



Date: 20 December 2018

STATISTICAL PRESS RELEASE

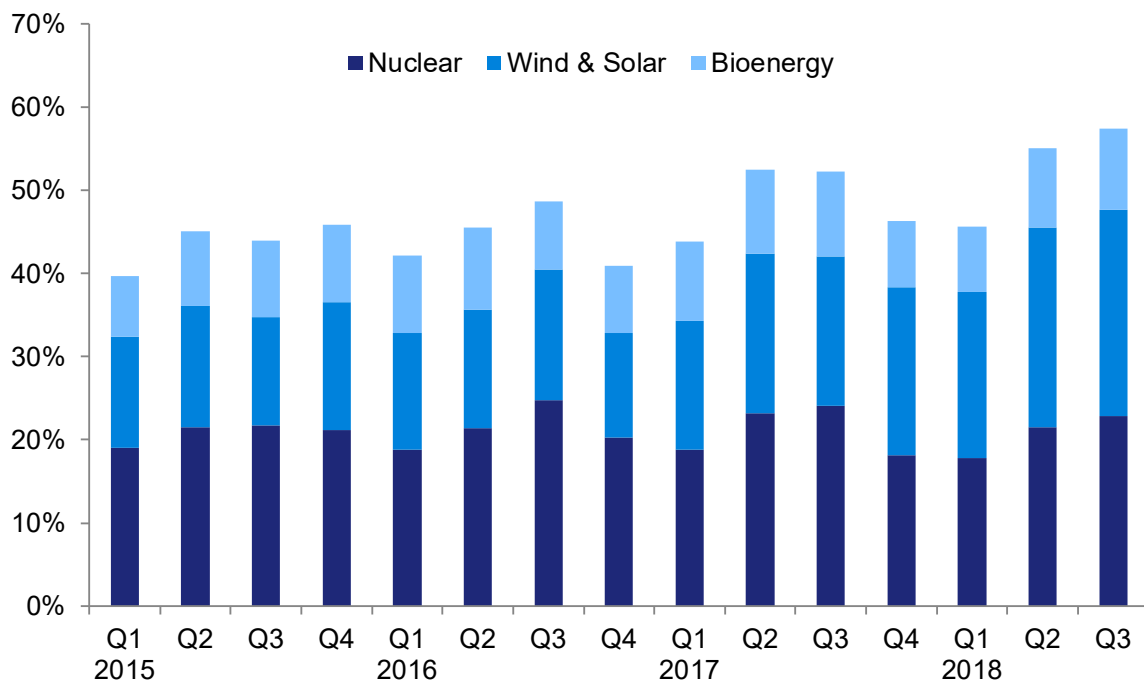
UK Energy Statistics, Q3 2018

Energy Trends and Energy Prices publications are published today 20 December 2018 by the Department for Business, Energy and Industrial Strategy.

Energy Trends covers statistics on energy production and consumption, in total and by fuel, and provides an analysis of the year on year changes. Energy Prices covers prices to domestic and industrial consumers, prices of oil products and comparisons of international fuel prices. **The main points for the third quarter of 2018** (July to September 2018) are:

- Low carbon electricity's share of generation accounted for a record high 56.0 per cent in the third quarter of 2018, up from 54.0 per cent in the same period of 2017, due to increased renewables generation.

Low carbon electricity's share of generation



Main points (continued):

- UK energy production rose by 0.7 per cent in the third quarter of 2018 compared with a year earlier. Production of oil fell by 1.3 per cent, whilst production of gas rose by 4.4 per cent largely due to maintenance in August 2017 depressing previous production.
- Primary energy consumption for energy uses fell by 1.4 per cent, however when adjusted to take account of weather differences between the third quarter of 2017 and the third quarter of 2018, primary energy consumption fell by 1.1 per cent.
- Final energy consumption (excluding non-energy use) fell by 0.4 per cent compared to the third quarter of 2017. Domestic consumption fell by 4.5 per cent reflecting the warmer weather in the quarter, service sector consumption fell by 3.0 per cent, whilst transport consumption rose by 1.2 per cent and industrial consumption rose by 0.6 per cent. On a temperature corrected basis, final energy consumption fell by 1.2 per cent.
- Of electricity generated in the third quarter of 2018, coal accounted for 2.5 per cent, while gas accounted for 38.6 per cent – both fuels shares were lower than in quarter 3 2017. Nuclear generation accounted for 22.9 per cent of total electricity generated in the third quarter of 2018.
- Renewables share of electricity generation increased to a record 33.1 per cent, up from 30.0 per cent in the third quarter of 2017. Renewable electricity capacity was 43.2 GW at the end of the third quarter of 2018, a 10 per cent increase (3.9 GW) on a year earlier.
- Provisional data for 2018 suggests that domestic energy bills increased by 5.8 per cent in current prices and by 3.7 per cent in real terms. For fixed consumption levels of electricity of 3,800 kWh per annum, bills increased by £57 to £676; and for fixed consumption levels of gas of 15,000 kWh per annum, bills increased by £16 to £646. The combined average domestic bill increased by £73 from £1,249 in 2017 to £1,322 in 2018. Average bills for those using prepayment meters increased by £43 (3.4 per cent) following the revisions of the price cap earlier this year, a slower rate compared to the other payment methods.

For more detailed information on methodology, quality assurance and use of the data, please refer to the methodology notes available by energy sector on the BEIS section of the GOV.UK website at: www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics



The December 2018 edition of Energy Trends also includes articles on:

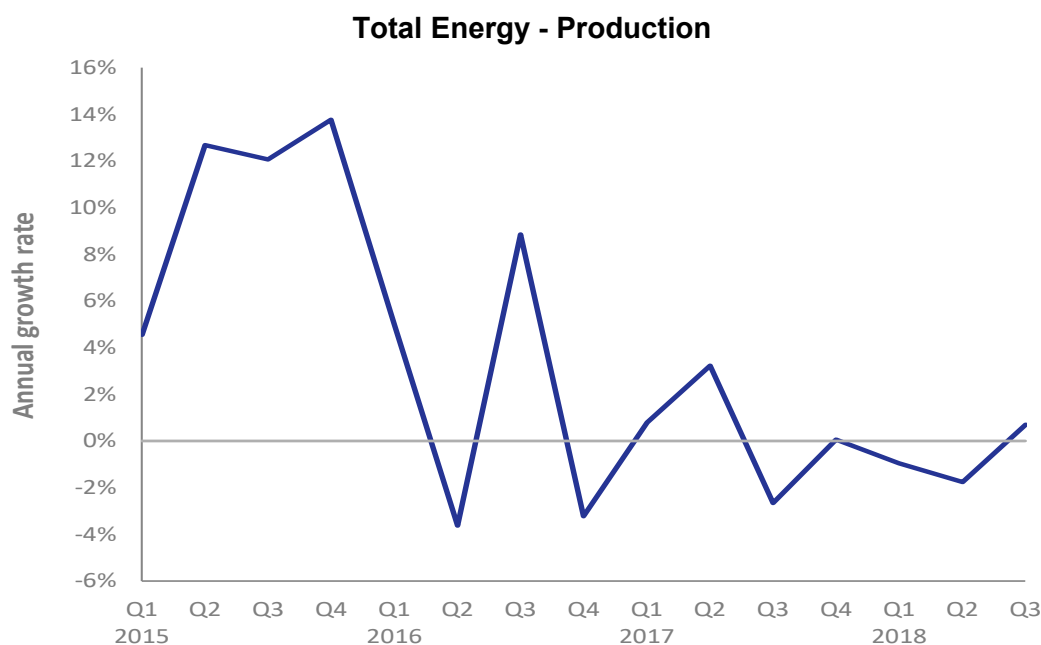
- Electricity generation and supply figures for Scotland, Wales, Northern Ireland and England, 2014 to 2017 (see commentary on page 15)
- Feed-in Tariff load factor analysis
- Do households move in and out of fuel poverty?
- International energy price comparisons

The following statistics are also published today, 20 December 2018, by the Department for Business, Energy and Industrial Strategy:

- Household Energy Efficiency headline release
www.gov.uk/government/statistics/household-energy-efficiency-national-statistics-headline-release-december-2017
- RHI deployment, November 2018
www.gov.uk/government/statistics/rhi-deployment-data-november-2017
- Solar photovoltaics deployment, November 2018
www.gov.uk/government/statistics/solar-photovoltaics-deployment
- Sub-national electricity consumption, 2017
www.gov.uk/government/collections/sub-national-electricity-consumption-data
- Sub-national gas consumption, 2017
www.gov.uk/government/collections/sub-national-gas-consumption-data
- Sub-national electricity and gas consumption at LSOA, MSOA and IGZ level, 2017
www.gov.uk/government/statistics/lower-and-middle-super-output-areas-electricity-consumption and www.gov.uk/government/statistics/lower-and-middle-super-output-areas-gas-consumption



TOTAL ENERGY: QUARTER 3 2018



	2018 Q3 <i>Million tonnes of oil equivalent</i>	Percentage change on a year earlier
Total production	29.2	+0.7
Oil	12.1	-1.3
Natural gas	8.8	+4.4
Primary electricity ⁽¹⁾	5.1	-2.1
Bioenergy & waste	2.7	+5.3
Coal	0.4	-8.3

(1) Nuclear and wind, solar & natural flow hydro electricity

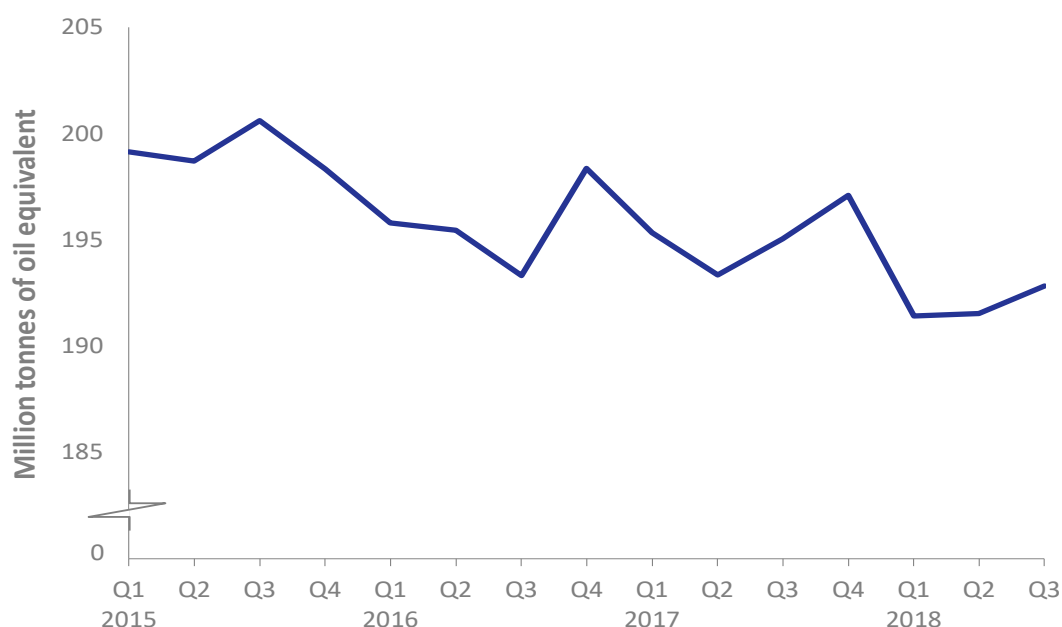
- Total energy production in the third quarter of 2018 was 29.2 million tonnes of oil equivalent, 0.7 per cent higher than in the third quarter of 2017.
- Production of oil fell by 1.3 per cent compared to the third quarter of 2017.
- Production of gas rose by 4.4 per cent compared to the third quarter of 2017, largely due to maintenance in August 2017 depressing production last year.
- Primary electricity output in the third quarter of 2018 was 2.1 per cent lower than in the third quarter of 2017, within which nuclear electricity output was 5.1 per cent lower as a result of maintenance at the Hunstontan reactor, whilst output from wind, solar and natural flow hydro was 7.2 per cent higher than the same period in 2017, due to increased renewable capacity and more favourable weather conditions.
- Production of bioenergy and waste was 5.3 per cent higher than in the third quarter of 2017.
- In the third quarter of 2018, production of coal and other solid fuels was 8.3 per cent lower than the corresponding period of 2017.

Total energy quarterly tables ET 1.1 – 1.3 are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/total-energy-section-1-energy-trends



TOTAL ENERGY: QUARTER 3 2018

Total Energy – consumption⁽¹⁾



(1) Total inland consumption on a primary fuel input basis (seasonally adjusted and temperature corrected annual rates).

	2018 Q3 Million tonnes of oil equivalent	Percentage change on a year earlier
Total consumption		
Unadjusted	39.7	-1.4
Seasonally adjusted and temperature corrected – annual rate	192.8	-1.1
Final consumption: unadjusted	28.6	-0.4
temperature corrected	36.3	-1.2

When examining seasonally adjusted and temperature corrected annualised rates:

- Total inland consumption on a primary fuel input basis was 192.8 million tonnes of oil equivalent in the third quarter of 2018, 1.1 per cent lower than the same quarter in 2017.
- Between the third quarter of 2017 and the third quarter of 2018, coal and other solid fuel consumption fell by 13 per cent driven by decreased coal use in electricity generation.
- Oil consumption fell by 0.3 per cent, whilst gas consumption fell by 4.2 per cent.
- Primary electricity consumption fell by 2.3 per cent, with a rise in wind, solar and hydro of 7.4 per cent but a fall in nuclear of 5.4 per cent.

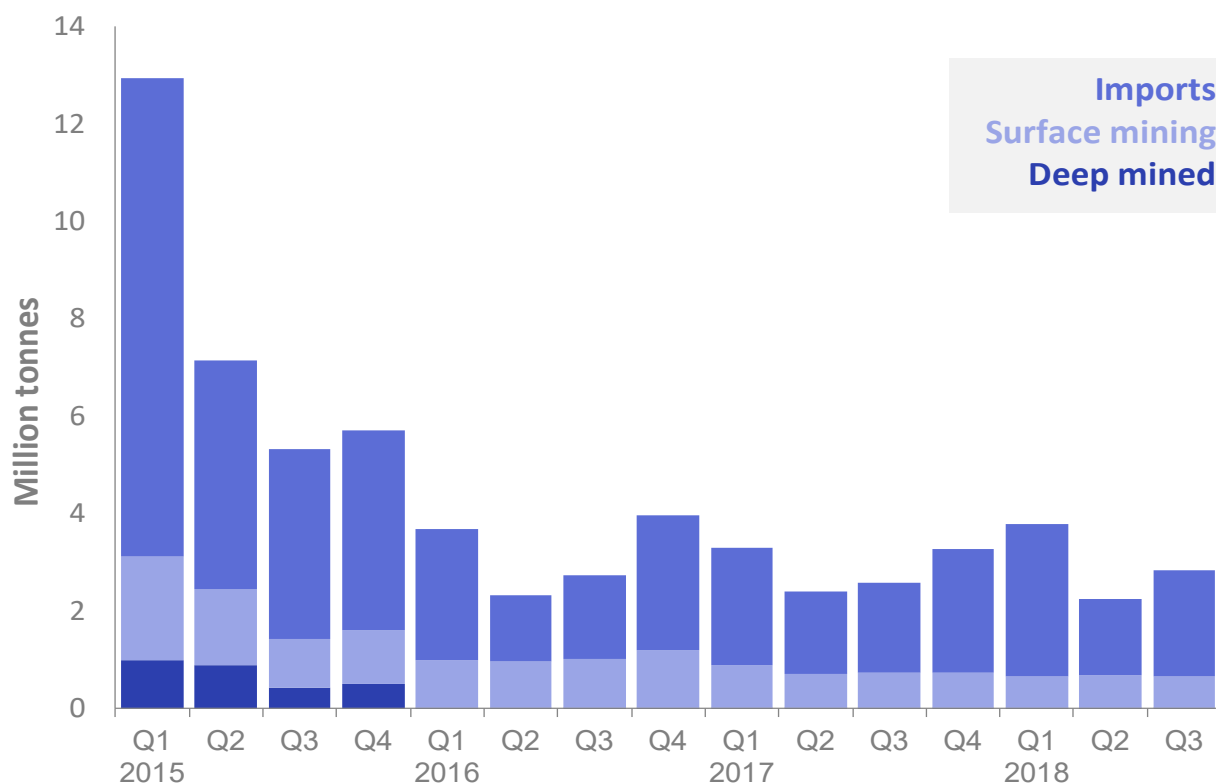
Final consumption was 0.4 per cent lower in the third quarter of 2018 compared to the same quarter a year earlier. The average temperature in the third quarter of 2018 was 1.1 degrees Celsius warmer than the same period a year earlier. On a temperature corrected basis, final energy consumption was 1.2 per cent lower over the same period.

Total energy quarterly tables ET 1.1 – 1.3 are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/total-energy-section-1-energy-trends



COAL: QUARTER 3 2018

Coal production and imports



	2018 Q3 Thousand tonnes	Percentage change on a year earlier
Coal Supply	2,043	-3.9
- Coal production	656	-9.0
- Coal imports	2,181	+17.1
Coal demand	2,043	-3.9
- Power stations	756	-12.6
- Coke ovens & blast furnaces	754	+1.3
- Final users	493	+2.5

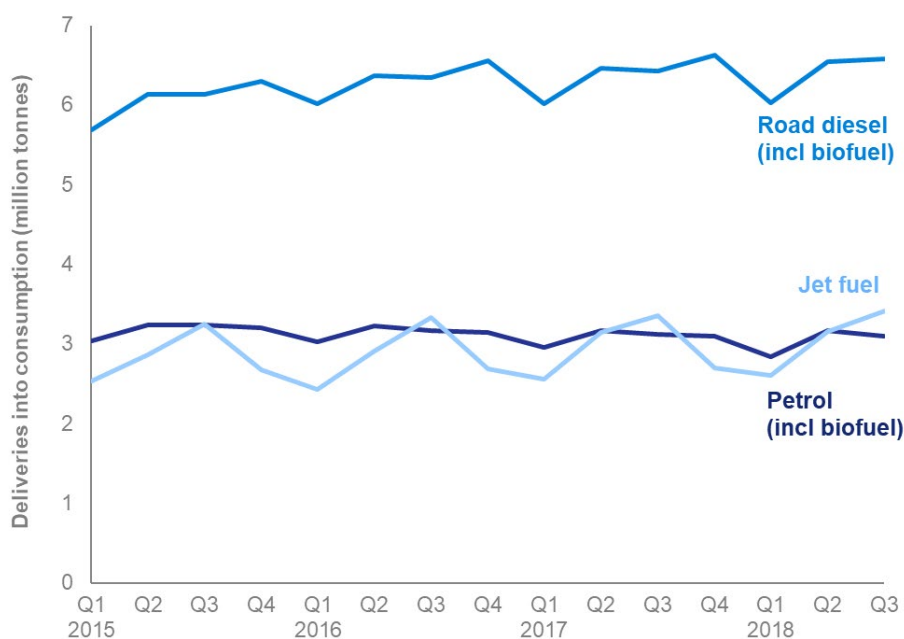
- Provisional figures for the third quarter of 2018 show that coal production fell to 0.7 million tonnes, 9.0 per cent lower than the third quarter of 2017. This is as a result of mine closures and prevailing economic trends in the UK's coal industry, which has made imports of coal cheaper than domestic production. However, coal production rose in September.
- Imports of coal in the third quarter of 2018 were 17.1 per cent higher than in the third quarter of 2017 at 2.2 million tonnes.
- Total demand for coal in the third quarter of 2018 fell 3.9 per cent to 2.0 million tonnes, with consumption by electricity generators down by 12.6 per cent to 0.8 million tonnes.
- Coal stocks showed a seasonal increase of 0.6 million tonnes during the third quarter of 2018 and now stand at 5 million tonnes, 1.8 million tonnes lower than at the end of September 2017. This was due to closing power stations using up their stocks.

Coal quarterly tables ET 2.1 – 2.4 are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/solid-fuels-and-derived-gases-section-2-energy-trends



OIL: QUARTER 3 2018

Demand for key transport fuels



	2018 Q3 <i>Thousand tonnes</i>	Percentage change on a year earlier
Primary oil production	11,177	-1.3
Primary oil demand	15,654	+1.6
Net imports (primary oil)	4,160	-3.9
Net imports (oil products)	2,710	+8.9
Refinery production	16,164	+1.4
Petroleum demand	17,873	+0.7
- Motor spirit (including biofuels)	3,095	-0.7
- DERV fuel (including biofuels)	6,584	+2.5
- Aviation turbine fuel	3,417	+1.2

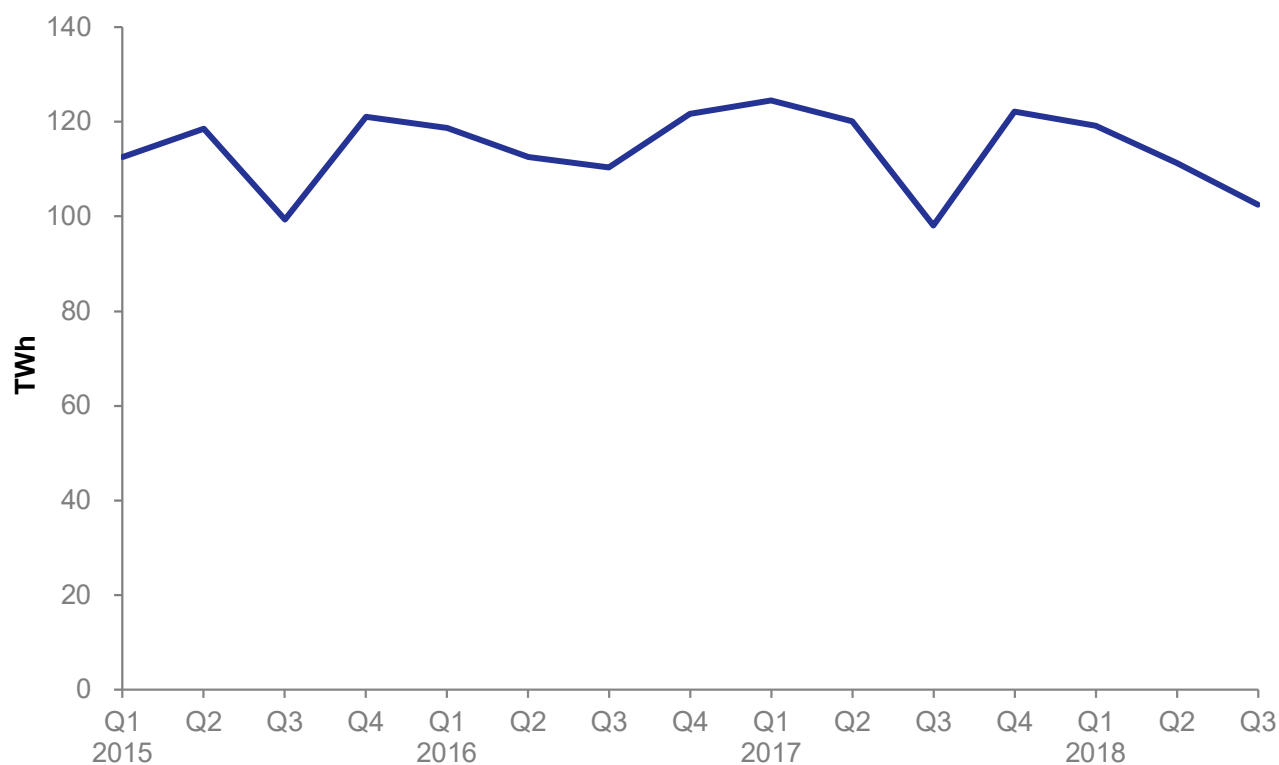
- Total indigenous UK production of crude oil and Natural Gas Liquids in Q3 2018 was 1.3 per cent lower than 2017.
- Refinery production in Q3 2018 was up 1.4 per cent on the same quarter of last year, following a contraction in the first half of the year as a result of refinery maintenance. Longer term, there is an ongoing decline in UK refinery production. Trade was relatively flat - imports of petroleum products were up on Q3 2017 by 4.5 per cent and exports were down 2.6 per cent.
- The UK was a net importer of oil and oil products in the third quarter of 2018 by 6.8 million tonnes. In the same period of 2017 the UK was a net importer by 6.9 million tonnes.
- Overall demand for petroleum products was up by 0.7 per cent on last year, with the main driver being demand for transport fuels, particularly diesel and aviation fuel.

Oil quarterly tables ET 3.1 & 3.2 and 3.4 – 3.6 are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/oil-and-oil-products-section-3-energy-trends



GAS: QUARTER 3 2018

Production of natural gas



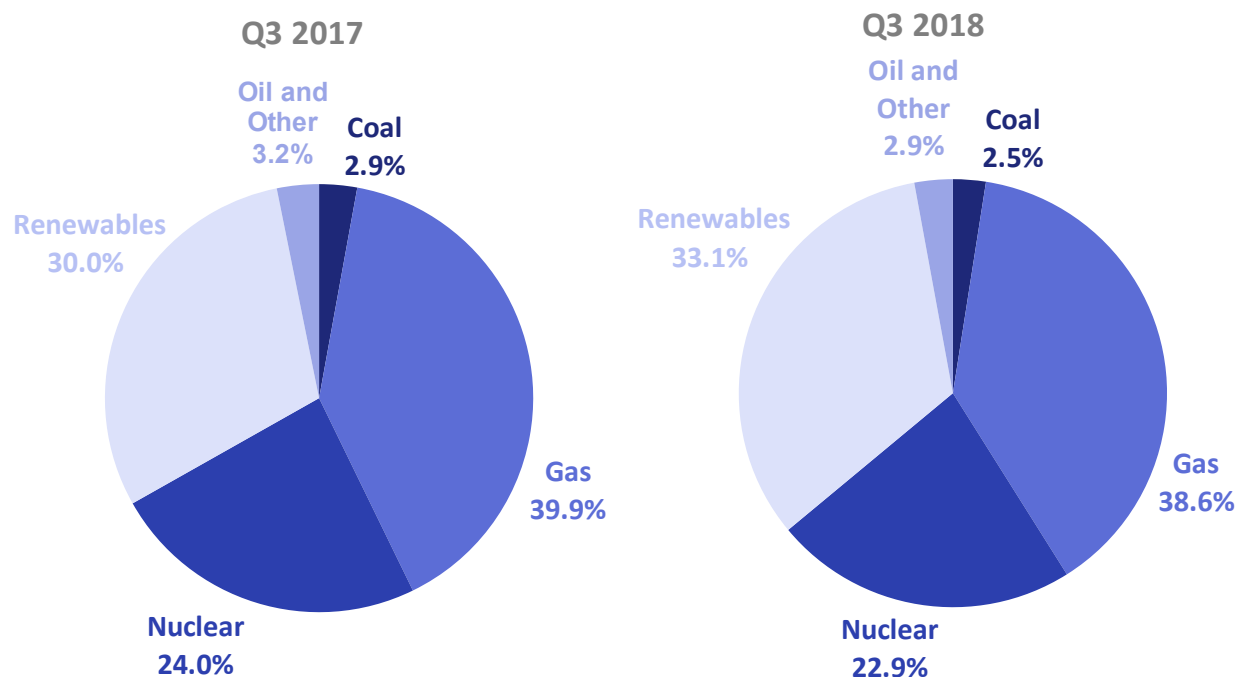
	2018 Q3 TWh	Percentage change on a year earlier
Gas production	102.5	+4.4
Gas imports	82.4	-16.6
Gas exports	44.4	-14.0
Gas demand	138.4	-4.3
- Electricity generation	59.7	-6.0
- Domestic	25.6	-7.1

- Total indigenous UK production of natural gas in the third quarter of 2018 was 102.5 TWh, 4.4 per cent higher than a year before.
- Imports and exports of natural gas were 82 TWh and 44 TWh respectively, 17 and 14 per cent lower than Q3 2017. This has reduced overall trade, where net imports were down by a fifth on the same quarter in 2017 – the lowest in Q3 since 2008.
- UK gas demand was down by 4.3 per cent compared to Q3 2017, with demand for electricity generation continuing to fall by 6.0 per cent. Domestic usage followed the same trend, down by 7.1 per cent on the same quarter last year.

Gas quarterly table ET 4.1 is available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/gas-section-4-energy-trends



ELECTRICITY: QUARTER 3 2018



	2018 Q3 <i>TWh</i>	Percentage change on a year earlier
Electricity Generated from		
Coal	1.9	-13.8
Nuclear	17.3	-5.1
Gas	29.1	-3.7
Renewables	25.0	+10.0
Total	75.3	-0.4
Supplied to		
Industry	23.1	+0.3
Domestic	20.9	-2.5
Other final consumers	23.7	+0.3
All	68.9	-0.6

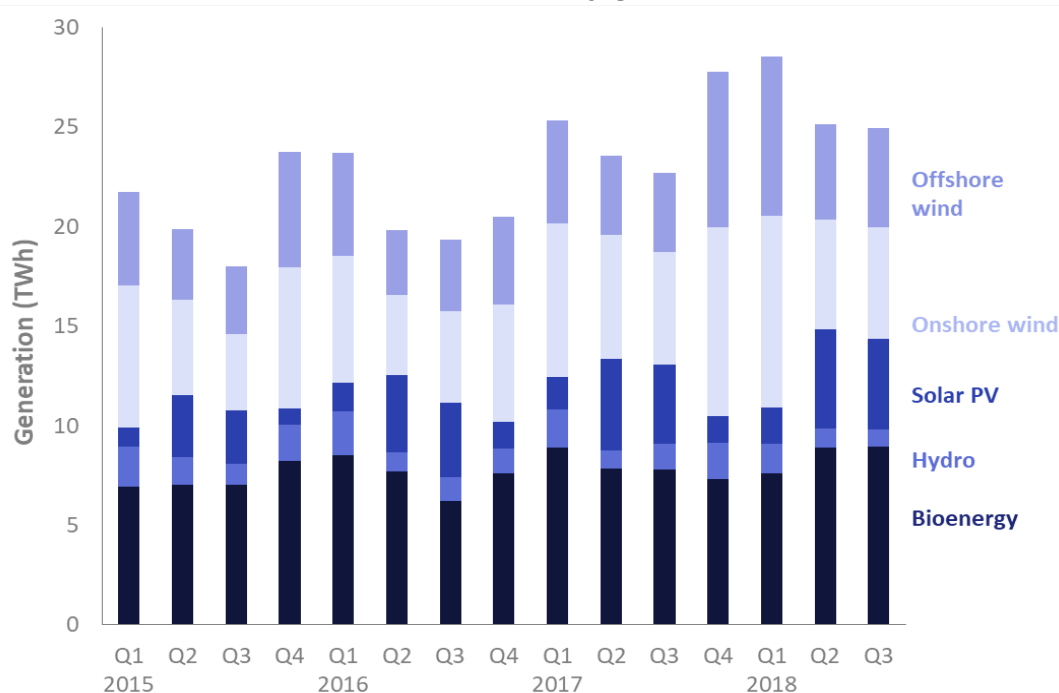
- Low carbon generation (including renewables) accounted for 56.0 per cent of generation in Q3 2018, a record high, up from 54.0 per cent from the same period of 2017.
- Combined gas and coal made up a record low of 41.1 per cent of total generation (down 1.7pp) in Q3 2018. This reduction was mainly due to increased baseload supply (non-thermal renewable and nuclear) offsetting the need for fossil fuel generation. Gas and coal generation decreased by 3.7 per cent, and 14 per cent respectively compared with a year earlier. Renewables generation was up 10 per cent, due to increased capacity and more favourable weather conditions.
- Total electricity generated in the third quarter of 2018 was 0.4 per cent lower than a year earlier, while net imports decreased by 7.1 per cent and accounted for 6.6 per cent of the electricity supply.
- Final consumption of electricity was 0.6 per cent lower than in the third quarter of 2017.

Electricity quarterly tables ET 5.1, 5.2 & 5.6 are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/electricity-section-5-energy-trends.



RENEWABLES: QUARTER 3 2018

Renewable electricity generation



	2018 Q3 TWh	Percentage change on a year earlier
Renewable electricity generation		
Onshore wind	5.6	-0.6
Offshore wind	5.0	+25.7
Hydro	0.8	-35.5
Solar PV	4.5	+14.4
Bioenergy (inc. co-firing)	9.0	+15.2
All renewables	25.0	+10.0

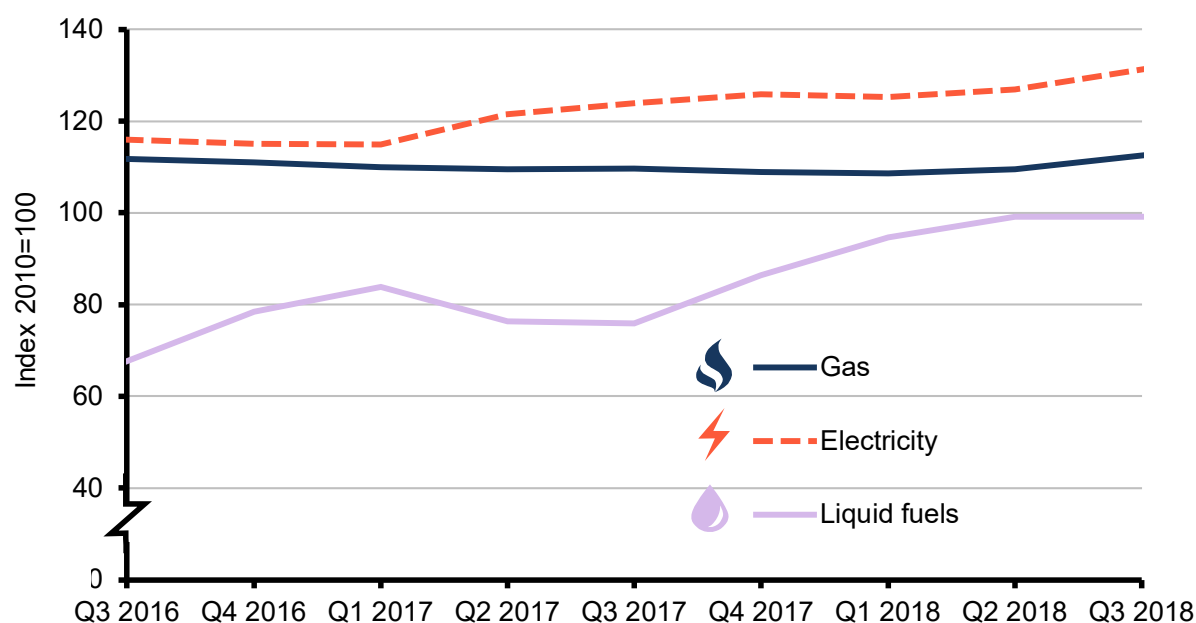
- Renewables' share of electricity generation was 33.1 per cent in the third quarter of 2018, up 3.1 percentage points on the share in 2017 Q3.
- Renewable electricity generation was 25.0 TWh in 2018 Q3, an increase of 10 per cent compared to 2017 Q3. In 2018 Q3, generation from bioenergy was 9.0 TWh, up 1.2 TWh (15 per cent) on a year earlier. Generation from onshore wind fell by 0.6 per cent on last year, due to lower wind speeds. Despite lower wind speeds, generation for offshore wind increased by more than a quarter due to a large increase in capacity. Generation from hydro fell by 36 per cent on a year earlier to 0.8 TWh, while generation from solar photovoltaics increased by 14 per cent (0.2 TWh) to 3.9 TWh, due to increased capacity and higher average sunlight hours.
- Renewable electricity capacity totalled 43.2 GW at the end of the third quarter of 2018, a rise of 10 per cent (3.9 GW) on a year earlier, with 47 per cent of this increase from offshore wind.
- In 2018 Q3, liquid biofuels represented 4.3 per cent of all fuels consumed in road transport, 1.3 percentage points higher than 2017 Q3's share.

Renewables quarterly tables ET 6.1 – 6.2 are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/energy-trends-section-6-renewables



DOMESTIC PRICES: QUARTER 3 2018

Fuel price indices in the domestic sector in real terms



Consumer price index fuel components in real terms ⁽¹⁾ 2010=100	2018 Q3	Percentage change on a year earlier
Solid fuels	101.3	-0.6
Gas	112.5	+2.6
Electricity	131.2	+5.8
Liquid fuels	99.1	+30.6
Total domestic fuel	122.0	+4.9

(1) Deflated using the GDP implied deflator. The original source of the indices is ONS.

- The price paid for all domestic fuels by household consumers increased by 4.9 per cent in real terms between Q3 2017 and Q3 2018, and by 2.9 per cent between Q2 and Q3 2018.
- Domestic electricity prices in real terms including VAT in Q3 2018 were 5.8 per cent higher than in Q3 2017. Prices were 3.4 per cent higher than in Q2 2018.
- The price of domestic gas in real terms including VAT rose by 2.6 per cent between Q3 2017 and Q3 2018 and by 2.8 per cent between Q2 and Q3 2018.
- The price of liquid fuels rose by 31 per cent between Q3 2017 and Q3 2018 but fell by 0.1 per cent between Q2 and Q3 2018.
- For the period January to June 2018, prices for medium domestic electricity and gas consumers, including taxes, were the fifth lowest and second lowest in the EU15 respectively.

Switching levels

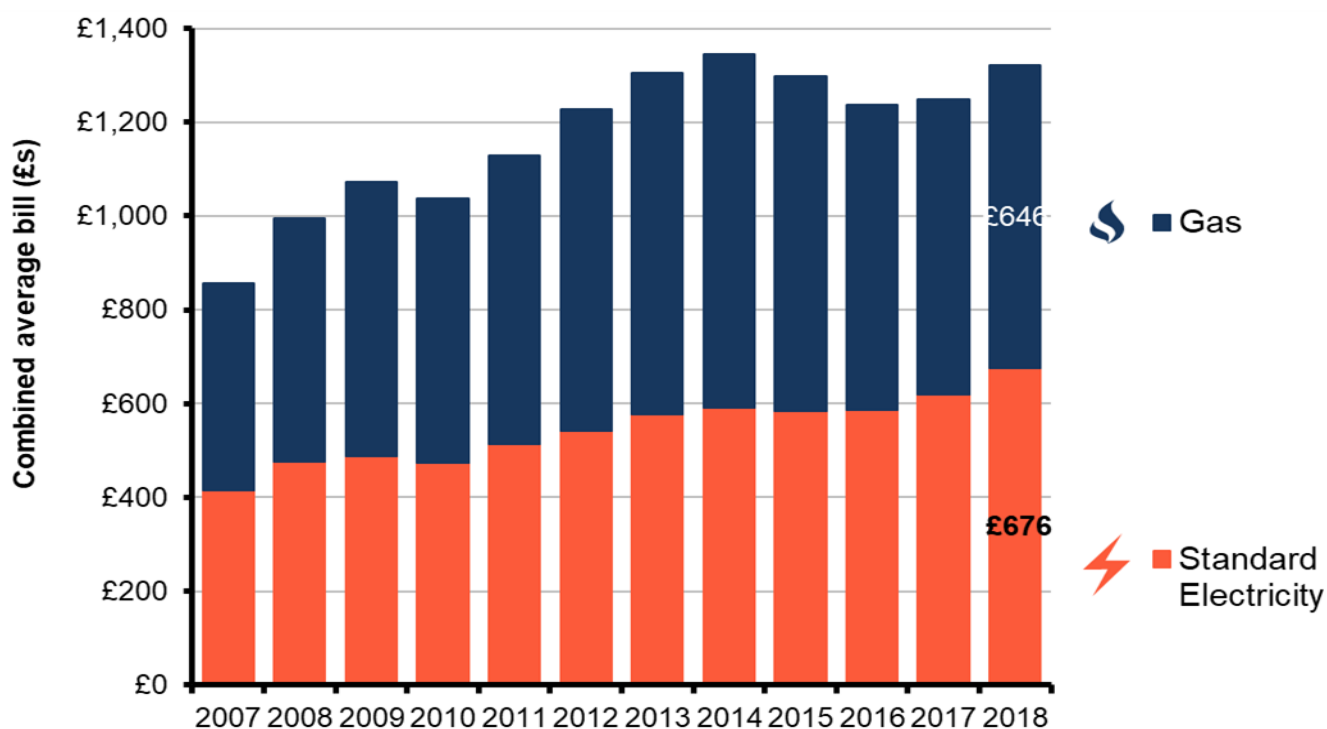
- Switching rates amongst consumers rose by 12 per cent for electricity and 7.5 per cent for gas between Q3 2017 and Q3 2018 and are at their highest level for 10 years. For both electricity and gas, these transfers in Q3 2018 represent around 5.1 per cent, respectively, of each of their domestic customers.

Domestic prices tables are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/collections/domestic-energy-prices



DOMESTIC ENERGY BILLS: 2018

Average domestic gas and electricity bills (cash terms)



Average annual domestic fuel bills ⁽¹⁾

	2017	2018 (p)	Percentage change, cash terms	Percentage change, real terms ⁽²⁾
Gas ⁽³⁾	£630	£646	2.6	0.6
Electricity ⁽⁴⁾	£619	£676	9.2	6.9
Total ⁽⁵⁾	£1,249	£1,322	5.8	3.6

(1) Average annual bills for domestic customers are weighted by the proportion of customers on the different payment methods, which include standard credit, direct debit and pre-payment meter. Bills relate to the total bill received in the calendar year and are in cash terms.

(2) To estimate the percentage change in real terms, bills were deflated using the GDP (implied) deflator.

(3) Gas bills are based on an annual consumption of 15,000 kWh.

(4) Electricity bills are based on an annual consumption of 3,800 kWh.

(5) The average total gas and electricity bill presented should be taken as broadly indicative only. It is not based on individual customers but is simply the sum of the averages for electricity and gas.

(p) Provisional bills only – final bills will be available in the March 2019 edition of 'Quarterly Energy Prices'.

- The combined average domestic bill increased by £73 from £1,249 in 2017 to £1,322 in 2018.
- The average standard electricity bill in 2018, across all payment types has increased by £57 (9.2 per cent) since 2017, from £619 to £676. Also, average 2018 gas bill across all payment types increased by £16 (2.6 per cent), from £630 to £646. These bills are based on standard consumptions of 3,800kWh per year for electricity and 15,000kWh per year for gas.
- The average combined bill for prepayment increased by £43, from £1,250 in 2017 to £1,293 in 2018. Credit was the most expensive method of payment at £1,454. Direct debit is still the cheapest method of payment, with a combined bill of £1,290, £3 cheaper than prepayment.

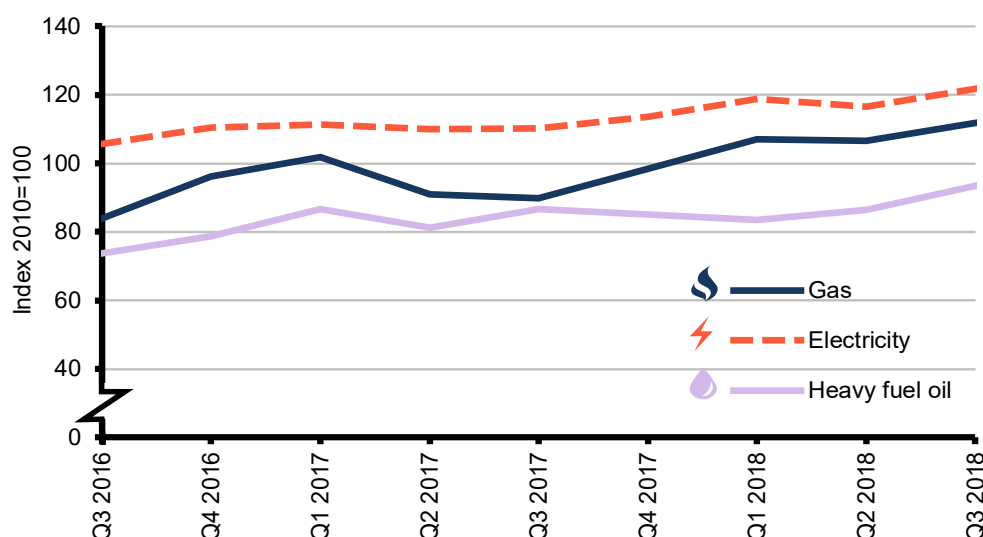
Domestic prices tables are available on the BEIS section of the GOV.UK website at:

www.gov.uk/government/collections/domestic-energy-prices



INDUSTRIAL PRICES: QUARTER 3 2018

Industrial fuel price indices in real terms including the Climate Change Levy



Fuel prices index in real terms ⁽¹⁾ 2010=100	2018 Q3	Percentage change on a year earlier
Coal	104.0	+7.1
Heavy fuel oil	93.6	+8.1
Gas	111.8	+24.3
Electricity	121.8	+10.5
Total fuel	115.1	+12.1

(1) Deflated using the GDP implied deflator. Includes estimates of the average Climate Change Levy (CCL) paid.

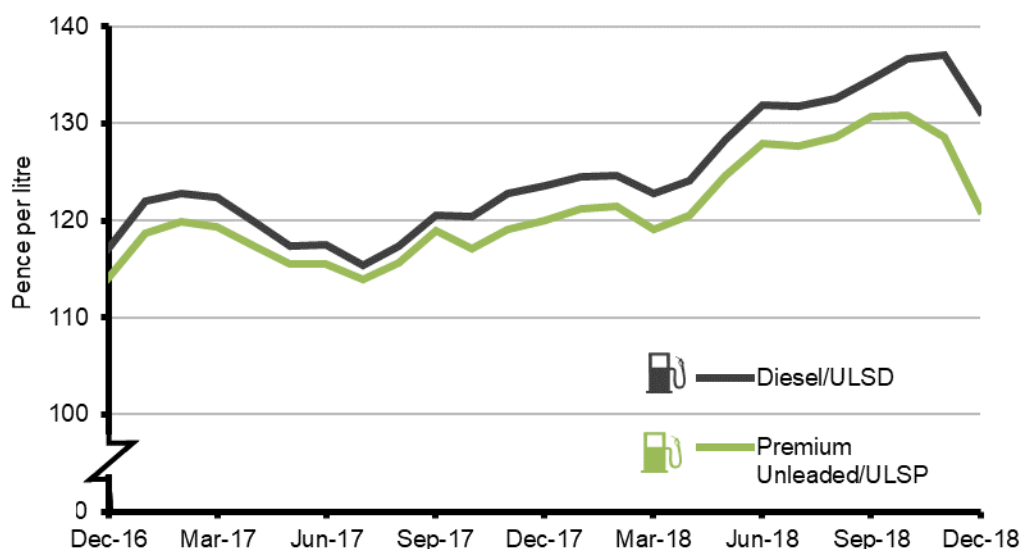
- Average industrial gas prices in real terms including CCL, were 24 per cent higher in Q3 2018 compared to Q3 2017, and prices excluding CCL were also 24 per cent higher.
- Average industrial electricity prices in real terms including CCL were 10 per cent higher and prices excluding CCL were 11 per cent higher in Q3 2018 compared to Q3 2017.
- Average coal prices in real terms including CCL were 7.1 per cent higher and prices excluding CCL were 7.7 per cent higher in Q3 2018 compared to Q3 2017.
- Heavy fuel oil prices were 8.1 per cent higher in real terms than a year ago.
- For the period January to June 2018, UK prices for industrial electricity for medium consumers including taxes were the highest in the EU15. UK industrial gas prices for medium consumers including taxes were the second lowest in the EU15.

Industrial prices tables are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/collections/industrial-energy-prices



ROAD TRANSPORT FUEL PRICES: QUARTER 3 2018

Typical retail prices of road transport fuels



Retail prices of petroleum products	Mid December 2018 ⁽¹⁾ Pence per litre	Percentage change on a year earlier
Unleaded petrol ⁽²⁾	121.0	+0.9
Diesel ⁽²⁾	131.3	+6.3

(1) Prices are for ultra low sulphur versions of these fuels.

(2) Prices are provisional estimates.

- Crude oil prices have followed a slow upward trend since the beginning of the year, reaching \$80 per barrel in October 2018. Prices have dropped in the last two months and in mid-December, at around \$61 per barrel, were 5.3 per cent lower than in the previous year.
- In mid-December 2018, unleaded petrol was on average 121.0 pence per litre, 1.0 pence per litre (0.9 per cent) higher than a year earlier but 15 per cent lower than the high reached in April 2012.
- In mid-December 2018, diesel was on average 131.3 pence per litre, 7.7 pence per litre (6.3 per cent) higher than a year earlier but 11 per cent below the peak seen in April 2012.
- Annual prices in 2018 were 6.5 per cent higher for petrol and 8.2 per cent higher for diesel than in 2017.
- In November 2018, UK retail prices for petrol were the sixth lowest in the EU15, with UK diesel prices second highest in the EU15 due to higher tax rates.

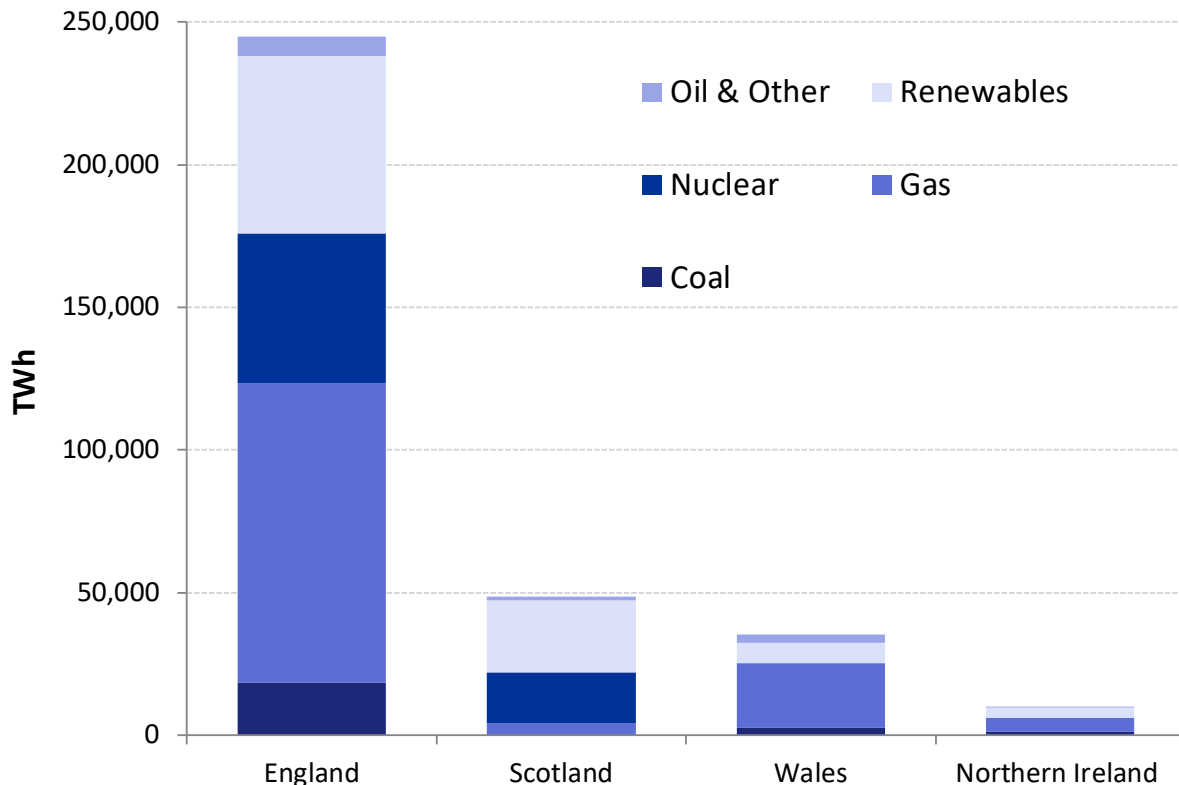
Road transport fuel prices tables are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/collections/road-fuel-and-other-petroleum-product-prices



ELECTRICITY GENERATION AND SUPPLY

This article updates the detailed electricity figures for Scotland, Wales, Northern Ireland and England that were provided in December 2017's Energy Trends. The data are for 2014 to 2017 and cover generation, supply, internal and external trade and consumption. The role of renewables in each area is also shown.

Generation by country and fuel type in 2017



- Renewables accounted for a record 29.3 per cent of electricity generation in the UK in 2017, up from 24.5 per cent in 2016 (+4.8 percentage points). Renewables accounted for over half of the generation in Scotland in 2017. Meanwhile, coal's share of UK generation continued to decline to 6.7 per cent and fell to zero in Scotland with the closure of the final coal plant.
- Each country in the UK had an increased share of generation from renewables in 2017. Scotland maintained the highest share of renewables at a record high 51.7 per cent (up 8.9 pp) with a similar increase in Northern Ireland to account for 34.0 per cent (up 8.7 pp). Wales also had a significant increase in its renewables share to 20.0 per cent (+7.7 pp), while England had the smallest share increase to reach 26.0 per cent (+2.8 pp). The increased renewables share was driven by a 29 per cent increase in non-thermal renewable generation, resulting from increased capacity, as weather conditions were broadly similar to 2016.
- The share of generation from nuclear was broadly similar to 2016 at 20.8 per cent (-0.3 pp). This decrease was accounted for in Scotland, where the share decreased to 36.6 per cent (-6.3 pp), which was due to a decrease in overall generation and more outages at Scotland's two nuclear reactors.
- Autogenerators accounted for 14.7 per cent of total generation in 2017, supplying a record 7.7 per cent of UK public electricity (+0.6 pp). This continues the upward trend since 2013, due to increased small-scale renewable capacity and reduced large-scale fossil fuel capacity. Autogenerators share of generation was particularly high in Northern Ireland (25.5 per cent) and Scotland (18.1 per cent).



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Notes to editors

1. More detailed figures of United Kingdom energy production and consumption and of energy prices, for the third quarter of 2018 are given in the December 2018 editions of ENERGY TRENDS and ENERGY PRICES respectively, the Department's statistical bulletins on energy, released on 20 December 2018.
2. Energy Trends and the Energy Prices bulletins, published quarterly, are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/collections/energy-trends and www.gov.uk/government/collections/quarterly-energy-prices
3. Articles featured in Energy Trends are also available on the BEIS section of the GOV.UK website at: www.gov.uk/government/collections/energy-trends-articles
4. More detailed annual data on energy production and consumption for the years 2013 to 2017 are available in the DIGEST OF UNITED KINGDOM ENERGY STATISTICS 2018, published on 26 July 2018. All information contained in the Digest is available on the BEIS section of the GOV.UK website at: www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes

