#### **PRESS NOTICE**





Date: 19 December 2019

#### STATISTICAL PRESS RELEASE

# **UK Energy Statistics, Q3 2019**

Energy Trends and Energy Prices publications are published today 19 December 2019 by the Department for Business, Energy and Industrial Strategy. The publications cover new data for the third quarter of 2019 (July to September).

**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 third quarter of 2019 are:

- UK energy production fell by 1.8 per cent in the third quarter of 2019 compared with a year earlier. Strong growth in wind, solar and hydro generation was offset by a fall in nuclear due to maintenance activity in the quarter.
- **Primary energy consumption** for energy uses fell by 2.7 per cent to a record quarterly low. However, when adjusted to take of account of weather differences between the third quarter of 2018 and the third quarter of 2019, primary energy consumption fell by 1.1 per cent.
- **Final energy consumption** (excluding non-energy use) fell by 1.5 per cent compared to the third quarter of 2018. Domestic consumption fell by 2.4 per cent, industrial consumption fell by 2.2 per cent, transport consumption fell by 1.4 per cent and service sector consumption fell by 0.5 per cent. On a temperature corrected basis, final energy consumption fell by 0.3 per cent.
- Of **electricity generated** in the third quarter of 2019, coal accounted for 1.0 per cent, while gas accounted for 38.8 per cent. The share for coal was lower than in quarter 3 2018 while the share for gas was similar in both years. Nuclear generation accounted for 18.4 per cent of total electricity generated in quarter 3 2018, lower than the previous year because of maintenance outages.
- Renewables share of electricity generation (wind, solar pv, hydro and bioenergy) increased to a record 38.9 per cent, up from 32.9 per cent in the third quarter of 2018. This marginally surpassed the share of generation from gas (38.8 percent) for the first time. Generation from wind increased by a third to 14.1 TWh compared to 2018 Q3 with offshore wind exceeding onshore wind generation for the first time as a result of increased capacity.

main points continued:

- Renewable electricity capacity was 46.9 GW at the end of the third quarter of 2019, a 7.2 per cent increase on a year earlier.
- Low carbon electricity's share of generation accounted for a record high 57.3 per cent in the third quarter of 2019, up from 55.9 per cent in the same period of 2018, due to increased renewables generation.

**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 2019 are:

• Provisional data for 2019 shows **domestic energy bills** increased by 3.2 per cent in current prices and by 1.1 per cent in real terms. The combined average domestic bill increased by £42 from £1,318 in 2018 to £1,360 in 2019.

Electricity bills increased by £33 to £705 and gas bills increased by £9 to £655 between 2018 and 2019.

All based on fixed consumption levels of electricity of 3,800 kWh per annum and 15,000 kWh per annum for gas

- An average of 511,000 households per month switched electricity supplier and 410,000 households per month switched gas supplier between July and September 2019 (Ofgem data).
- Average prices paid for electricity in the industrial sector rose by 7.2 per cent but fell by 18
  per cent for gas used in industry in July to September 2019 compared with the same quarter
  in 2018

Prices in real terms, not seasonally adjusted and including the Climate Change Levy

 In December 2019 unleaded petrol was on average 124.7 pence per litre, 3.1 per cent higher than December 2018 and the average diesel price was 129.8 pence per litre, 0.9 per cent lower.

Diesel has been more expensive than unleaded petrol over the past 3 years. It is currently 5.0 pence per litre more than unleaded petrol after peaking at a difference of 10.3 pence per litre in March 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: <a href="https://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics">www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics</a>



The December 2019 edition of Energy Trends also includes articles on:

- Electricity generation and supply figures for Scotland, Wales, Northern Ireland and England, 2015 to 2018
- Feed-in Tariff load factor analysis
- Diversity and security of gas supply in the EU, 2018
- Gas consumption savings from bead and mineral wool cavity wall insulation

The following statistics are also published today, 19 December 2019, by the Department for Business, Energy and Industrial Strategy:

- Household Energy Efficiency headline release <u>www.gov.uk/government/statistics/household-energy-efficiency-statistics-headline-release-december-2019</u>
- RHI deployment, November 2019 www.gov.uk/government/statistics/rhi-monthly-deployment-data-november-2019
- Solar photovoltaics deployment, November 2019 <u>www.gov.uk/government/statistics/solar-photovoltaics-deployment</u>
- Sub-national electricity consumption, 2018
   www.gov.uk/government/collections/sub-national-electricity-consumption-data
- Sub-national gas consumption, 2018
   www.gov.uk/government/collections/sub-national-gas-consumption-data
- Sub-national electricity and gas consumption at LSOA, MSOA and IGZ level, 2018 electricity at:

www.gov.uk/government/statistics/lower-and-middle-super-output-areas-electricity-consumption and

www.gov.uk/government/collections/sub-national-electricity-consumption-data#postcode-level-data

and gas at:

www.gov.uk/government/collections/sub-national-gas-consumption-data#postcode-level-data and

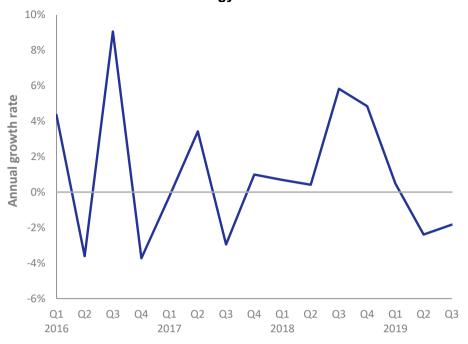
www.gov.uk/government/statistics/lower-and-middle-super-output-areas-gas-consumption

- Energy consumption in domestic buildings built in 2015 2017 (England and Wales)
   www.gov.uk/government/statistics/energy-consumption-in-new-domestic-buildings-2015-to-2017-england-and-wales
- National Energy Efficiency Data-Framework (NEED): anonymised data 2004 -2017 <u>www.gov.uk/government/statistics/national-energy-efficiency-data-framework-need-anonymised-household-consumption-data-2019</u>



#### **TOTAL ENERGY: QUARTER 3 2019**

**Total Energy - Production** 



	<b>2019 Q3</b> Million tonnes of oil equivalent	Percentage change on a year earlier
Total production	30.0	-1.8
Oil	13.3	+0.3
Natural gas	8.9	-0.8
Primary electricity <sup>(1)</sup>	4.6	-8.9
Bioenergy & waste	2.8	-0.5
Coal	0.4	-14.0

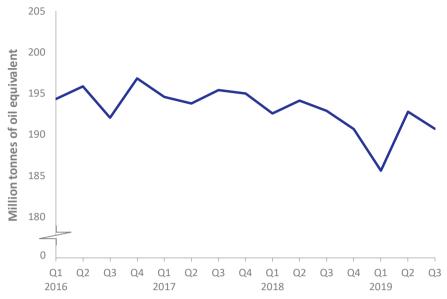
- (1) Nuclear and wind, solar & natural flow hydro electricity
- Total energy production in the third quarter of 2019 was 30.0 million tonnes of oil equivalent, 1.8 per cent lower than in the third quarter of 2018.
- Production of oil rose by 0.3 per cent, whilst production of gas fell by 0.8 per cent compared to the third quarter of 2018.
- Primary electricity output in the third quarter of 2019 was 8.9 per cent lower than in the third quarter of 2018, within which nuclear electricity output was 21 per cent lower as a result of outages at several major reactors, whilst output from wind, solar and natural flow hydro was 24 per cent higher than the same period in 2018, due to increased renewable capacity, primarily from offshore wind.
- In the third quarter of 2019, production of coal and other solid fuels was 14 per cent lower than the corresponding period of 2018.

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 2019**

## Total Energy - consumption(1)



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

	<b>2019 Q3</b> Million tonnes of oil equivalent	Percentage change on a year earlier
Total consumption Unadjusted	38.8	-2.7
Seasonally adjusted and temperature corrected – annual rate	190.7	-1.1
Final consumption: unadjusted temperature corrected	28.3 36.1	-1.5 -0.3

Final consumption was 1.5 per cent lower in the third quarter of 2019 compared to the same quarter a year earlier. The average temperature in the third quarter of 2019 was 0.1 degrees Celsius cooler than the same period a year earlier. On a temperature corrected basis, final energy consumption was 0.3 per cent lower over the same period.

When examining seasonally adjusted and temperature corrected annualised rates:

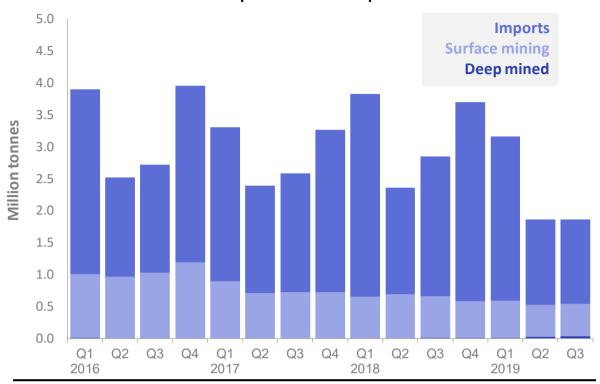
- Total inland annual consumption on a primary fuel input basis was 190.7 million tonnes of oil equivalent in the third quarter of 2019, 1.1 per cent lower than the same quarter in 2018.
- Between the third quarter of 2018 and the third quarter of 2019, coal and other solid fuel consumption fell by 15 per cent driven by less coal use in electricity generation, as a result of high carbon prices for coal and strong performance from renewable sources.
- Oil consumption fell by 1.7 per cent, whilst gas consumption rose by 1.1 per cent.
- Primary electricity consumption fell by 7.7 per cent, with a rise in wind, solar and hydro of 24 per cent but a fall in nuclear of 21 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 3 2019**

## Coal production and imports



	<b>2019 Q3</b> Thousand tonnes	Percentage change on a year earlier
Coal Supply	1,591	-22.8
Coal production	542	-17.4
Coal imports	1,318	-39.9
Coal demand	1,588	-23.0
- Power stations	317	-58.3
<ul> <li>Coke ovens &amp; blast furnaces</li> </ul>	770	+2.1
- Final users	463	-8.9

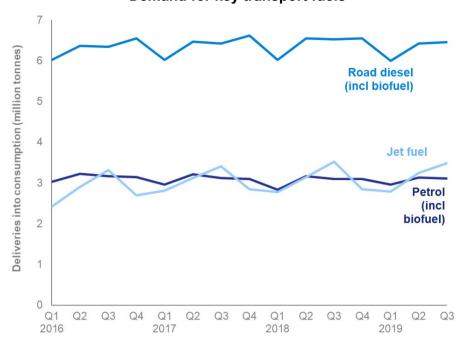
- Provisional figures for the third quarter of 2019 show that coal production fell to 0.5 million tonnes, 17 per cent lower than the third quarter of 2018. This is as a result of mine closures and falling demand for coal for electricity generation.
- Imports of coal in the third quarter of 2019 were 40 per cent lower than in the third quarter of 2018 at 1.3 million tonnes. This was the lowest value in the published time series covering 21 years.
- Total demand for coal in the third quarter of 2019 fell 23 per cent to 1.6 million tonnes, with consumption by electricity generators down by 58 per cent to 0.3 million tonnes.
- Coal stocks showed an increase of 0.1 million tonnes during the third quarter of 2019 and now stand at 6.2 million tonnes, 1.1 million tonnes higher than at the end of September 2018. This was due to a build up of electricity generators stocks as less coal was used in electricity generation.

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 2019

## Demand for key transport fuels



	<b>2019 Q3</b> Thousand tonnes	Percentage change on a year earlier
Primary oil production Primary oil demand	12,263 14,642	+0.2 -6.5
Net imports (primary oil) Net imports (oil products) Refinery production	1,461 3,813 15,093	-50.8 +41.7 -6.6
Petroleum demand - Petrol (including biofuels) - Diesel (including biofuels)	17,804 3,107 6,457	-2.9 +0.4 -1.1
<ul> <li>Aviation turbine fuel</li> </ul>	3,484	-0.9

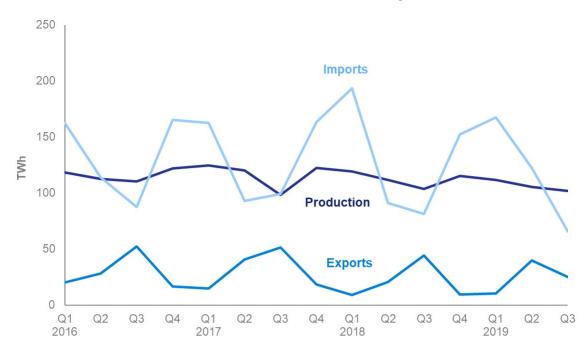
- Total indigenous UK production of crude oil was stable on the same period last year, and Natural Gas Liquids were down 4.4 per cent.
- Refinery production in the third quarter of 2019 was down 6.6 per cent on the same quarter of last year, as a result of refinery maintenance. Longer term, there is an ongoing decline in UK refinery production. Imports of petroleum products were stable on the third quarter of 2018 and exports were down 19 per cent.
- The UK was a net importer of oil and oil products in the third quarter of 2019 by 3.8 million tonnes. In the same period of 2018, the UK was a net importer by 2.7 million tonnes.
- Overall demand for petroleum products was down by 2.9 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 2019

## Production and trade of natural gas



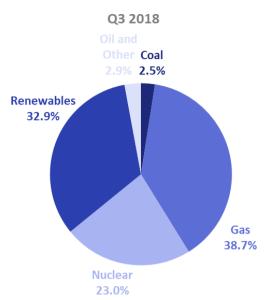
	<b>2019 Q3</b> <i>TWh</i>	Percentage change on a year earlier
Gas production	102.9	-0.8
Gas imports	65.5	-19.2
Gas exports	25.2	-43.1
Gas demand	136.5	-1.5
- Electricity generation	59.0	-1.5
- Domestic	23.5	-3.5

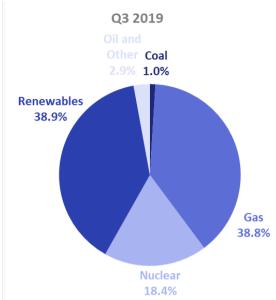
- Total indigenous UK production of natural gas in the third quarter of 2019 was 102.9 TWh, 0.8 per cent lower than the same period a year before.
- Both imports and exports of natural gas were down 19 and 43 per cent respectively compared to the third quarter of 2018. This overall reduction in trade resulted in an increase in net imports over the quarter by 9.5 per cent.
- UK gas demand was down by 1.5 per cent compared to the third quarter of 2018, with demand for electricity generation continuing to fall by 1.5 per cent. Domestic usage followed the same trend, down by 3.5 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: <a href="https://www.gov.uk/government/statistics/gas-section-4-energy-trends">www.gov.uk/government/statistics/gas-section-4-energy-trends</a>



#### **ELECTRICITY: QUARTER 3 2019**





	2019 Q3	Percentage change on a
	TWh	year earlier
Electricity		
Generated from		
Coal	0.7	-60.8%
Nuclear	13.6	-21.2%
Gas	28.7	-1.2%
Renewables	28.8	16.5%
Total	74.0	-1.5%
Supplied to		
Industry	22.9	-1.4%
Domestic	20.4	-1.3%
Other final consumers	24.4	-0.6%
All	67.7	-1.1%

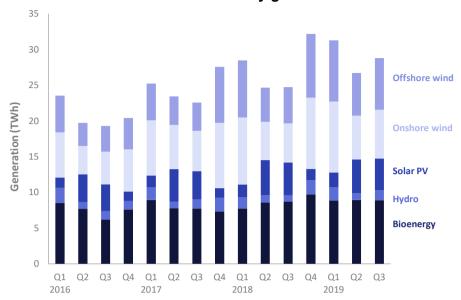
- Renewable electricity generation was 29 TWh in the third quarter of 2019, representing 38.9 per cent of total electricity generation. This was the highest share seen in the UK and marginally surpassed the share of generation from gas (38.8 per cent) for the first time. High renewable generation also meant that the share of generation from low carbon sources continued to increase in the third quarter of 2019 to reach a record high of 57.3 per cent.
- Conversely, the share of generation from fossil fuels decreased to a record low in the third quarter of 2019 at 40.1 per cent of generation.
- In the third quarter of 2019, total generation was 74 TWh. This was the lowest quarterly figure in the published data series and a decrease of 1.5 per cent compared to the third quarter of 2018. Net imports of electricity reduced by 9.7 per cent but despite the decrease, the UK remained a net importer of electricity, with imports accounting for 6.0 per cent of the total electricity supply.
- Final consumption by customers was also at its lowest published value in the third quarter of 2019, down by 1.1 per cent to 68 TWh, with lower demand in all customer sectors.

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 2019**

#### Renewable electricity generation



	<b>2019 Q3</b> TWh	Percentage change on a year earlier
Renewable electricity generation		
Onshore wind	6.8	+24.3
Offshore wind	7.2	+43.2
Hydro	1.4	+58.0
Solar PV	4.4	-2.8
Bioenergy	8.9	+1.9
All renewables	28.8	+16.5

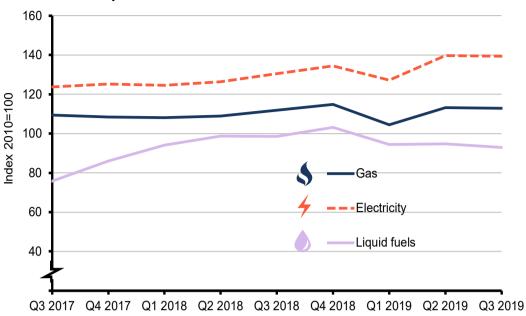
- Renewables' share of electricity generation was 38.9 per cent in the third quarter of 2019.
  This was up by 6.0 percentage points on the share in the third quarter of 2018 and a new record share, as well as marginally surpassing the share of generation from gas (38.8 per cent) for the first time.
- Renewable electricity generation was 28.8 TWh in the third quarter of 2019, an increase of 16 per cent compared to the third quarter of 2018. In the third quarter of 2019, generation from bioenergy was 8.9 TWh, up 1.9 per cent on a year earlier. Generation from onshore wind rose by 24 per cent and offshore wind by 43 per cent on last year, this was driven by large increases in capacity with offshore wind up 21 per cent. Generation from hydro rose by 58 per cent on a year earlier to 1.4 TWh with the wettest August since 2000, while generation from solar photovoltaics fell by 2.8 per cent to 4.4 TWh, as increased capacity was countered by reduced average sunlight hours.
- Renewable electricity capacity totalled 46.9 GW at the end of the third quarter of 2019, a rise of 7.2 per cent (3.2 GW) on a year earlier, with 55 per cent of this from offshore wind.
- In the third quarter of 2019, liquid biofuels represented 5.8 per cent of all fuels consumed in road transport, 0.9 percentage points higher than the share a year earlier, and a new record 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 2019**

#### Fuel price indices in the domestic sector in real terms



Consumer price index fuel components in real terms (1) 2010=100	2019 Q3	Percentage change on a year earlier
Solid fuels	103.0	+2.3
Gas	112.8	+0.8
Electricity	139.4	+6.8
Liquid fuels	92.9	-5.8
Total domestic fuel	126.1	+3.9

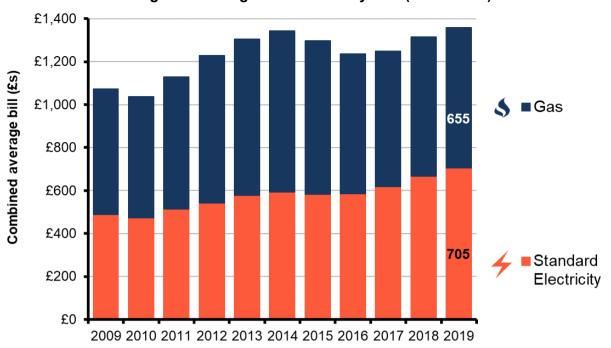
- (1) Deflated using the GDP implied deflator. Source: ONS Consumer Price Indices.
  - The price paid for all domestic fuels by household consumers increased by 3.9 per cent in real terms between Q3 2018 and Q3 2019 but fell by 0.3 per cent between Q2 and Q3 2019.
  - Domestic electricity prices in real terms including VAT in Q3 2019 were 6.8 per cent higher than in Q3 2018. Prices were 0.3 per cent lower than in Q2 2019.
  - The price of domestic gas in real terms including VAT rose by 0.8 per cent between Q3 2018 and Q3 2019 but fell by 0.3 per cent between Q2 and Q3 2019.
  - The price of liquid fuels fell by 5.8 per cent between Q3 2018 and Q3 2019 and by 1.9 per cent between Q2 and Q3 2019.
  - For the period January to June 2019, prices for medium domestic electricity including taxes, were mid-ranked in the EU15 while prices for medium gas consumers were the second lowest.

Domestic prices tables are available on the BEIS section of the GOV.UK website at: <a href="https://www.gov.uk/government/collections/domestic-energy-prices">www.gov.uk/government/collections/domestic-energy-prices</a>



#### **DOMESTIC ENERGY BILLS: 2019**

#### Average domestic gas and electricity bills (cash terms)



Average annual domestic fuel bills (1)

	2018	2019 (p)	Percentage change, cash terms	Percentage change, real terms (2)
Gas (3)	£646	£655	1.4	-0.8
Electricity <sup>(4)</sup>	£672	£705	4.9	3.0
Total (5)	£1,318	£1,360	3.2	1.1

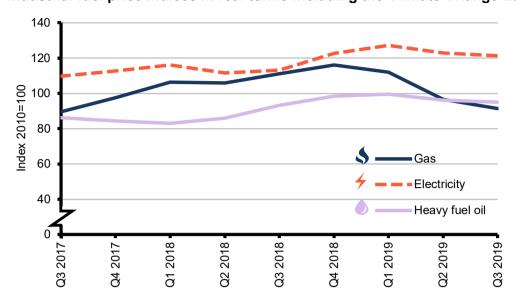
- (1) Average annual bills for domestic customers are weighted by the proportion of customers on the different payment methods, which include standard credit, direct debit and pre-payment meter. Bills relate to the total bill received in the calendar year and are in cash terms.
- (2) To estimate the 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 2020 edition of 'Quarterly Energy Prices'.
  - The combined average domestic bill increased by £42 from £1,318 in 2018 to £1,360 in 2019.
  - The average standard electricity bill in 2018, across all payment types has increased by £42 (4.9 per cent) since 2018, from £672 to £705.
  - Average 2019 gas bills across all payment types increased by £9 (1.4 per cent), from £646 to £655. These bills are based on standard consumptions of 3,800 kWh per year for electricity and 15,000 kWh per year for gas.
  - An estimated 1,532,000 electricity customers changed supplier in Q3 2019, up 6.8 per cent compared to the same period in 2018, and 1,228,000 gas customers transferred to a different supplier in Q3 2019, up 2.9 per cent on the same period last year.

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 2019**

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



Fuel prices index in real terms <sup>(1)</sup> 2010=100	2019 Q3	Percentage change on a year earlier
Coal	98.6	-4.5
Heavy fuel oil	95.0	+1.8
Gas	91.4	-17.8
Electricity	121.4	+7.2
Total fuel	112.4	+1.7

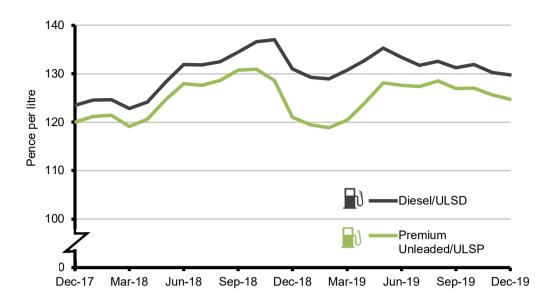
- (1) Deflated using the GDP implied deflator. Includes estimates of the average Climate Change Levy (CCL) paid.
  - Average industrial gas prices in real terms including CCL, were 18 per cent lower in Q3 2019 compared to Q3 2018, and prices excluding CCL were 20 per cent lower.
  - Average industrial electricity prices in real terms including CCL were 7.2 per cent higher and prices excluding CCL were 5.2 per cent higher in Q3 2019 compared to Q3 2018.
  - Average coal prices in real terms including CCL were 4.5 per cent lower and prices excluding CCL were 4.6 per cent lower in Q3 2019 compared to Q3 2018.
  - Heavy fuel oil prices were 1.8 per cent higher in real terms than a year ago.
  - For the period January to June 2019, UK prices for industrial electricity for medium consumers including taxes were the second 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 2019**

### Typical retail prices of road transport fuels



Retail prices of petroleum products	Mid December 2019 <sup>(1)</sup> Pence per litre	Percentage change on a year earlier
Unleaded petrol (2)	124.7	+3.1
Diesel (2)	129.8	-0.9

<sup>(1)</sup> Prices are for ultra low sulphur versions of these fuels.

- Crude oil prices started the year at around \$64 per barrel and rose steadily to \$71 in April 2019. Prices have since dropped to around an average of \$61 per barrel. In the first half of December 2019, crude oil prices averaged to \$63 which was 9.5 per cent higher than in the previous year and 0.8 per cent higher than in the previous month.
- In mid-December 2019, unleaded petrol was on average 124.7 pence per litre, 3.8 pence per litre (3.1 per cent) higher than a year earlier but 12 per cent lower than the high reached in April 2012.
- In mid-December 2019, diesel was on average 129.8 pence per litre, 1.2 pence per litre (0.9 per cent) lower than a year earlier and 12 per cent below the peak seen in April 2012.
- Annual prices in 2019 were only 0.2 per cent lower for petrol and 1.2 per cent higher for diesel than in 2018.
- In November 2019, UK retail prices for petrol were mid-ranked in the EU15, and UK diesel prices the 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



<sup>(2)</sup> Prices are provisional estimates.

## Issued by:

Department for Business, Energy and Industrial Strategy, 1 Victoria Street, London SW1H 0ET

#### Contacts:

Lead statistician: Warren Evans, Tel: 0300 068 5059

Press enquiries: Tel: 0207 215 1000

Statistical enquiries

General enquiries: Tel 0207 215 5000

#### **Notes to editors**

- 1. More detailed figures of United Kingdom energy production and consumption and of energy prices, for the third quarter of 2019 are given in the December 2019 editions of ENERGY TRENDS and ENERGY PRICES respectively, the Department's statistical bulletins on energy, released on 19 December 2019.
- 2. Energy Trends and the Energy Prices bulletins, published quarterly, are available on the BEIS section of the GOV.UK website at: <a href="https://www.gov.uk/government/collections/quarterly-energy-prices">www.gov.uk/government/collections/quarterly-energy-prices</a>
- 3. Articles featured in Energy Trends are also available on the BEIS section of the GOV.UK website at: <a href="https://www.gov.uk/government/collections/energy-trends-articles">www.gov.uk/government/collections/energy-trends-articles</a>
- 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. All information contained in the Digest is available on the BEIS section of the GOV.UK website at: <a href="https://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes">www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes</a>

