



Date: 27 September 2018

STATISTICAL PRESS RELEASE

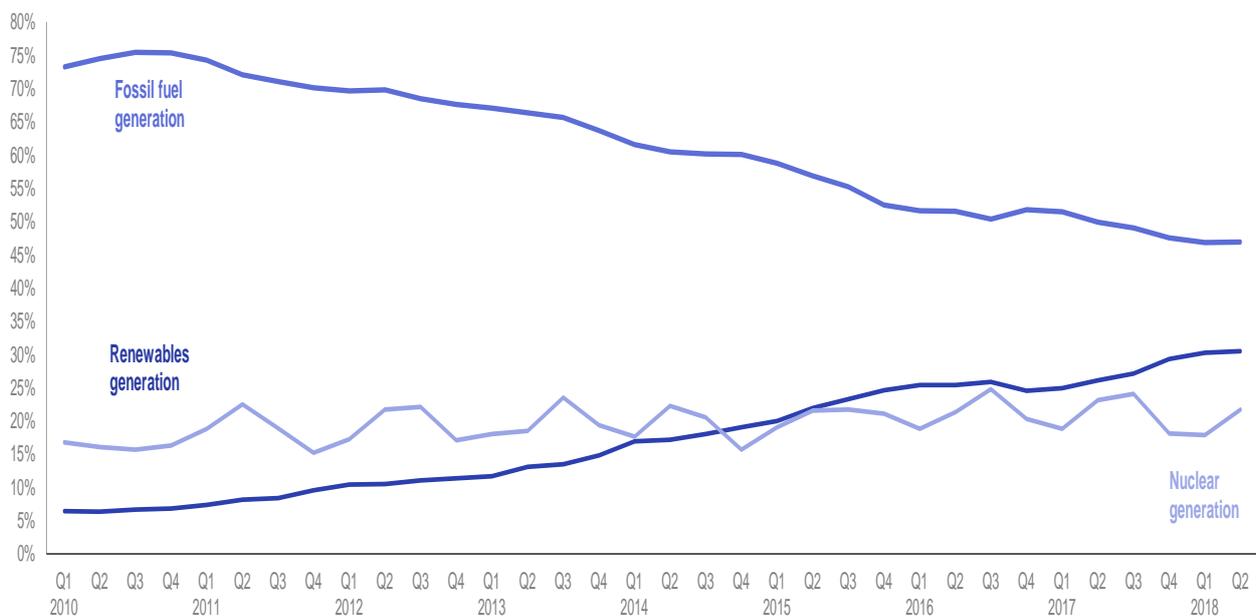
UK Energy Statistics, Q2 2018

Energy Trends and Energy Prices publications are published today 27 September 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 second quarter of 2018 are:**

- Renewables' share of electricity generation was a record 31.7 per cent in 2018 Q2 as generation from solar photovoltaics increased to set a new record for solar generation.
- Renewables share of generation has been increasing whilst fossil fuel generation has been decreasing, with coal falling to a new record low in 2018 Q2. The chart below shows this relationship back to 2012.

Shares of electricity generation: average of four rolling quarters



Main points (continued):

- Total energy production was 2.1 per cent lower than in the second quarter of 2017.
- Total primary energy consumption for energy uses fell by 1.3 per cent. However, when adjusted to take account of weather differences between the second quarter of 2017 and the second quarter of 2018, primary energy consumption fell by 1.1 per cent to a new record low. The main driver for the low level is the switch by electricity generators from using fossil fuels to low carbon sources (nuclear and renewables), as well as improvements in energy efficiency.
- Final energy consumption (excluding non-energy use) was 0.8 per cent lower than in the second quarter of 2017. The average temperature in the second quarter of 2018 was 0.2 degrees Celsius warmer than the same period a year earlier, with only May being slightly colder than in 2017. On a temperature adjusted basis, final energy consumption rose by 0.3 per cent.
- Of electricity generated in the second quarter of 2018, gas accounted for 42.0 per cent, whilst coal accounted for a record low of only 1.6 per cent. Nuclear generation accounted for 21.7 per cent of total electricity generated in the second quarter of 2018.
- Renewable electricity generation was 24.3 TWh in 2018 Q2, an increase of 3.0 per cent on the 23.6 TWh in 2017 Q2. Renewable electricity capacity was 42.2 GW at the end of 2018 Q2, a 10 per cent increase (3.9 GW) on a year earlier, with over half of the annual increase coming from offshore wind.
- Low carbon electricity's share of electricity generation remained over 50 per cent in the second quarter of 2018 at 53.4 per cent, compared to 53.7 per cent in the second quarter of 2017.
- Switching rates increased in Q2 2018, by 9.9 per cent compared to the levels of a year earlier for electricity and by 22.5 per cent for gas, based on data provided by Ofgem. An average of 460,000 households per month switched electricity supplier, with 390,000 households per month switching their gas supplier in the quarter.

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 September 2018 edition of Energy Trends also includes articles on:

- Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2017
- Combined Heat and Power in Scotland, Wales, Northern Ireland and the regions of England in 2017
- Diversity of supply for oil and oil products in OECD countries in 2017
- Competition in gas supply
- Competition in UK electricity markets
- Aggregated energy balances showing proportion of renewables in supply and demand

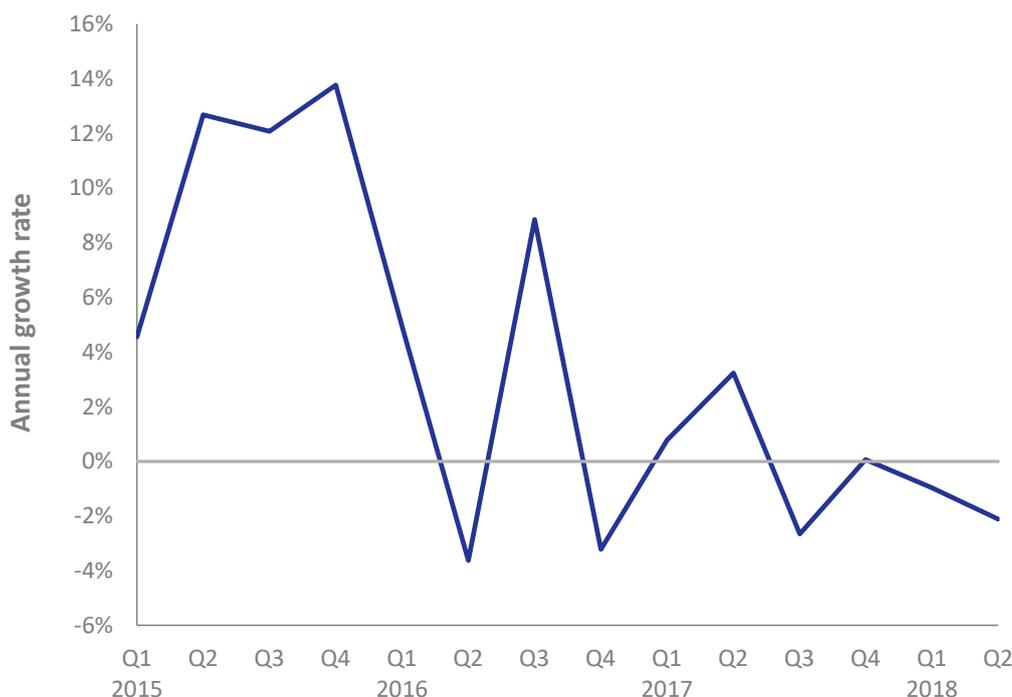
The following statistics are also published today 27 September 2018 by the Department for Business, Energy and Industrial Strategy:

- Solar photovoltaics deployment, August 2018
www.gov.uk/government/statistics/solar-photovoltaics-deployment
- Sub-national residual fuel use, 2016
www.gov.uk/government/collections/sub-national-consumption-of-other-fuels
- Sub-national total energy use, 2016
www.gov.uk/government/collections/total-final-energy-consumption-at-sub-national-level
- Sub-national electricity consumption in Northern Ireland, 2016
www.gov.uk/government/collections/northern-ireland-electricity-consumption-data



TOTAL ENERGY: QUARTER 2 2018

Total Energy - Production



| | 2018 Q2 <i>Million tonnes of oil equivalent</i> | Percentage change on a year earlier |
|------------------------------------|---|-------------------------------------|
| Total production | 31.2 | -2.1 |
| Oil | 13.0 | +0.4 |
| Natural gas | 9.6 | -6.7 |
| Primary electricity ⁽¹⁾ | 4.9 | -5.0 |
| Bioenergy & waste | 3.1 | +8.0 |
| Coal | 0.4 | -1.1 |

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

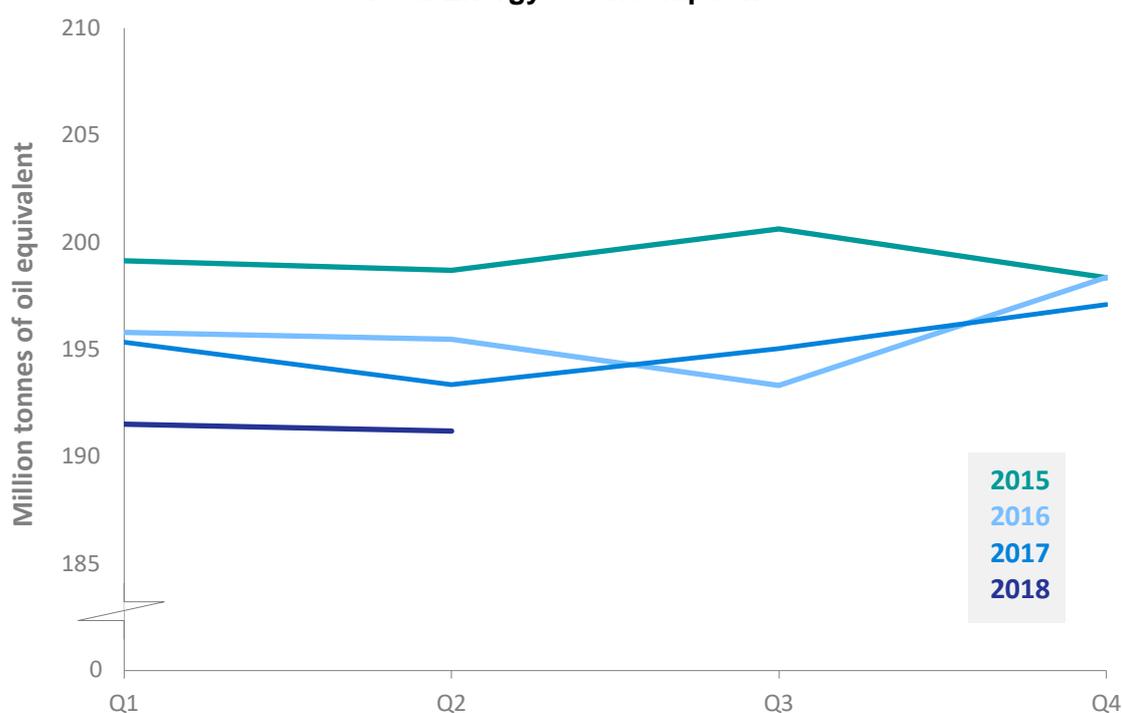
- Total production in the second quarter of 2018 was 31.2 million tonnes of oil equivalent, 2.1 per cent lower than in the second quarter of 2017.
- Production of oil rose by 0.4 per cent, whilst production of natural gas fell by 6.7 per cent predominantly due to robust production this time last year.
- Primary electricity output in the second quarter of 2018 was 5.0 per cent lower than in the second quarter of 2017. Nuclear electricity output was 6.7 per cent lower due to outages at several large reactors, whilst output from wind, hydro and solar pv was broadly unchanged, with rises in offshore wind and solar (a record quarterly level) offset by falls in onshore wind and hydro output.
- Production of bioenergy and waste was 8.0 per cent higher compared to the second quarter in 2017, whilst coal production fell by 1.1 per cent.

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 2 2018

Total Energy – consumption⁽¹⁾



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

| | 2018 Q2 Million tonnes of oil equivalent | Percentage change on a year earlier |
|--|--|---|
| Total consumption | | |
| <i>Unadjusted</i> | 42.4 | -1.3 |
| <i>Seasonally adjusted and temperature corrected – annual rate</i> | 191.2 | -1.1 |
| Final consumption: <i>unadjusted</i> | 31.0 | -0.8 |
| <i>temperature corrected</i> | 36.4 | +0.3 |

When examining seasonally adjusted and temperature corrected annualised rates:

- Total inland consumption on a primary fuel input basis was 191.2 million tonnes of oil equivalent in the second quarter of 2018, a record low, 1.1 per cent lower than the same quarter in 2017. The main driver for the low level is the switch by electricity generators from using fossil fuels to low carbon sources (nuclear and renewables), as well as improvements in energy efficiency.
- Coal and other solid fuel consumption fell by 13 per cent, driven by decreased coal use in electricity generation, gas consumption fell by 2.6 per cent, whilst oil consumption rose by 0.5 per cent.

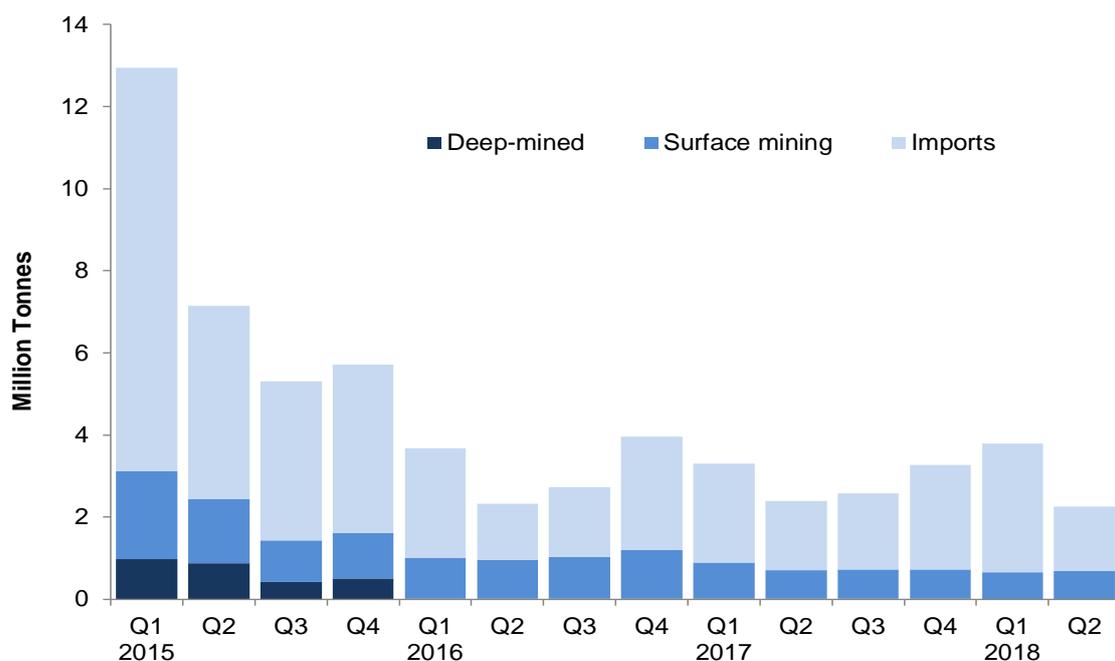
Final energy consumption (excluding non-energy use) was 0.8 per cent lower in the second quarter of 2018 compared to the same quarter a year earlier. The average temperature in the second quarter of 2018 was 0.2 degrees Celsius warmer than a year earlier, with only May being slightly colder than in 2017. On a temperature corrected basis, final energy consumption was up 0.3 per cent.

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 2 2018

Coal production and imports



| | 2018 Q2 Thousand tonnes | Percentage change on a year earlier |
|-------------------------------|----------------------------|--|
| Coal supply | 1,761 | -12.3 |
| Coal production | 694 | -1.9 |
| Coal imports | 1,559 | -7.3 |
| Coal demand | 1,754 | -12.5 |
| - Power stations | 525 | -17.7 |
| - Coke ovens & blast furnaces | 704 | -14.5 |
| - Final users | 478 | -2.9 |

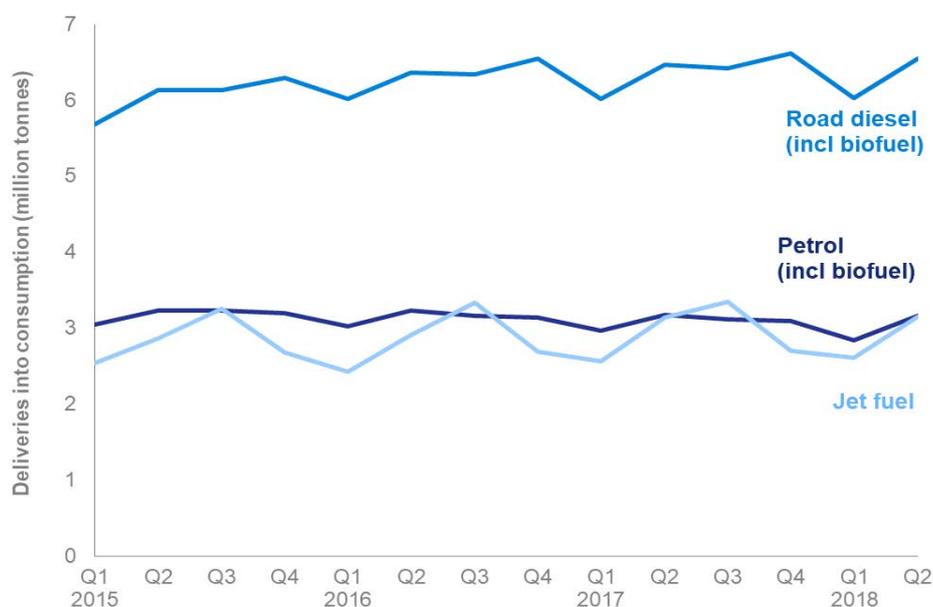
- Provisional figures for the second quarter of 2018 show that coal production fell to 0.7 million tonnes, 1.9 per cent lower than the second quarter of 2017. This was due to falling demand for electricity generation and a number of mines under 'care and maintenance' rather than active production.
- Imports of coal in the second quarter of 2018 were 7.3 per cent lower than in the second quarter of 2017 at 1.6 million tonnes.
- Total demand for coal in the second quarter of 2018 fell 12.5 per cent lower to a new record low of 1.8 million tonnes, with consumption by electricity generators down by 17.7 per cent to a new record low of 0.5 million tonnes.
- Coal stocks showed a seasonal increase of 0.4 million tonnes during the second quarter of 2018 but now stand at 4.5 million tonnes, 2.0 million tonnes lower than at the end of June 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 2 2018

Demand for key transport fuels



| | 2018 Q2 Thousand tonnes | Percentage change on a year earlier |
|-------------------------------------|----------------------------|--|
| Primary oil production | 12,010 | +0.4 |
| Primary oil demand | 14,165 | -7.3 |
| Net imports (primary oil) | 3,228 | -19 |
| Net imports (oil products) | 3,705 | +58 |
| Refinery production | 14,681 | -7.3 |
| Petroleum demand | 12,470 | +0.2 |
| - Motor spirit (including biofuels) | 3,012 | -0.1 |
| - DERV fuel (including biofuels) | 6,304 | +0.4 |
| - Aviation turbine fuel | 3,154 | +0.3 |

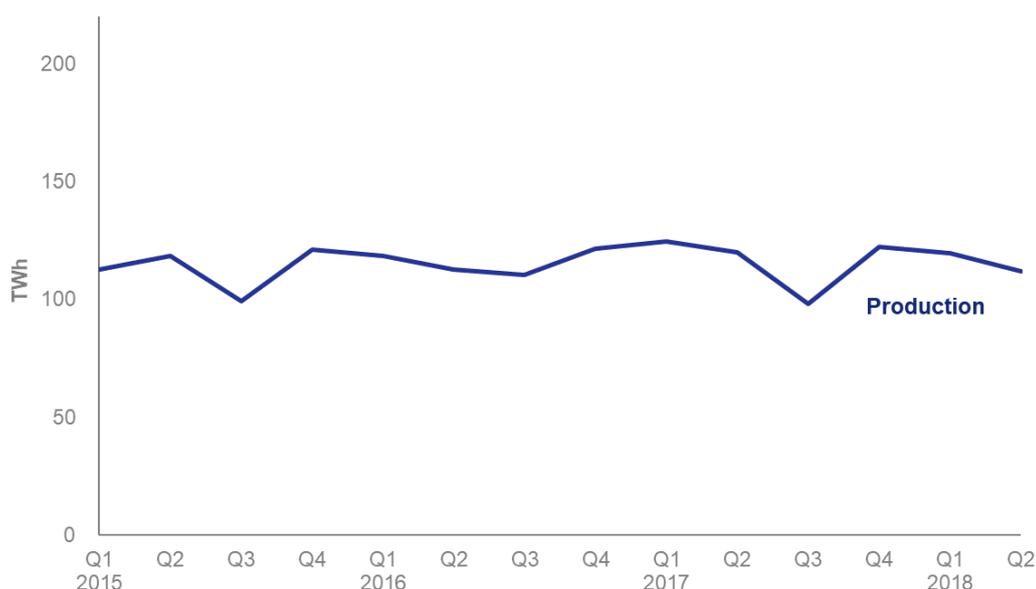
- Primary oil production was up 0.4 per cent in Q2 2018 compared to last year, with a decrease in Natural Gas Liquids production offset by an increase in Crude production.
- The UK was a net importer for all oil products in the second quarter of 2018 by 6.9 million tonnes, higher than the 6.2 million tonnes in the same period of 2017. This is driven primarily by the increase in the imports of petroleum products as both imports and exports of primary oil products fell.
- Production of petroleum products in Q2 2018 decreased on last year (down 7.3 per cent). Imports were up 17.4 per cent, returning to normal levels following low imports in Q2 2017.
- Overall demand for petroleum products in the second quarter of 2018 was similar to last year (up 0.2 per cent), within which sales of Motor Spirit including biofuels (unleaded) decreased by 0.1 per cent in the second quarter of 2018 while sales of DERV including biofuels (diesel) increased by 0.4 per cent.

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 2 2018

Production of natural gas



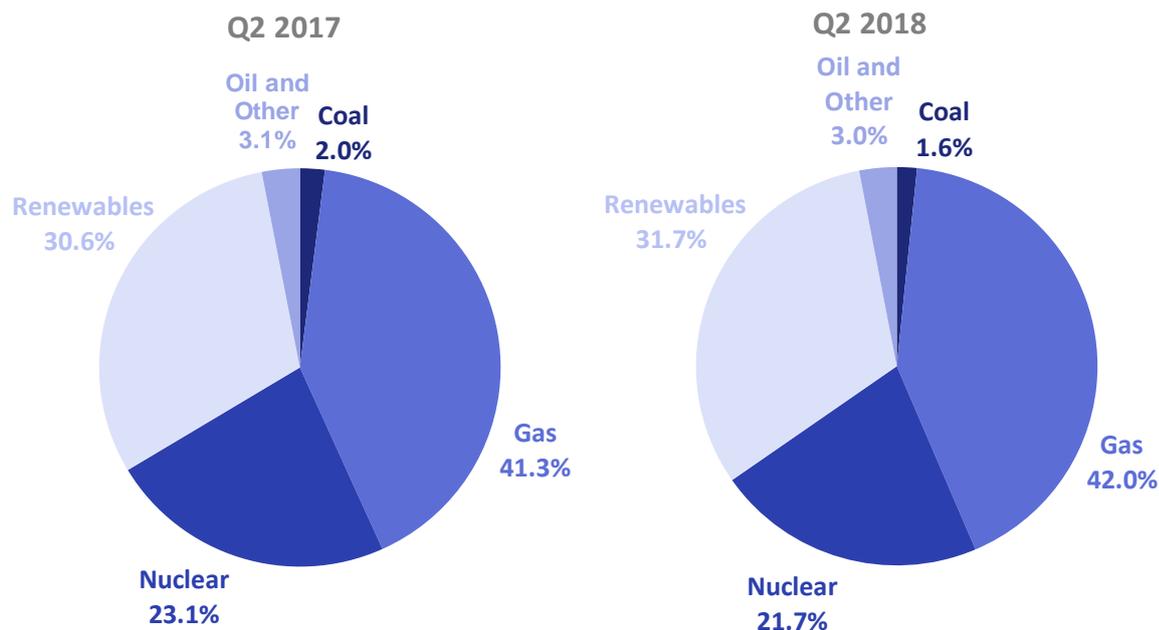
| | 2018 Q2 TWh | Percentage change on a year earlier |
|--------------------------|----------------|--|
| Gas production | 112.1 | -6.7 |
| Gas imports | 84.8 | -10.7 |
| Gas exports | 20.7 | -49.3 |
| Gas demand | 170.4 | -2.7 |
| - Electricity generation | 66.3 | -0.5 |
| - Domestic | 44.4 | -6.7 |

- Total indigenous UK production of natural gas in the second quarter of 2018 was 112.1 TWh, 6.7 per cent lower than a year before.
- Following near record pipeline imports at the start of the year due to the cold weather, imports in Q2 fell by 11 per cent on last year and included a 41 per cent fall in LNG imports.
- Exports remained low in Q2 following low levels in Q1 and were down by one-half on 2017, falling to the lowest volume for Q2 in the last 20 years.
- UK gas demand was down 2.7 per cent compared to Q2 2017, with demand for electricity generation and domestic usage both down, by 0.5 and 6.7 per cent respectively.

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 2 2018



| | 2018 Q2 <i>TWh</i> | Percentage change on a year earlier |
|-----------------------------------|-----------------------|--|
| Electricity Generated from | | |
| Coal | 1.24 | -19.5 |
| Nuclear | 16.63 | -6.7 |
| Gas | 32.13 | +1.0 |
| Renewables | 24.25 | +3.0 |
| Total | 76.55 | -0.7 |
| Supplied to | | |
| Industry | 22.5 | +1.5 |
| Domestic | 22.7 | -2.9 |
| Other final consumers | 24.4 | -1.3 |
| All | 69.5 | -1.0 |

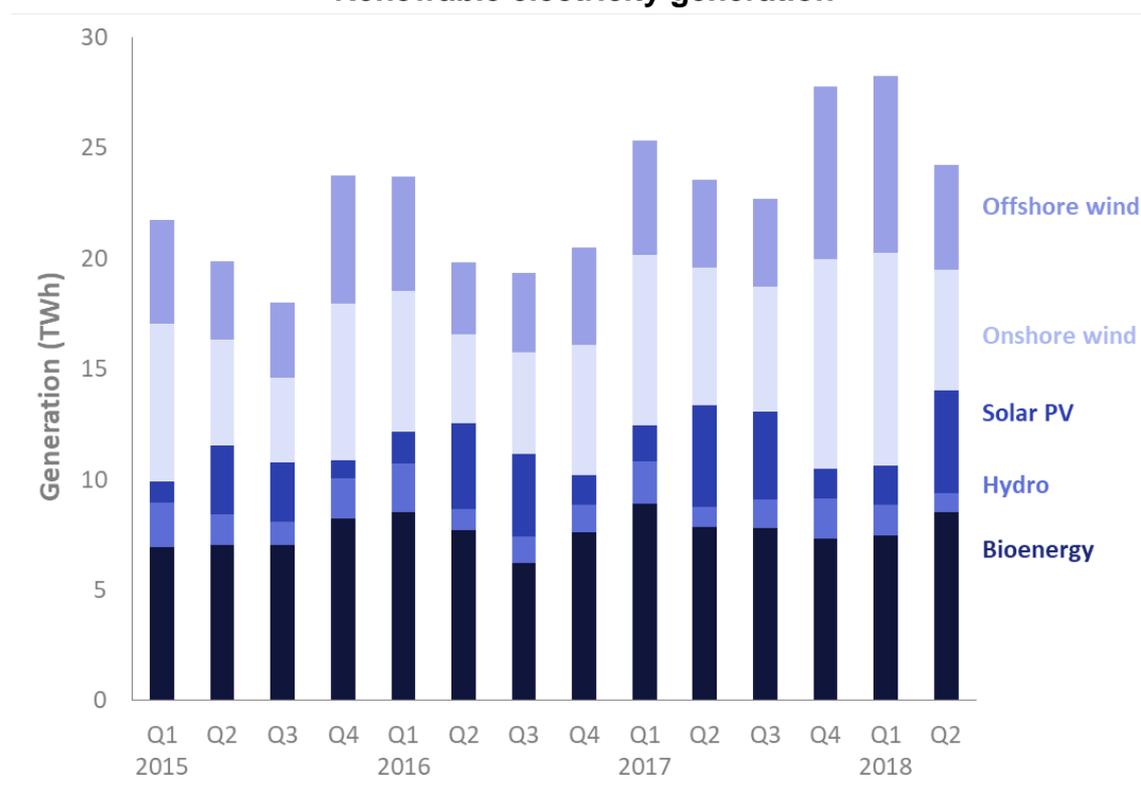
- Fuel used by generators in the second quarter of 2018 was 1.5 per cent lower than in the second quarter of 2017.
- Generation from coal in the second quarter of 2018 fell by nearly 20 per cent, while gas increased by 1.0 per cent when compared with a year earlier. Nuclear generation decreased by 6.7 per cent. Renewables generation increased by 3.0 per cent.
- Low carbon generation accounted for 53.4 per cent of generation in Q2 2018, a 0.3 percentage point decrease from the same period last year.
- Total electricity generated in the second quarter of 2018 was 0.7 per cent lower than a year earlier.
- Final consumption of electricity fell by 1.0 per cent in the second quarter of 2018, with domestic use down by 2.9 per cent, due to relatively warmer temperatures.

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 2 2018

Renewable electricity generation



| | 2018 Q2 TWh | Percentage change on a year earlier |
|----------------------------------|----------------|--|
| Renewable electricity generation | | |
| Onshore wind | 5.45 | -12.1 |
| Offshore wind | 4.75 | +19.0 |
| Hydro | 0.87 | -4.5 |
| Solar PV | 4.65 | +0.9 |
| Bioenergy (inc. co-firing) | 8.53 | +8.9 |
| All renewables | 24.25 | +3.0 |

- Renewables' share of electricity generation was a record 31.7 per cent in 2018 Q2, up 1.1 percentage points on the share in 2017 Q2
- Renewable electricity generation was 24.3 TWh in 2018 Q2, an increase of 3.0 per cent on the previous year. Onshore wind generation fell by 12 per cent; due to the lower wind speeds, although this was more than offset by an increase in offshore wind generation, due to a 2.2 GW increase in capacity. Generation from hydro fell by 4.5 per cent on a year earlier, due to lower rainfall. Generation from bioenergy was up by 8.9 per cent, despite a fall in generation from landfill gas. Solar PV increased to a new record of 4.6 TWh, 0.9 per cent higher than the second quarter of 2017, the previous record.
- Renewable electricity capacity was 42.2 GW at the end of the second quarter of 2018, a 10 per cent increase (3.9 GW) on a year earlier.
- Renewable transport: Liquid biofuels increased by 14 per cent, and represented 3.8 per cent (by volume) of petrol and diesel consumed in road transport in the second quarter of 2018.

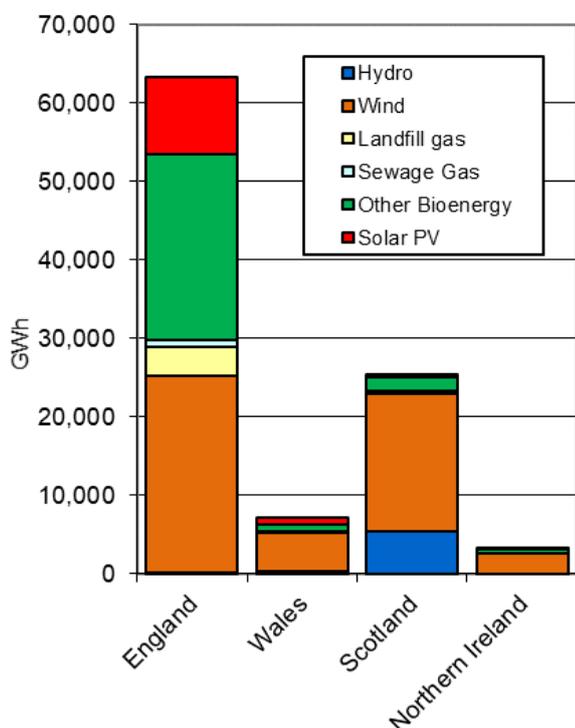
Renewables quarterly tables ET 6.1 – 6.2 are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/energy-trends-section-6-renewables



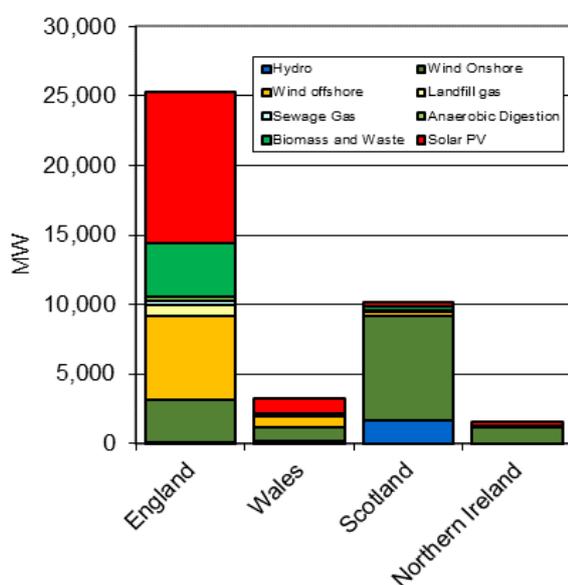
RENEWABLE ELECTRICITY IN THE REGIONS

A special feature in the September 2018 edition of Energy Trends looks at renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2017. The article covers all renewables including those that are not eligible for the Renewables Obligation or Feed in Tariffs. It updates a similar article that was published in September 2017. The main features of the latest statistics are:

Renewable generation by country, 2017



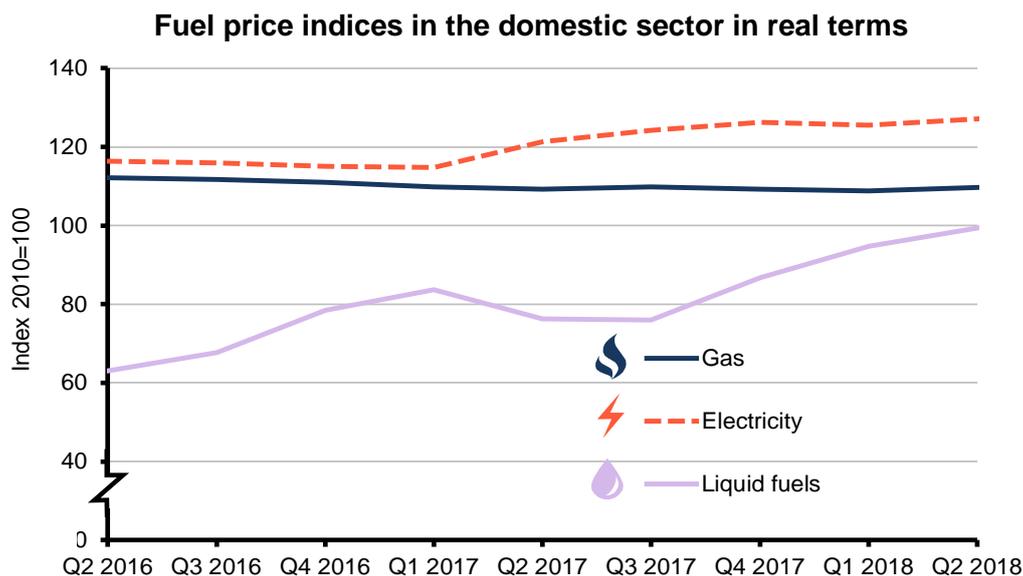
Renewable capacity, by country, 2017



- At the end of 2017, England had 62 per cent of UK capacity, with 25 per cent in Scotland. Similarly, England had 64 per cent of UK generation, reflecting the high share of bioenergy, with 26 per cent in Scotland.
- Within England, Yorkshire and the Humber has the largest share of generation (32 per cent), largely due to the three units of Drax power station. Following is the East of England, with 20 per cent of capacity, and 17 per cent of generation, more than half of which coming from offshore wind.
- During 2017, capacity in England increased by 12 per cent, including a 37 per cent (1.6 GW) increase in Offshore wind capacity. Generation rose by 14 per cent (7.6 TWh). This included a 29 per cent (4.0 TWh) increase in onshore wind generation as well as increases in solar PV generation and bioenergy.
- Capacity in Northern Ireland increased by 39 per cent (0.4 GW), with onshore wind contributing about three quarters of this growth. There was also a large increase in Solar PV capacity (85 per cent higher than at the end of 2016). Generation increased by over 40 per cent (0.9 TWh), with a 0.8 TWh increase in onshore wind generation.
- Capacity in Scotland rose by 1 per cent (1.4 GW), with 1.2 GW of the increase due to new onshore wind capacity. Generation in Scotland increased by 29 per cent (2.4 TWh), with wind up 40 per cent (4.9 TWh) on 2016.
- Capacity in Wales increased by 12 per cent (0.3 GW), with just over half of this from onshore wind. Generation increased by just over a third (1.8 TWh), with a 1.0 TWh increase in onshore wind generation as well as a 0.4 TWh increase in generation from bioenergy.



DOMESTIC PRICES: QUARTER 2 2018



| Consumer price index fuel components in real terms ⁽¹⁾ 2010=100 | 2018 Q2 | Percentage change on a year earlier |
|--|---------|-------------------------------------|
| Solid fuels | 102.5 | -0.5 |
| Gas | 109.7 | +0.3 |
| Electricity | 127.2 | +4.8 |
| Liquid fuels | 99.4 | +30.4 |
| Total domestic fuel | 118.8 | +3.4 |

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

- Q2 2018 data shows that the price paid for all domestic fuels by household consumers increased by 3.4 per cent in real terms between Q2 2017 and Q2 2018, and by 1.2 per cent between Q1 and Q2 2018.
- Domestic electricity prices, including VAT, in Q2 2018 were 4.8 per cent higher in real terms than in Q2 2017. Prices were 1.3 per cent higher than in Q1 2018.
- The price of domestic gas, including VAT, rose slightly by 0.3 per cent in real terms between Q2 2017 and Q2 2018, and by 0.8 per cent between Q1 and Q2 2018.
- The price of liquid fuels increased by 30 per cent between Q2 2017 and Q2 2018 and by 4.9 per cent between Q1 and Q2 2018.

Switching levels

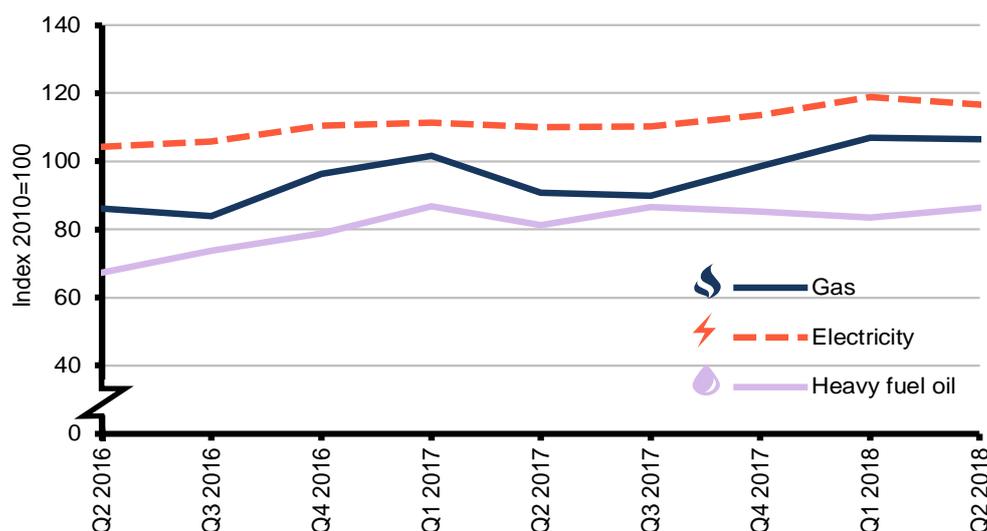
- Switching rates increased in Q2 2018, by 9.9 per cent compared to the levels of a year earlier for electricity and by 22.5 per cent for gas, based on data provided by Ofgem. An average of 460,000 households per month switched electricity supplier, with 390,000 households per month switching their gas supplier in the quarter.

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 2 2018

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



| Fuel prices index in real terms ⁽¹⁾ 2010=100 | 2018 Q2 | Percentage change on a year earlier |
|---|---------|-------------------------------------|
| Coal | 99.8 | 6.1 |
| Heavy fuel oil | 86.3 | 6.3 |
| Gas | 106.5 | 17.2 |
| Electricity | 116.6 | 6.1 |
| Total fuel | 109.6 | 7.8 |

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

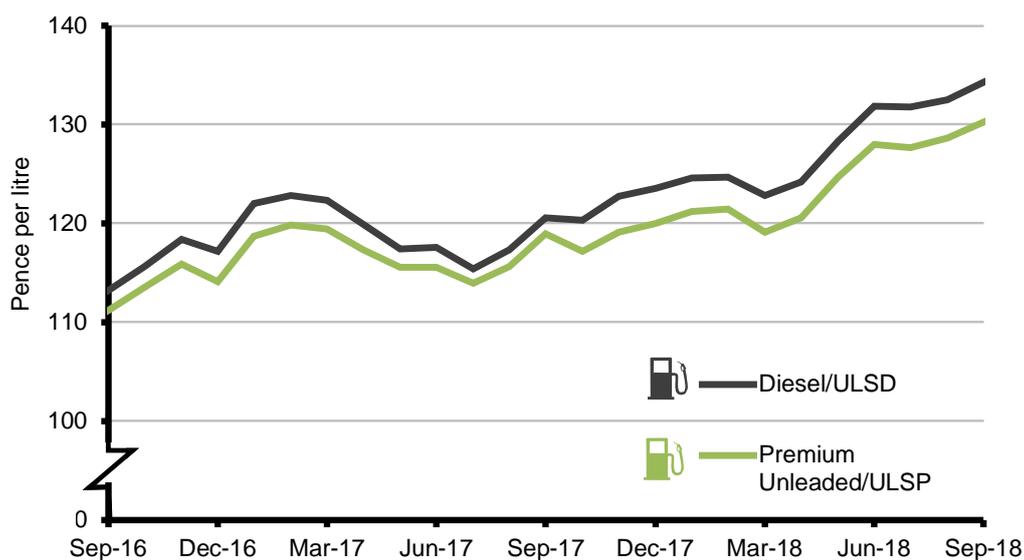
- Average industrial gas prices, including CCL were 17.2 per cent higher in real terms in Q2 2018 compared to Q2 2017 while prices excluding CCL were 16.9 per cent higher.
- Average industrial electricity prices were 6.1 per cent higher including CCL in real terms and 6.5 per cent higher excluding CCL in real terms, in Q2 2018 compared to Q2 2017.
- Average coal prices were 6.1 per cent higher in real terms including CCL and 6.6 per cent higher excluding CCL in Q2 2018 compared to Q2 2017.
- Heavy fuel oil prices were 6.3 per cent higher in real terms than a year ago.
- For the period July to December 2017, UK industrial electricity prices for medium consumers including taxes were the third highest in the EU15 whilst UK industrial gas prices for medium consumers including taxes were the 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 2 2018

Typical retail prices of road transport fuels



| Retail prices of petroleum products | Mid-September 2018 ⁽¹⁾ Pence per litre | Percentage change on a year earlier |
|-------------------------------------|--|--|
| Unleaded petrol ⁽²⁾ | 130.2 | 9.5 |
| Diesel ⁽²⁾ | 134.3 | 11.4 |

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

(2) Prices are provisional estimates.

- In mid-September 2018, unleaded petrol was on average 130.2 pence per litre, 11.3 pence per litre (9.5 per cent) higher than a year earlier but 8.1 per cent lower than the high reached in April 2012.
- In mid-September 2018, diesel was on average 134.3 pence per litre, 13.8 pence per litre (11 per cent) higher than a year earlier but 9.1 per cent lower than the high reached in April 2012.
- In August 2018, the UK retail price for petrol was ranked fifth lowest in the EU15. UK diesel prices were the third highest in the EU15.
- In August 2018 the price of crude oil acquired by refineries, in £ sterling terms, was 42 per cent higher than a year ago, unchanged compared to the previous month but 30 per cent lower than the level in March 2012.

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



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Notes to editors

1. More detailed figures of United Kingdom energy production and consumption and of energy prices, for the second quarter of 2018 are given in the September 2018 editions of ENERGY TRENDS and ENERGY PRICES respectively, the Department's statistical bulletins on energy, released on 27 September 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

