



BP Statistical Review 2018

United Kingdom energy market in 2017

For the first time on record non-fossil energy sources accounted for the majority of UK power generation in 2017, further displacing coal and lowering CO₂ emissions

Fast facts

1. Primary energy consumption in the UK declined by just 0.1% in 2017, having declined on average by 1.8% p.a. over the previous decade
2. Oil consumption increased marginally as growing demand for diesel and jet fuel outweighed declines in gasoline and fuel oil
3. Power generation from coal-fired plants continued to decline, driven by plant closures and the strong carbon price. Coal's overall share of the generation mix fell to just 6.7%

75%

Combined share of oil and gas in primary energy consumption

+33%

Growth in wind-powered generation

-26.3%

Decline in coal-fired power generation

-2.7%

Decline in CO₂ emissions

- Primary energy consumption in the UK fell by just 0.1% in 2017, a much slower rate of decline than over the previous 10 years.
- Oil and gas remained the dominant energy sources, accounting for 40% and 35% of primary energy consumption, respectively.
- Crude oil production returned to decline following two years of growth, falling by 1.3%.
- However natural gas production increased slightly (+0.6%), compared with a 10-year average decline of 6.7% p.a.. The increase reflected reduced maintenance and new fields coming on stream.
- Oil consumption increased by 0.3%, compared with a 10-year average decline of 1.3% p.a..
- Refinery throughput declined by 0.6%, a relatively solid performance compared with the 10-year average decline of 3.5% p.a.. Strong refining margins supported high utilization rates.
- Energy intensity (the amount of energy required per unit of GDP) declined by 1.8% p.a., having fallen by 3.3% in 2016.
- Total power generation declined by 0.8% to 340 TWh, its lowest level since 1994, reflecting efficiency measures and warmer weather.
- For the first time on record a majority of UK power generation came from zero carbon sources (nuclear, hydro and renewables). These accounted for 50.4% of generation, up from 45.7% in 2016.
- This growth was driven by an increase in renewables output, rising from 78 TWh last year to 93 TWh. Wind (+12 TWh) accounted for more than 80% of the increase.
- Coal-fired power generation continued to decline (-26.3%), driven by plant closures and the strong carbon price. Coal's overall share of the generation mix fell to just 6.7%.
- Gas retained its dominant role in power generation, accounting for 39.7% of total output. Nuclear and hydro output remained broadly stable, accounting for 20.9% and 1.8% of total generation, respectively.
- Power sector declines drove CO₂ emissions from energy use down by 2.7% (vs a 10-year average annual decline of 3.4%).