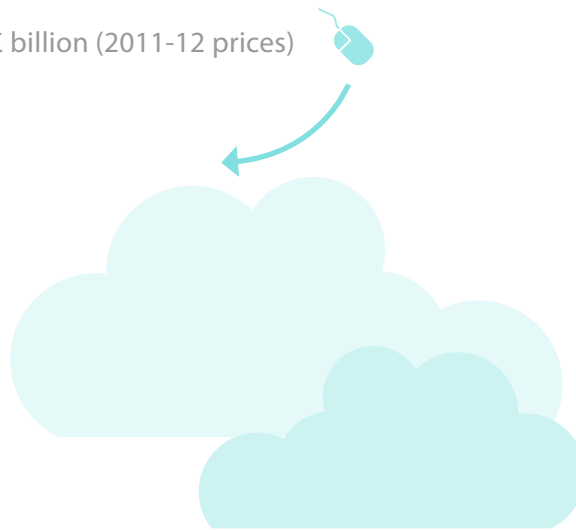




Economic Opportunity

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 [Carbon Plan](#) is the government's response to this challenge, but the [2050 calculator](#) lets you explore the options for yourself.

2050 Pathways Calculator



The [2050 calculator](#) 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 Bristol Energy Challenge

Bristol is playing a leading role in tackling the British Energy Challenge. The city has a long history of driving sustainability and energy efficiency improvements and has been named European Green Capital 2015. The City has committed a budget of €500 million for transport improvements by 2015 and up to €300 million for energy efficiency and renewable energy by 2020.

To find out more about what Bristol is doing [click here](#).

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

- Solar Mapping – Bristol City Council has developed the UK's first comprehensive mapping of solar potential for the entire city. The [map](#) allows you to locate your property so that you can see how suitable your roof would be to install solar.
- Bristol Green Doors – Learn how to make your home warmer, cheaper to heat and fit for the future! [Bristol Green Doors](#) is an open homes event where people who have already started to make their homes future proof open them up for visitors to learn from their experiences.
- Bristol Green Capital Partnership – A free membership organisation whose aim is to make Bristol 'a low carbon city'. You can become [a member](#) as long as you are representing or part of an organisation.
- Centre for Sustainable Energy offers energy efficiency advice for householders who want to make their homes warmer or save money. Call **0800 082 2234** for free advice.

Bristol Energy Network (BEN)

Bristol has a wide range of groups and community energy projects spread across different areas of the city.

BEN is an umbrella organisation that connects them to share ideas, best practice and gain greater recognition for the work they do across the city.

Further information can be found at www.bristolenergynetwork.org





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 [My2050](#) 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 [DECC Stakeholder newsletter](#) or to get other updates
- To find out more on some of the panel members at the Bristol British Energy Challenge event on 10th October
- Read DECC Chief Scientific Adviser David MacKay's *Sustainable Energy – Without the Hot Air*. Free online at www.withouthotair.com
- Visit Mark Lynas's website at www.marklynas.org

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.

