



Department for
Business, Energy
& Industrial Strategy



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STATISTICAL PRESS RELEASE

UK Energy Statistics, Q2 2020

Energy Trends and Energy Prices publications are published today 24 September 2020 by the Department for Business, Energy and Industrial Strategy. The publications cover new data for the second quarter of 2020 (April to June).

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 second quarter of 2020 are:

- Total **energy production** was 1.5 per cent higher than in the second quarter of 2019.
- Total **primary energy consumption** for energy uses fell by 24 per cent. However, when adjusted to take account of weather differences between the second quarter of 2019 and the second quarter of 2020, total primary energy consumption fell by 19 per cent. This record low quarterly level of consumption was a direct result of the Covid-19 pandemic lockdown which took effect from 23 March 2020, resulting in a significant fall in demand for the main transport and other fuels (see further detail below).
- **Final energy consumption** (excluding non-energy use) was 30 per cent lower than in the second quarter of 2019. On a temperature adjusted basis, final energy consumption fell by 22 per cent. The quarter saw significant drops in all fuels and all sectors, notably transport which was down by over half compared to last year. Industrial and use in other sectors also fell, though domestic demand remained strong as people were encouraged to stay home.
- **Demand for the main transport fuels** was at a record low level of 5.6 million tonnes in the second quarter of 2020, as the Covid-19 lockdown impacted domestic and international travel. Aviation fuel fell by 86 per cent, whilst petrol and diesel fell by 48 and 39 per cent respectively.
- Of **electricity generated** in the second quarter of 2020, coal accounted for only 0.5 per cent, a record low, whilst gas accounted for 34.4 per cent. Nuclear generation accounted for 17.6 per cent of total electricity generated in the second quarter of 2020.

Main points continued:

- **Renewables share of electricity generation** (wind, solar pv, hydro and bioenergy) increased from 35.6 per cent in the second quarter of 2019 to 44.6 per cent in the second quarter of 2020, partly due to increased capacity.
- **Renewable electricity generation** was 30.1 TWh in the second quarter of 2020, an increase of 12 per cent on the 27.0 TWh in the second quarter of 2019.
- **Low carbon** electricity's share of electricity generation increased to 62.1 per cent in the second quarter of 2020, compared to 52.8 per cent in the second quarter of 2019.
- **Renewable electricity capacity** was 48.5 GW at the end of the second quarter of 2020, a 5.4 per cent increase (2.4 GW) on a year earlier, with just under 80 per cent of the increase coming from offshore wind.

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 2020 are:

- Office of National Statistics **price indices** for Quarter 2 2020 show large decreases in the real terms price of gas (decreases of 18 per cent) for both domestic and industrial users, when compared with the same period in 2019.
- The number of domestic customers **switching suppliers** decreased in the second quarter of 2020 compared to Q2 2019 (which saw the highest number of switches on record). The number of switches were 13 per cent lower for electricity and 21 per cent lower for gas (based on the latest Ofgem data).

(Customer switching figures for 2020 were updated on 25 September 2020 to incorporate a data correction from Ofgem. For more information visit Ofgem's website: www.ofgem.gov.uk/data-portal/retail-market-indicators)

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 2020 edition of Energy Trends also includes articles on:

- Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2019
- Combined Heat and Power in Scotland, Wales, Northern Ireland and the regions of England in 2019
- Diversity of supply for oil and oil products in OECD countries in 2019
- Competition in gas supply
- Competition in UK electricity markets
- Aggregated energy balances showing proportion of renewables in supply and demand
- Supply and demand of transport fuels during Covid-19



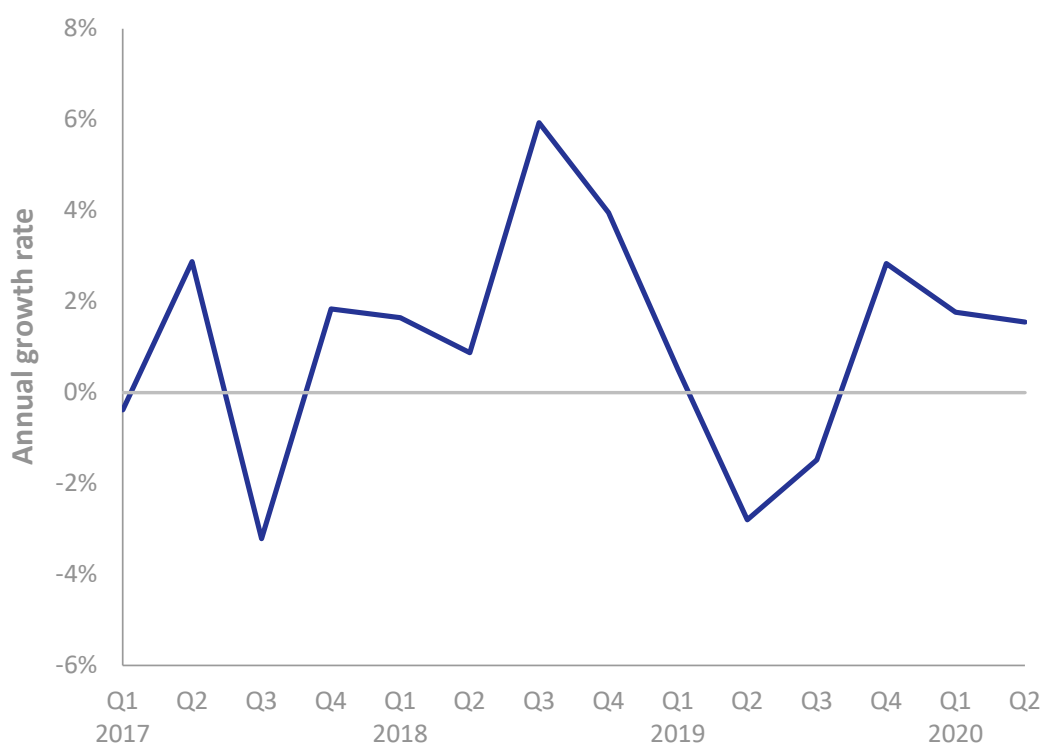
The following statistics are also published today 24 September 2020 by the Department for Business, Energy and Industrial Strategy:

- Solar photovoltaics deployment, August 2020
www.gov.uk/government/statistics/solar-photovoltaics-deployment
- Sub-national residual fuel use, 2018
www.gov.uk/government/statistics/sub-national-residual-fuel-consumption-2005-to-2018
- Sub-national total energy use, 2018
www.gov.uk/government/statistics/total-final-energy-consumption-at-regional-and-local-authority-level-2005-to-2018
- Sub-national electricity consumption in Northern Ireland
www.gov.uk/government/statistics/sub-national-electricity-consumption-statistics-in-northern-ireland
- Sub-national gas consumption in Northern Ireland
www.gov.uk/government/statistics/sub-national-gas-consumption-statistics-in-northern-ireland
- NEED: The impact of energy efficiency measures by property and household attributes
www.gov.uk/government/statistics/national-energy-efficiency-data-framework-need-impact-of-measures-data-tables-2020
- Average road fuel sales and stock levels: 20 September 2020
www.gov.uk/government/statistics/oil-and-oil-products-section-3-energy-trends



TOTAL ENERGY: QUARTER 2 2020

Total Energy - Production



	2020 Q2 Million tonnes of oil equivalent	Percentage change on a year earlier
Total production	31.7	+1.5
Oil	14.0	-1.4
Natural gas	10.0	+9.7
Primary electricity ⁽¹⁾	4.5	-1.9
Bioenergy & waste	3.0	+0.1
Coal	0.3	-29.3

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

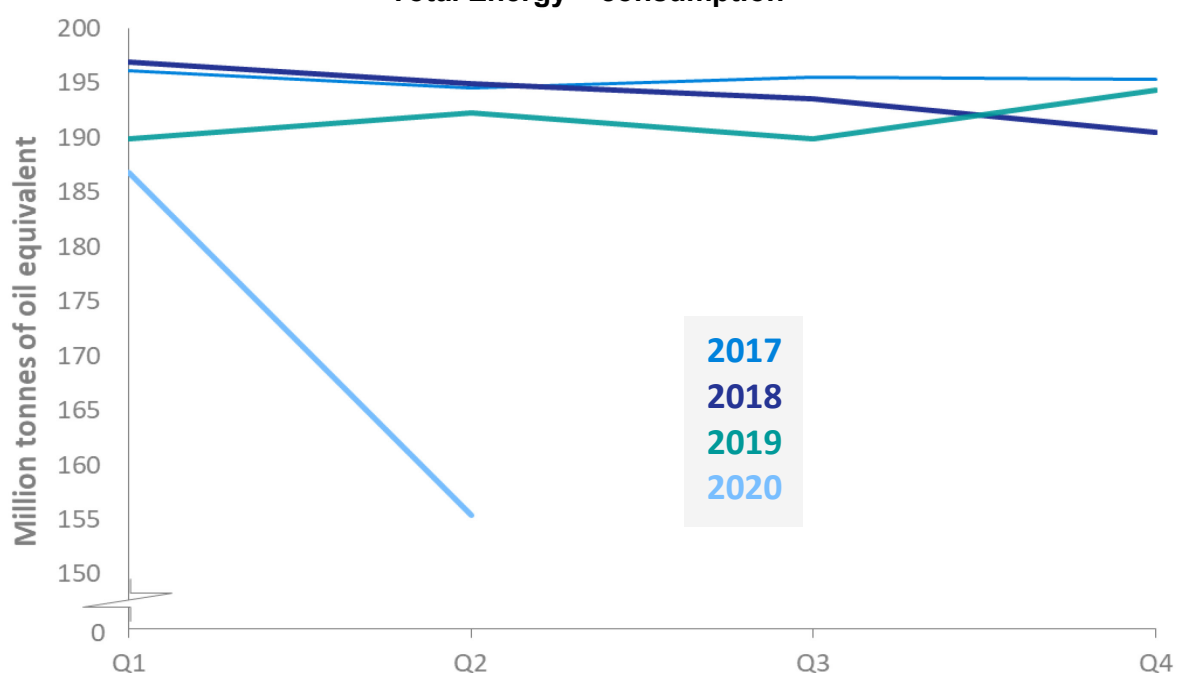
- Total production in the second quarter of 2020 was 31.7 million tonnes of oil equivalent, 1.5 per cent higher than in the second quarter of 2019.
- Production of oil fell by 1.4 per cent, whilst production of natural gas rose by 9.7 per cent due to planned summer maintenance being postponed due to the social distancing measures required because of the Covid-19 pandemic.
- Primary electricity output in the second quarter of 2020 was 1.9 per cent lower than in the second quarter of 2019. Nuclear electricity output was 9.2 per cent lower due to maintenance outages at Dungeness B, Hinkley Point B, Hunterston B and Sizewell B, whilst output from wind, hydro and solar pv was 13 per cent higher, driven by record levels of solar generation.
- Production of bioenergy and waste was 0.1 per cent higher compared to the second quarter in 2019, whilst coal production fell by 29 per cent to a record low level.

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 2020

Total Energy – consumption⁽¹⁾



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

	2020 Q2 Million tonnes of oil equivalent	Percentage change on a year earlier
Total consumption		
<i>Unadjusted</i>	33.0	-23.6
<i>Seasonally adjusted and temperature corrected – annual rate</i>	155.4	-19.2
Final consumption: <i>unadjusted</i>	22.4	-29.9
<i>temperature corrected</i>	28.1	-22.3

- **Final energy consumption** (excluding non-energy use) was 30 per cent lower than in the second quarter of 2019. On a temperature adjusted basis, final energy consumption fell by 22 per cent. The quarter saw significant drops in all fuels and all sectors, notably transport which was down by over half compared to last year. Industrial and use in other sectors also fell, though domestic demand remained strong as people were encouraged to stay home.

When examining seasonally adjusted and temperature corrected annualised rates:

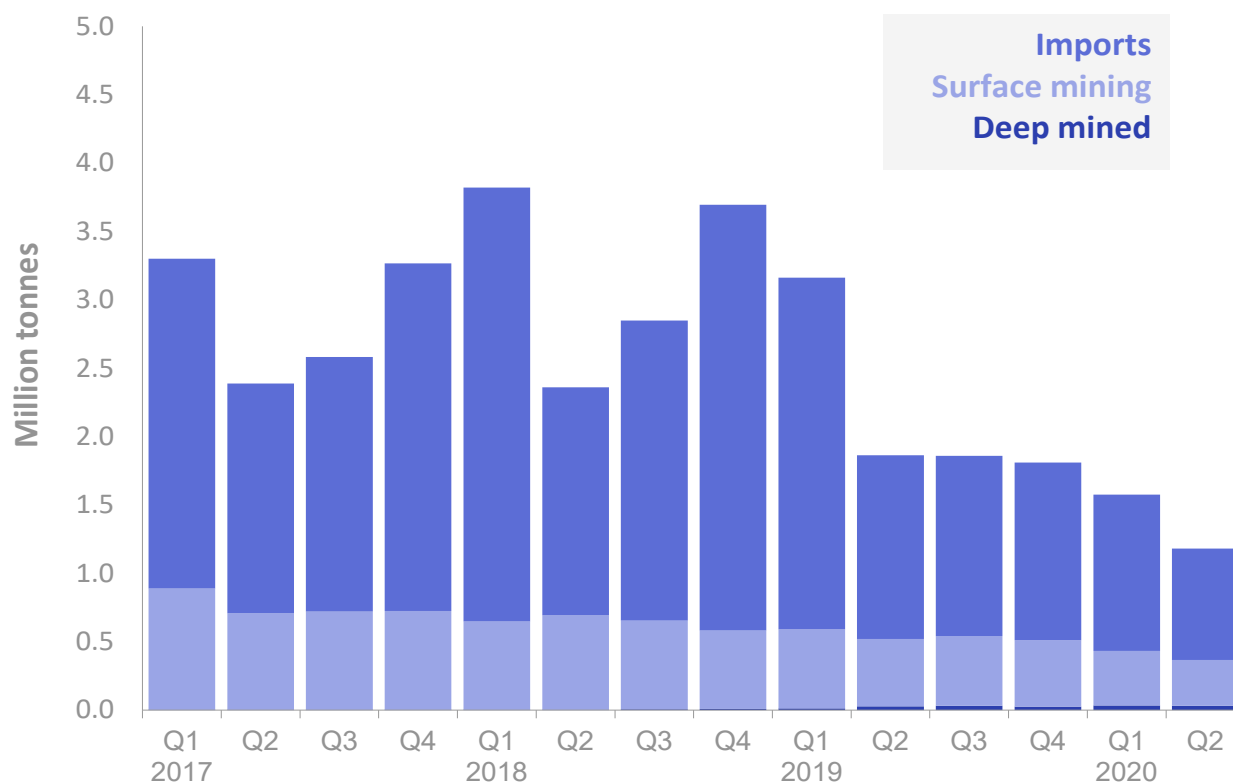
- **Total inland consumption** on a primary fuel input basis was 155.4 million tonnes of oil equivalent in the second quarter of 2020, 19 per cent lower than the same quarter in 2019. This record low quarterly level of consumption was a direct result of the Covid-19 pandemic lockdown which took effect from 23 March 2020, resulting in a fall in oil consumption to a record low quarterly level as demand fell significantly for the three main transport fuels of petrol, diesel and aviation turbine fuel.
- On the same basis, natural gas consumption fell by 8.2 per cent as schools, shops and workplaces were all forced to close as part of the lockdown restrictions.

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 2020

Coal production and imports



	2020 Q2 Thousand tonnes	Percentage change on a year earlier
Coal supply	1,290	-12.8
Coal production	367	-29.4
Coal imports	813	-39.5
Coal demand	1,290	-12.8
- Power stations	166	-18.8
- Coke ovens & blast furnaces	695	-9.0
- Final users	396	-17.8

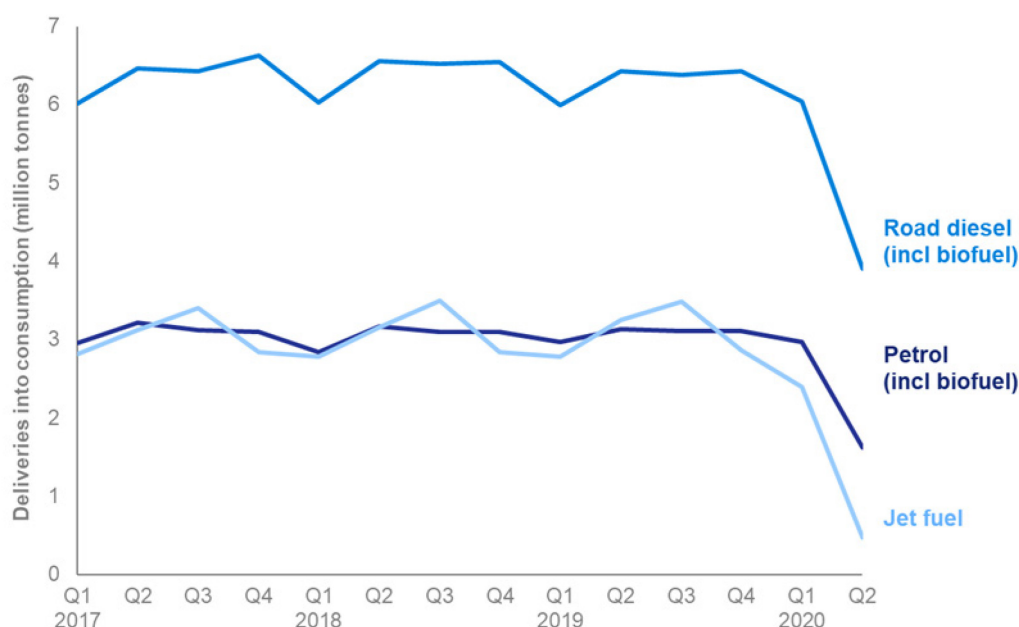
- Provisional figures for the second quarter of 2020 show that coal production fell to a record low of 0.4 million tonnes, 29 per cent lower than the second quarter of 2019. This was due to mine closures and falling demand for coal for electricity generation.
- Imports of coal in the second quarter of 2020 were 39 per cent lower than in the second quarter of 2019 at 0.8 million tonnes.
- Total demand for coal in the second quarter of 2020 fell 13 per cent lower to a record low of 1.3 million tonnes, with consumption by electricity generators down by 19 per cent to a record low of 0.2 million tonnes.
- Coal stocks showed a seasonal fall of 0.4 million tonnes during the second quarter of 2020 and now stand at 3.7 million tonnes, 2.3 million tonnes lower than at the end of June 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 2 2020

Demand for key transport fuels



	2020 Q2 Thousand tonnes	Percentage change on a year earlier
Primary oil production	12,819	- 1.4
Primary oil demand	10,235	- 26.5
Net imports (crude oil and NGLs)	-1,830	(-)
Net imports (oil products)	618	- 84.4
Refinery production	10,459	- 27.3
Petroleum demand	9,857	- 43.0
- Petrol (including biofuels)	1,623	- 48.1
- Diesel (including biofuels)	3,904	- 39.2
- Aviation turbine fuel	469	- 85.6

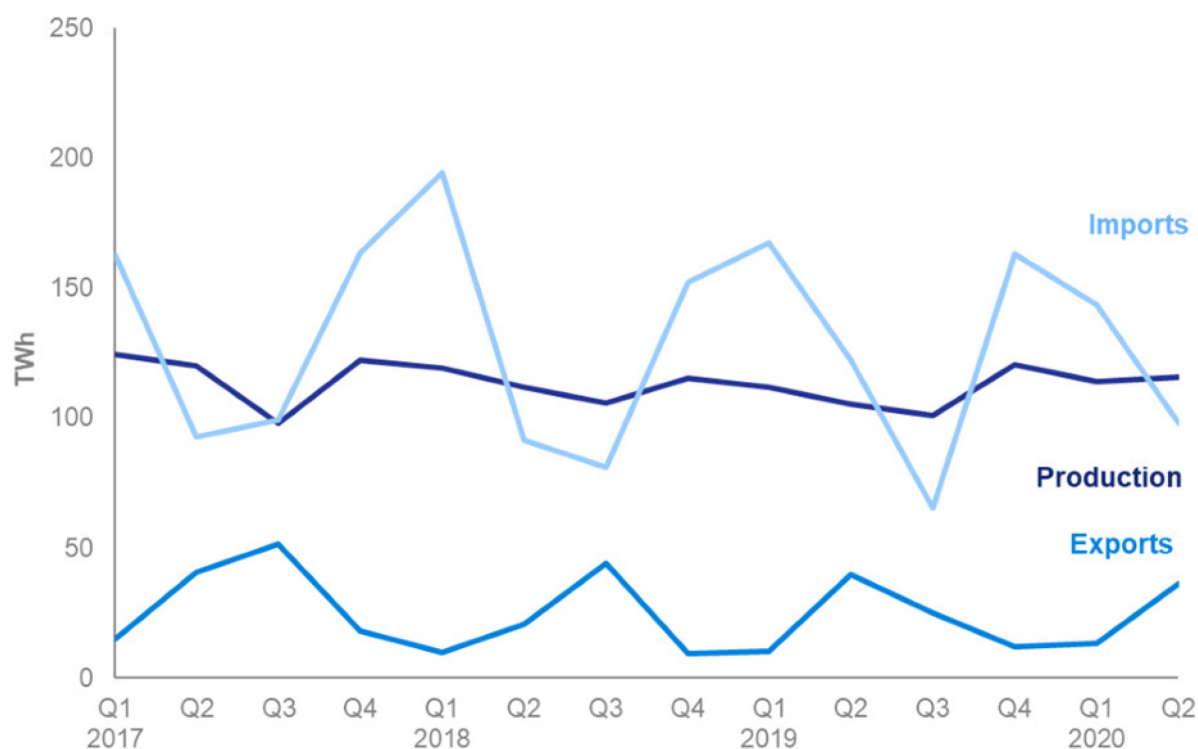
- The Covid-19 pandemic and lockdown restrictions resulted in record low demand for Q2 2020, down 43 per cent compared to the same period last year and 5.9 million tonnes lower than the previous low in Q1 2013.
- Exports of petroleum products remained stable whilst imports reduced by more than a third, resulting in an 84 per cent reduction in net imports in the second quarter of 2020. However, the UK remained a net importer of petroleum products by 0.6 million tonnes.
- The UK became a net exporter of primary oils in the second quarter of 2020 for the first time since 2005, by 1.8 million tonnes.
- Production of petroleum products were at a record low of just 10.5 million tonnes in the second quarter of 2020, down 27 per cent, primarily due to the fall in demand for transport fuels.
- Sales of petrol including biofuels decreased by 48 per cent, and diesel including biofuels fell by 39 per cent. However, it was aviation turbine fuel that fell the most, down 86 per cent, to a record low demand of 0.5 thousand tonnes in the second quarter of 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 2 2020

Production and trade of natural gas



	2020 Q2 <i>TWh</i>	Percentage change on a year earlier
Gas production	115.7	+9.7
Gas imports	94.5	-22.7
Gas exports	36.3	-9.0
Gas demand	155.1	-16.1
- Electricity generation	48.8	-27.1
- Domestic	46.4	-10.7

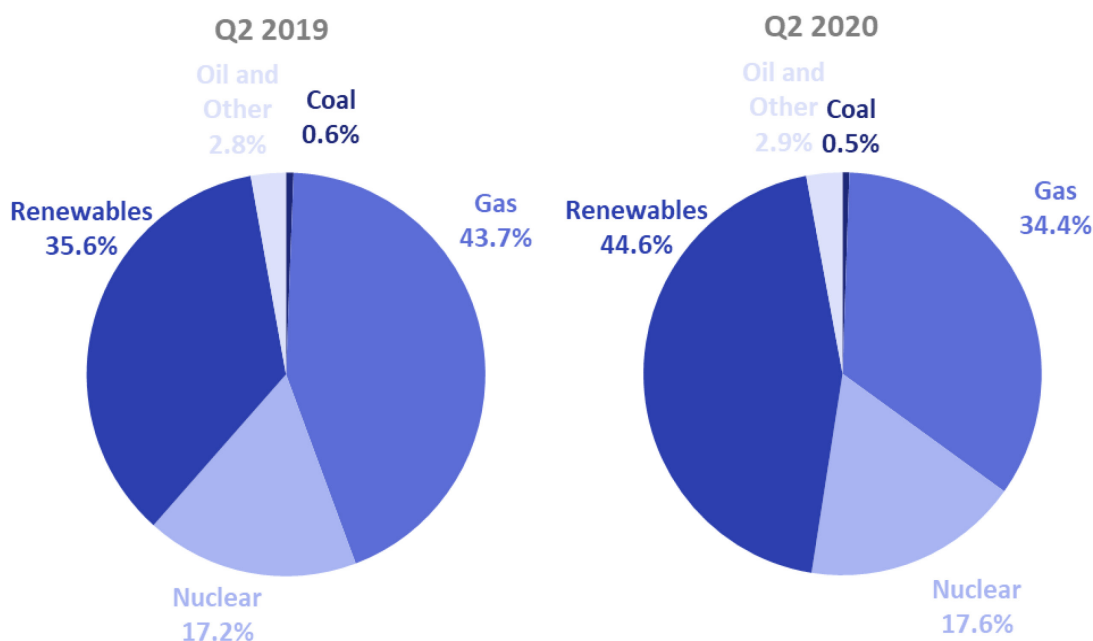
- Total indigenous UK production of natural gas in the second quarter of 2020 was 116 TWh, 9.7 per cent higher than a year before as planned maintenance of terminals was postponed to help maintain social distancing measures in place due to the Covid-19 pandemic.
- Following a near halving of pipeline imports in Q2 2020, Qatar became the main source of imported gas with a share of more than 50 per cent of total imports. Overall total imports were down by 23 per cent on Q2 2019.
- Exports fell by 9.0 per cent compared to the same period last year. However, as the fall in imports outstripped the decrease in exports, net imports were down by nearly 30 per cent.
- Due to the impact of the Covid-19 pandemic on use of gas in the industrial and commercial sectors, demand for natural gas in Q2 2020 dropped off sharply by 16 per cent to just 155 TWh. This was the lowest demand on record for Q2.

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 2020

Electricity generated



	2020 Q2 TWh	Percentage change on a year earlier
Generated from		
Coal	0.4	-19.6%
Nuclear	11.9	-9.2%
Gas	23.2	-29.9%
Renewables	30.1	11.6%
Total	67.5	-10.9%
Supplied to		
Industry	18.3	-17.3%
Domestic	22.7	-1.7%
Other final consumers	19.5	-19.3%
All	60.5	-12.8%

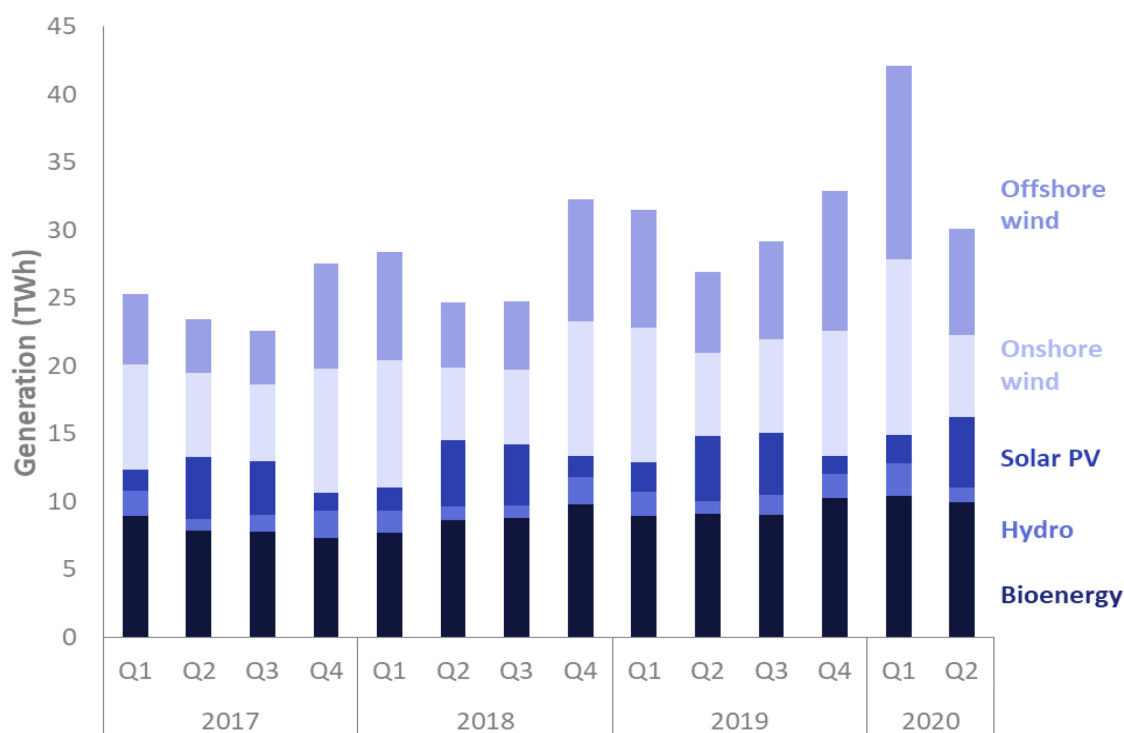
- Fuel used by generators in the second quarter of 2020 was 11 per cent lower than in the second quarter of 2019.
- Generation from coal in the second quarter of 2020 fell by 20 per cent to a new record low. Gas generation decreased by 30 per cent when compared with a year earlier. Nuclear generation decreased by 9.2 per cent due to planned and unplanned outages. Renewables generation increased by 12 per cent.
- Low carbon generation accounted for 62.1 per cent of generation in Q2 2020, a 9.3 percentage point increase from Q2 2019, due to the large increase in renewable generation.
- Total electricity generated in the second quarter of 2020 was 11 per cent lower than a year earlier, because of low demand linked to the Covid-19 lockdown restrictions.
- Final consumption of electricity fell by 13 per cent in the second quarter of 2020, because of the Covid-19 lockdown restrictions and warmer average temperatures reducing demand.

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 2020

Renewable electricity generation



	2020 Q2 TWh	Percentage change on a year earlier
Renewable electricity generation		
Onshore wind	6.1	-0.8
Offshore wind	7.8	+30.9
Hydro	1.1	+20.3
Solar PV	5.1	+5.7
Bioenergy	9.9	+9.7
All renewables	30.1	+11.6

- Renewables' share of electricity generation was 44.6 per cent in 2020 Q2, up 9.0 percentage points on the share in 2019 Q2 and the second highest percentage share on record. Renewable generation increased and non-renewable generation decreased due to lower demand, this was largely due to the Covid-19 pandemic.
- Renewable electricity generation was 30.1 TWh in 2020 Q2, an increase of 12 per cent on the previous year. Offshore wind generation rose by 31 per cent despite slower average wind speeds, but there was a slight fall in onshore wind generation. Generation from hydro rose by 20 per cent on a year earlier. Generation from bioenergy was up by 9.7 per cent due to a large increase in generation from plant biomass. Solar PV rose by 5.7 per cent due to high load factors.
- Renewable electricity capacity was 48.5 GW at the end of the second quarter of 2019, a 5.4 per cent increase on a year earlier.
- Renewable transport: Liquid biofuels fell by 26.5 per cent and represented 6.3 per cent (by volume) of petrol and diesel consumed in road transport in the second quarter of 2020.

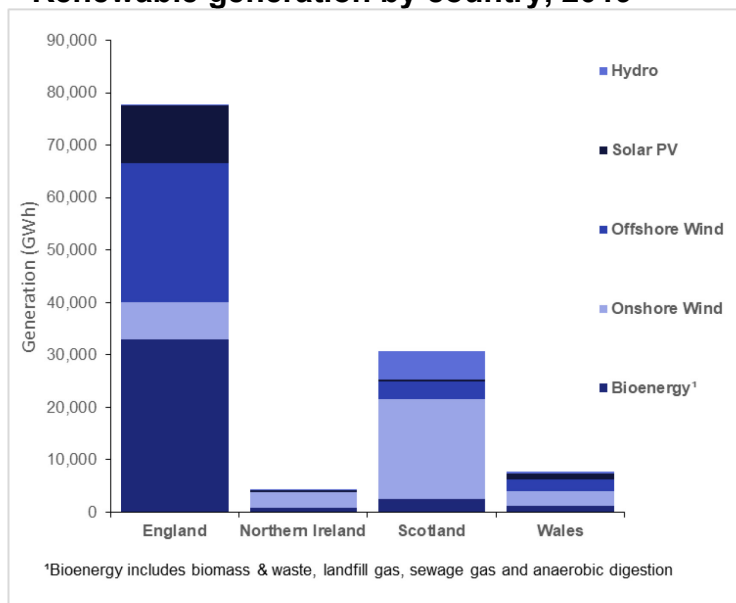
Renewables quarterly tables ET 6.1 – 6.2 are available on the BEIS section of the GOV.UK website at: www.gov.uk/government/statistics/energy-trends-section-6-renewables



RENEWABLE ELECTRICITY IN THE REGIONS

A special feature in the September 2020 edition of Energy Trends looks at renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2019. 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 2019. The main features of the latest statistics are:

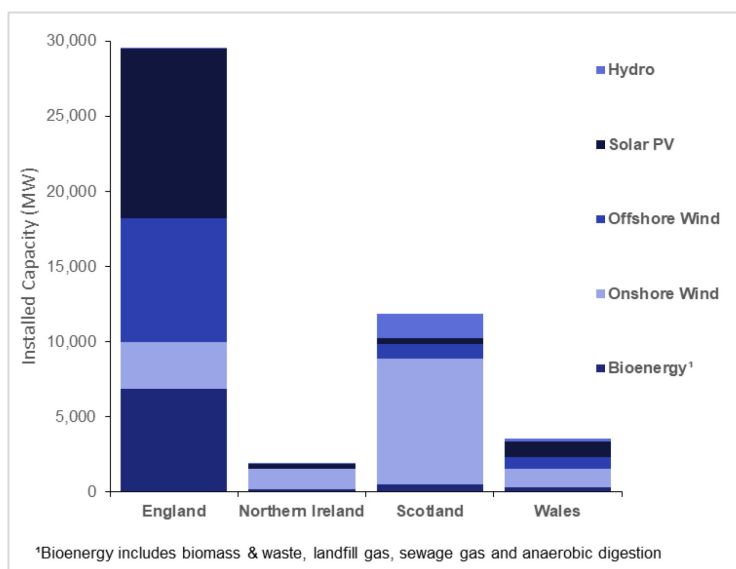
Renewable generation by country, 2019



Renewable generation in the UK grew by **9.5 per cent** from 110 TWh in 2018 to 120.5 TWh in 2019. Within this:

- Generation in England was up 7.8 per cent due to new capacity coming online.
- Generation in Northern Ireland was up 6.0 per cent
- Generation in Scotland was up 14.3 per cent.
- Generation in Wales was up 9.4 per cent after a slight fall in 2018

Renewable capacity, by country, 2019



Overall capacity increased by 6.5 per cent from 44.3 GW at the end of 2018 to 47.2 GW at the end of 2019. Within this:

- Capacity in England was up by 6.1 per cent.
- Capacity in Northern Ireland was up by 2.5 per cent.
- Capacity in Scotland was up by 7.76 per cent
- Capacity in Wales was up by 5 per cent

Note: Whilst the UK totals align with those published in DUKES and Energy Trends, the country breakdowns in this article differ slightly due to methodological differences.



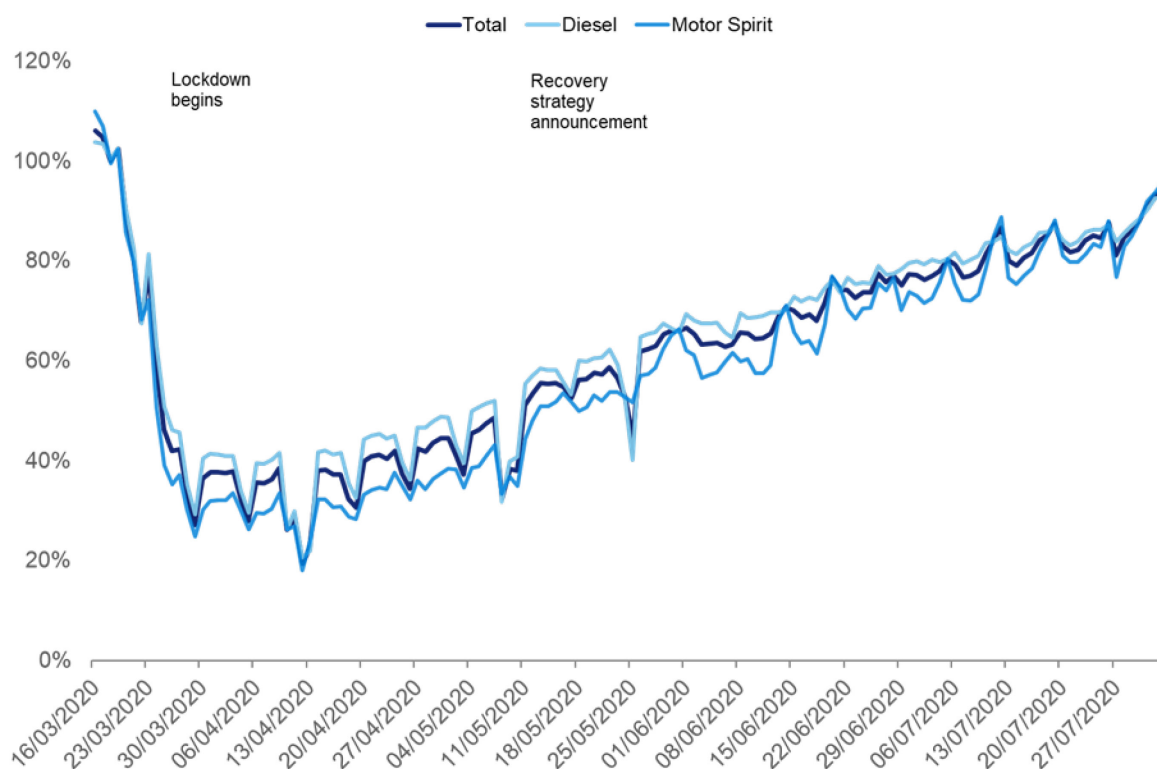
SUPPLY AND DEMAND OF TRANSPORT FUELS DURING COVID-19

A special feature in the September 2020 edition of Energy Trends looks at changes in supply and demand of road fuels (petrol and diesel) and aviation fuel (collectively, transport fuels) during the disruption to travel that resulted from the Covid-19 pandemic. The main features are:

Covid-19 and lockdown measures caused a reduced demand across transport fuels and levels of supply decreased in response to this.

Road fuels

- From the start of lockdown until the Prime Minister's recovery strategy speech (23 March – 10 May 2020) average forecourt sales in Great Britain decreased by around 60 per cent compared to average sales in the eight weeks prior to lockdown,
- Following the recovery strategy speech on 10 May 2020 demand for road fuels in Great Britain increased in July and reached around 90 per cent of typical levels seen in the eight weeks prior to lockdown by the end of July,
- As more sectors in England re-opened, demand initially recovered faster in England than Scotland and Wales. Demand in Scotland and Wales also increased as sectors re-opened later.



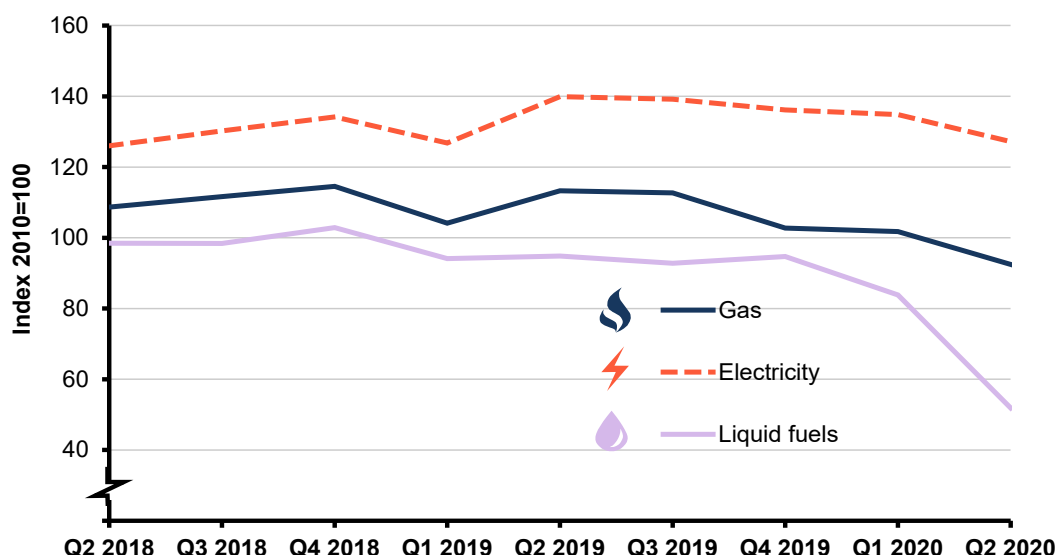
Aviation fuel

- A larger impact of the pandemic was felt in the aviation sector as the number of flights in and out of UK declined steeply,
- In April - June 2020, UK flight traffic decreased by 90 per cent compared to 2019,
- Flight traffic increased slightly in July following quarantine exemptions to some countries.



DOMESTIC PRICES: QUARTER 2 2020

Fuel price indices in the domestic sector in real terms



Consumer price index fuel components in real terms ⁽¹⁾ 2010=100	2020 Q2	Percentage change on a year earlier
Solid fuels	100.2	- 2.8
Gas	92.5	- 18.3
Electricity	127.2	- 9.1
Liquid fuels	51.9	- 45.3
Total domestic fuel	109.3	- 13.6

(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 decreased by around 14 per cent in real terms between Q2 2019 and Q2 2020. Prices decreased by 8.0 per cent between Q1 and Q2 2020.
- Domestic electricity prices, including VAT, in Q2 2020 were 9.1 per cent lower in real terms than in Q2 2019. Prices were 5.7 per cent lower than in Q1 2020.
- The price of domestic gas, including VAT, decreased by around 18 per cent in real terms between Q2 2019 and Q2 2020, and by 9.1 per cent between Q1 and Q2 2020.
- The price of liquid fuels fell by around 45 per cent between Q2 2019 and Q2 2020, decreasing by around 38 per cent between Q1 and Q2 2020.

Switching levels

- Switching rates decreased in Q2 2020, by 13 per cent compared to the levels of a year earlier for electricity and by 21 per cent for gas, based on data provided by Ofgem. An average of 444,000 households per month switched electricity supplier and 328,000 households per month switching their gas supplier over the quarter.

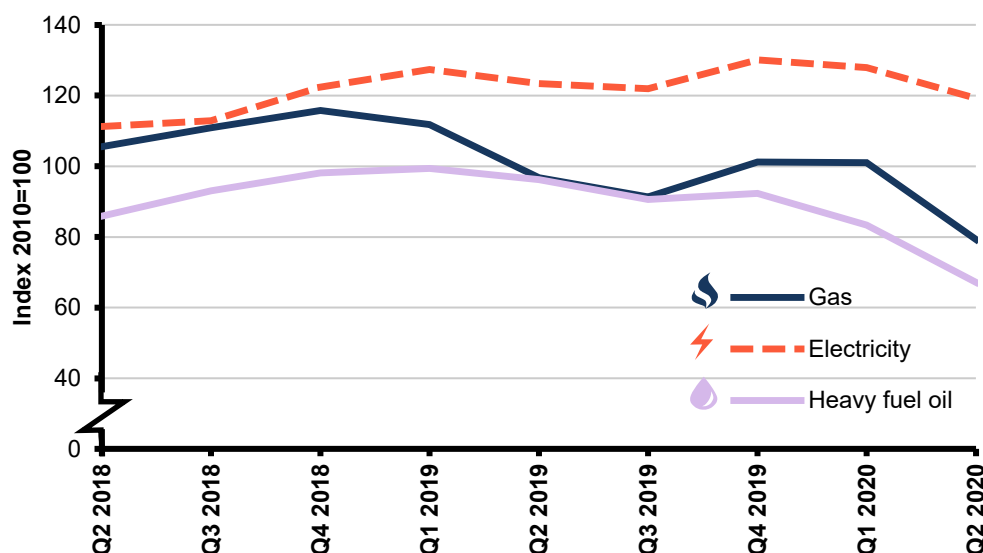
(Customer switching figures for 2020 were updated on 25 September 2020 to incorporate a data correction from Ofgem. For more information visit Ofgem's website: www.ofgem.gov.uk/data-portal/retail-market-indicators)

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 2020

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



Fuel prices index in real terms ⁽¹⁾ 2010=100	2020 Q2	Percentage change on a year earlier
Coal	100.5	-1.7
Heavy fuel oil	67.1	-30.2
Gas	79.2	-18.1
Electricity	119.2	-3.4
Total fuel	106.8	-7.8

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

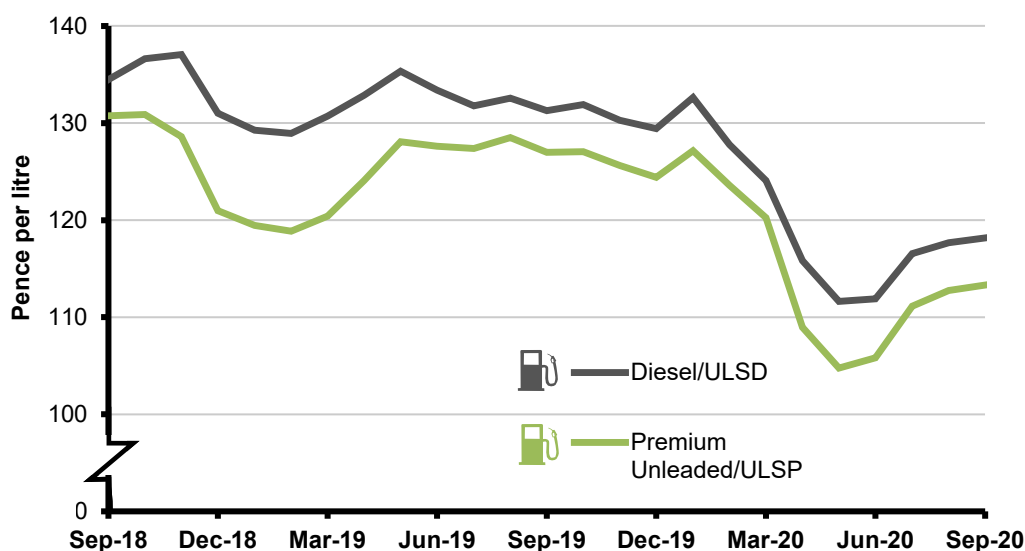
- Average industrial gas prices, including CCL were 18 per cent lower in real terms in Q2 2020 compared to Q2 2019 while prices excluding CCL were 20 per cent lower.
- Average industrial electricity prices were 3.4 per cent lower including CCL in real terms and 3.0 per cent lower excluding CCL in real terms, in Q2 2020 compared to Q2 2019.
- Average coal prices were 1.7 per cent lower in real terms including CCL and 1.4 per cent lower excluding CCL in Q2 2020 compared to Q2 2019.
- Heavy fuel oil prices were 30 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 taxes were the highest in the EU15 whilst 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

Typical retail prices of road transport fuels



Retail prices of petroleum products	Mid-September 2020 ⁽¹⁾ Pence per litre	Percentage change on a year earlier
Unleaded petrol ⁽²⁾	113.3	-10.8
Diesel ⁽²⁾	118.2	-10.0

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

(2) Prices are provisional estimates.

- In mid-September 2020, unleaded petrol was on average 113.3 pence per litre, 13.7 pence per litre (10.8 per cent) lower than a year earlier and 20.0 per cent lower than the high reached in April 2012.
- In mid-September 2020, diesel was on average 118.2 pence per litre, 13.1 pence per litre (10.0 per cent) lower than a year earlier and 20.0 per cent lower than the high reached in April 2012.
- In August 2020, the average UK retail price for petrol was ranked fourth lowest compared with in the former EU15. Average UK diesel price was the third highest compared with former EU15 countries.
- In August 2020 the price of crude oil acquired by refineries, in £ sterling terms, was 32.2 per cent lower than a year ago, 1.6 per cent lower compared to the previous month and 57.3 per cent lower than the level reached in March 2012 (highest on record).

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 2020 are given in the September 2020 editions of ENERGY TRENDS and ENERGY PRICES respectively, the Department's statistical bulletins on energy, released on 24 September 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 2015 to 2019 are available in the DIGEST OF UNITED KINGDOM ENERGY STATISTICS 2020, 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

