

PRESS NOTICE



Department for
Business, Energy
& Industrial Strategy



22 February 2018

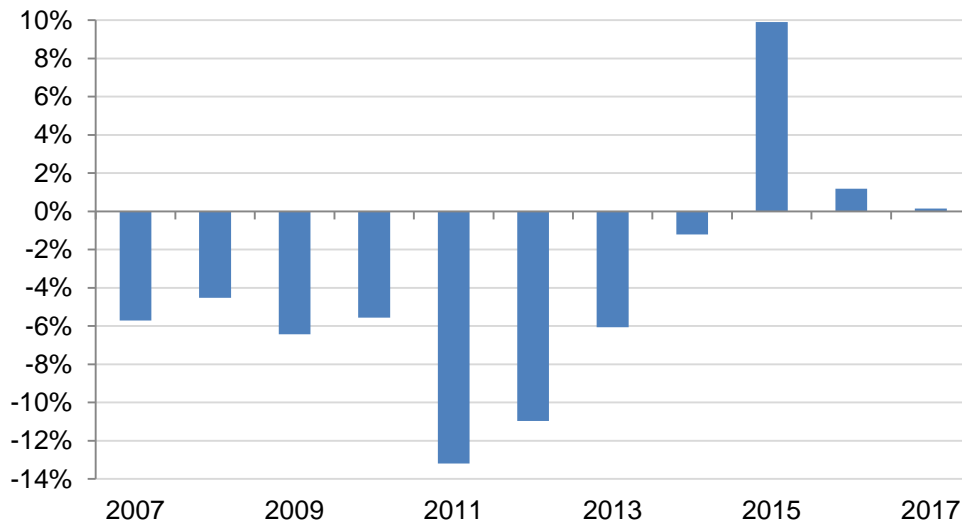
Statistical Press Release

UK Energy Statistics – 2017 provisional data

The Department for Business, Energy and Industrial Strategy today releases its December 2017 energy statistics that allow a provisional assessment to be made of trends in energy production and consumption in 2017. A more detailed analysis will be available in Energy Trends, published on 29 March 2018.

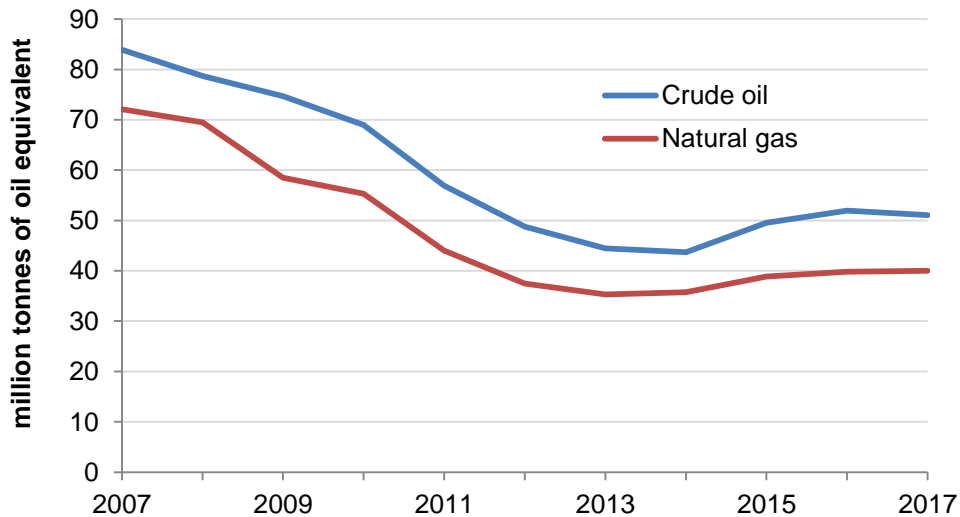
Primary energy production rose marginally, up by 0.1 per cent on a year earlier to 125.3 million tonnes of oil equivalent (chart 1). This increase, though modest, is the third in successive years. Energy production in 2017 was marginally above the levels of 2012.

Chart 1: UK energy production – annual growth



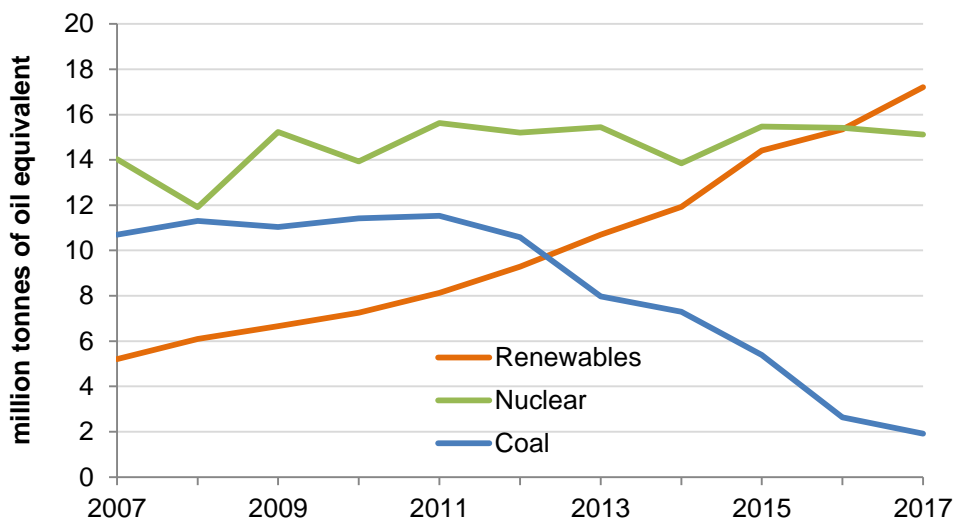
Oil production was down 1.7 per cent, despite strong NGLs production, whilst gas production was up 0.6 per cent. (chart 2). The closure of the Forties Pipeline System for maintenance impacted upon production levels in December 2017. Oil and gas accounted for 41 and 32 per cent respectively of production in 2017.

Chart 2: UK oil and gas production



Renewables energy production rose by 12.1 per cent, with an increase in bioenergy output of 5.7 per cent, and an increase in wind, solar and hydro output of 27 per cent due to increased wind and solar capacity, as well as higher wind speeds. Nuclear output was down by 1.9 per cent due to outages in the fourth quarter of 2017 (chart 3). Production of coal fell by 27 per cent, to a new record low. In the last five years coal output has declined by 76 per cent.

Chart 3: Other UK energy production



Primary energy consumption on a fuel input basis decreased by 1.3 per cent, and on a temperature adjusted basis, was down 0.3 per cent continuing the downward trend of the last ten years (chart 4). The daily average temperatures for 2017 was 0.3 degrees higher than in 2016, though there was a small decrease in the number of heating degree days. Consumption of coal and gas decreased as generators made more use of renewable sources for generation in 2017. Consumption of nuclear and net imports also fell.



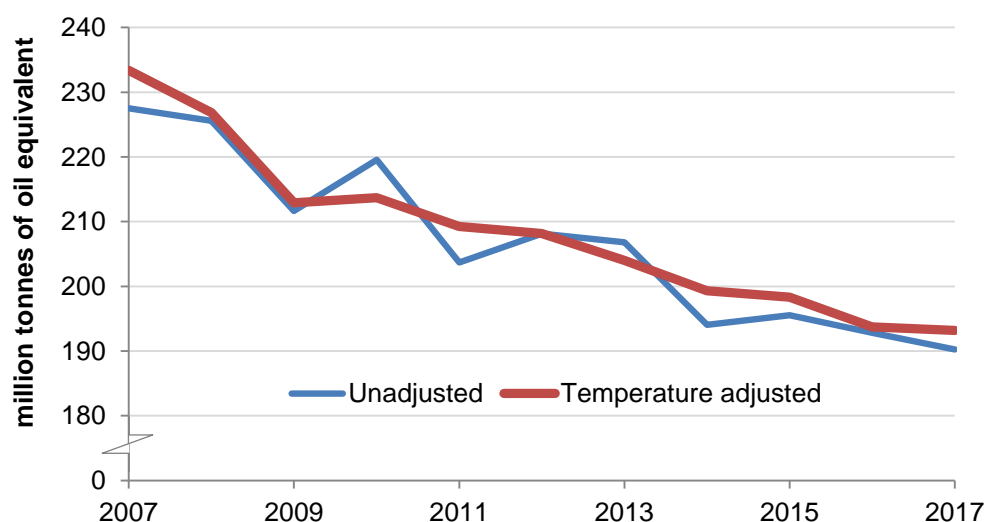
Bioenergy and wind, solar and hydro rose, whilst there was also a small rise in petroleum use.

Estimates of final energy consumption, including detail by sector, will be published in the March edition of Energy Trends.

With GDP growth of 1.8 per cent in 2017, the energy ratio, a measure of energy efficiency (energy consumption per unit of economic output) is likely to have fallen by around 2.0 per cent between 2016 and 2017; the ratio has fallen at an average rate of 3.0 per cent per annum since 2000.

The majority of the fall in temperature adjusted primary consumption is due to the change in electricity generation, with coal being displaced gas in Q1 2017, and then gas by renewable sources for the remainder of the year.

Chart 4: Primary energy consumption

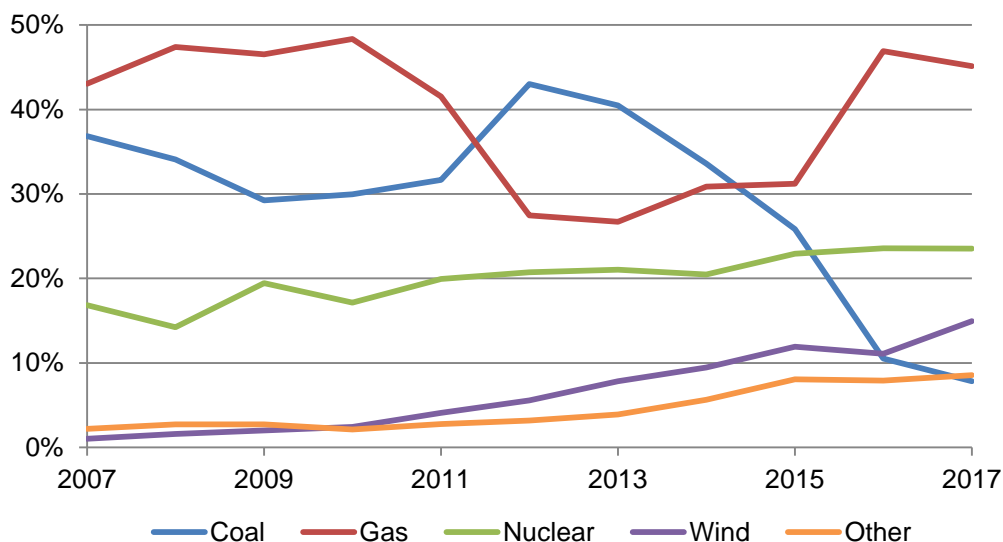


Electricity

At this stage only complete annual estimates are available for Major Power Producers (MPPs), which exclude auto-producers and some renewable sources. Gas accounted for 45.2 per cent of electricity supplied, down from 47.0 per cent in 2016, whilst coal accounted for 7.8 per cent, down from 10.5 per cent in 2016. Nuclear accounted for 23.6 per cent, unchanged from 2016. Renewables (bioenergy, wind, solar and hydro) accounted for 23.4 per cent of electricity supplied, up from 18.9 per cent in 2016 (chart 5).

Low carbon generation accounted for a record high of 47.0 per cent of supply, up from 42.5 per cent in 2016, following increased generation from wind (due to an increase in capacity and higher wind speeds) and solar (due to an increase in capacity).

Chart 5: Electricity – share of generation from major power producers



Gas

In 2017, UK production of gas rose by 0.6 per cent, the fourth consecutive annual increase. This was despite the closure of the Forties Pipeline System for maintenance which impacted upon production levels in December 2017, which were 17 per cent lower than the same month in 2016. Whilst gas production has increased, this century has been characterised by year-on-year decreases and gas production is now down by 63 per cent compared to the peak production levels seen in 2000.

Although import volumes were broadly similar to 2016 (down 1.8 per cent, though with notably fewer Liquefied Natural Gas imports), exports showed a rise, up 9.6 per cent on 2016.

The rise in exports coincided with a decrease in demand, down 2.4 per cent on 2016. This is mainly due to electricity generators preferring renewable sources, but also reflects the warmer temperatures during 2017.

Crude oil and petroleum products

In 2017, UK production of crude oil & Natural Gas Liquids (NGL) fell by 1.8 per cent, with crude oil production down 2.6 per cent, but with NGL production up 10.6 per cent. The closure of the Forties Pipeline System for maintenance impacted upon production levels in December 2017, which were 23 per cent lower than the same month in 2016. Production is now down by 66 per cent compared to the peak production levels seen in 1999.

Crude oil & NGL imports and exports both increased in 2017 by 9.7 per cent and 10.5 per cent respectively, with increased volumes shipped to Asia to meet demand following OPEC production cuts. UK refineries increased their intake of UK crude in producing petroleum products by 0.8 per cent in 2017. Demand for petroleum products was up 0.3 per cent on last year, the fourth consecutive annual increase. Motor spirit consumption fell by 1.4 per cent, whilst DERV consumption rose by 1.0 per cent.



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Notes to editors

1. [Monthly Energy Statistics](#) are compiled by the Department for Business, Energy and Industrial Strategy (BEIS), and are available for download on the BEIS section of the GOV.UK website. They contain tables and commentary on highlights, and technical notes.
2. More detailed estimates of 2017 will be available on 29 March 2018 when BEIS publish the quarterly editions of Energy Trends and Energy Prices. The Digest of UK Energy Statistics (DUKES) will be published on 26 July 2018.

