

Kent County Council

Energy Security Select Committee

A Profile of Energy in the UK

The UK currently meets its energy needs through a mixed supply of coal, oil, gas, renewables (i.e. solar and wind) and nuclear power.

Transport is the largest consumer of energy in the UK at 38% of all energy consumption in 2013. Domestic use is the second largest at 31%, with manufacturing last at 17%.¹²

Since 2004, the UK has shifted from being a net exporter of energy to a net importer. In 2014, the UK imported 46% of the energy required to meet national demand.³

Electricity Generation

In 2014, electricity in the UK was generated from the following sources:

- 30.2% from gas
- 29.1% from coal
- 19.2% from renewables
- 19.0% from nuclear
- 2.5% from oil and other⁴

Renewables now generate around as much electricity for the UK as nuclear power plants.⁵

Domestic Energy Bills

In 2014, the average annual domestic fuel bills were £752 for gas, and £592 for electricity (£1,344 in total). This represents a 3.2% and 2.6% increase on 2013 bills respectively.⁶

Energy bills have continued to increase in both cash (see graph below) and real terms year on year; meaning that energy bills are taking up more of people's expenditure with each year.⁷

¹ The remaining 14% accounts for energy that is converted into other forms of energy, as opposed to being used for domestic, industrial or transport purposes.

² ONS (2015) Energy and Emissions in the UK.

³ DECC (2015) UK Energy Statistics, 2014 & Q4 2014.

⁴ Ibid.

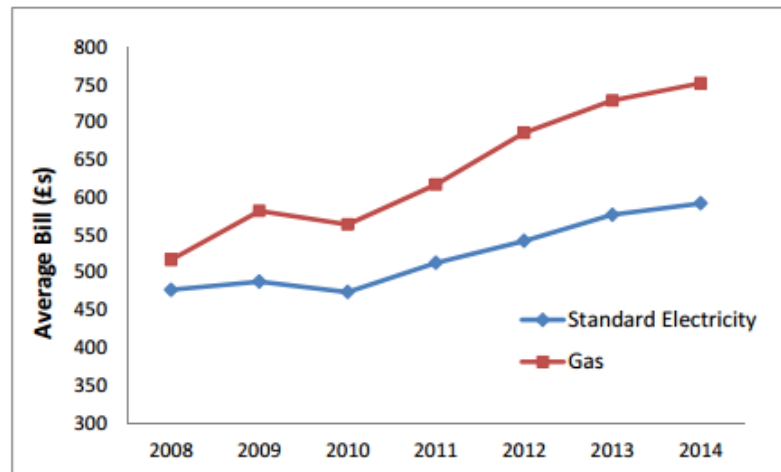
⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

In 2013, 2.35 million UK households were estimated to be living in fuel poverty⁸. This figure has remained relatively stable since 2003.⁹

DOMESTIC ENERGY BILLS: 2014
Average domestic gas and electricity bills (cash terms), 2008 to 2014



Targets & Acts

The UK has a legally binding EU target to ensure that 15% of all energy (transport, heating and cooling, and electricity) consumed nationally is generated from renewable sources by 2020.¹⁰

The Climate Change Act 2008 requires a reduction in UK carbon emissions by 2050 of 80% on their 1990 baseline.¹¹

⁸ Defined as a situation whereby a family spending the required amount to adequately heat their home would then be left with a residual income below the poverty line.

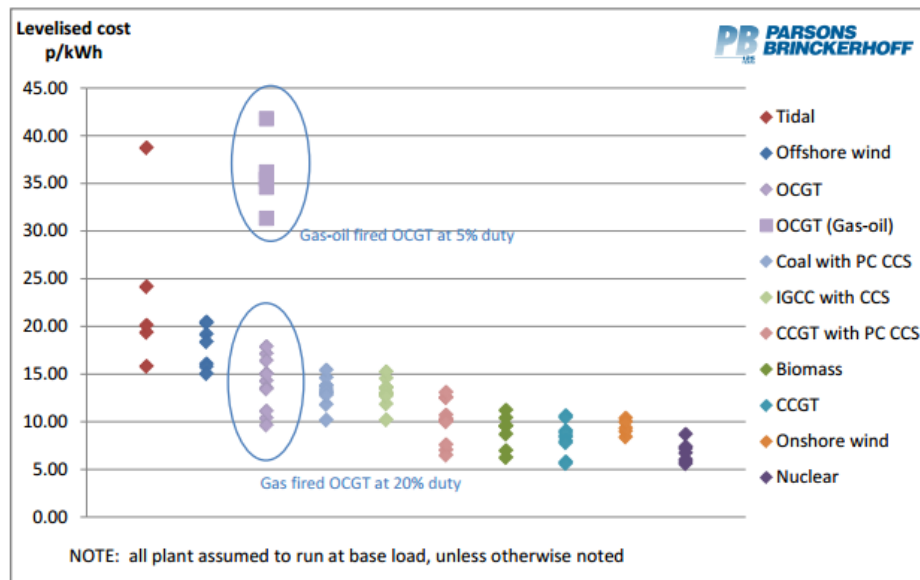
⁹ DECC (2015) Annual Fuel Poverty Statistics Report, 2015.

¹⁰ KCC (2015) Kent State of the Environment Report. Available at:
<http://consultations.kent.gov.uk/consult.ti/KESconsultation/consultationHome>

¹¹ HM Government (2011) Implementing the Climate Change Act 2008

Economic Information

Levelised costs for producing electricity via various power generation technologies are shown below.¹²



¹² [Online] Available at: <https://www.gov.uk/government/collections/energy-generation-cost-projections>