



Department for
Business, Energy
& Industrial Strategy



Date: 25 June 2020

STATISTICAL PRESS RELEASE

UK Energy Statistics, Q1 2020

Energy Trends and Energy Prices publications are published today 25 June 2020 by the Department for Business, Energy and Industrial Strategy. The publications cover new data for the first quarter of 2020 (January to March).

Energy Trends covers statistics on energy production and consumption, in total and by fuel, and provides an analysis of the year on year changes.

The main points for the first quarter of 2020 are:

- Total **energy production** was 1.8 per cent higher than in the first quarter of 2019. Coal production reached a record low in the quarter, down 26 per cent on the same period last year.
- Total **primary energy consumption** fell by 0.9 per cent. However, when adjusted to take account of weather differences between the first quarter of 2019 and the first quarter of 2020, total primary energy consumption fell by 1.0 per cent.
- **Final energy consumption** (excluding non-energy use) was 0.7 per cent higher than in the first quarter of 2019. Domestic consumption rose by 4.5 per cent, potentially a result of increased home working from March 2020. On a temperature corrected basis, final energy consumption was up 1.0 per cent over the same period.
- **The impact of COVID-19 on energy production and consumption is relatively marginal for most fuels as the lockdown came into effect late into the quarter (23 March 2020).** As noted above, there was some increase in domestic demand but also a sharp drop in transport demand resulting from a downturn in petrol sales (down 2.8 per cent) and a sharp drop in aviation fuel demand (down 14.2 per cent).
- **Renewables' share of electricity generation** (wind, solar, hydro and other renewables) increased to record 47.0 per cent in 2020 Q1, compared to 35.9 per cent in 2019 Q1, mostly due to increased capacity and higher wind speeds in February 2020. Wind and solar combined accounted for a record high of 32.2 per cent of electricity generation in 2020 Q1.
- **Low carbon generation reached a new record high** at 62.1 per cent of generation, with fossil fuel generation reaching a new record low at 35.4 per cent with a sharp fall in gas generation. This is despite a fall in nuclear generation caused by maintenance outages.

- **Renewable electricity capacity** was 47.4 GW at the end of the first quarter of 2020, an increase of 5.2 per cent on the same period a year earlier, mostly due to increased capacity for offshore wind generation.
- **Provisional calculations show that 13.2 per cent of final energy consumption in 2019 came from renewable sources**, up from 12.0 (revised) per cent in 2018, as measured against the UK's target to reach 15 per cent by 2020 under the 2009 EU Renewable Directive.

Energy Prices covers prices to domestic and industrial consumers, prices of oil products and comparisons of international fuel prices.

The main points for the first quarter of 2020 are:

- **Domestic energy supplier switching** data for the first quarter of 2020 shows transfers between suppliers increased compared to the same period in 2019 continuing the upward trend in numbers of customers switching. The equivalent of 5.0 per cent of all electricity customers (1.4 million) and 5.1 per cent of all gas customers (1.2 million) switched during January, February and March 2020.
- **Unleaded petrol and diesel prices** for mid-June 2020 are both 21 pence per litre less than prices for June 2019. Unleaded petrol in June 2020 was on average 106.4 pence per litre which is 17 per cent lower than the year before and diesel was on average 112.5 pence per litre, 16 per cent lower than 2019.

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 June 2020 edition of Energy Trends also includes an article on:

- What are households' perceptions of fuel poverty?

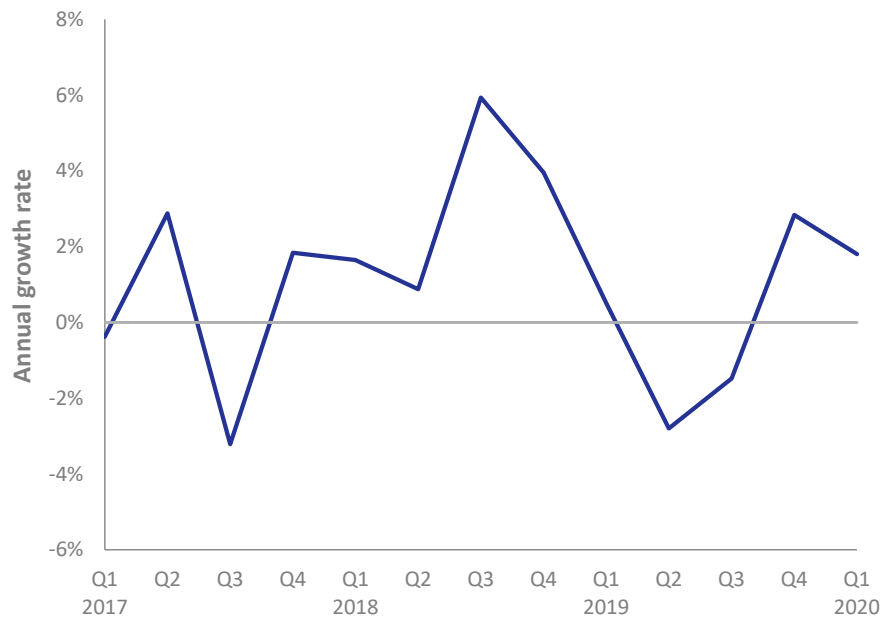
The following energy and climate change statistics are also published today 25 June 2020, by the Department for Business, Energy and Industrial Strategy:

- Local authority carbon dioxide emissions, 2018
www.gov.uk/government/collections/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics.
- National Energy Efficiency Data-framework
www.gov.uk/government/collections/national-energy-efficiency-data-need-framework.
- Solar photovoltaics deployment, May 2020
www.gov.uk/government/statistics/solar-photovoltaics-deployment
- Sub-national road transport consumption, 2018
www.gov.uk/government/collections/road-transport-consumption-at-regional-and-local-level



TOTAL ENERGY: QUARTER 1 2020

Total Energy - Production



	Q1 2020 Million tonnes of oil equivalent	Percentage change on a year earlier
Total production	34.6	+1.8
Oil	14.1	-5.5
Natural gas	10.0	+3.6
Primary electricity ⁽¹⁾	5.7	+9.4
Bioenergy & waste	4.5	+18.9
Coal	0.3	-26.5

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

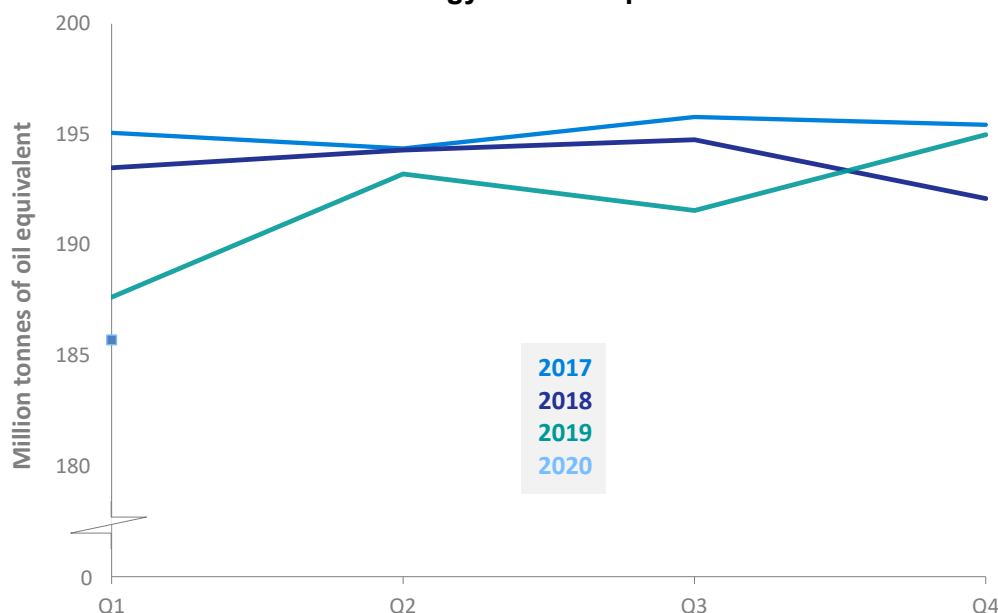
- Total production in the first quarter of 2020 stood at 34.6 million tonnes of oil equivalent, 1.8 per cent higher than in the first quarter of 2019.
- Production of oil fell by 5.5 per cent compared to the first quarter of 2019, with NGL production falling by 13 per cent due to maintenance work at the Mossmorran NGL processing plant in Fife, whilst production of natural gas rose by 3.6 per cent due to strong output at several terminals across the UK.
- Primary electricity output in the first quarter of 2020 was 9.4 per cent higher than in the first quarter of 2019, within which nuclear electricity output was 5.8 per cent lower due to outages, whilst output from wind, solar and natural flow hydro was 35 per cent higher and at a record quarterly high due to record levels of wind generation in February 2020 when particularly extreme wind conditions were experienced during Storms Ciara and Dennis.
- Production of bioenergy and waste was 19 per cent higher compared to the first quarter in 2019 due to increased capacity.
- Coal production fell by 26 per cent compared to the first quarter in 2019 due to falling demand for coal for electricity generation and mine closures.

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 1 2020

Total Energy – consumption⁽¹⁾



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

	Q1 2020 Million tonnes of oil equivalent	Percentage change on a year earlier
Total energy consumption		
Unadjusted	53.0	-0.9
Seasonally adjusted and temperature corrected – annual rate	185.7	-1.0
Final consumption: unadjusted	41.0	+0.7
temperature corrected	36.3	+1.0

Final consumption (excluding non-energy use) was provisionally 0.7 per cent higher than in the first quarter of 2019, with domestic consumption up 4.5 per cent, reflecting cooler weather in February and March 2020, along with a shift to increased home working in March 2020. On a temperature corrected basis, final energy consumption was up 1.0 per cent over the same period, within which domestic consumption was up 7.0 per cent.

When examining seasonally adjusted and temperature corrected annualised rates:

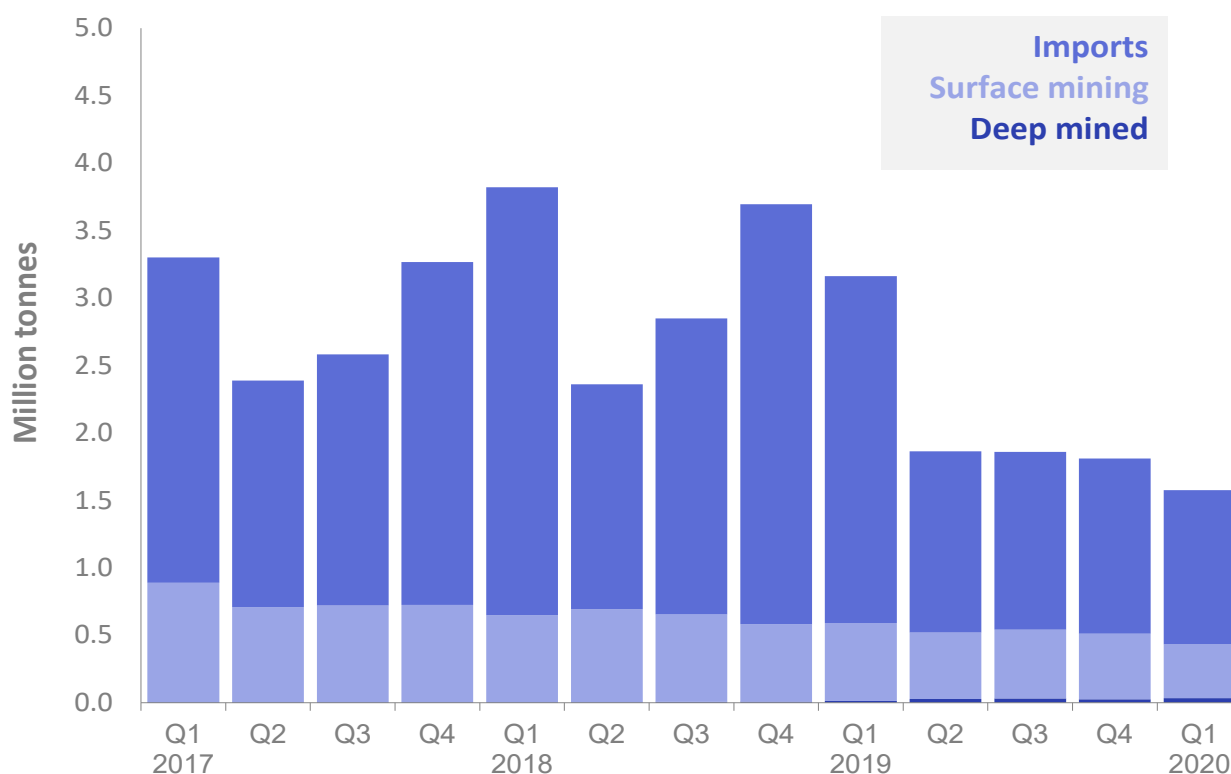
- Total inland energy consumption on a primary fuel input basis was 185.7 million tonnes of oil equivalent in the first quarter of 2020, 1.0 per cent lower than the same quarter in 2019.
- Between the first quarter of 2019 and the first quarter of 2020, coal and other solid fuel consumption rose by 5.6 per cent as Fiddlers Ferry power station burnt its remaining stocks before closing on 31 March 2020.
- Oil consumption fell by 2.6 per cent, whilst gas consumption fell by 5.8 per cent.
- Bioenergy consumption rose by 13 per cent.
- Primary electricity consumption rose by 7.3 per cent due to an increase of 36 per cent from wind, solar and hydro due to higher wind speeds and increased offshore wind capacity, which more than offset falls of 5.6 per cent from nuclear and 4.1 per cent from net imports.

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 1 2020

Coal production and imports



	Q1 2020 Thousand tonnes	Percentage change on a year earlier
Coal supply	2,563	+2.3
Coal production	434	-26.6
Coal imports	1,141	-55.6
Coal demand	2,563	+2.5
- Power stations	1,366	+9.6
- Coke ovens & blast furnaces	675	-3.2
- Final users	490	-6.3

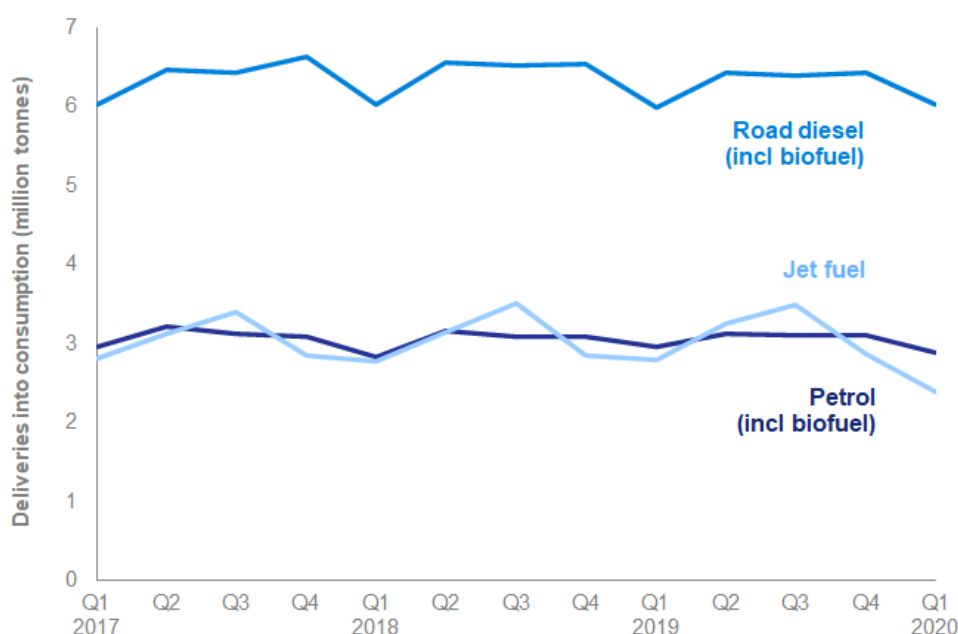
- Provisional figures for the first quarter of 2020 show that coal production fell to a new record low of 0.4 million tonnes, 27 per cent lower than the first quarter 2019. This is a result of mine closures and falling demand for coal for electricity generation.
- Imports of coal in the first quarter of 2020 were 56 per cent lower than in the first quarter of 2019 at 1.1 million tonnes (a new record low).
- Total demand for coal in the first quarter of 2020 was 2.6 million tonnes, 2.5 per cent higher than in the first quarter of 2019, with consumption by electricity generators up by 9.6 per cent to 1.4 million tonnes. as Fiddlers Ferry burnt its remaining stocks before it closed on 31 March 2020. The rise in coal generation is a temporary deviation from the declining trend.
- Coal stocks showed a seasonal fall of 1.2 million tonnes during the first quarter of 2020 and stood at 4.1 million tonnes, 1.7 million tonnes lower than at the end of March 2019.

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 1 2020

Demand for key transport fuels



Q1 2020	Thousand tonnes	Percentage change on a year earlier
Primary oil production	13,029	-5.4
Primary oil demand	14,069	-4.6
Net imports (crude oil and NGLs)	1,598	(+)
Net imports (oil products)	3,056	+22.0
Refinery production	14,473	-4.5
Petroleum demand	16,465	-2.3
- Petrol (including biofuels)	2,880	-2.8
- Diesel (including biofuels)	6,032	+0.7
- Aviation turbine fuel	2,391	-14.2

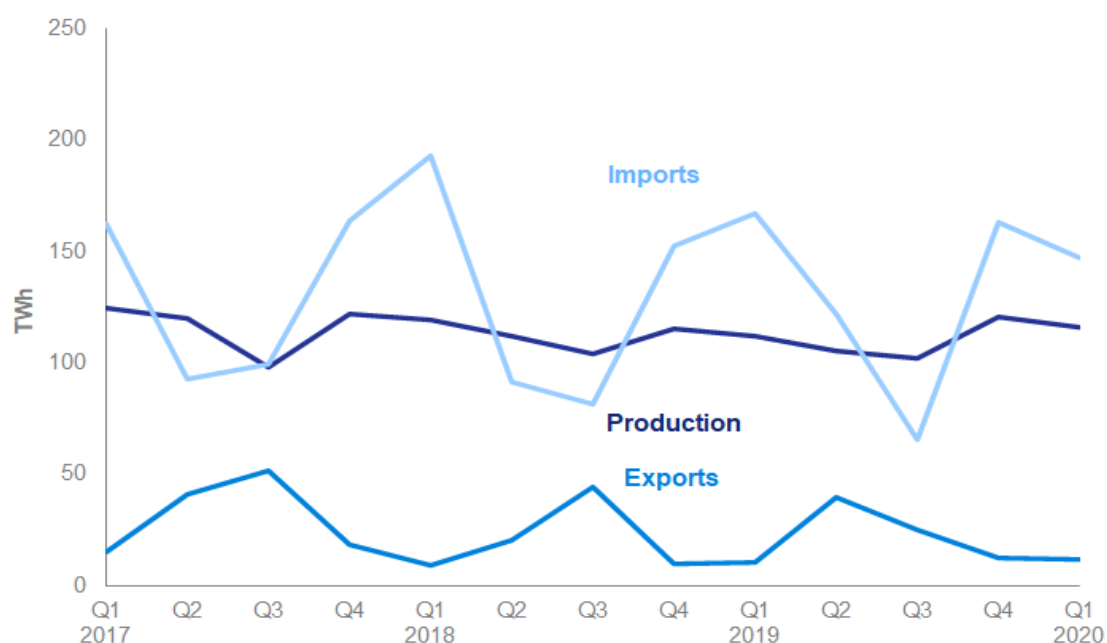
- Indigenous production of primary oils was down 5.4 per cent on Q1 2019, which includes a 13 per cent contraction in NGL volumes. A contributing factor to continued low NGL production was ongoing maintenance at the Mossmorran NGL processing plant in Fife.
- The UK was a net importer of petroleum products by 3 million tonnes in Q1 2020, up by a fifth as total imports increased to 8.1 million tonnes.
- Demand decreased by 2.3 per cent in Q1 2020. Demand for transport fuels fell by 5.3 per cent, the second largest fall in transport since the 2008 recession. Most notably demand for aviation fuel fell by 14 per cent. In the UK aviation fuel is largely used for international travel, which was impacted early by Covid-19 in countries abroad. Petrol was down 2.8 per cent and diesel up 0.7 per cent. The decrease in petrol demand compared to diesel can be explained by road miles driven by vehicle type, which decreased by 7 billion vehicle miles. Of this, 87 per cent was car miles and followed the ban on unnecessary travel within the UK announced on 23rd March 2020. Heavy Goods and Light Goods vehicles used for business have been affected less and these vehicles have predominantly diesel engines, meaning diesel demand was less impacted during Q1 2020.

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 1 2020

Production and trade of natural gas



	Q1 2020 TWh	Percentage change on a year earlier
Gas production	115.8	+3.6
Gas imports	147.0	-12.2
Gas exports	11.9	+13.9
Gas demand	269.4	-4.6
- Electricity generation	57.6	-23.6
- Domestic	122.5	+4.4

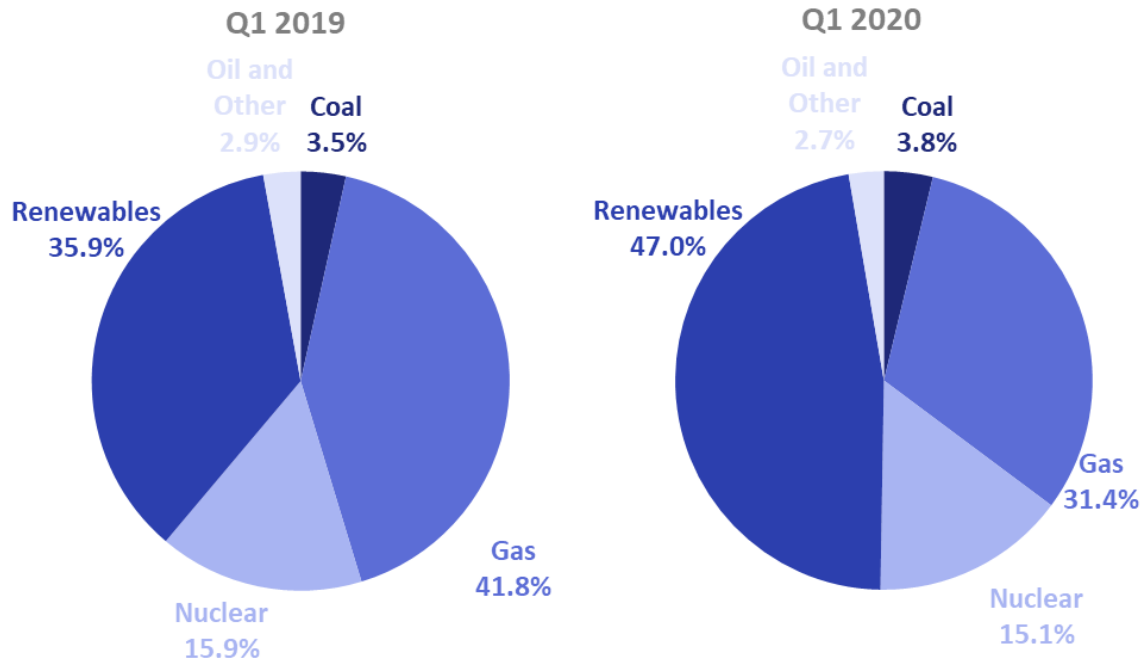
- Total indigenous UK production of natural gas in the first quarter of 2019 was 116 TWh, 3.6 per cent higher than last year.
- Due to increased domestic production and a drop in demand, overall imports fell by 12 per cent compared to Q1 2019. Despite this overall decrease, Liquefied Natural Gas (LNG) imports increased sharply and now comprise just under half of all imported gas, which means an increased diversification of supply. Domestic production was the largest source of gas at 42 per cent of supply, with gas imports from Norway remaining the second largest at 27 per cent.
- Meanwhile, exports increased by 14 per cent, driven by increased trade with Ireland. Net imports have decreased by 14 per cent.
- Demand for gas for electricity generation dropped by 24 per cent following exceptionally windy weather that increased the output of renewables to record levels.
- Although temperatures were slightly warmer than last year, demand for domestic gas increased by 4.4 per cent. This increase could have been due to the impact of the Covid-19 pandemic on household behaviour as people began working from home both before and after the UK government lockdown announcement on 23rd March 2020.

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 1 2020

Electricity generated



	Q1 2020 TWh	Percentage change on a year earlier
Electricity Generated from		
Coal	3.3	7.7%
Nuclear	13.1	-5.8%
Gas	27.3	-25.5%
Renewables	40.8	29.8%
Total	86.9	-0.8%
Supplied to		
Industry	23.1	-3.6%
Domestic	30.1	-0.3%
Other final consumers	25.1	-1.8%
All	78.3	-1.8%

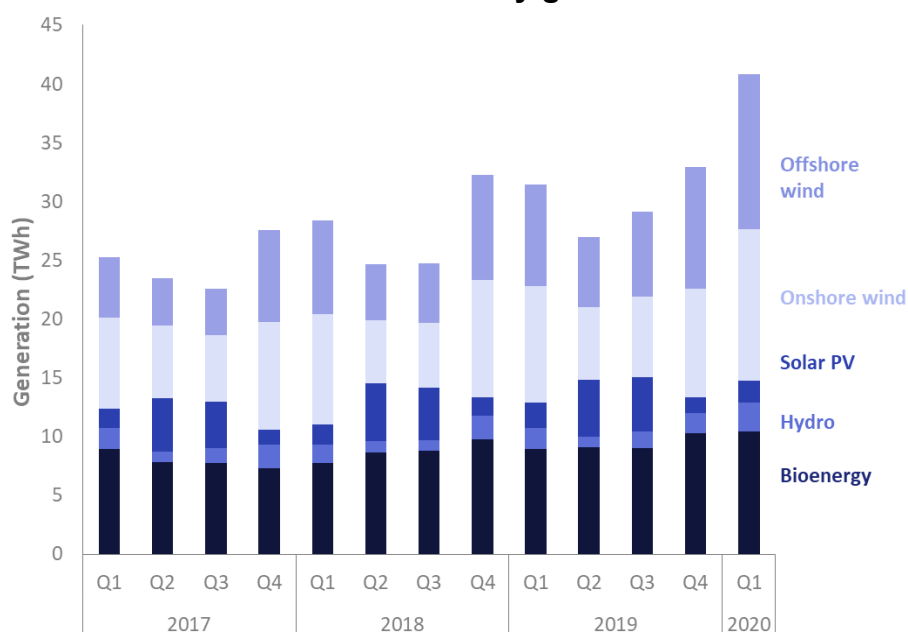
- Final electricity consumption was down by 1.8 per cent in Q1 of 2020 compared to the same period in 2019. Consumption was lower in all sectors with a large decrease for the industrial sector, down 3.6 per cent compared to Q1 of 2019.
- The share of electricity generated from low carbon sources was 62.1 per cent in Q1 of 2020, the highest quarterly value on the published data series. This came from a record share of electricity from renewable sources of 47.0 per cent, despite a fall in nuclear generation (down 5.8 per cent in comparison to Q1 of 2019).
- Fossil fuel's share of generation decreased to 35.4 per cent in Q1 2020, as the fuel mix continued to move towards renewable sources. This is a new record low for fossil fuels.
- Fuel used by generators in the first quarter of 2020 was 4.5 per cent lower than in Q1 2019.

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 1 2020

Renewable electricity generation



Renewable electricity generation	Q1 2020 TWh	Percentage change on a year earlier
Onshore wind	12.8	+29.1
Offshore wind	13.2	+53.1
Hydro	2.5	+34.9
Solar PV	1.9	-11.1
Bioenergy	10.4	+16.7
All renewables	40.84	+29.8

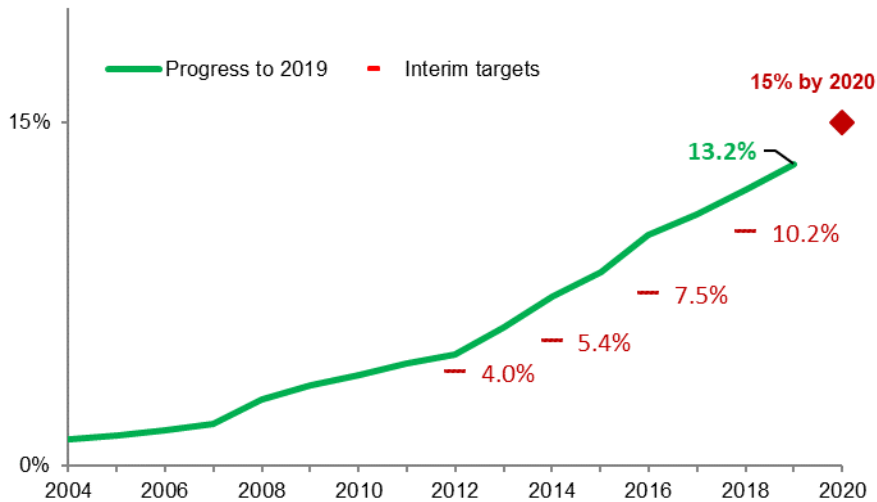
- Renewable electricity generation was a record 40.8 TWh in 2020 quarter 1, an increase of 30 per cent on the 31.5 TWh recorded a year earlier and 24 per cent up on the most recent quarter. Compared to Q1 2019, electricity generated from onshore wind rose by 29 per cent to 12.8 TWh and offshore wind generation increased by more than a half to 13.2 TWh. This was largely due to higher average wind speeds which rose to the second highest quarterly average in our data series. In addition, offshore wind capacity increased by 18.5 per cent on the year before. Generation from hydro increased by 35 per cent compared to 2019 quarter 1, largely due to increased rainfall (the quarter was the wettest since 2015). Generation from solar photovoltaics decreased by 11 per cent as a small increase in capacity was offset by a decrease in average daily sun hours. Generation from bioenergy increased by 16.7 per cent to 10.4 TWh.
- Renewables' share of total generation in 2020 Q1 was a record 47.0 per cent, an increase of 11.1 percentage points on 2019 Q1, reflecting increased capacity, higher wind speeds and more rainfall.
- Renewable electricity capacity was 47.4 GW at the end of the first quarter of 2020, a 5.2 per cent increase on a year earlier.
- Liquid biofuels represented 5.8 per cent of petrol and diesel consumed in road transport in 2020 Q1, a new record share and up from 3.8 per cent in 2019 Q1. Biofuel figures are provisional and are subject to revision.

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



UK progress against the Renewable Energy Directive

An update on the progress made against the UK's target under the 2009 EU Renewable Directive is provided within Energy Trends. Provisional calculations show that 13.2 per cent of final energy consumption in 2019 came from renewable sources, up from 12.0 (revised) per cent in 2018. The target to reach 15 per cent by 2020.

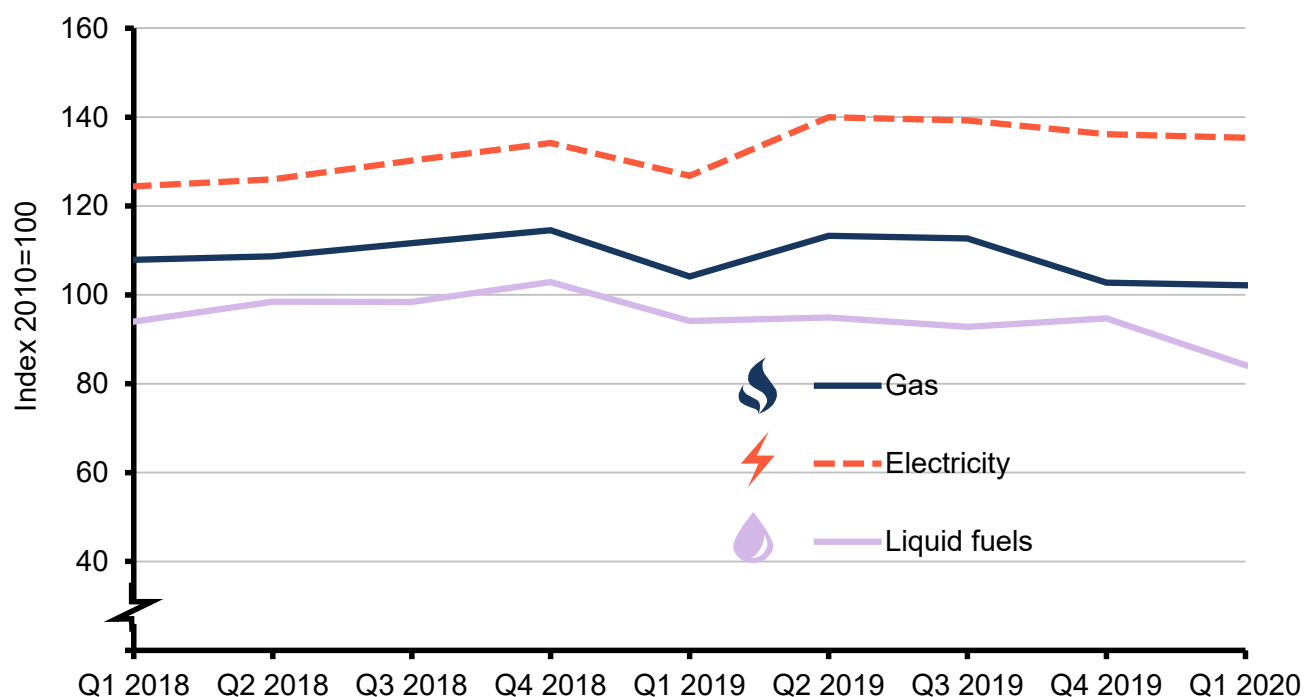


In addition, in 2019 compared to 2018, provisional figures show that:

- Renewable electricity accounted for 34.9 per cent of total generation (as measured using the RED methodology), an increase of 3.3 percentage points compared to 2018.
- Renewable heat accounted for 7.9 per cent of total heat consumption, an increase of 0.3 percentage points on 2018.
- Data for the transport estimate are being currently being reviewed and will be included in the Digest of UK Energy Statistics (DUKES) which is published on 30th July 2020. The result of that review will update the overall 13.2 per cent figure above.

DOMESTIC PRICES: QUARTER 1 2020

Fuel price indices in the domestic sector in real terms



Consumer price index fuel components in real terms ⁽¹⁾ 2010=100	Q1 2020	Percentage change on a year earlier
Solid fuels	106.6	2.0
Gas	102.1	-1.9
Electricity	135.3	6.8
Liquid fuels	84.2	-10.6
Total domestic fuels	119.2	2.7

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

- Prices paid for all domestic fuels increased by 2.7 per cent in real terms between Q1 2019 and Q1 2020. Between Q4 2019 and Q1 2020 prices for all domestic fuels fell by only 0.9 per cent in real terms.
- Domestic electricity prices, including VAT, in Q1 2020 were 6.8 per cent higher in real terms than in Q1 2019. Prices were 0.6 per cent lower than in Q4 2019.
- The price of domestic gas, including VAT, fell by 1.9 per cent in real terms between Q1 2019 and Q1 2020, and was 0.6 per cent lower between Q4 2019 and Q1 2020.
- For the period July to December 2019, prices for medium domestic gas consumers, including taxes, were the second lowest in the EU15 and for electricity consumers prices including taxes, were seventh highest.

Switching levels

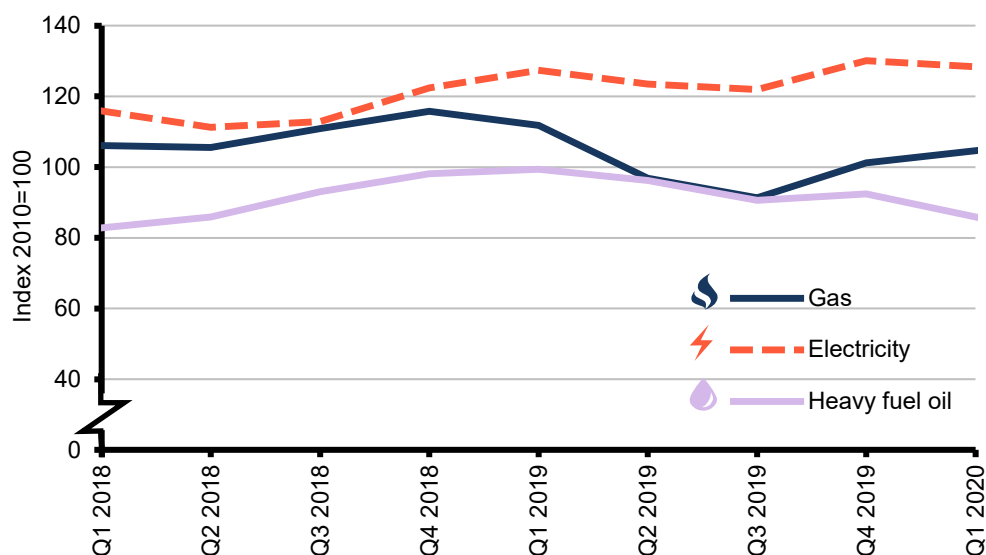
- The rates of switching in the electricity and gas market increased by 5.2 per cent between the first quarters of 2020 and 2019.
- The equivalent of 5.0 per cent of all electricity customers (1.4 million) and 5.1 per cent of all gas customers (1.2 million) switched during January, February and March 2020.

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 1 2020

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



Fuel prices index in real terms ⁽¹⁾ 2010=100	Q1 2020	Percentage change on a year earlier
Coal	103.4	-7.7
Heavy fuel oil	85.9	-13.6
Gas	104.6	-6.4
Electricity	128.4	0.8
Total fuel	119.0	-1.8

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

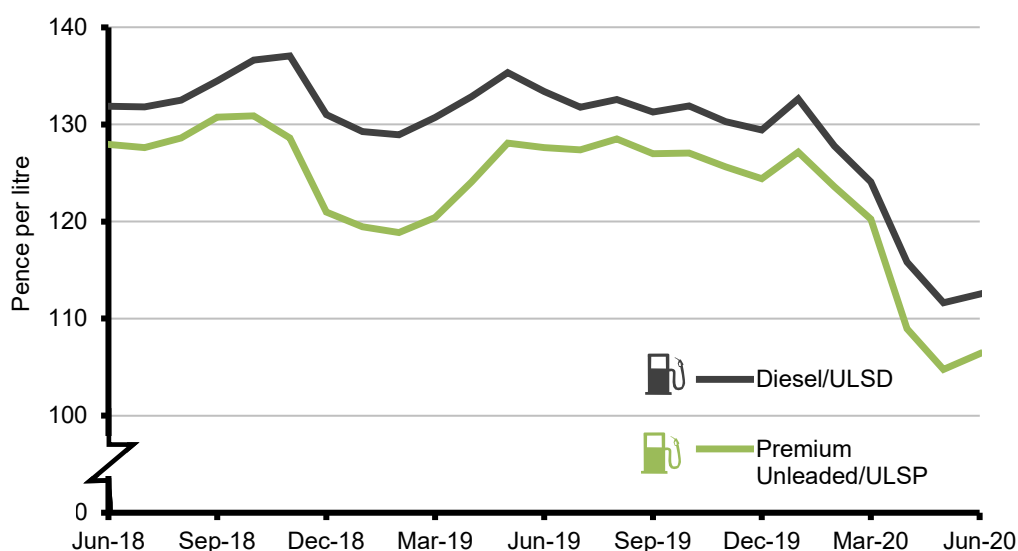
- Average industrial gas prices, including CCL were 6.4 per cent lower in real terms in Q1 2020 compared to Q1 2019, whilst prices excluding CCL were 9.1 per cent lower.
- Average industrial electricity prices were only 0.8 per cent higher including CCL but only 0.4 per cent lower excluding CCL, in real terms, in Q1 2020 compared to Q1 2019.
- Average coal prices were 7.7 per cent lower in real terms including CCL and 8.0 per cent lower excluding CCL in Q1 2020 compared to Q1 2019.
- Heavy fuel oil prices were 14 per cent lower in real terms than a year ago.
- For the period July to December 2019, UK industrial electricity prices for medium consumers including tax were the highest in the EU15, whilst industrial gas prices for medium consumers including tax 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

Typical retail prices of road transport fuels



Retail prices of petroleum products	Mid-June 2020 ⁽¹⁾ Pence per litre	Percentage change on a year earlier
Unleaded petrol ⁽²⁾	106.4	-17
Diesel ⁽²⁾	112.5	-16

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

(2) Prices are provisional estimates.

- In mid-June 2020, unleaded petrol was on average 106.4 pence per litre, 21.3 pence per litre lower than a year earlier, and 25 per cent lower than the high reached in April 2012.
- In mid-June 2020, diesel was on average 112.5 pence per litre, 20.9 pence per litre lower than a year earlier, and 24 per cent below the peak seen in April 2012.
- In May 2020, the average UK retail prices for petrol, including taxes, were fifth lowest in the EU15. Average UK diesel prices were the second highest in the EU15.
- In May 2020, the price of crude oil acquired by refineries, in £ sterling terms, was 65 per cent lower than a year earlier but only 0.4 per cent higher than in the previous month.

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 first quarter of 2020 are given in the June 2020 editions of ENERGY TRENDS and ENERGY PRICES respectively, the Department's statistical bulletins on energy, released on 25 June 2020.
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 2014 to 2018 are available in the DIGEST OF UNITED KINGDOM ENERGY STATISTICS 2019, published on 25 July 2019. The 2020 edition of the Digest will be published on 30 July 2020. 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

