



## Quarterly Energy Prices United Kingdom, Quarter 1 (January - March) 2019

27 June 2019

National Statistics

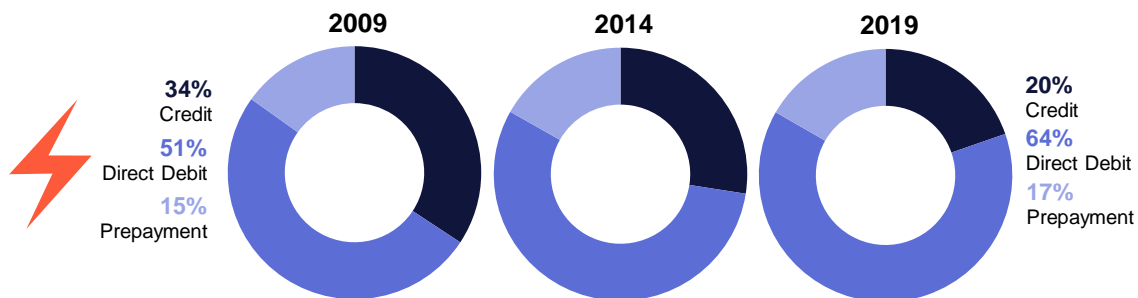
This publication details the average prices paid for energy and fuels in the United Kingdom by households and industrial, commercial and services sectors. International prices for households and industry are included to illustrate how the UK compares with other countries.

### Key Points and Trends

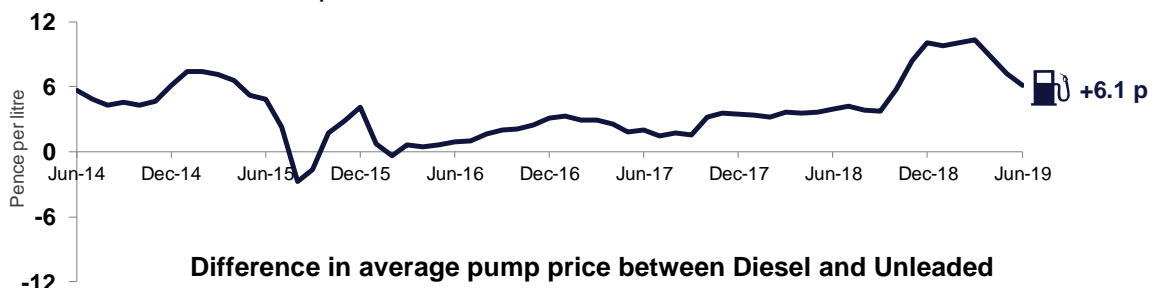
- Most people pay their electricity and gas bills by Direct Debit. **64%** of households pay for their electricity this way, **20%** by Standard Credit and **17%** by Prepayment. These proportions are similar for gas customers.

**Prepayment** is essentially a 'pay as you go' method, users topping up an allowance and usage drawing on their balance. **Standard Credit** is where households settle the bill on the electricity or gas they used upon receipt but do not pay a recurring set payment as with **Direct Debit**.

- Over the past 10 years households have shifted to direct debit to pay for electricity, away from credit while proportions on prepayment arrangements remained largely the same.



- In June 2019 unleaded petrol was on average **127.7 pence per litre**, **0.2 per cent lower** than last year whereas diesel on average was **133.8 pence per litre** or **1.4 per cent higher**.
- Over the past 5 years, diesel has generally been more expensive than unleaded petrol and is currently **6.1p more than unleaded**, peaking at 10.3p in March 2019. Both series follow similar trends in terms of price movements.



Alongside this quarterly release, data tables providing detailed breakdowns of the data covered are available [online](#). There are series for each section covered in the release, [Domestic](#) prices, [Industrial](#) prices, [Fuel](#) prices and [International](#) price comparisons.

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# Introduction

The **Quarterly Energy Prices** (QEP) publication and the detailed associated tables provide information related to the prices paid for energy and fuels in the United Kingdom.

Information is presented for both the **domestic market** (which are the prices paid by households for their energy and fuels) and the **non-domestic sector** (prices paid by industrial users of energy, commercial users and services).

**International data** are also collated and presented in the publication to provide comparisons in prices with the European Union (EU) member states and members of the [International Energy Association](#) (IEA).

The publication also provides a summary of national information on prices for **oil and petroleum products**. In particular; road fuels which are also collated published online both on a [weekly](#) and [monthly](#) basis - underlying datasets additionally provide data regionally.

## Information about this release

This release, published on 27 June 2019, provides UK energy data for the first quarter 2019.

**Please note:** Data on domestic bills published in the Q4 2018 issue published in March have been revised this quarter. Due to a processing error, data for the average electricity prices have been revised. The tables affected are the Annual Bills [tables 2.2.1 – 2.2.5](#). Data relating to bills in this report use the revised figures. For comparison purposes the average bill for electricity:

Release	Status	Average Electricity Bill
December 2018	Provisional	£676
March 2019	Final	£668
<b>June 2019</b>	<b>Revised</b>	<b>£672</b>

## Background to the release

The Quarterly Energy Prices publication was first published in June 2001. The release includes tables that are available as Excel files at [www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics](http://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics)

The tables for the specific areas covered are available at the following links:

- [Domestic energy prices](#)
- [Industrial energy prices](#)
- [International energy price comparisons](#)
- [Road fuel prices](#)

In addition to the quarterly updates with this publication, there are also some monthly updates for example to the **domestic energy price indices** and the **prices of petroleum products**, and any other tables that are affected by changes or updates to the GDP deflator.

# Domestic Market Prices

Households in the UK predominantly use electricity from the national grid (though some households do use fuel-based generators for their own use) to provide energy for lighting, utilities and heating. A significant number of households (approximately 23 million) also use gas for heating and cooking in their homes.

This section details the average prices paid by households for their energy, the methods they paid for it and presents regional customer information in the domestic energy market.

The focus of this issue is on the proportions of households using gas (for Great Britain) and electricity (for United Kingdom) by the different payment types, regions and types of contract households have with energy companies which are presented. Additionally, details on competition in the market are presented through the energy company switching statistics.

Some data are provided on average bills from 2018 for context. It should also be noted that average electricity bills data have been revised since the March 2019 publication. The revised data can be found [here](#). Provisional bills for 2019 will be published in December 2019 and final bills in March 2020.

**Domestic Data** all underlying domestic data and related publications can be found on GOV.UK here:  
<https://www.gov.uk/government/collections/domestic-energy-prices>

## Highlights and Headline Figures

The price paid for all domestic fuels in **real terms** has risen slightly by 0.1 per cent in Q1 2019 compared with the same quarter in 2018. ([Tables 2.1.1 – 2.1.3](#))

Between Q1 2018 and Q1 2019, **real terms** prices, including VAT, for domestic electricity have increased by 2.1 per cent but for domestic gas prices have fallen by 3.3 per cent. ([Tables 2.1.1 – 2.1.3](#))

Since 2010, the proportion of customers with non-home supplier has been increasing year on year. As at the end of Q1 2019 (covering time period January to March 2019), **71 per cent** of gas customers are now non-home suppliers, up 14 percentage points since 2010.

The trend is similar for electricity, the proportion of customers with non-home supplier for is now at **74 per cent**, up 12 percentage points since 2010. ([Tables 2.4.1 – 2.5.2](#))

**‘Home’ suppliers** as referred to in this release, are those energy companies that are the regional suppliers of gas and electricity to households prior to privatisation.

**‘Non-home’ suppliers** are those energy companies that were not the regional suppliers of gas and electricity to households prior to privatisation.

In order to increase competition in the energy market [Ofgem encourages consumers](#) to switch energy suppliers to get the best deal.

The number of these transfers made within both the domestic electricity and gas market **increased by 16 per cent** between the first quarter of 2018 and the same quarter in 2019, with an estimated 1,382,000 electricity and 1,128,000 gas transfers being made in Q1 2019. ([Table 2.7.1](#))

### Revised Annual Average Bills Data

The combined average domestic bill in current prices increased by £69 from £1,249 in 2017 to £1,318 (5.5 per cent) in 2018. In actual terms for fixed consumption levels of electricity of 3,800 kWh per annum, bills increased by £53 to £672; and for fixed consumption levels of gas of 15,000 kWh per annum, bills increased by £16 to £646. ([Tables 2.2.1 – 2.3.5](#))

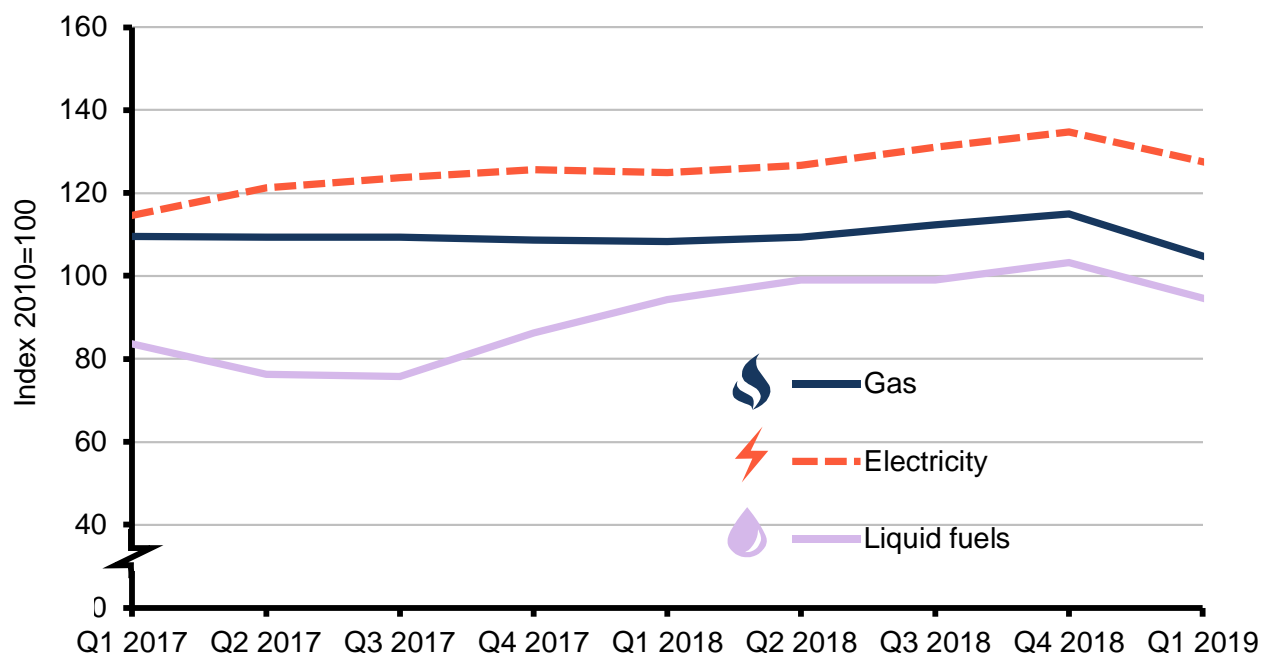
After accounting for the effects of inflation (the general increase in price for goods and services) and presenting prices in real terms, the increase in the combined average bill falls to 3.4 per cent. ([Tables 2.2.1 – 2.3.5](#))

Average bills for those using prepayment meters increased by £24 (1.9 per cent) following the revisions of the price cap in 2018, a slower rate compared to the other payment methods. ([Tables 2.2.1 – 2.3.5](#))

**Prepayment** is a method of paying for electricity and gas where consumers are essentially on a 'pay as you go' agreement. They 'top up' an allowance and their usage draw down their balance. **Standard Credit** is a method of payment for household energy where customers are sent a bill for their gas and electric usage for each cycle. This can be monthly, quarterly, annually which they must pay for. **Direct Debit** is like standard credit but difference is consumers have paid for their usage in advance.

## Retail price of fuels for the domestic sector

Chart 2.1 Real terms fuel price indices in the domestic sector <sup>(1)</sup> - Quarterly



Source: ONS, Consumer prices index

<sup>(1)</sup> Data in real terms, adjusted for inflation using the GDP (market prices) deflator.

Reference and link to tables:

[Table 2.1.1: Consumer prices index: fuel components in the UK](#)

[Table 2.1.2: Consumer prices index: fuel components in the UK relative to GDP deflator](#)

[Table 2.1.3: Consumer prices index: fuel components, monthly figures](#)

Chart 2.1 shows the quarterly changes in the price indices in real terms between Q1 2017 and Q1 2019 in the domestic sector.

In terms of the domestic fuel price indices, the price for all domestic fuels in **real terms** has **fallen by 0.1 per cent** in Q1 2019 compared to Q1 2018.

Over the same period, in real terms:

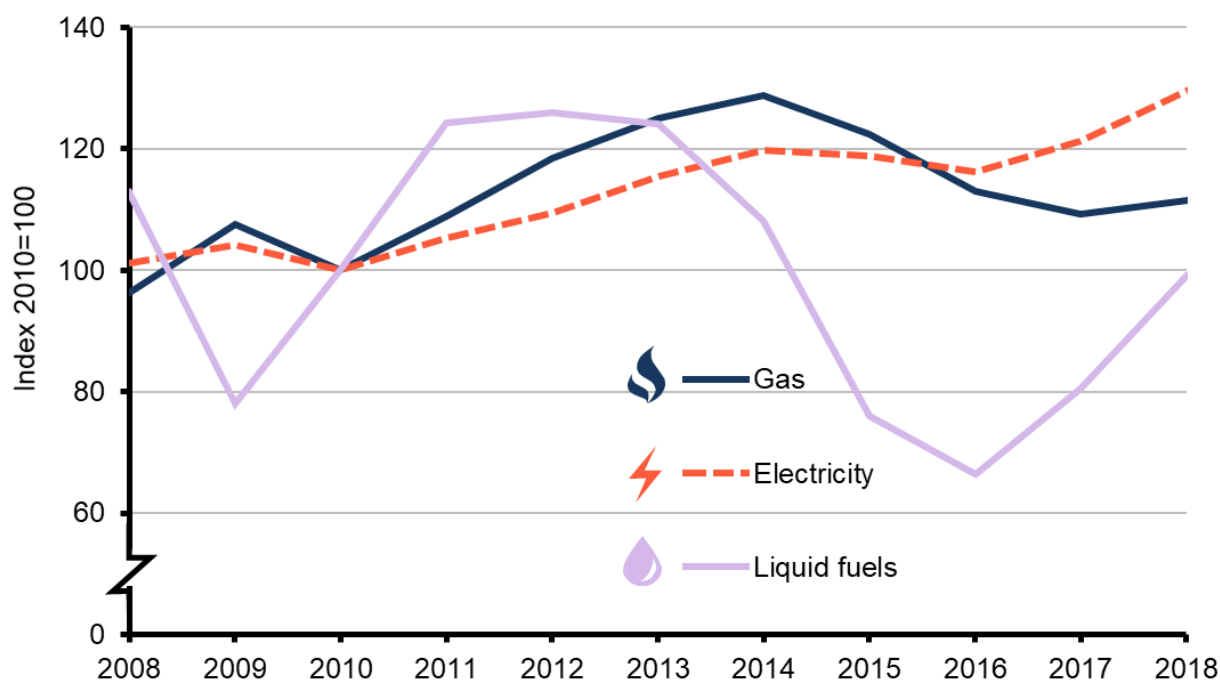
- domestic electricity prices have **increased by 2.1 per cent**
- gas prices have **decreased by 3.3 per cent**
- prices for liquid fuels **increased slightly by 0.3 per cent**

When compared directly to the previous quarter (Q4 2018), in real terms:

- domestic electricity prices have **decreased by 5.3 per cent**
- gas prices have **decreased by 8.9 per cent**.
- liquid fuel prices have **decreased by 8.3 per cent**

Although not shown chart above, data in the underlying tables show motor fuel and oil prices have decreased by 0.2 per cent and prices of solid fuels have increased slightly in real terms, by 0.8 per cent between Q1 2018 and Q1 2019.

**Chart 2.2 Real terms fuel price indices in the domestic sector <sup>(1)</sup> - Annual**



Source: ONS, Consumer prices index

<sup>(1)</sup> Data in real terms, adjusted for inflation using the GDP (market prices) deflator.

Reference and link to tables:

[Table 2.1.1: Consumer prices index: fuel components in the UK](#)

[Table 2.1.2: Consumer prices index: fuel components in the UK relative to GDP deflator](#)

[Table 2.1.3: Consumer prices index: fuel components, monthly figures](#)

Chart 2.2 shows the annual changes in the price indices in real terms for the years 2008 to 2018 in the domestic sector.

UK wholesale gas prices have been increasing since the early 2000's, due to upward pressure on prices in Europe and the decline in the UK Continental Shelf gas production, however wholesale gas prices have fallen back since the start of 2014 till into the second half of 2016 before rising again. In 2018 wholesale prices rose by 35 per cent (an increase of 4 percentage points on the previous year). Electricity prices have generally been on a rising trend. With gas an important part of the UK generation mix, and also as a result of higher coal prices, wholesale electricity prices have been rising from unsustainably low levels, and also due to the introduction of the EU Emissions Trading scheme in 2005.

Liquid fuel (heating oil) prices typically follow crude oil prices. Apart from a sharp fall in 2009, between 2003 and 2012 liquid fuel prices increased strongly in real terms. Since 2013 prices have fallen but more so between 2014 and 2016. Liquid fuel prices have risen over the past two years and in 2018 were 23 per cent higher in real terms compared to the previous year. Motor fuel prices similarly follow crude oil prices, but vary according to changes in the duty payable on petrol and diesel, and to the rate of VAT.



## Domestic electricity and gas bills

Domestic Bills data is published provisionally every December issue and revised with complete data in the March issue following each year. The below has been updated for context and to incorporate revisions to the 2018 figures published in March 2019.

BEIS estimates for bills are based on fixed annual consumption levels of 15,000kWh for gas and 3,800kWh for electricity, to allow comparisons over time of the effects of actual price changes, whilst excluding any change in consumption.

**Please note:** we intend to adjust the representative consumption levels used, see the methodology note [here](#).

Actual average domestic consumption of both gas and electricity varies from year to year due to changes in weather and energy efficiency improvements.

The majority of the major six domestic energy suppliers announced increases to their gas prices in early to mid-2018. All the major six domestic energy suppliers announced price rises for electricity and gas customers between March 2018 and December 2018, with some of the suppliers announcing price increases twice within this period.

**Table 1 – Change in average annual bills 2018<sup>(1)</sup> in current prices compared to 2017<sup>1</sup>**

	2017	2018	Change	Percentage Change
Standard Electricity	£619	£672	£53	8.5%
Gas	£630	£646	£16	2.5%
Combined	£1,249	£1,318	£69	5.5%

Average energy bills in 2018 were higher than in 2017; this was mainly due to price increases for electricity and gas implemented between March and November 2018.

To assist in offsetting the increases in energy prices for households on Prepayment meters, the Prepayment Cap<sup>2</sup> was implemented in April 2017 and several additional revisions to the cap have taken place since. However, average annual bills for prepayment customers increased by £24 from £1,250 in 2017 to £1,274 in 2018 following a revision of the prepayment cap.

Furthermore, the proportion of customers on a fixed tariff has increased between 2017 and 2018, with fixed tariffs offering the cheapest average energy bills compared to variable tariffs (a saving of around £129).

<sup>2</sup> Standard electricity and gas bills may not add up exactly to the combined bill as they have been calculated on non-rounded figures

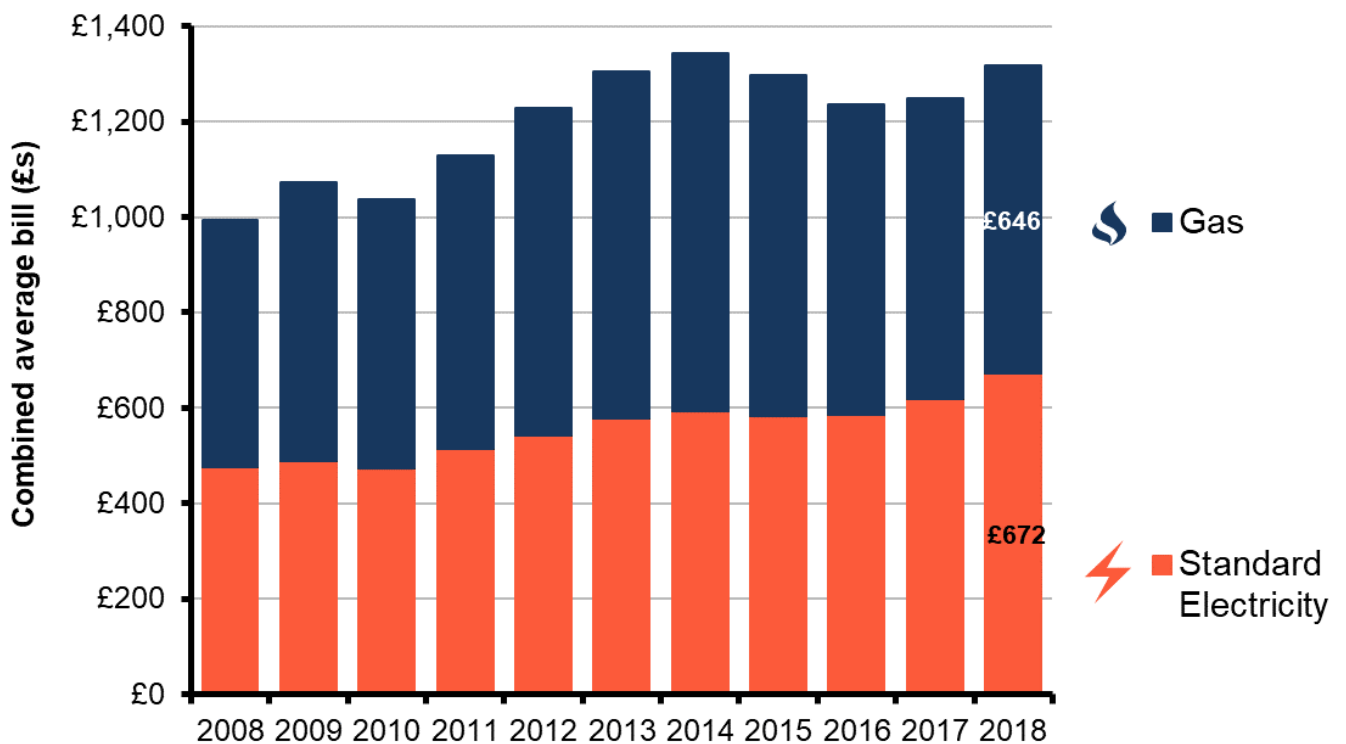
<sup>2</sup> For more information on the Prepayment Cap, see:

<https://www.ofgem.gov.uk/gas/retail-market/market-review-and-reform/implementation-cma-remedies/prepayment-meter-price-cap>

Chart 2.3 shows the average standard domestic energy bills, in cash terms. Combined gas and electricity bills have **increased by £69 (5.5 per cent)** between 2017 and 2018 (to £1,318). Average standard electricity bills in 2018 **increased by £53** (to £672). Average gas bills **increased by £16** (to £646) compared with 2017.

Except for a 3.0 per cent fall in 2010, combined bills increased each year between 2002 and 2014. Between 2014 and 2016 combined bills decreased, however in 2017 they started to increase again and are now **1.9 per cent lower** than their peak in 2014 in cash terms (8.2 per cent lower in real terms).

**Chart 2.3: Average standard electricity and gas bills**



Reference and link to tables:

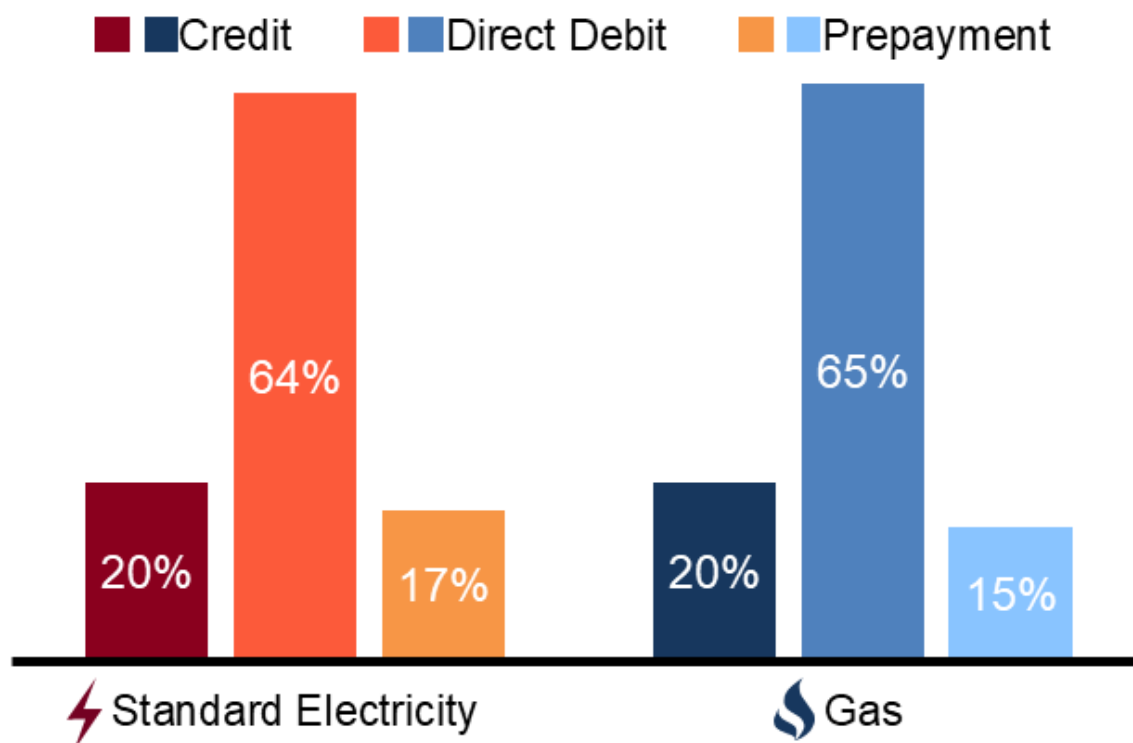
[Table 2.2.1: Average annual domestic electricity bills, by home and non-home supplier](#)

[Table 2.3.1: Average annual domestic gas bills, by home and non-home supplier](#)

## Payment methods

This section presents data based on a fixed consumption level s outlined in the previous section

**Chart 2.4: Proportion of households that pay their electricity bills by direct debit has increased by 2 per cent since last quarter.**



Reference and link to tables:

[Table 2.4.2: Regional variation of payment method for standard electricity](#)

[Table 2.5.2: Regional variation of payment method for gas](#)

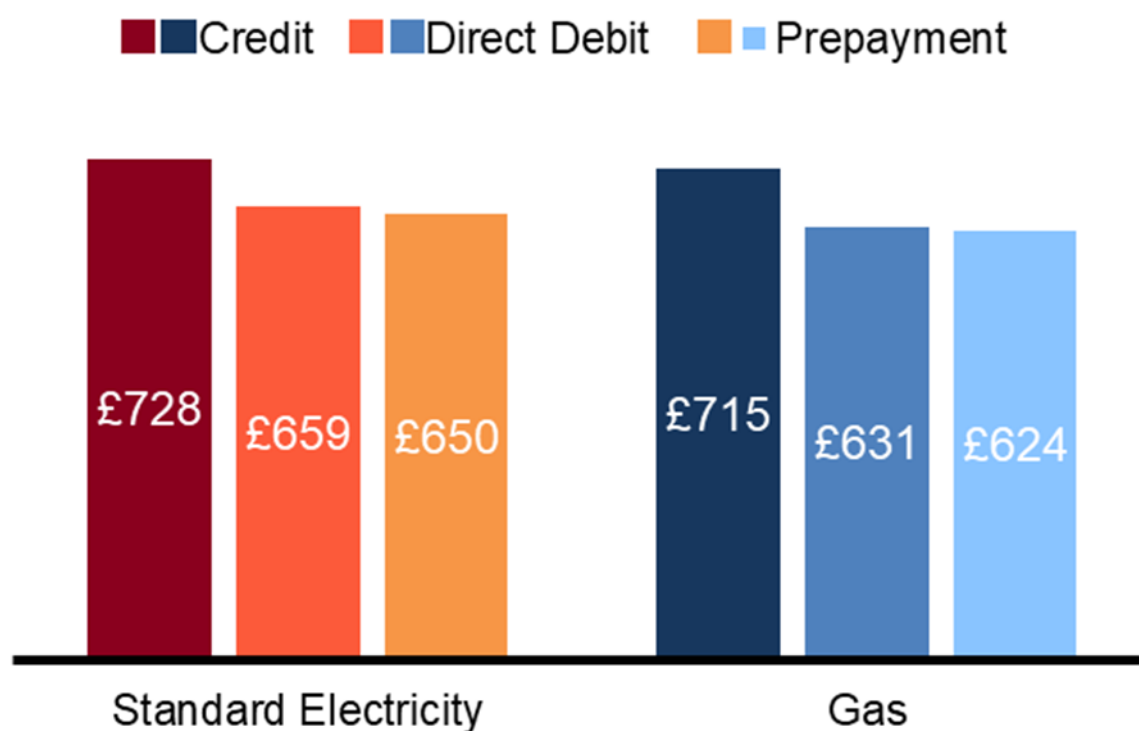
At the end of March 2019, most standard electricity customers in the United Kingdom (UK) and gas customers in Great Britain (GB) paid by direct debit. Chart 2.4 shows the proportion of customers that use each of the three main payment methods for both gas and standard electricity. Over time the percentage of customers on direct debit has increased whereas the percentage of customers who pay on receipt of their bill (credit) has decreased.

**Table 2 – Average annual bills 2018 in current price by payment method<sup>3</sup>**

	Credit	Direct Debit	Prepayment	Overall
Standard Electricity	£728	£659	£650	<b>£672</b>
Gas	£715	£631	£624	<b>£646</b>
<b>Combined</b>	<b>£1,443</b>	<b>£1,290</b>	<b>£1,274</b>	<b>£1,318</b>

<sup>3</sup> Standard electricity and gas bills may not add up exactly to the combined bill as they have been calculated on non-rounded figures.

**Chart 2.5: Average annual bills on each payment type, 2018**



Reference and link to tables:

[Table 2.2.1: Average annual domestic electricity bills, by home and non-home supplier](#)

[Table 2.3.1: Average annual domestic gas bills, by home and non-home supplier](#)

In 2018 the average annual bill<sup>4</sup> was cheapest for customers paying by prepayment, with an average bill of £650 for standard electricity customers in the UK and £624 for gas customers in GB, as shown in Chart 2.5.

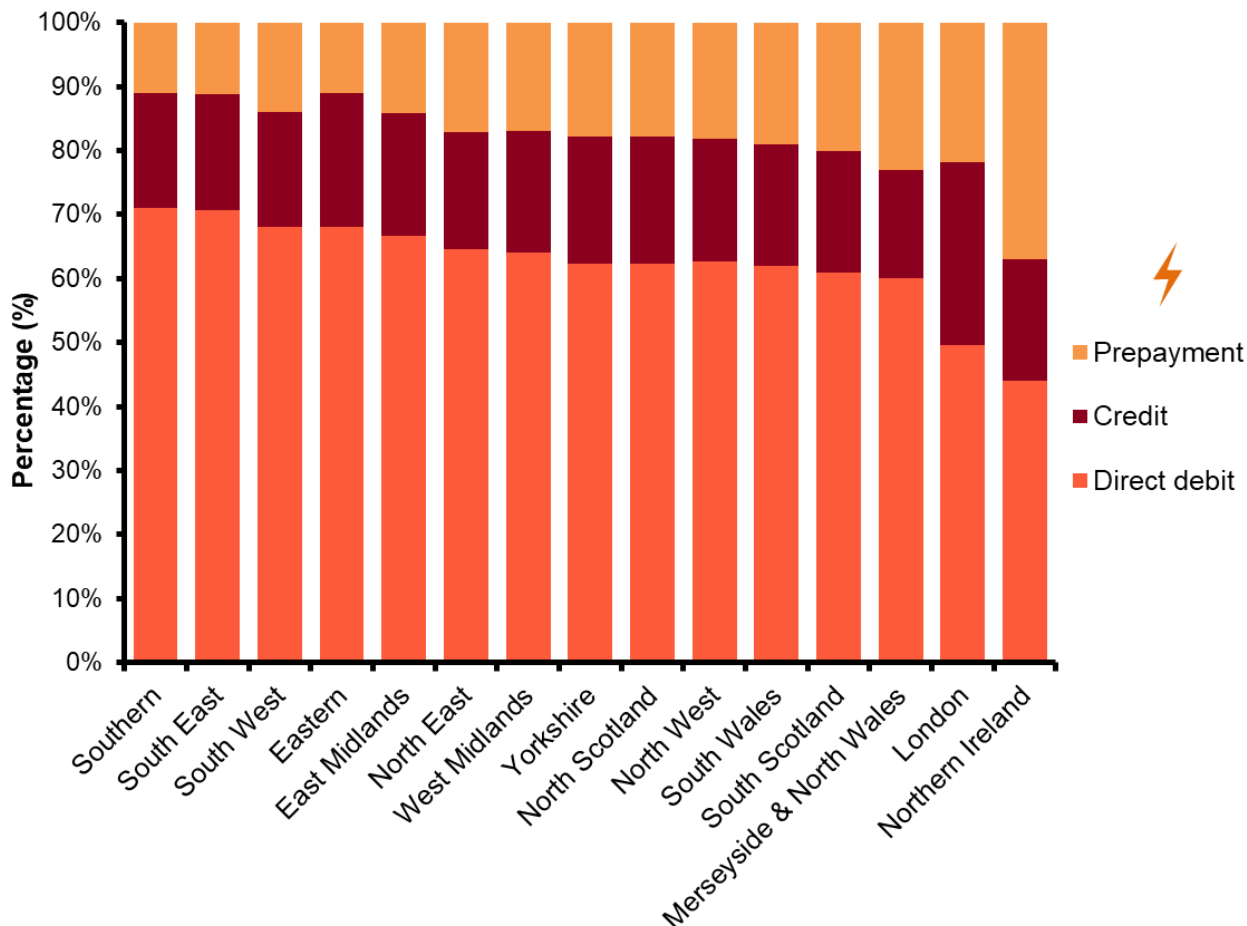
For combined bills, based on BEIS consumption levels, Credit remains the most expensive method of payment at £1,443 (an increase of £87 since last year).

Direct debit is now slightly more expensive (in 2018 average payments were £1,290) than prepayment. Direct debit was formerly the cheapest option but now prepayment is the cheapest method of payment with a combined bill of £1,274, £16 cheaper than direct debit. Though average prices paid on direct debit were still £153 cheaper than those on credit.

<sup>4</sup> Based on a fixed consumption of 15,000kWh for gas and 3,800kWh for electricity

## Regional variation of payment methods – Electricity

**Chart 2.6 Southern region continues to show the highest proportion of households paying by direct debit at 71 per cent for quarter ending 31 March 2019.**



Reference and link to tables:

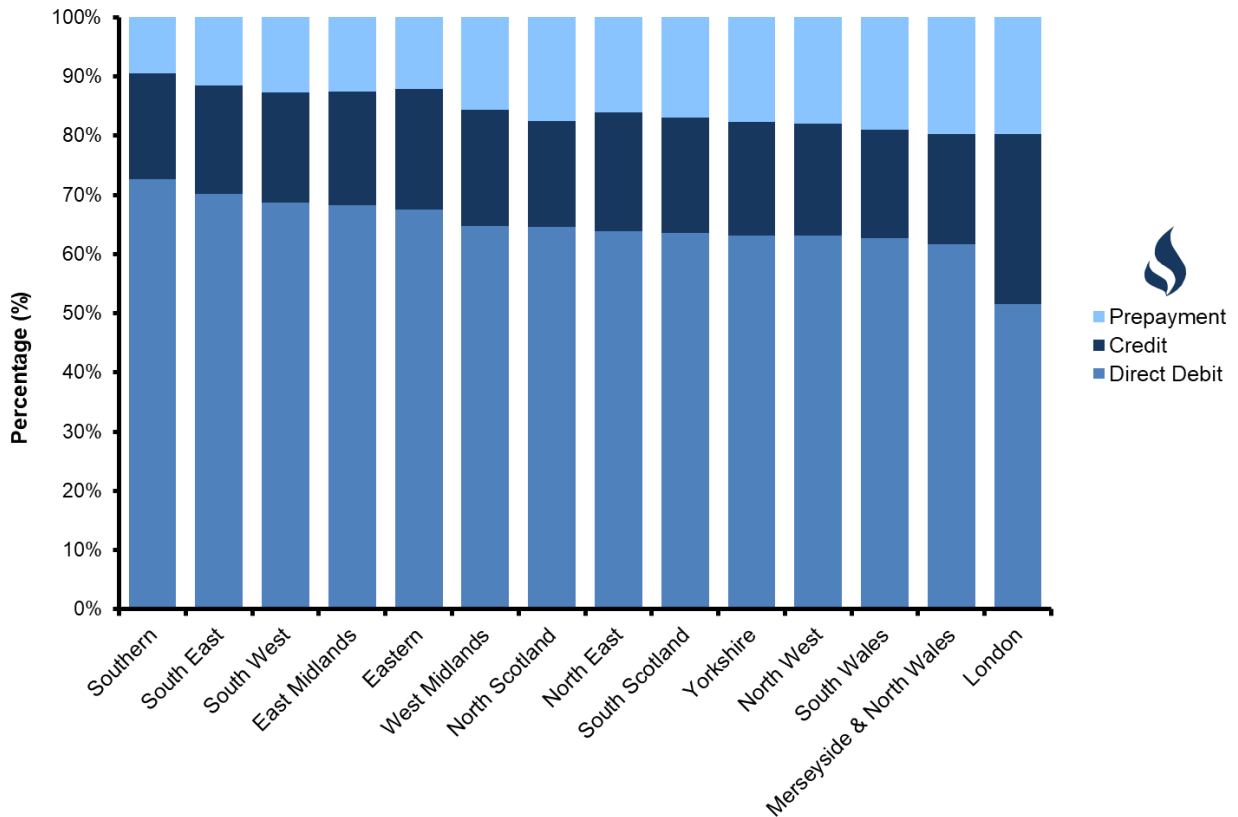
[Table 2.4.2: Regional variation of payment method for standard electricity](#)

The proportion of customers by the different payment methods varies by region. In Q1 2019, for standard electricity, direct debit was the most popular payment method in all regions.

Northern Ireland, however, has a broadly similar proportion of customers who pay by prepayment (37 per cent) as who pay by direct debit (44 per cent), see Chart 2.6.

## Regional variation of payment methods - Gas

**Chart 2.7 Southern region shows the highest proportion of households paying by direct debit at 73 per cent**



Reference and link to tables:

[Table 2.5.2: Regional variation of payment method for gas](#)

Regional variation in payment method for gas is like that of standard electricity with direct debit being the most preferred form of payment. London has the lowest percentage of customers paying by direct debit, at 52 per cent and has the highest percentage of credit customers, at 29 per cent.

Merseyside & North Wales as well as London have the highest percentage of gas customers paying by prepayment at 20 per cent.

## Domestic energy competition

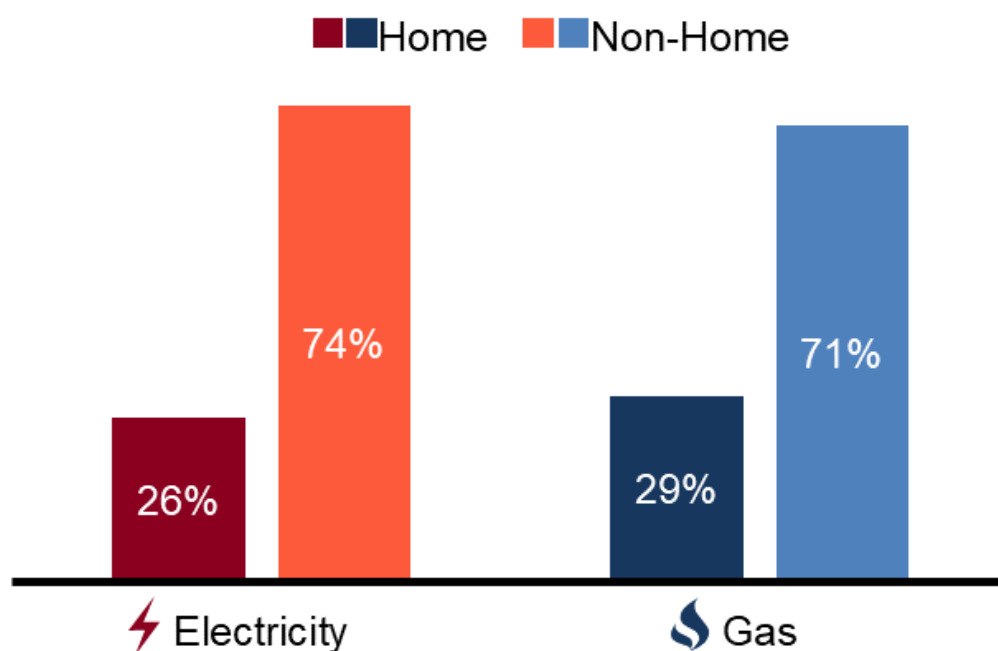
Prior to the privatisation of the GB energy market, all energy customers were supplied by their regional electricity and gas boards. With privatisation these boards became the commercial 'home' suppliers for each region to which all customers in that region belonged before the market opened to competition.

The first trial in competitive gas supply started in April 1996 in South West England, with all customers able to choose supplier by May 1998. Competition in domestic electricity supply began on 14 September 1998 with 750,000 consumers in four areas and gradually extended to all consumers in Great Britain by 24 May 1999.

In Northern Ireland the market is now open to competition, after being monopolistic for many years, although two suppliers still currently supply most of the market. Gas is still not yet widely available in Northern Ireland, although the number of customers with access to the gas grid is increasing.

At the end of March 2019, BEIS estimates that 19.9 million (74 per cent) domestic electricity<sup>5</sup> customers and 16.7 million (71 per cent) domestic gas customers in Great Britain<sup>6</sup> were no longer with their original home supplier, the firm who had supplied that region before the energy market opened to competition (see chart 2.8).

**Chart 2.8: Proportion of customers with their original home supplier for electricity and gas at similar levels from last quarter.**



Reference and link to tables:

[Table 2.4.1: Percentage of domestic electricity customers by region by supplier type](#)

[Table 2.5.1: Percentage of domestic gas customers by region by supplier type](#)

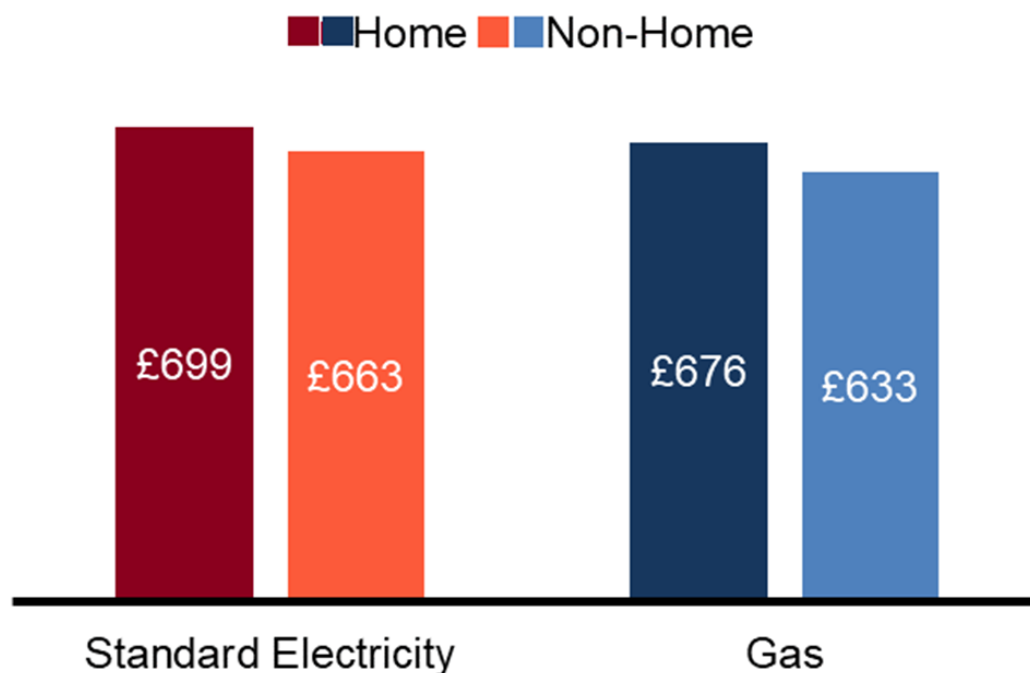
<sup>5</sup> Includes both standard electricity and Economy 7 electricity.

<sup>6</sup> Competition is still limited in scope for domestic customers in Northern Ireland, and so this country has been excluded from this analysis.

Direct debit customers were most likely to have switched supplier, with 78 per cent of electricity customers and 76 per cent of gas customers no longer with their home suppliers. Credit customers were the least likely to have switched, with 62 per cent of electricity customers and 55 per cent of gas customers supplied by a non-home supplier. To note, these figures account for BEIS' estimate for small suppliers in the market.

## Variation in energy competition between payment methods

**Chart 2.9: Average annual Standard Electricity and Gas bills for home and non-home suppliers in GB, 2018**



Reference and link to tables:

[Table 2.2.1: Average annual domestic electricity bills, by home and non-home supplier](#)

[Table 2.3.1: Average annual domestic gas bills, by home and non-home supplier](#)

Average annual bill based on fixed consumption<sup>7</sup> for gas and standard electricity is lower for customers with non-home suppliers, with the average bill for customers with home suppliers around £79 more expensive. Of this £79, standard electricity contributes around £36 of the difference between home and non-home suppliers, with gas contributing around £43.

**Table 3 – Average annual bills<sup>(r)</sup> by payment method and supplier type for 2018<sup>8</sup>**

	Credit		Direct Debit		Prepayment		Overall	
	Home	Non-Home	Home	Non-Home	Home	Non-Home	Home	Non-Home
Standard Electricity	£749	£717	£686	£651	£649	£651	£699	£663
Gas	£719	£711	£667	£620	£629	£621	£676	£633
<b>Total</b>	<b>£1,468</b>	<b>£1,428</b>	<b>£1,353</b>	<b>£1,271</b>	<b>£1,278</b>	<b>£1,272</b>	<b>£1,375</b>	<b>£1,296</b>

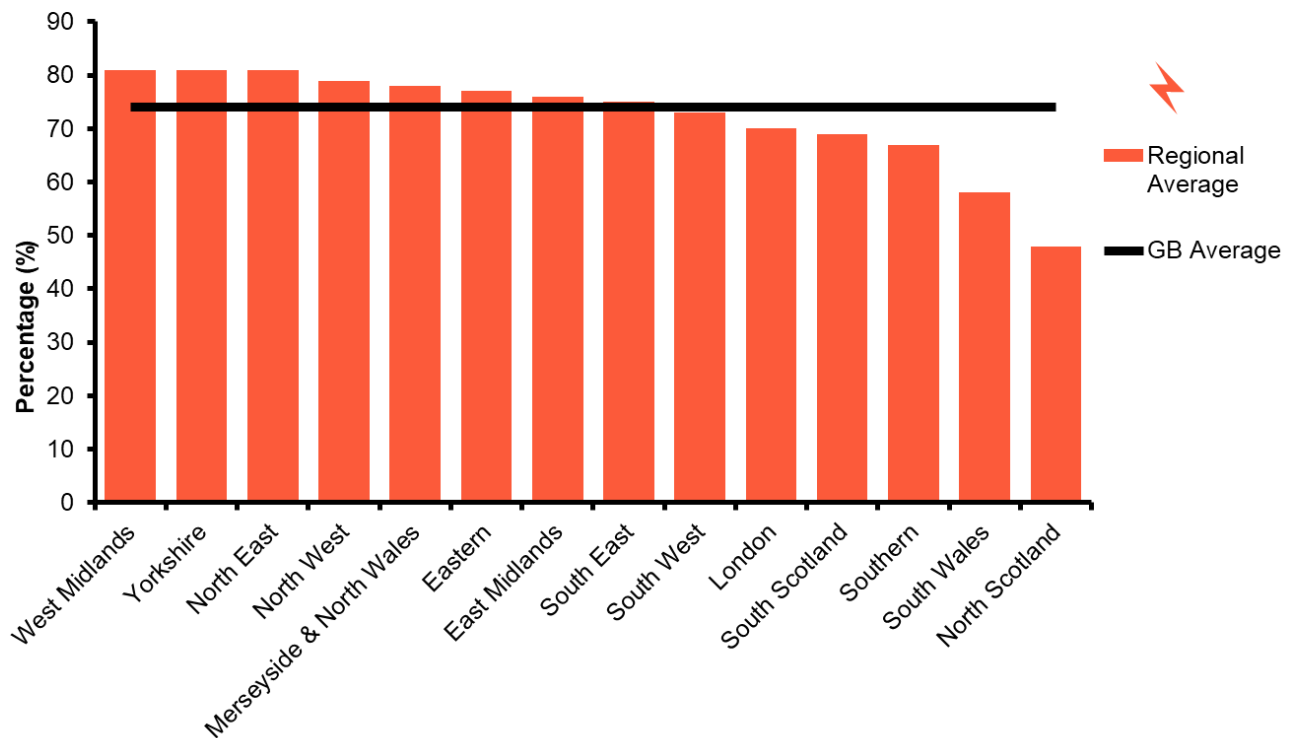
<sup>7</sup> 15,000kWh for gas and 3,800kWh for electricity

<sup>8</sup> Standard electricity and gas bills may not add up exactly to the combined bill as they have been calculated on non-rounded figures.



## Regional competition - Electricity

**Chart 2.10: West Midlands, Yorkshire and North East regions have the least proportion of electricity customers with a home supplier at 19 per cent for quarter ending March 31, 2019**



Reference and link to tables:

[Table 2.4.1: Percentage of domestic electricity customers by region by supplier type](#)

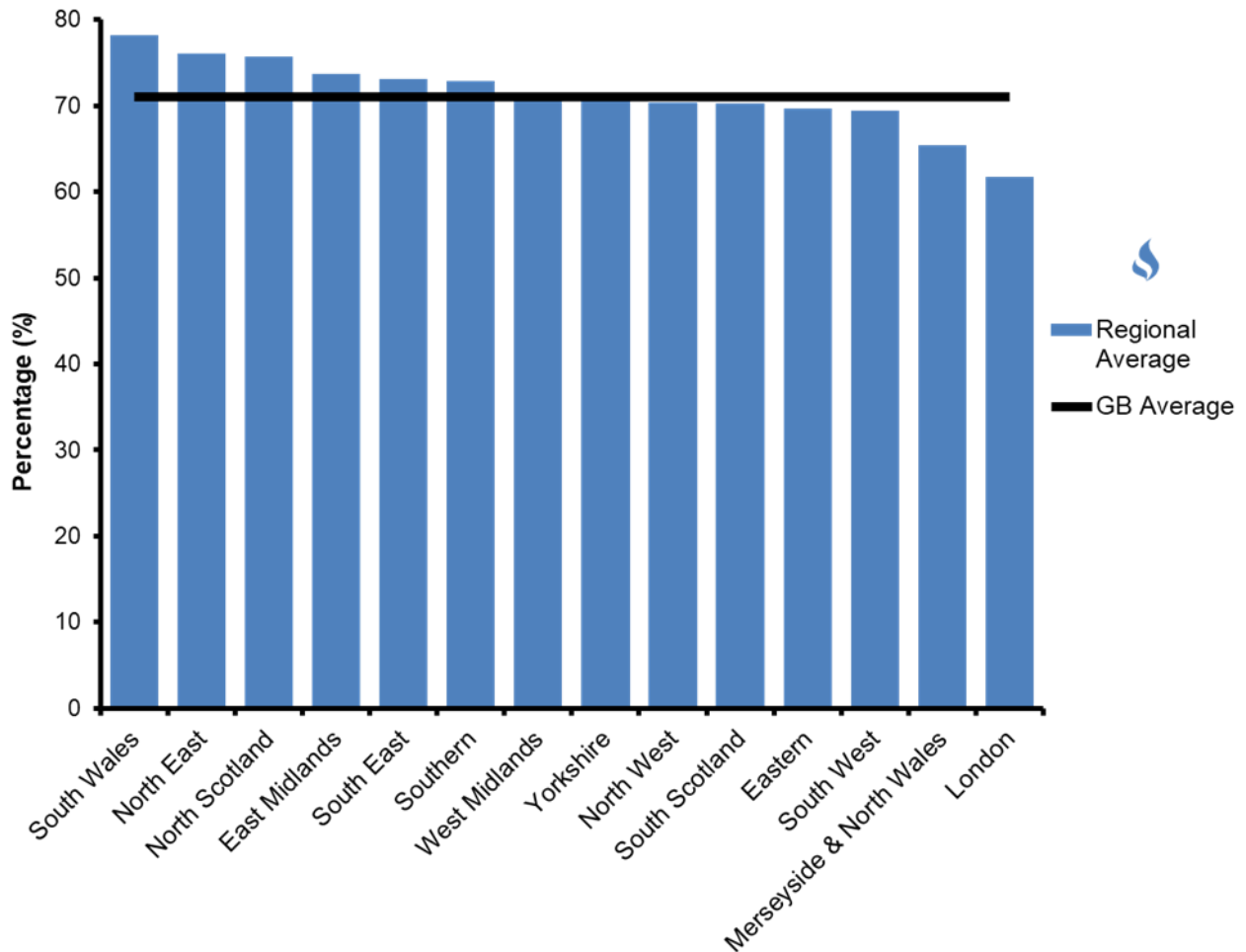
Since the March 2017 edition of QEP, BEIS has published adjusted figures for regional proportions with a non-home supplier. This is to account for the fact that BEIS' survey coverage is primarily of larger energy suppliers with a home region, so in the past have underestimated the proportion of customers who had moved away from their home supplier.

Also, since March 2018, breakdowns by payment type are also adjusted to account for the smaller energy companies, which is a result of surveying a larger proportion of the energy market.

Overall, at the end of March 2019, customers in North Scotland were the least likely to have moved, with around 52 per cent still with their home supplier, double the national average at 26 per cent (see Chart 2.10).

## Regional competition - Gas

**Chart 2.11: South Wales showing the lowest proportion of households remaining with their home supplier at 22 per cent**



Reference and link to tables:

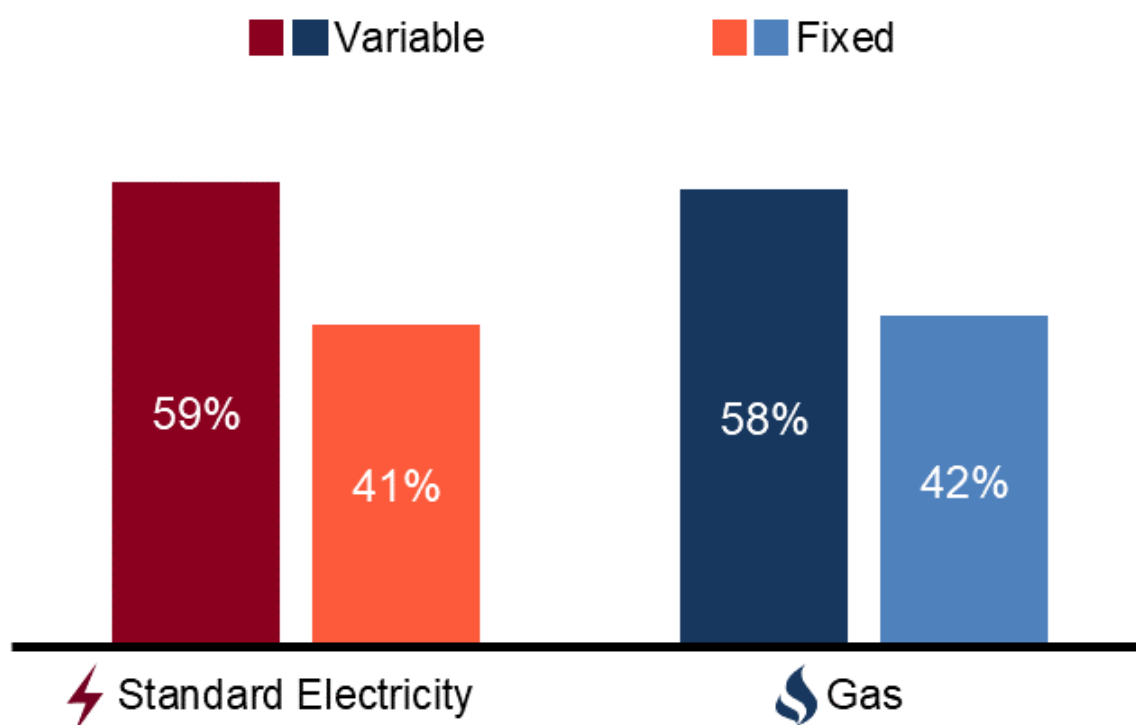
[Table 2.5.1: Percentage of domestic gas customers by region by supplier type](#)

At the end of March 2019, customers in London were the least likely to have moved gas supplier, with around 38 per cent still with their home supplier which is 9 per cent higher than the national average of customers at 29 per cent.

## Fixed Tariffs

Please note whether tariffs are fixed, or variable have been derived by BEIS from the names of the tariffs provided to us by the energy companies. We continually are reviewing our methodology, but these are currently classed as **Experimental Statistics** and are not as robust as the data presented elsewhere in the release. A variable tariff is defined as one where the price is subject to change at any point. A fixed tariff<sup>9</sup> is one where the price has been set for a defined period.

**Chart 2.12: Proportion of customers on fixed tariffs for electricity up by 2 per cent from last quarter**



Reference and link to tables:

[Table 2.4.2: Regional variation of payment method for standard electricity](#)

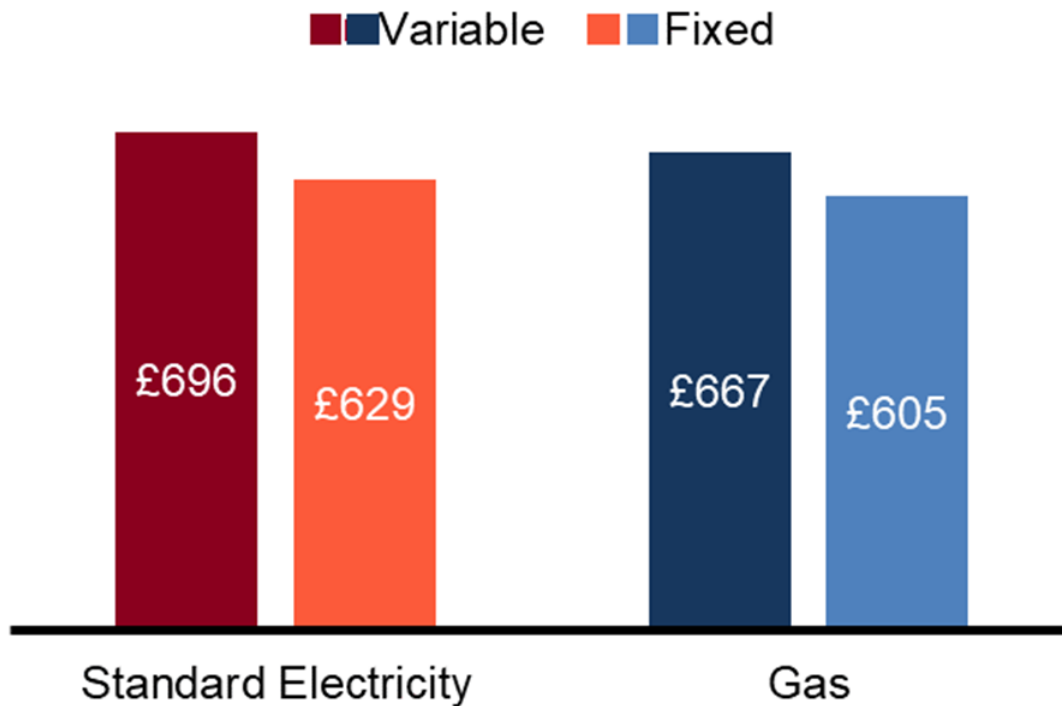
[Table 2.5.2: Regional variation of payment method for gas](#)

At the end of March 2019, most standard electricity customers in the United Kingdom (UK) and gas customers in Great Britain (GB), on all payment methods were on variable tariffs, however the percentage of customers on fixed tariffs has increased greatly in recent years.

<sup>9</sup> The method used to determine a fixed tariff is dependent on the tariff name and BEIS' research of tariffs. It is therefore possible that some fixed tariffs have not been identified and may well have been incorrectly classified as a variable tariff.

Around 42 per cent of all standard electricity and gas customers were on fixed tariffs at the end of March 2019. Direct Debit customers are most likely to be on fixed tariffs with 57 per cent of these customers on a fixed deal for both electricity and gas. Credit customers were the second most likely to be on a fixed tariff, with 21 per cent and 26 per cent of standard electricity and gas customers on a fixed tariff. Prepayment customers were the least likely to be on a fixed tariff, with only 1 per cent of standard electricity and 2 per cent of gas customers on a fixed tariff.

**Chart 2.13: Average standard electricity and gas bills for fixed and variable tariffs**



Reference and link to tables:

[Table 2.2.1: Average annual domestic electricity bills, by home and non-home supplier](#)

[Table 2.3.1: Average annual domestic gas bills, by home and non-home supplier](#)

In 2018, annual domestic gas and standard electricity bills for customers on a fixed tariff were, on average, cheaper across all payment types compared to those on variable tariffs, as shown in Table 3, where combined bills were around £129 cheaper for those on a fixed tariff.

## Variation in tariff type between payment methods

**Table 3 – Average annual bills by payment method and tariff type, 2018<sup>(r)10</sup>**

	Credit		Direct Debit		Prepayment		Overall	
	Variable	Fixed	Variable	Fixed	Variable	Fixed	Variable	Fixed
Standard Electricity	£739	£683	£697	£622	£651	£608	£696	£629
Gas	£725	£672	£660	£597	£624	£608	£667	£605
<b>Total</b>	<b>£1,464</b>	<b>£1,355</b>	<b>£1,357</b>	<b>£1,219</b>	<b>£1,275</b>	<b>£1,216</b>	<b>£1,363</b>	<b>£1,234</b>

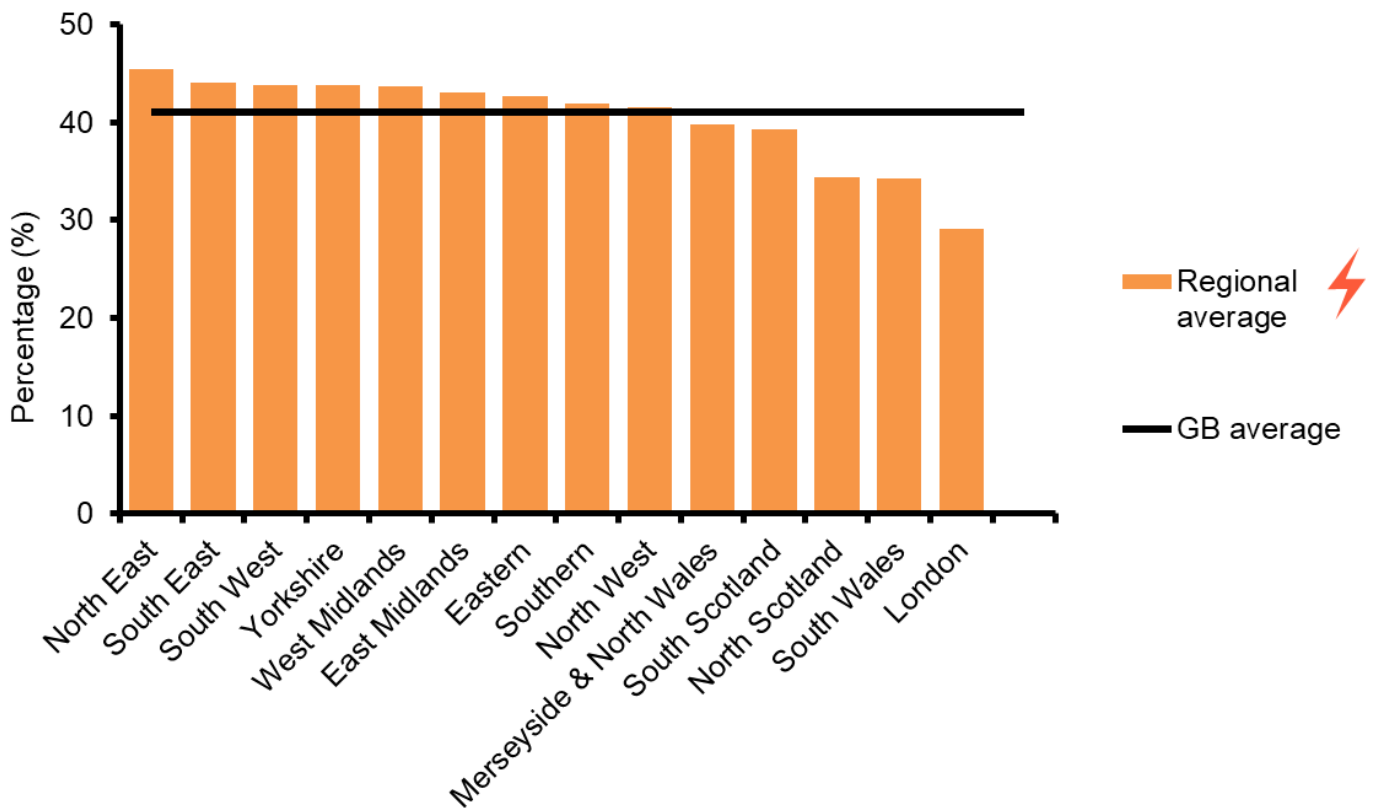
As can be seen in Table 3, average fixed tariff bills were cheaper than variable tariff bills across all payment types. The difference was greatest when paying by direct debit, with fixed tariff bills being £75 and £53 lower for standard electricity and gas, respectively. Equivalent savings for customers paying by credit were £56 and £53 for standard electricity and gas respectively. The difference between fixed and variable tariff bills was lower for prepayment customers by £43 for electricity and £16 for gas.

BEIS data suggest that for variable tariffs, prepayment customers were paying around £82 less than direct debit customers in 2018, whilst customers on fixed tariffs were paying around £3 less.

<sup>10</sup> Standard electricity and gas bills may not add up exactly to the combined bill as they have been calculated on non-rounded figures.

## Regional variation of fixed tariff proportions – Electricity

**Chart 2.14 North East region showing the highest proportion of households on standard electricity on a fixed tariff<sup>11</sup> at 45 per cent, up 2 per cent from last quarter.**



Reference and link to tables:

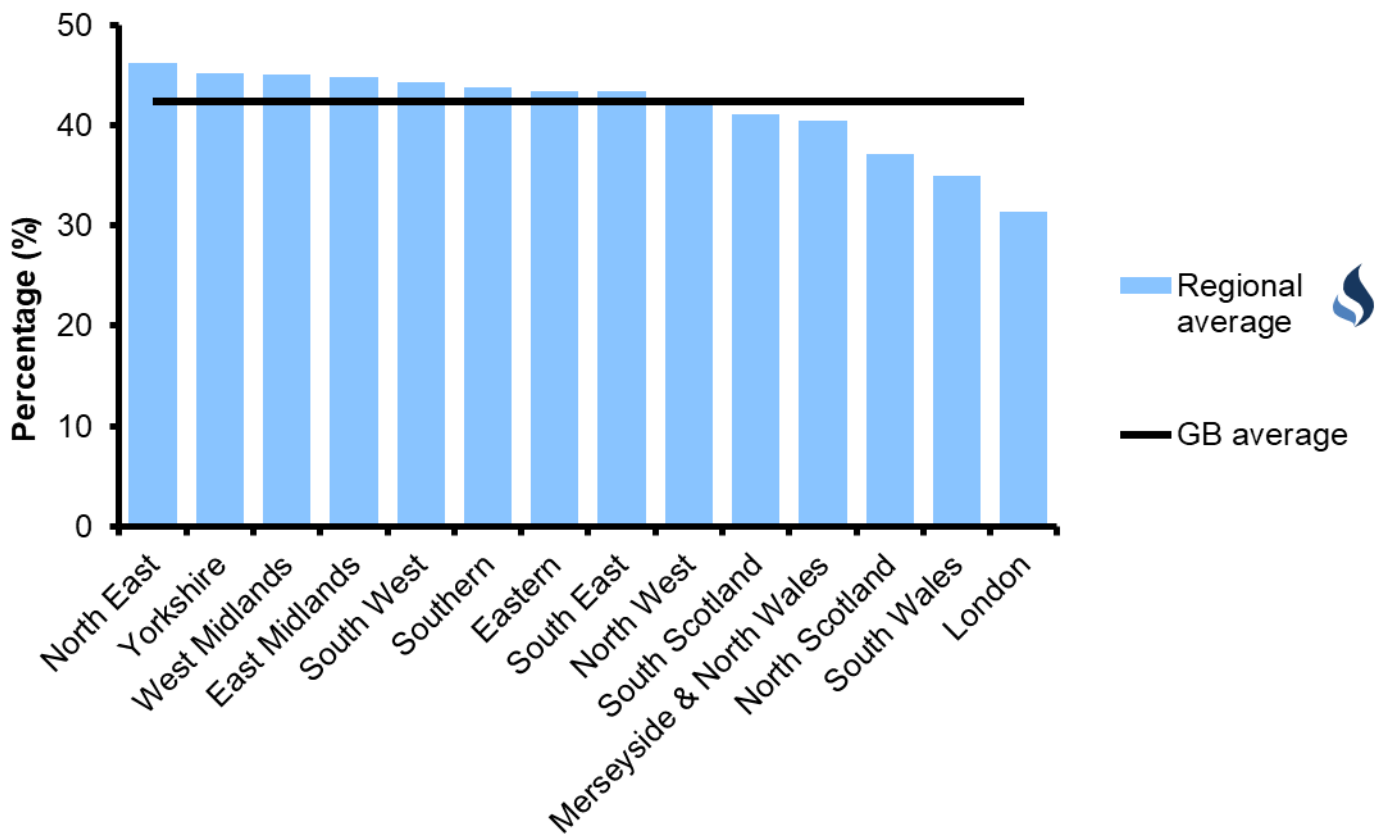
[Table 2.4.2: Regional variation of payment method for standard electricity](#)

The proportion of customers on fixed tariffs, across all payment types, varies by region. London had the lowest proportion of customers on fixed tariffs across all regions in Great Britain at 29 per cent, 12 per cent below GB average.

<sup>11</sup> Northern Ireland has been excluded from this analysis as BEIS survey coverage of the region is not as comprehensive, and so the figures were potentially unrepresentative.

## Regional variation of fixed tariff proportions – Gas

**Chart 2.15: North East region showing the highest proportion of households on fixed tariffs at 46 per cent**



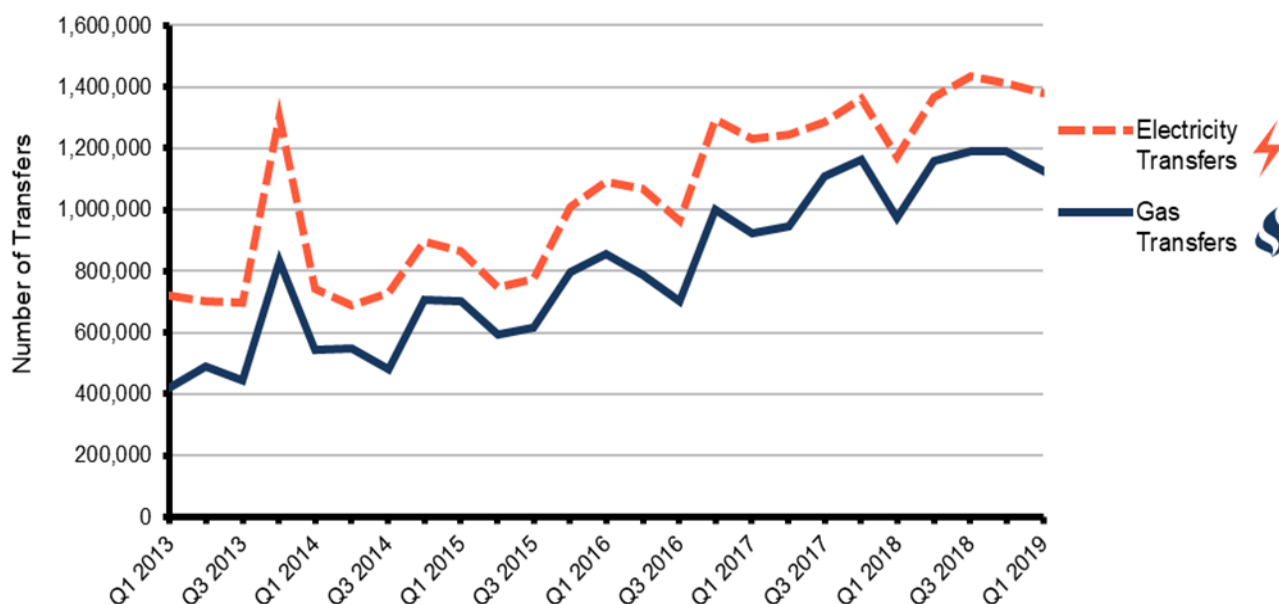
Reference and link to tables:

[Table 2.5.2: Regional variation of payment method for gas](#)

The proportions are comparable for gas, with North East having the highest proportion on fixed tariffs at 46 per cent. Again, London had the lowest proportion of customers on fixed tariffs in Great Britain, at 31 per cent.

## Transfer statistics

Chart 2.16 Domestic gas and electricity transfers<sup>12</sup>



Source: Ofgem

Reference and link to tables:

[Table 2.7.1: Transfer statistics in the domestic gas and electricity markets](#)

Comparing the first quarter of 2019 with the same period in 2018, the number of transfers between energy suppliers made by households in the domestic electricity and gas market increased by **16 per cent**.

Historically there are generally peaks each year around March (Quarter 1) however in 2018 there was not the same trend as previously observed. March 2019 was in line with this previously observed seasonal effect which creates a higher percentage increase than reported in other quarters.

There was an estimated 1,328,000 electricity transfers in Q1 2019 compared to 1,190,000 in the same period in 2018, and 1,128,000 transfers for gas in the same period last year as seen in Chart 2.17.

<sup>12</sup> Since April 2016 data supplied to BEIS has included additional filtering to remove non-domestic customers. This data is sourced from network operators and filtered by the active suppliers in the market, who to the best of Ofgem's knowledge are operating in the domestic and non-domestic segments of the energy market. For this reason the data supplied from April 2016 onwards may be more accurate but lower than levels before this time.



These quarterly transfers represent around 5 per cent for both electricity and gas customers in the domestic market. The Office for Gas and Electricity Markets (Ofgem), provide BEIS with the number of domestic customers in Great Britain that have switched supplier for both electricity and gas.

For electricity, this covers the whole domestic market. Formerly gas switching levels only covered the main six suppliers however from January 2014 Ofgem provided switching levels for the whole market. As a result of this, published gas transfers will be lower before Q1 2014 compared to more recent quarters.

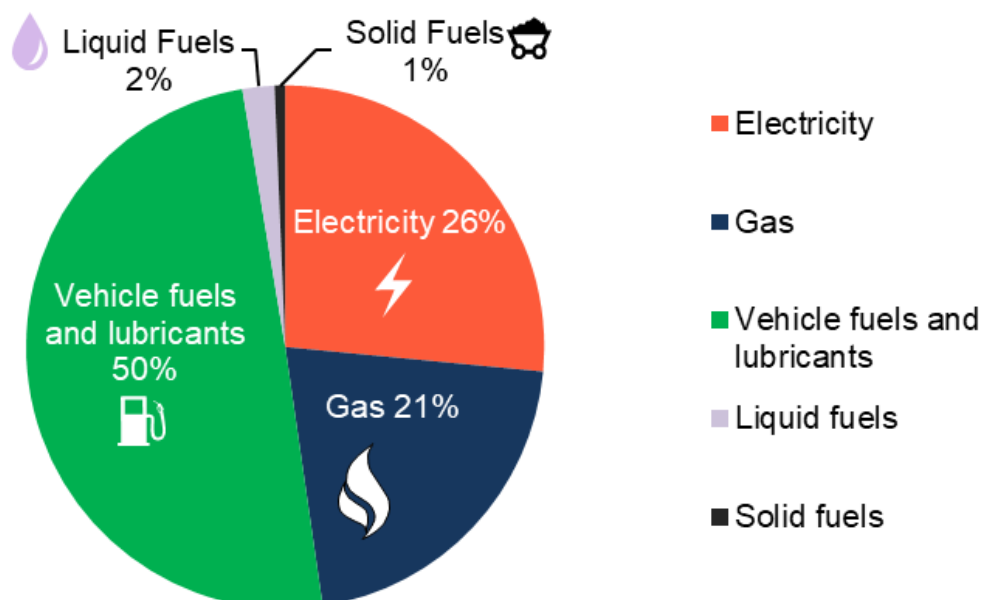
More can be found on Ofgem's website here:

<https://www.ofgem.gov.uk/data-portal/number-domestic-customers-switching-supplier-fuel-type-gb>

## Household Expenditure on Energy 2018

In 2018, the total expenditure on energy increased by **9.1 per cent**. This increase was mainly due to the increase in expenditure on electricity and gas following the price increases seen in 2018. Half of energy expenditure is accounted for by spending on vehicle fuels and lubricants.

**Chart 2.17: Energy expenditure by fuel type**



Source: ONS, Consumer trends

Reference and link to tables:

[Table 2.6.1: Total household expenditure on energy](#)

[Table 2.6.2: Average expenditure each week on fuel per consuming household in the UK](#)

# Industrial Sector Prices

*UK industry is reliant on fuels, in particular gas and electricity, to operate and this section gives an insight on the prices of fuels paid by the non-domestic sector.*

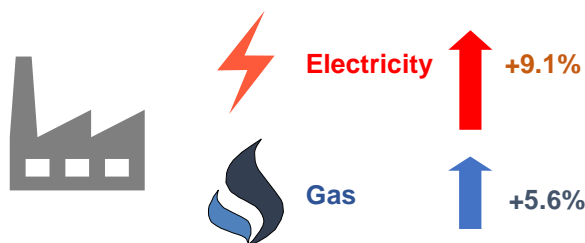
Whilst the fuels are the same, it is not generally comparable with the domestic market given the different levies and taxes paid by industry compared to households and the considerably higher consumption levels that industry have over domestic users.

This section presents information on prices of fuels (e.g. coal, oil, gas and electricity) the manufacturing and industrial sector use to operate; the prices paid for the fuels used by major power producers to generate electricity (mainly coal and gas) and the prices of fuels (e.g. electricity and gas) used in the non-domestic sector. Non-domestic in this context refers to sectors and organisations other than households.

**Industrial Data** all of the detailed underlying data associated with this section and previous related datasets can be found on GOV.UK here: [www.gov.uk/government/collections/industrial-energy-prices](http://www.gov.uk/government/collections/industrial-energy-prices)

## Highlights and Headline Figures

The industrial sector in the UK is mainly dependant on electricity and gas. Compared to the same quarter in the previous year in Q1 2019, the average industrial prices in real terms, not seasonally adjusted and including the [Climate Change Levy](#) (CCL) - **rose by 5.6 per cent for gas** and by **9.1 per cent for electricity**. ([Table 3.3.2](#))



Compared to the same quarter in the previous year in Q1 2019, industrial prices for **coal fell by 13 per cent** but **heavy fuel oil** (not subject to CCL) **increased by 16 per cent**.

The 'major power producers' are part of the electric power industry and use gas and coal as part of the fuel mix to generate electricity. Between Q1 2018 and Q1 2019, the price of gas used for electricity generation by major power producers in the UK **fell by 2.5 per cent** in cash terms whilst that for the coal **fell by 5.9 per cent** ([Table 3.2.1](#))

## Notes

Please note that the prices presented in this section vary depending on the sectoral coverage (e.g. manufacturing industry, all industry, or non-domestic consumers) and on consumption levels. Prices of fuels may move by different amounts, or even in different directions, depending on the sectors and/or consumption size bands being compared. Changes in prices may also vary depending on the time period used, i.e. changes in annual average prices may be different to changes in prices between quarters a year apart.

Additionally, average prices in tables 3.1.1 to 3.1.4, which cover the manufacturing industry, tend to be weighted more towards the prices paid by the large consumers, whereas in tables 3.4.1 and 3.4.2 which cover the non-domestic consumers, average prices tend to be weighted more towards the smaller consumers.

Given that large consumers purchase large volumes, they may be more dependent on wholesale spot prices, and therefore more vulnerable to price spikes whereas the small consumers tend to be on more stable contracts. These factors help to explain the variation in prices.

Price indices in table 3.3.1 aim to be reflective of all industrial users.

**Heavy Fuel Oil**, a derivative from the oil refining process is used for heating and to fuel furnaces and boilers, ships, locomotives and industrial power plants. It is very viscous and requires to be kept at a high temperature and pre-heating before use.

**Gas Oil** (sometimes called Red Diesel for agricultural uses) is a more refined oil and is used as a fuel in off road vehicles like tractors, as burning fuel in central heating systems and in the chemical industry

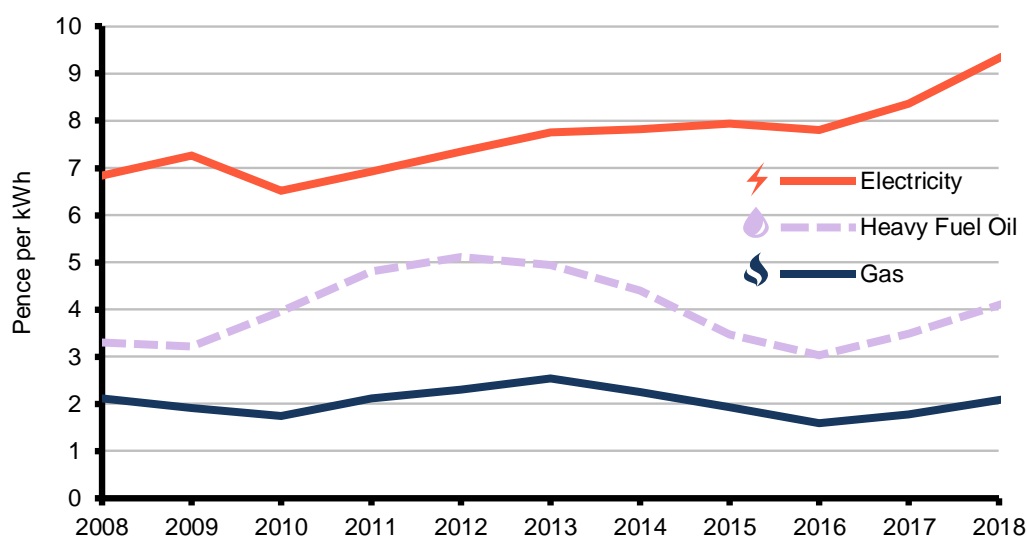
## Energy prices in the manufacturing sector

Prices of fuels in the manufacturing sector, excluding CCL, for various size bands of consumers are presented in tables 3.1.1 to 3.1.4. The fuels covered in this section are mainly **heavy fuel oil, electricity and gas**.

Associated tables with this release also provide details on the movements of prices for **coal** and **gas oil** used in the manufacturing sector.

These prices vary by consumption reflecting the bargaining position of the larger users and factors such as length of contracts and the relative impact of crude oil prices on fuel prices.

**Chart 3.1: Average annual prices of fuels purchased by manufacturing industry**



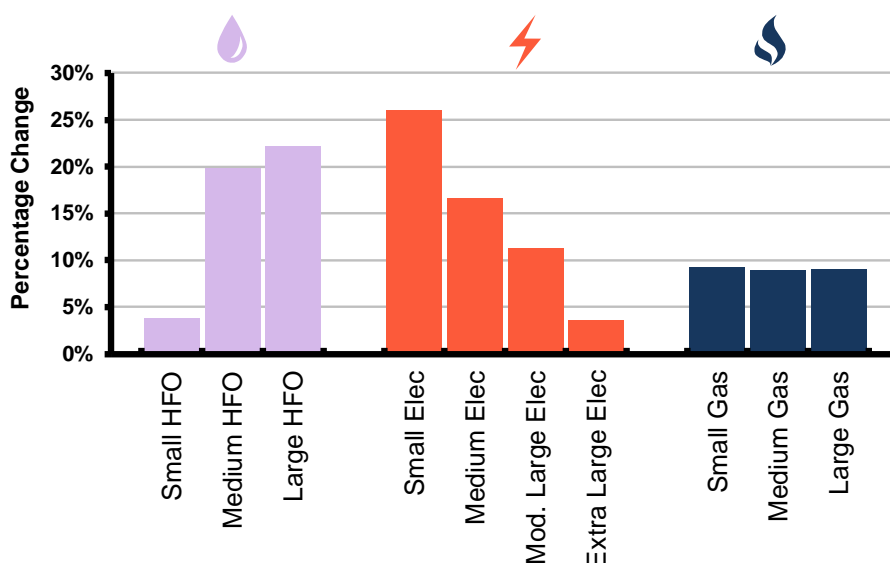
Reference and link to data table:

[Table 3.1.4: Annual prices of fuels purchased by manufacturing industry \(p/kWh\)](#)

In the manufacturing sector, average annual fuel prices for electricity have been on a general upward trend since 2004, rising each year with the exception of falls in 2007, 2010 and in 2016 (chart 3.1).

With regard to gas, average prices have been more variable with a rising trend interspaced with falls in individual years. In 2016 average gas prices fell by 37 per cent from the peak in 2013. However, over the past two years, gas prices in the manufacturing sector have increased and in 2018 were 18 per cent higher than in the previous year. For heavy fuel oil and gas oil, with the exception of 2009, prices increased each year between 2005 and 2012. Since then, prices for both fuels have decreased with stronger falls in 2015. But over the past two years the heavy fuel oil and gas oil prices have again increased. Coal prices generally increased each year between 2004 and 2014 before falling. In the past two years coal prices have again increased and in 2018 were 23 per cent higher than in the previous year and the highest for over a decade.

**Chart 3.2 Manufacturing industry price movements by size of consumer <sup>(1)</sup>**



<sup>(1)</sup> Percentage price movement between Q1 2018 and Q1 2019 for heavy fuel oil (HFO), electricity and gas, in cash terms excluding Climate Change Levy (CCL)

Data for 2018 show that over the past five years (2013 to 2018) average industrial electricity prices have risen by 20 per cent in cash terms (11 per cent in real terms) and compared to the previous year average industrial electricity prices have increased by 12 per cent (9.6 per cent in real terms). Over the same five-year period average industrial gas prices have decreased by 18 per cent in cash terms (24 per cent in real terms) but have increased by 18 per cent (16 per cent in real terms) over the previous year.

Recent price movements by size band are shown in Chart 3.2. Compared to the previous year, heavy fuel oil consumers in the manufacturing industry in Q1 2019 have seen average prices increase by 18 per cent in cash terms. Over the same period, average prices paid by electricity consumers in the manufacturing industry, in cash terms excluding CCL, rose by 12 per cent and the average prices for gas consumers, in cash terms excluding CCL, increased by 9.1 per cent.

References and links to data tables:

[Table 3.1.1: Quarterly prices of fuels purchased by manufacturing industry \(original units\)](#)

[Table 3.1.2: Quarterly prices of fuels purchased by manufacturing industry \(p/kWh\)](#)

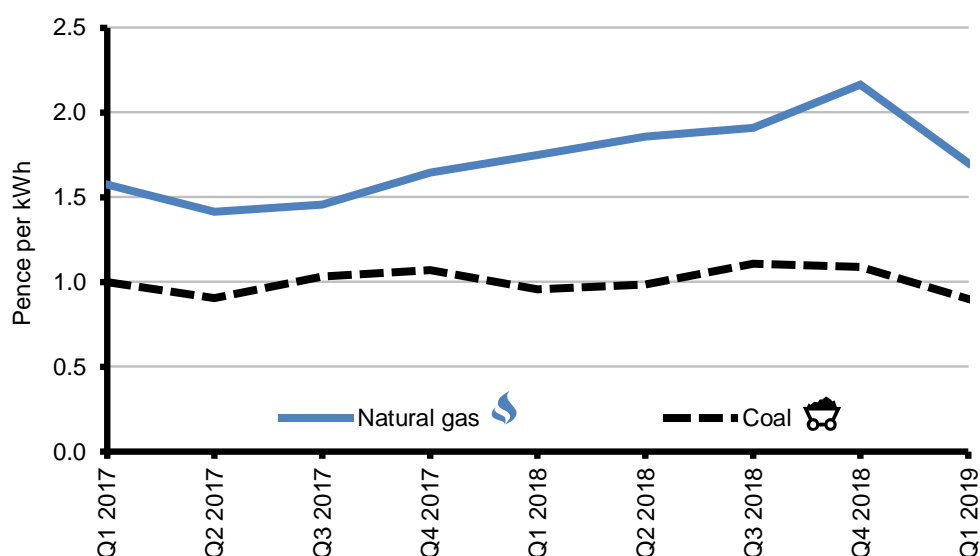
[Table 3.1.3: Annual prices of fuels purchased by manufacturing industry \(original units\)](#)

[Table 3.1.4: Annual prices of fuels purchased by manufacturing industry \(p/kWh\)](#)

## Average prices of fuels purchased by the major UK power producers

Average purchase costs of fuels used to generate electricity are presented in table 3.2.1. Generation costs are also affected by non-fuel costs such as transportation costs, and by the efficiency with which fuel is converted into electricity in different types of power station. Therefore, comparing the fuel input costs in common units does not explain the full costs involved.

**Chart 3.3 Price paid by UK power producers for coal and natural gas - quarterly**



Reference and link to data table:

[Table 3.2.1: Average price of fuels purchased by the major UK power producers](#)

Gas wholesale prices have generally been higher and more volatile since 2008, in line with crude oil prices. Since the high of 1.81 pence per kWh in January 2017 wholesale gas prices fell sharply to 1.20 pence per kWh in June 2017. Apart from a slight dip in October 2017 and a much larger dip in January 2018, wholesale gas prices rose to a high of 2.46 pence per kWh in March 2018, the highest for over four years. This was due to the first two days of March 2018 when wholesale gas prices reached a record high of 12.71 pence per kWh on account of the cold weather. Prices however then fell significantly to an average of 1.89 pence per kWh for the rest of the month.

Following a sharp fall of 29 per cent in wholesale gas prices in April 2018, prices again rose steadily to a peak of 2.51 pence per kWh in September 2018. Wholesale gas prices have since followed a steady downward trend and in March 2019 were down to an average of 1.36 pence per kWh, the lowest since August 2017.

Compared to the previous year, in Q1 2019 wholesale gas prices were 20 per cent lower. The large fall in wholesale gas prices was due to fall in demand on account of the warmer winter weather and high levels of supply, particularly from LNG.

Between Q1 2018 and Q1 2019 the price of coal in cash terms for power stations fell by 5.9 per cent to 0.9 pence per kWh whilst the price of gas over the same period fell by 2.5 per

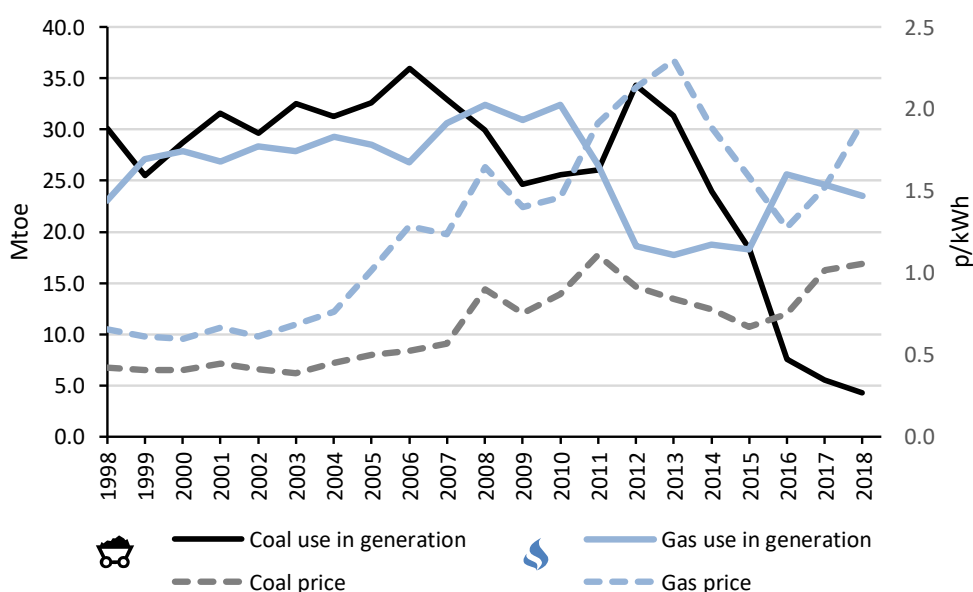
cent to 1.7 pence per kWh. As shown in Chart 3.3, in Q1 2019 the price of coal in pence per kWh was nearly half that of gas leading to a price gap in cash terms of 0.8 pence per kWh.

Compared to the previous year, in Q1 2019 less coal (down 63 per cent) and less gas (down 2.9 per cent) were used in electricity generation. These reductions were due to increased use of renewables in generation, in particular bioenergy and hydro, though electricity demand in the quarter was down. In terms of share of generation, in Q1 2019 gas accounted for 42 per cent of the UK total electricity generation (2.4 percentage points higher than in the previous year), while coal's share was 3.5 per cent (5.8 percentage points lower than in the previous year).

Reference and link to data table:

[Table 3.2.1: Average price of fuels purchased by the major UK power producers](#)

**Chart 3.4 Price paid by UK power producers for coal and natural gas - annual**



Prior to 2008, coal was the dominant fuel used in electricity generation. Between 2008 and 2011, gas overtook coal as the dominant fuel, but between 2012 and 2015 the relative prices of coal and gas meant that coal use increased once more at the expense of gas. In 2013, gas fuelled generation fell to its lowest level since 1996 due to the high gas prices, but in 2014 gas fuelled generation increased by 5.3 per cent due to lower wholesale gas prices between June and August and in response to lower nuclear and coal output.

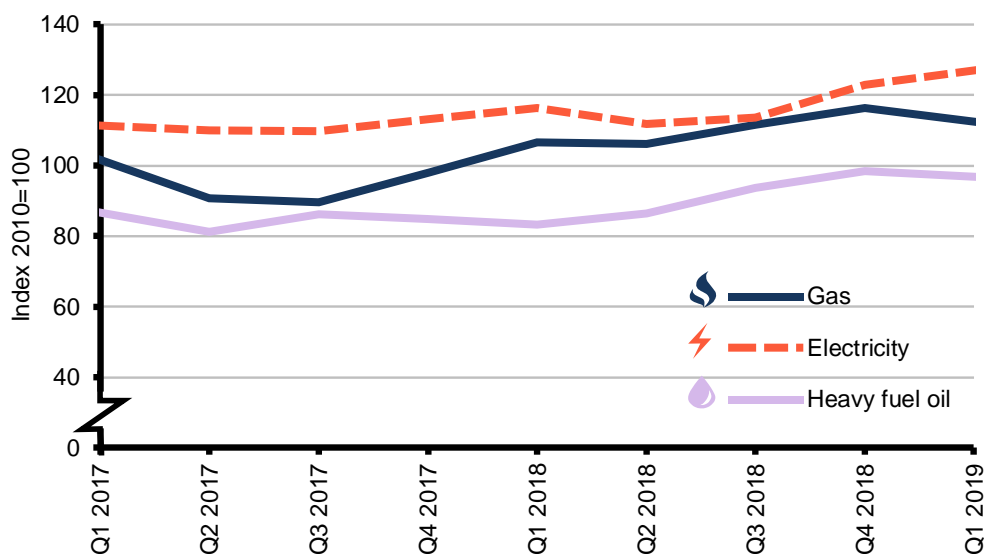
In 2015, gas use fell by 2.4 per cent while coal use fell by 23 per cent as a result of reduced coal capacity and an increase in the carbon price floor. In 2016 the large fall in wholesale gas prices saw a 40 per cent increase in gas use, however as a result of the increase in wholesale gas prices and in renewable sources in the recent two years, gas use in generation have fallen. Coal use has fallen in the last five years due to reduction in coal capacity, power station closures and increasing costs of generating from coal.

In 2018 coal prices for power generation, in cash terms, increased by 4.0 per cent over the previous year while gas prices increased by 26 per cent. Gas prices in 2018 were 16 per cent lower than the peak of 2.3 pence per kWh seen in 2013 (chart 3.4). Over the past 5 years, the annual average real terms prices of coal have increased by 15 per cent while natural gas used by the major power producers have decreased by around 23 per cent.



## Fuel price indices for the industrial sector

Chart 3.5 Industrial fuel price indices <sup>(1)</sup> – quarterly



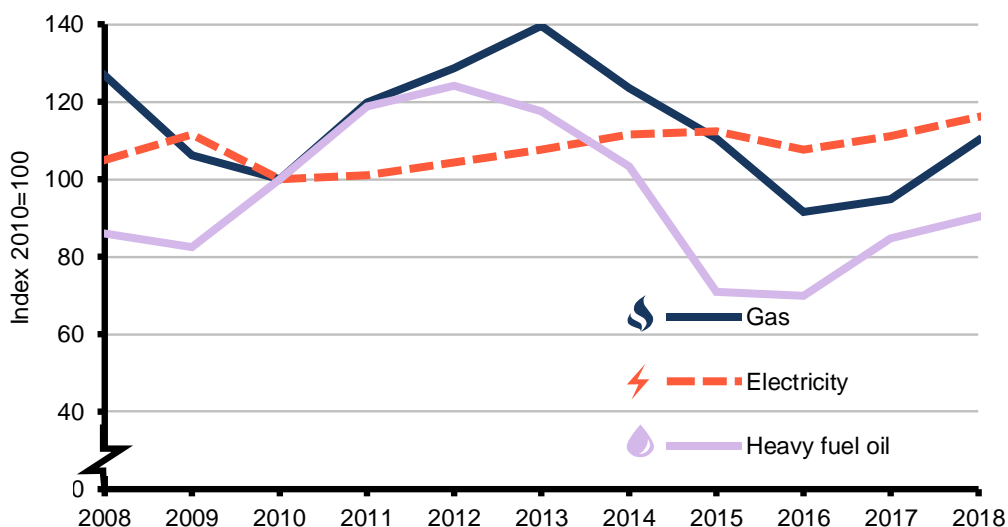
<sup>(1)</sup> Data in real terms deflated using the GDP implied deflator at market prices. Prices include Climate Change Levy (CCL).

Fuel price indices, both excluding and including the Climate Change Levy (CCL) in real and cash terms, are presented in Tables 3.3.1 and 3.3.2.

As shown in Chart 3.5 between Q1 2018 and Q1 2019 the average industrial gas prices including CCL rose by 5.6 per cent in real terms, whilst industrial electricity prices including CCL rose by 9.1 per cent. Over the same period the price of coal fell in real terms by 13 per cent while the price of heavy fuel oil (not subject to CCL) increased by 16 per cent.

The inclusion of CCL increased the average prices of coal by 5.9 per cent, electricity by 3.7 per cent and gas by 4.3 per cent in Q1 2019.

**Chart 3.6 Industrial fuel price indices <sup>(2)</sup> - annual**



<sup>(2)</sup> Data in real terms deflated using the GDP implied deflator at market prices. Prices include Climate Change Levy (CCL).

References and links to data tables:

[Table 3.3.1 and 3.3.2: Fuel price indices for the industrial sector](#)

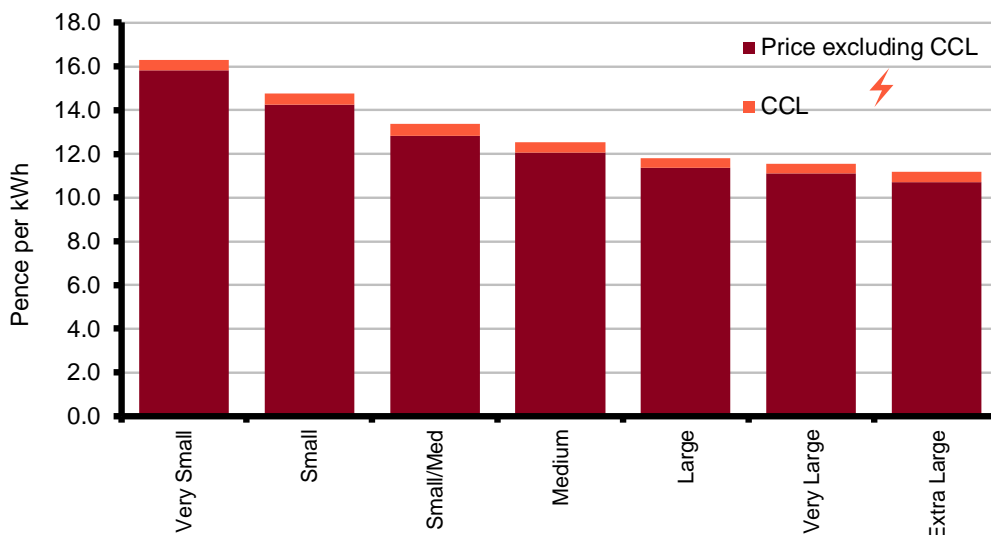
Since the low in 2003 total fuel prices have followed an upward trend reaching a peak in 2013 and with some of the largest annual increases occurring between 2005 and 2008. In most recent years, prices have again risen and in 2018 total fuel prices in real terms (including CCL) were 6.7 per cent higher than in the previous year, but 4.5 per cent below the peak in 2013.

The average price of heavy fuel oil over the five years to 2018 decreased by 23 per cent in real terms but in 2018 increased by 6.7 per cent compared to the previous year. The annual average price of gas, including CCL, fell by 21 per cent in real terms over the past five years, but has increased by 16 per cent on the previous year. However, the average price of electricity, including CCL, has risen by 8 per cent in real terms over the past five years, and by 4.6 per cent on the previous year.

## Gas and electricity prices for the non-domestic sector in the UK

This section presents electricity and gas prices data in the non-domestic sector which **excludes** prices paid by households and generally **comprises** all industrial (manufacturing, energy for example) and commercial sectors (services, retail for example).

**Chart 3.7 UK non-domestic electricity prices Q1 2019**



Reference and links to data tables:

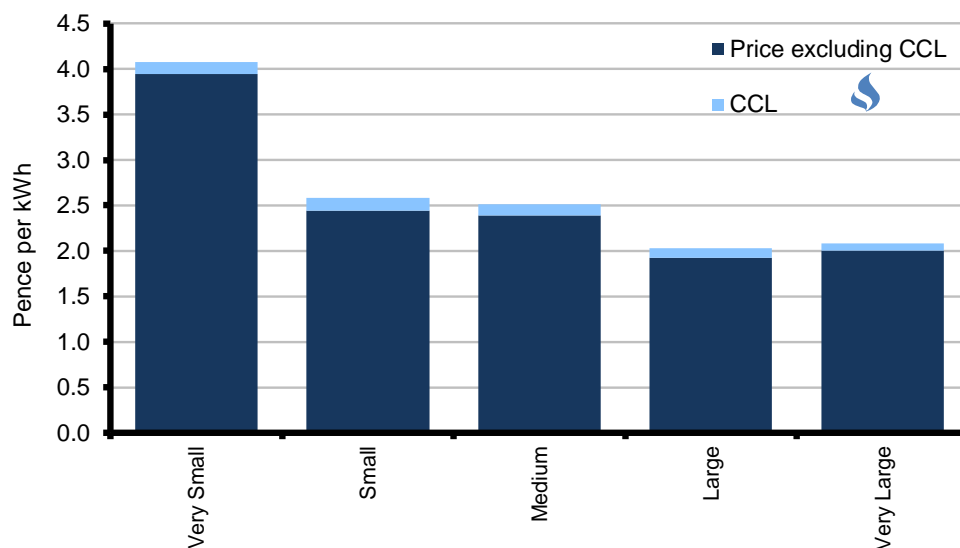
[Table 3.4.1 and 3.4.2: Price of fuels purchased by non-domestic consumers in the UK excluding and including CCL](#)

Gas and electricity prices in the non-domestic sector, both including and excluding CCL, for various sizes of consumer are presented in tables 3.4.1 and 3.4.2.

Chart 3.7 shows the electricity prices in the non-domestic sector by size bands in Q1 2019. Between Q1 2018 and Q1 2019, average electricity prices in cash terms excluding CCL in the non-domestic sector rose by 11 per cent. Prices for all the consumer bands increased over the same period, with increases ranging from 8.0 per cent for the Very Small band to 17 per cent for the Extra Large band.

Since the second quarter of 2011 electricity prices in the non-domestic sector, including CCL, have been on a general upward trend. In Q1 2019 the average prices of electricity including CCL in the non-domestic sector was 12 per cent higher than in the previous year. The inclusion of CCL in Q1 2019 increased the average price of electricity in the non-domestic sector by 3.9 per cent and by 3.0 per cent to 4.2 per cent for the various consumer bands.

**Chart 3.8 UK non-domestic gas prices Q1 2019**



Reference and links to data tables:

[Table 3.4.1 and 3.4.2: Price of fuels purchased by non-domestic consumers in the UK excluding and including CCL](#)

Between Q1 2018 and Q1 2019, average gas prices in cash terms excluding CCL in the non-domestic sector rose by 17 per cent. Prices for all the consumer bands increased, ranging from 8.9 per cent for the Large band to 20 per cent for the Very Large band.

Since the high in Q1 2014, average gas prices, excluding CCL, have been decreasing at a slow rate until Q4 2017. Prices have since been on the rise and in Q1 2019 average gas price was 5.4 per cent higher than in the previous quarter. Chart 3.8 shows the current gas prices in the non-domestic sector by size band in Q1 2019.

Average gas prices, including CCL, trended upwards from 2004 but downwards since the second quarter of 2014 to the fourth quarter of 2017 before rising again, with a slight seasonal decrease usually evident in the second and third quarter of each year. This seasonal decrease was not apparent in 2008 due to the consistently high wholesale gas prices and has also been less marked in recent years for the same reason. In Q1 2019, the inclusion of CCL increases the average price of gas in the non-domestic sector by 4.3 per cent and by 3.3 to 5.7 per cent for the various consumer bands.

# Oil and Petroleum Product Prices

*Petrol and diesel are used by all sectors whether it be for domestic purpose, e.g. individuals refuelling their car or a company fuelling its fleet of vehicles. This section presents average 'pump prices' for petrol and diesel and on the wholesale prices of oil and its derivatives.*

This section presents information on the United Kingdom oil and petroleum products prices. The petroleum products referred to in this section are unleaded petrol (ULSP), DERV, burning oil and gas oil.

Prices for ULSP and DERV are the average of the 'forecourt' or 'pump' prices across the UK and for oil the prices are those for crude oil purchased by the UK refineries. Prices for ULSP and DERV also include duty and VAT. Chart 4.4 shows the proportions of the duty and VAT components for ULSP.

**Oil and Petrol Data** all underlying petrol and oil data and other related publications can be found on GOV.UK here:

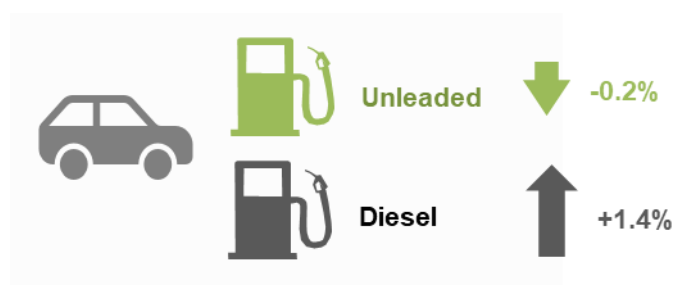
[www.gov.uk/government/collections/road-fuel-and-other-petroleum-product-prices](http://www.gov.uk/government/collections/road-fuel-and-other-petroleum-product-prices)

In addition to the summary in this publication, average road fuel prices are also published in the **Weekly Road Fuel Prices** publication which is available at:

[www.gov.uk/government/statistical-data-sets/oil-and-petroleum-products-weekly-statistics](http://www.gov.uk/government/statistical-data-sets/oil-and-petroleum-products-weekly-statistics)

## Highlights and Headline Figures

The provisional price of petrol in June 2019 was **127.7 pence per litre** which was **0.2 per cent lower** than that a year ago, whilst the diesel price at **133.8 pence per litre** was **1.4 per cent higher** compared to a year ago.



The petrol price in June 2019 was 14 pence (9.9 per cent) lower than its peak in April 2012, and the diesel price was 14 pence (9.5 per cent) lower than its peak in April 2012. ([Tables 4.1.1 and 4.1.2](#))

The price of crude oil purchased by UK refineries, in £ Sterling terms, in May 2019 was 2.8 per cent lower than a year ago, 21 per cent higher than the low seen in December 2018 and 0.8 per cent higher than the previous month.

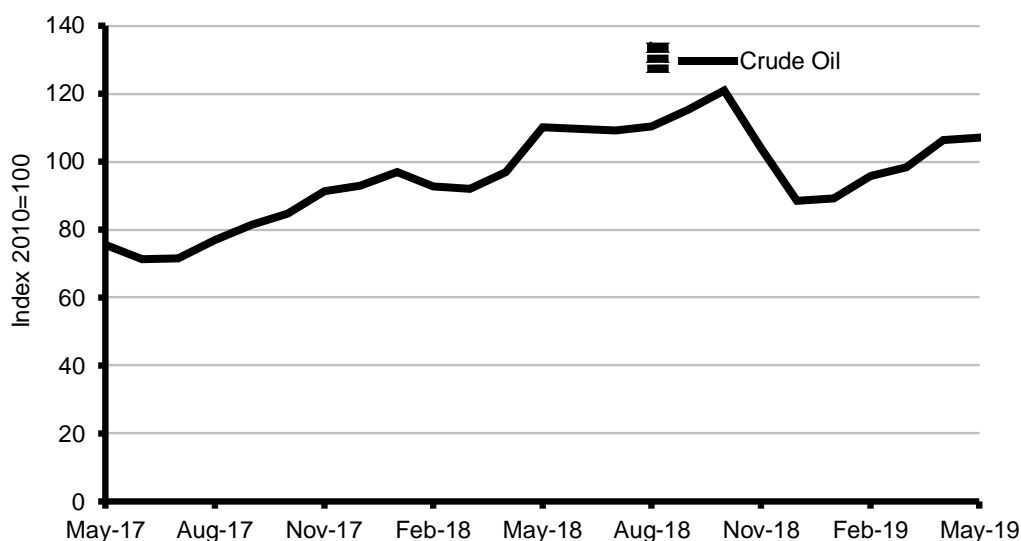
The price of Brent crude (a benchmark standard for the quality of the oil) in May 2019 at around \$72 per barrel was **6.5 per cent lower** than the previous year but **0.7 per cent higher** than in the previous month though remained considerably below the prices seen between February 2011 and August 2014 when prices were above \$100 per barrel.

## Crude oil prices

Movements in the price of crude oil can affect the prices of the various refined petroleum products and therefore can impact on the domestic and industrial fuels. Over the years, several factors have affected the prices of crude oil, for example: oil shortages (1973); over-supply and weak demand (1998); hurricanes (2005); the global recession (2008-9); and geopolitical tensions (2008 onwards). Tables 4.1.1 and 4.1.2 contains index price for crude oil that can be used to explain growth in the prices of petroleum products.

The OPEC and Non-OPEC production cuts of 1.2m bpd, agreed at their 175<sup>th</sup> meeting in December 2018, came into effect in January 2019. The larger share of the cut came from the OPEC group (excluding Iran, Venezuela and Libya) with the rest from the Non-OPEC group including Russia. The reduction was set for an initial period of six months but will be reviewed later at the 176<sup>th</sup> OPEC meeting on the 25<sup>th</sup> June 2019. Since January 2019, crude oil prices have increased and in March 2019 prices were broadly similar to the previous year.

**Chart 4.1 Monthly index <sup>(1)</sup> of crude oil prices**



<sup>(1)</sup> The index represents the monthly average price paid by refineries, calculated in pound Sterling on a cost, insurance, freight (cif) basis, see Annex A.

Reference and link to data table:

[Table 4.1.1: Typical monthly retail prices of petroleum products and a crude oil index](#)

Chart 4.1 shows the price index of crude oil acquired by UK refineries. In May 2019 the price index was 2.8 per cent lower than that of a year ago but 31 per cent below that in March 2012, which was the highest level since our record began in 1991.

The annual price index for 2018 was 28 per cent higher than 2017 and 24 per cent lower than the high of 2012. Over the past five years (May 2014 to May 2019) the average index price of crude oil acquired by refineries has decreased by 15 per cent.

# Crude Oil Prices and the Effect on Derivatives

Prices of most fuels broadly follow the trends in prices of crude oil. Because of the time it takes to refine this and produce the derivatives the effects are essentially 'lagged' by 1-2 months before they appear in the trends. Below is a timeline of the key events that have affected crude prices over the past decade.

## Timeline showing key events trends in crude oil prices

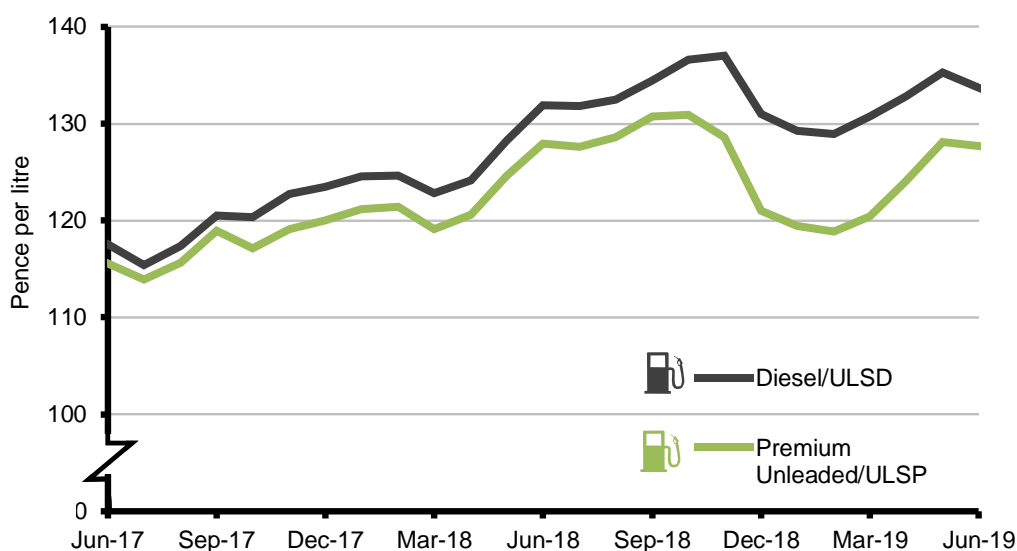
2011 - 2013	<b>Prices stable</b> though at the higher end on the trend <b>Prices above \$100 per barrel</b>
2012	<b>Prices reach their most recent peak</b> the highest in over a decade <b>Prices around \$112 per barrel</b>
Q1 2016	<b>Prices at their lowest in cash terms</b> this was the lowest price since 2004 <b>Prices around \$35 per barrel</b>
Q4 2016	<b>OPEC announced cuts to supply from January 2017 for six months.</b> Quarter 4 2016 prices rise 16 per cent compared to year earlier and 9.3 per cent compared to Q3 2016
2017	<b>Prices more erratic</b> Crude prices rose 7.9 per cent in Q1 2017, fell 7.1 per cent in Q2 2017 before rising again in Q3 by 3.0 per cent
Q2 2017	<b>OPEC agreed to extend cuts till March 2018</b>
Q4 2017	<b>OPEC and Russia led group of oil producers extend production cut until end 2018</b> prices of crude oil increase 19 per cent on the previous quarter. Impacts also from outage of the Forties Pipeline System <b>Price around \$61 per barrel</b>
Q2 2018	<b>OPEC and non-OPEC members (OPEC+) agreed to boost production</b>
Q3 2018	<b>Despite this announcement crude oil prices increased to a peak of \$75 (the highest since Q4 2014)</b> - an increase of 1.3 per cent on the previous quarter and 46 per cent higher compared to Q3 2017
Q4 2018	<b>OPEC+ announced cut to supply from January 2019</b> despite this, crude prices were down by 10 per cent on Q3 though still 10 per cent higher on the previous year. US sanctions on Iran came into effect
2018	<b>Geopolitical tensions lead to increases in crude oil prices, up 31 per cent on 2017</b> <b>Prices at just above \$71 per barrel</b>
Q1 2019	<b>OPEC+ output cut by 1.2m barrels per day came into effect in January 2019. US imposing sanctions on Venezuela oil.</b>

**Crude oil** is the raw material processed at refineries to produce various petroleum products. They vary in colour, composition and consistency. The economic value of crude oil increases as its API gravity (a measure of its density) increases and its sulphur content decreases.

## Retail prices of petroleum products

Motor fuel prices increased at a steady rate from the Gulf crisis in 1990/91 to 2000, mainly as a result of duty changes. Since 2000, prices have followed oil prices, increasing strongly in 2008, falling back in 2009, and then increasing strongly once more in 2010 and 2011 before broadly levelling off in 2012 and 2013. Prices fell in 2014 and more sharply in 2015 though less so in 2016 but over the last two years prices have risen along with the prices of crude acquired at refineries.

**Chart 4.2 Retail prices of motor spirits - Monthly**



Reference and link to data table:

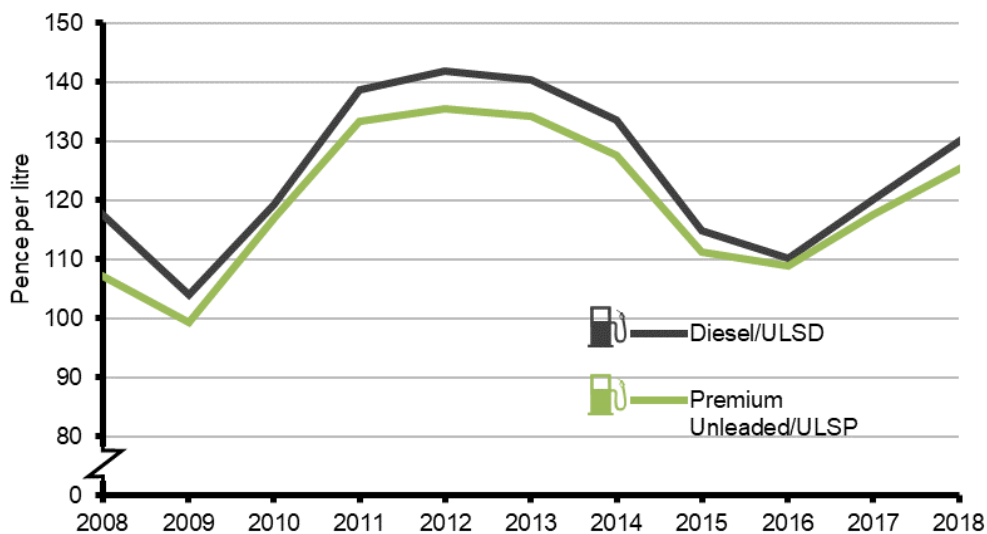
[Table 4.1.1: Typical monthly retail prices of petroleum products and a crude oil index](#)

Prices of petroleum products, including road fuels, are presented in Tables 4.1.1 to 4.1.3. Prices of unleaded petrol (ULSP) and diesel (ULSD) reached new highs in April 2012, mainly due to the cost of crude oil. Relative to those peaks, the petrol price in June 2019 was 14 pence lower and similarly the diesel price was also 14 pence lower. Prices of petroleum products are also affected by duty rate changes, as listed in Annex C, and by changes in the general rate of VAT.

Chart 4.2 shows that, in June 2019, a litre of ULSP was on average 127.7 pence. This was 0.4 pence per litre lower than the previous month and 0.3 pence per litre (0.2 per cent) lower than a year ago. The diesel price was 138.8 pence per litre which was 1.6 pence per litre lower than the previous month, and 1.9 pence per litre (1.4 per cent) higher than a year ago.



**Chart 4.3 Retail prices of motor spirits - annual**

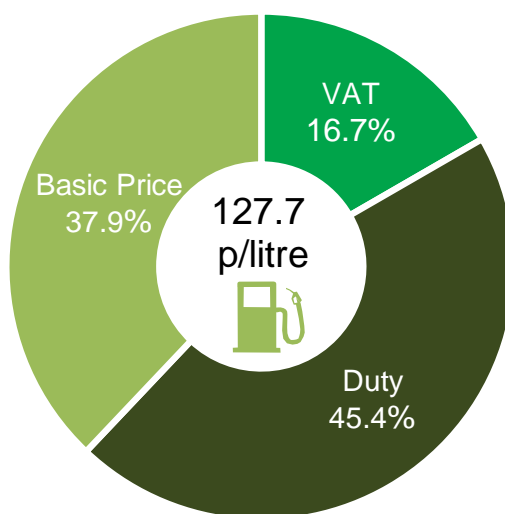


Reference and link to data table:

[Table 4.1.2: Typical monthly retail prices of petroleum products and a crude oil index](#)

Annual 2018 prices of ULSP and ULSD were lower than the record highs of 2012 by 7.5 per cent and 8.4 per cent respectively, as shown in Chart 4.3. The differential between ULSP and ULSD in 2018 was 4.8 pence per litre, a rise of 2.2 pence per litre on 2017.

**Chart 4.4 Component price of unleaded petrol, June 2019**



<sup>(1)</sup> Basic price is the price excluding VAT and duty

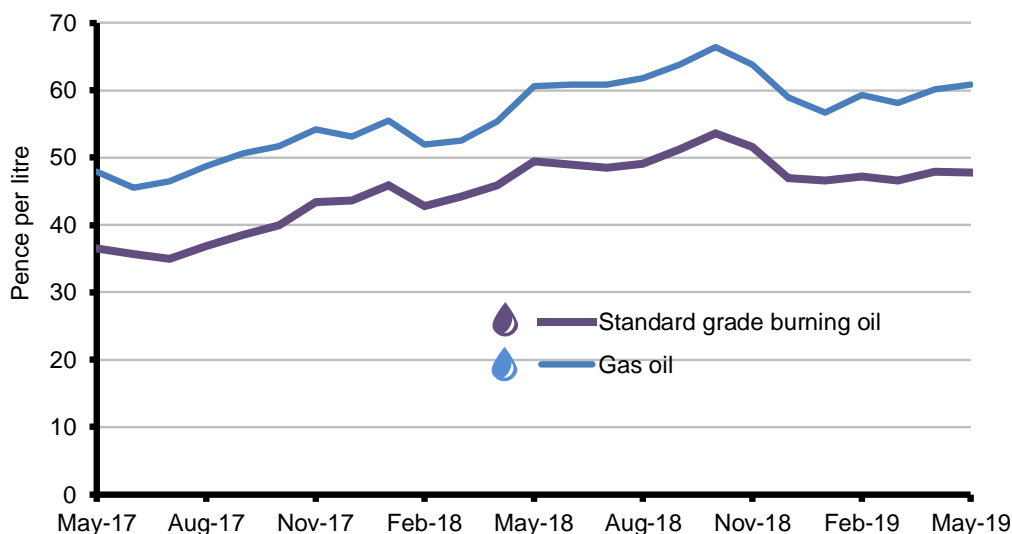
Reference and link to data table:

[Table 4.1.1: Typical monthly retail prices of petroleum products and a crude oil index](#)

Relative to the peak in April 2012, the price of unleaded petrol, excluding tax and duty, in June 2019 is 19 per cent lower and the price of diesel, excluding tax and duty, is 18 per cent lower. Chart 4.4 shows the components of the retail price of petrol in June 2019 when the basic price was 48.43 pence per litre, duty at 57.95 pence per litre, and VAT at 20 per cent (21.28 pence per litre).

Comparisons on how the UK petrol and diesel prices fare with the other European countries can be found in Chapter 5.

**Chart 4.5 Retail prices of heating oil <sup>(1)</sup> and gas oil**



<sup>(1)</sup> Heating oil is standard grade burning oil (SGBO)

References and link to data tables:

[Table 4.1.1: Typical monthly retail prices of petroleum products and a crude oil index](#)

Retail prices of heating oil such as standard grade burning oil (SGBO), and gas oil are more directly influenced by the price of crude oil rather than other petroleum products due to lower rates of duty and VAT.

The price of SGBO in May 2019 was 26 per cent lower than the peak in February 2013. The price of gas oil in May 2019 was 18 per cent lower than in April 2012, which was the highest level on record which started in 1989. In May 2019 the price of SGBO was 3.3 per cent lower than a year ago while that of gas oil was broadly the same (Chart 4.5).

# International Comparisons

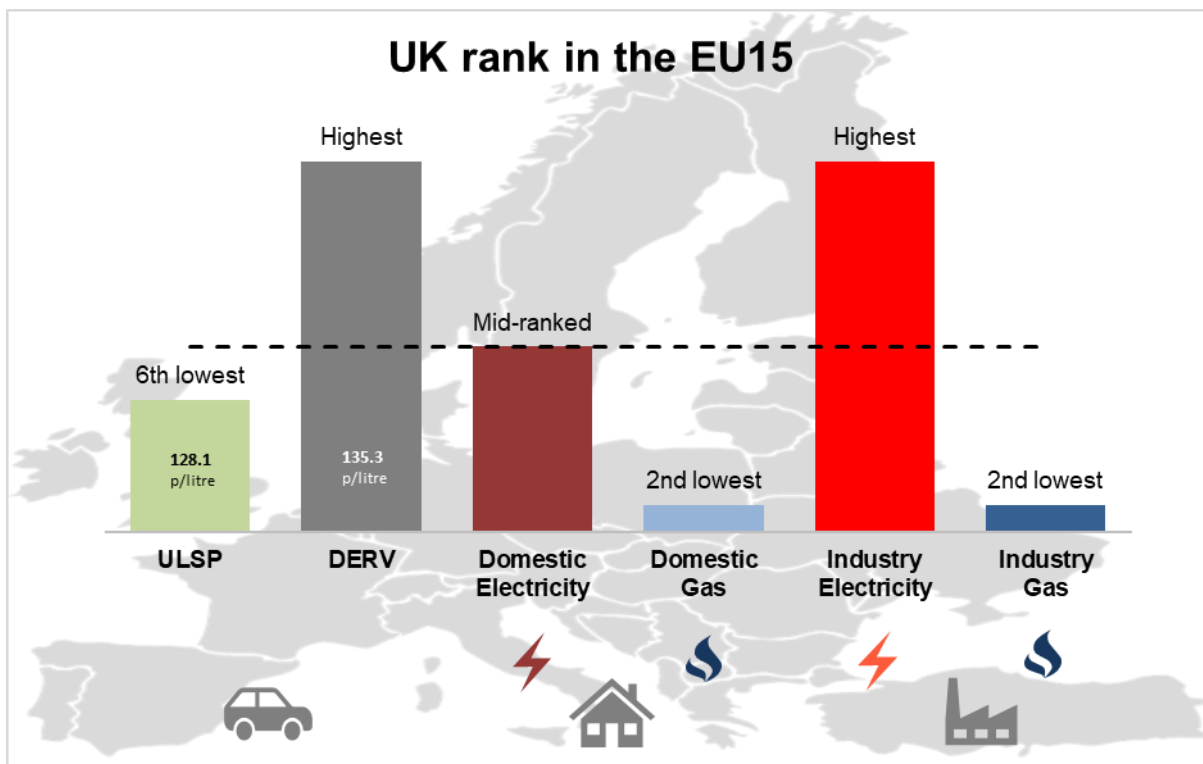
This section compares prices data for the United Kingdom with the European Union and the International Energy Association (IEA). The Department provides both organisations with UK data throughout the year and data from other countries are used in this report to make consistent comparisons to highlight relative competitiveness.

**International Data** all the underlying international comparisons data and related publications can be found on GOV.UK here:

[www.gov.uk/government/collections/international-energy-price-comparisons](http://www.gov.uk/government/collections/international-energy-price-comparisons)

## Highlights and Headline Figures

This issue of the Quarterly Energy Prices provides comparisons of the prices paid for fuels by consumers in the UK focussing mainly on countries within the EU15.



ULSP and DERV – May 2019  
 Domestic electricity and gas – July to December 2018  
 Industry electricity and gas – July to December 2018

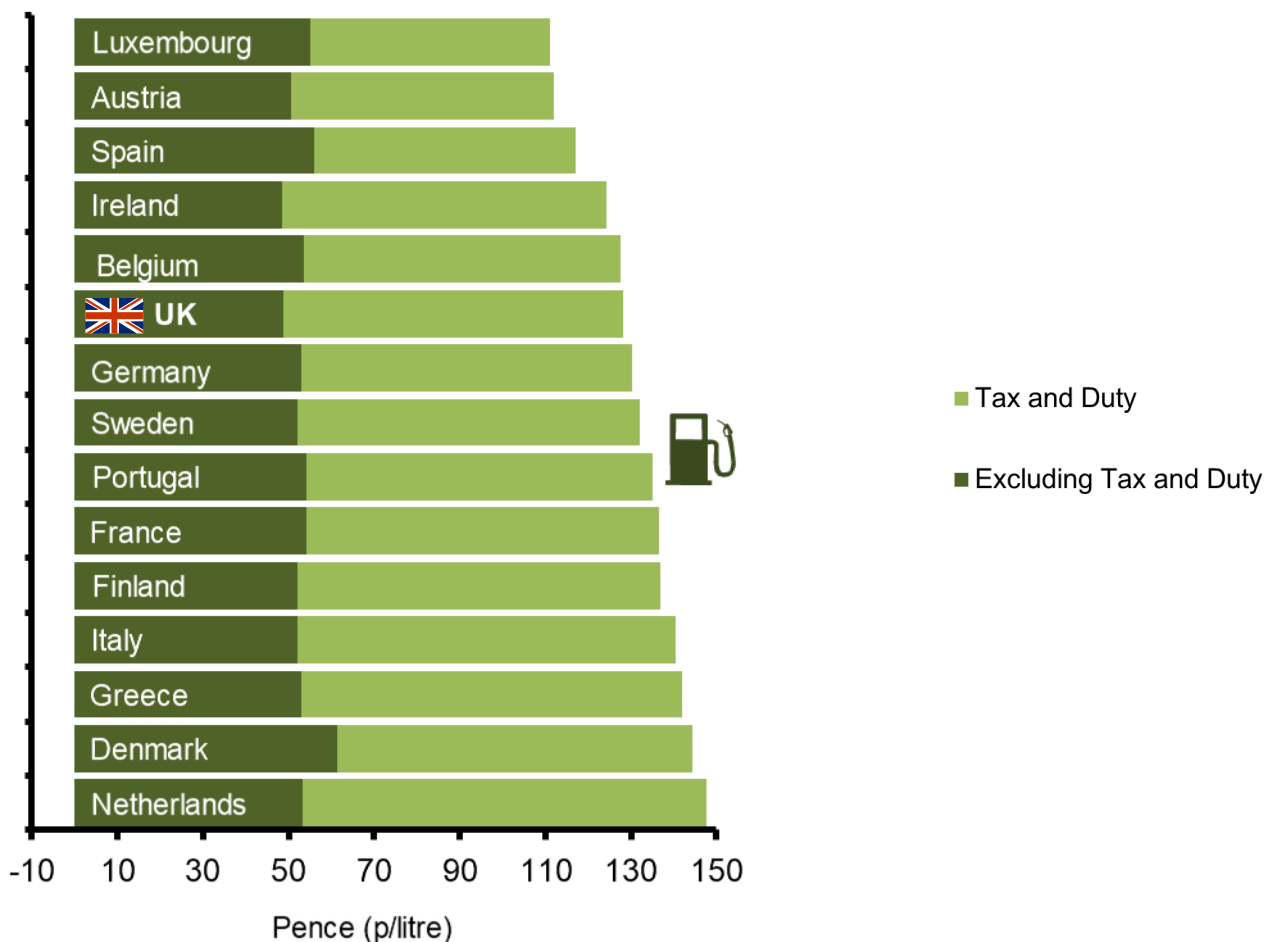
### Notes

International prices vary for many reasons including differences in indigenous resources and market structures, varying exchange rates and inflation rates (for instance, there was an appreciation of 0.3 per cent in the pound against the euro between the second half of 2017 and the second half of 2018).

# Unleaded petrol and diesel prices

## Premium unleaded petrol prices

**Chart 5.1 Premium unleaded petrol prices, May 2019**



Source: European Commission Oil Bulletin

Reference and link to tables:

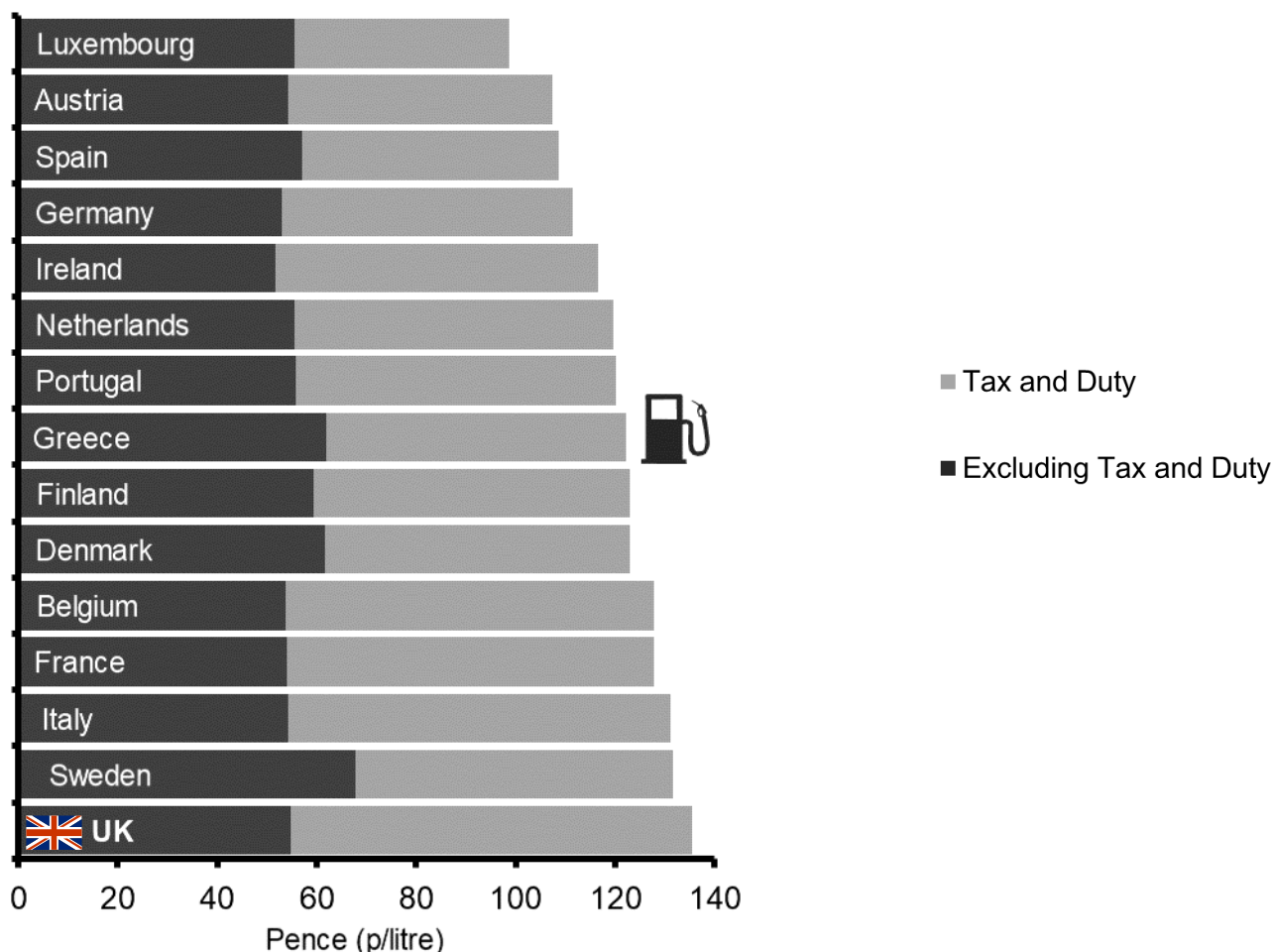
[Table 5.1.1 and 5.2.1: Premium unleaded petrol prices in the EU](#)

Chart 5.1 shows that the average UK unleaded petrol prices, including taxes, in May 2019 were the sixth lowest in the EU15 at 128.1 pence per litre. When presented in a common currency basis, the lowest price was in Luxembourg at 111.0 pence per litre while the highest price was in the Netherlands at 147.6 pence per litre.

Average UK petrol prices, excluding taxes, in May 2019 were the second lowest in the EU15 at 48.8 pence per litre. The highest price in the EU15 was in Denmark at 61.4 pence per litre.

## Diesel prices

**Chart 5.2 Diesel prices, May 2019**



Source: European Commission Oil

Reference and link to tables:

[Table 5.1.1 and 5.2.1: Premium unleaded petrol prices in the EU](#)

Chart 5.2 shows that average UK diesel prices, including taxes, in May 2019 were the highest within the EU15 at 135.3 pence per litre. When presented in a common currency basis, the lowest price was in Luxembourg at 98.7 pence per litre.

The high UK diesel prices are partly due to the taxes levied, which accounted for 59 per cent of the total price in May 2019, compared to the lowest tax proportion of 44 per cent in Luxembourg. Average UK diesel prices, excluding taxes, in May 2019 were the seventh lowest in the EU15 at 54.8 pence per litre. The highest price was that in Sweden at 67.7 pence per litre.

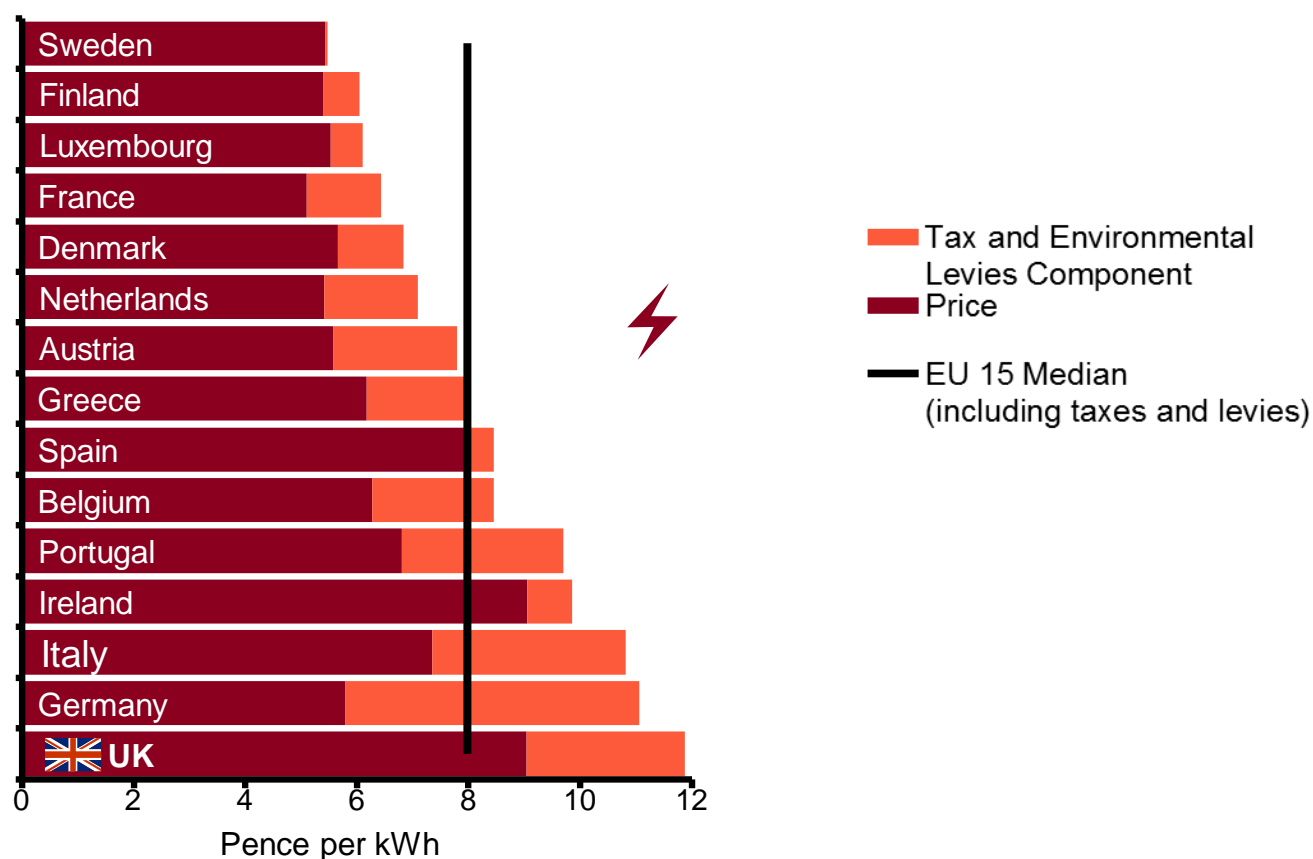
## Industrial gas and electricity prices

Prices for gas and electricity in this section will vary depending on the periodicity (6-monthly or annual) and on the consumption level (by band size or an overall average). In general, the 6-monthly (semester) Eurostat EU 28 tables have more timely data and reflect changes on a shorter timescale; however, for comparisons including non-EU countries the annual IEA tables are more suitable.

Rankings may differ between the IEA and Eurostat tables. The charts (shown in colour) include actual data available at the time of publication for the EU15 countries. The black line on the charts represents the EU15 median.

### Industrial electricity prices

**Chart 5.3 Industrial electricity prices**



Prices are for medium consumers in the EU15 for July – December 2018.

Medium consumers are defined as having an annual consumption of 2,000 - 19,999 MWh per annum.

Source: Eurostat Statistics in Focus electricity prices for EU Industry at: <http://ec.europa.eu/eurostat/data/database>

Average UK industrial electricity prices including taxes for medium consumers for the period July to December 2018 were the highest in the EU15 and were 49 per cent above the EU15 median of 8.0 pence per kWh. The UK prices for medium consumers excluding taxes and levies were the second highest in the EU15 and were 56 per cent above the estimated median price of 5.8 pence per kWh. Chart 5.3 shows the prices for the EU15 nations for the period July to December 2018.

The average industrial electricity prices including taxes for medium consumers rose in most of the EU15 countries on the same period in 2017. The average increase in the EU15 was 0.8 per cent. The largest increase was in Sweden by 10 per cent and the largest fall was in Greece by 11 per cent. The price increase in the UK was 12 per cent.

Reference and link to tables:

[Table 5.4.1: Industrial electricity prices in the EU](#)

In 2018, average UK industrial electricity prices, including taxes, were the sixth highest in the IEA, mid-ranked in the G7, and was 39 per cent above the IEA median price. UK industrial electricity prices were twice that in the US. The UK price increased by 6.5 per cent between 2017 and 2018.

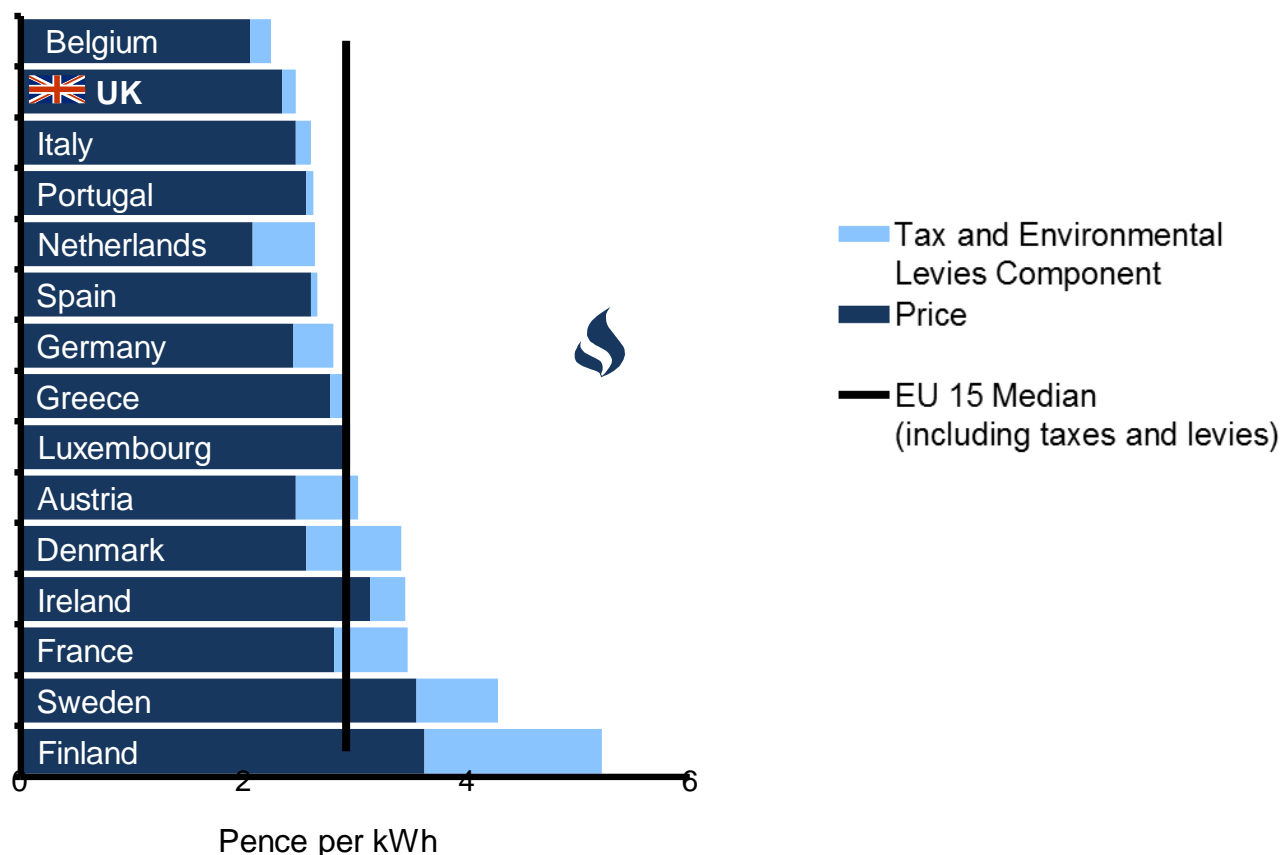
Reference and link to table:

[Table 5.3.1: Industrial electricity prices in the IEA including and excluding taxes](#)



## Industrial gas prices

**Chart 5.4 Industrial gas prices**



Prices are for medium consumers in the EU15 for July - December 2018.

Medium consumers are defined as having an annual consumption of 2,778 – 27,777 MWh.

Source: Eurostat Statistics in Focus gas prices for EU Industry at: <http://ec.europa.eu/eurostat/data/database>

Average UK industrial gas prices for the period July to December 2018, including taxes, for medium consumers were the second lowest in the EU15 and were 16 per cent below the median price of 2.9 pence per kWh. The UK prices excluding taxes and levies for the medium consumers were 2.3 pence per kWh; which were 8.3 per cent below EU15 median. Chart 5.4 shows the prices for EU15 nations for the period July to December 2018.

The average industrial gas prices including taxes in the UK for medium consumers rose by 23 per cent on the same period in 2017. Prices rose in all of the EU15 countries with increases ranging from 2 per cent in Austria to 20 per cent in Ireland.

Reference and link to table:

[Table 5.8.1: Average industrial gas prices in the EU](#)

In 2017, average UK industrial gas prices, including taxes where not refunded, were the eleventh lowest in the IEA, mid-ranked in the G7, and were 5.6 per cent below the IEA median. UK industrial gas prices were 84 per cent higher than in the US.

Reference and link to table:

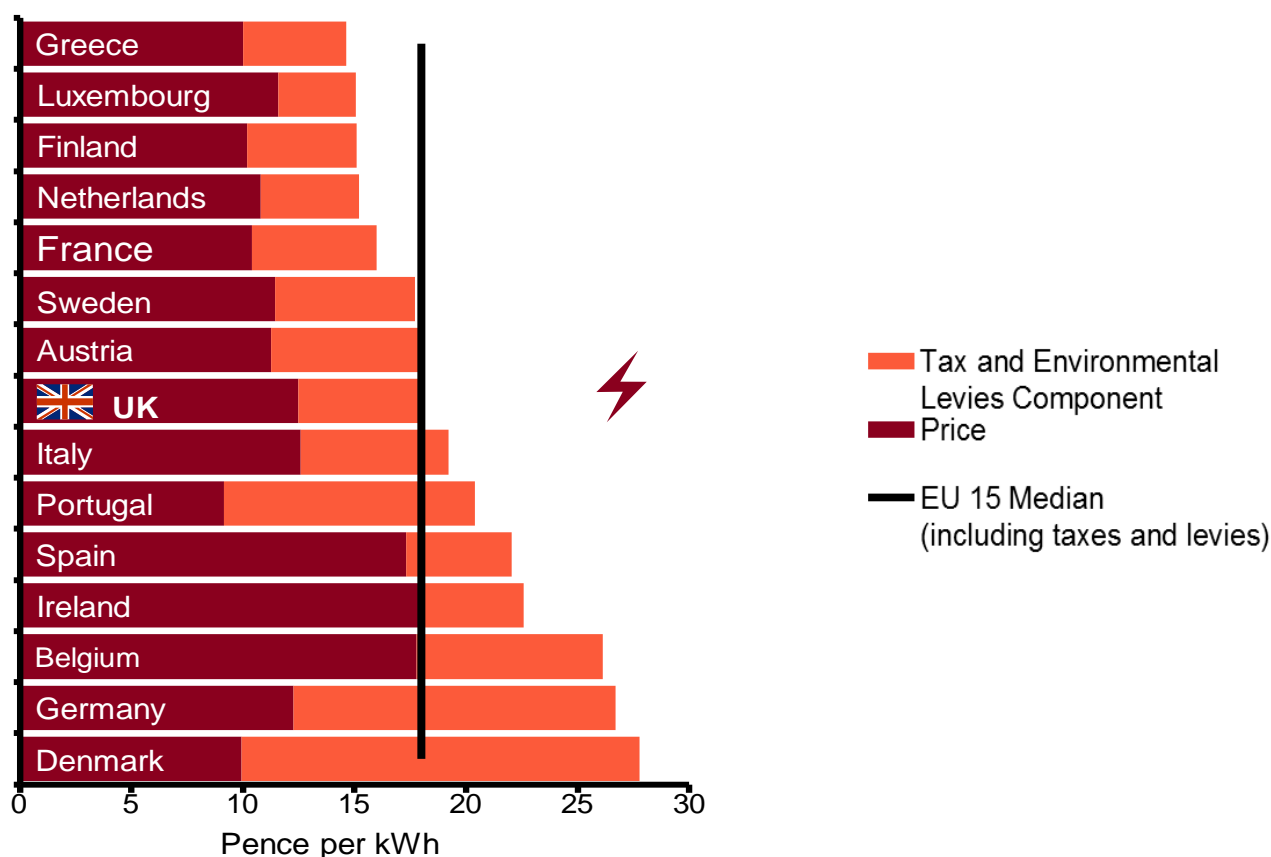
[Table 5.7.1: Industrial gas prices in the IEA including and excluding taxes](#)

# Domestic electricity and gas prices

## Domestic electricity prices

The average UK domestic electricity prices including taxes for medium consumers for July to December 2018 were mid-ranked in the EU15 at 18 pence per kWh. The UK prices excluding taxes and levies were the fifth highest in the EU15 and were 8.9 per cent above the median level of 11.4 pence per kWh. Chart 5.5 shows the prices for EU15 nations for the period July to December 2018.

**Chart 5.5 Domestic electricity prices**



Prices are for medium consumers in the EU15 for July - December 2018.

Medium consumers are defined as having an annual consumption of 2,500 - 4,999 kWh per annum.

Source: Eurostat Statistics in Focus electricity prices for EU households at: <http://ec.europa.eu/eurostat/data/database>

The average domestic electricity prices including taxes in the UK for medium consumers rose by 8.7 per cent for the period July to December 2018 compared to the same period in 2017, while changes in the other EU15 countries ranged between -1.9 and 13 per cent.

Reference and link to table:

[Table 5.6.1: Average domestic electricity prices in the EU](#)

In 2018, average UK domestic electricity prices, including taxes, were the ninth highest in the IEA, third highest in the G7 and were 12 per cent higher than the IEA median. Compared to the USA, the UK domestic electricity prices were 79 per cent higher.

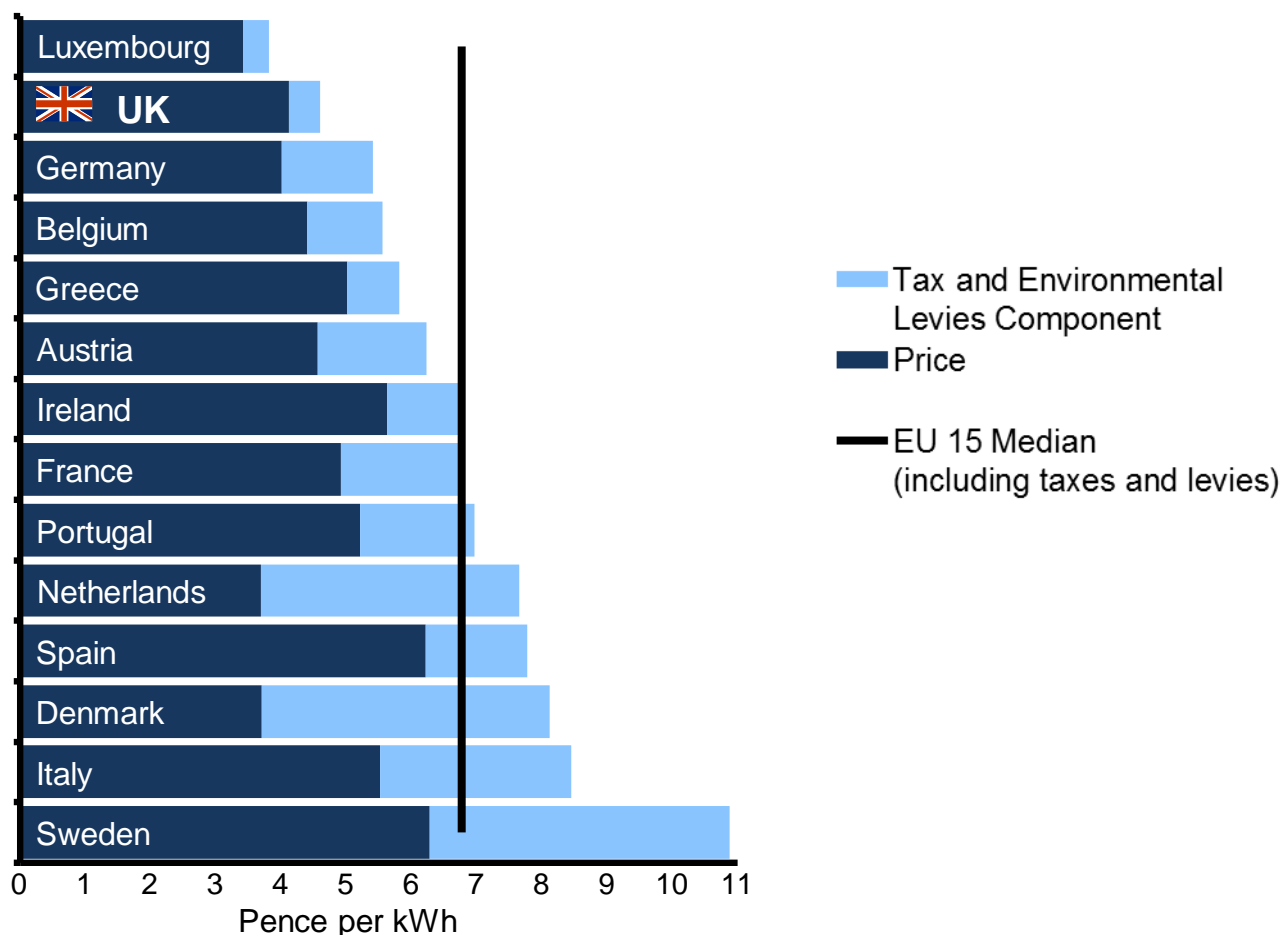
Reference and link to table:

[Table 5.5.1: Domestic electricity prices in the IEA including and excluding taxes.](#)

## Domestic gas prices

Average UK domestic gas prices for the period July to December 2018, including taxes, for medium consumers were the second lowest in the EU15 and were 32 per cent below the median of 6.8 pence per kWh. The UK prices excluding taxes were the fifth lowest in the EU15 and were 13 per cent lower than the median price of 4.7 pence per kWh. Chart 5.6 shows the prices for the EU15 nations (where data are available) for the period July to December 2018.

**Chart 5.6 Domestic gas prices**



Prices are for medium consumers in the EU15 for July - December 2018.

Medium consumers are defined as having an annual consumption of 5,557 – 55,556 kWh per annum.

Finland does not provide data to Eurostat for this series.

Source: Eurostat Statistics in Focus gas prices for EU households at: <http://ec.europa.eu/eurostat/data/database>

The average domestic gas price including taxes in the UK for medium consumers rose by 7.7 per cent on the same period in 2017. Prices in the rest of the EU15 increased, by an average of 15.3 per cent except in Germany and Portugal where prices all fell by 0.5 and 2.2 per cent respectively.

Reference and link to table:

[Table 5.10.1: Average domestic gas prices in the EU](#)

In 2018, average UK domestic gas prices, including taxes where not refunded, were the eighth lowest in the IEA, third lowest in the G7, and were 26 per cent below the IEA median. Compared to the USA, the UK domestic gas prices were 70 per cent higher.

Reference and link to table:

[Table 5.9.1: Domestic gas prices in the EU15 and G7 countries including and excluding taxes](#)

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- Chart 2.8 Proportion of customers with their original home supplier for electricity and gas in GB
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- Chart 2.10 Proportion of electricity customers with a non-home supplier
- Chart 2.11 Proportion of gas customers with a non-home supplier
- Chart 2.12 Proportion of customers on variable and fixed tariffs
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# Accompanying tables

The following tables are available in Excel format on the department's statistics website. Alongside this statistical bulletin, the department publishes data in monthly, quarterly and annual tables that form part of the wider Quarterly Energy Prices publication. The contents of these tables are detailed below and can be found by following the links.

## Domestic

- Table 2.1.1: Consumer prices index UK: fuel components
- Table 2.1.2: Consumer prices index UK: fuel components, relative to GDP deflator
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- Table 2.2.1: Average annual domestic electricity bills by home and non-home supplier
- Table 2.2.2: Average annual domestic electricity bills for UK countries
- Table 2.2.3: Average annual domestic standard electricity bills for UK regions with average unit costs
- Table 2.2.4: Average variable unit costs and fixed costs for electricity for UK regions
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- Table 2.3.1: Average annual domestic gas bills by home and non-home supplier
- Table 2.3.2: Average annual domestic gas bills for GB countries
- Table 2.3.3: Average annual domestic gas bills for GB regions with average unit costs
- Table 2.3.4: Average variable unit costs and fixed costs for gas for GB regions
- Table 2.3.5: Average annual domestic gas bills by payment type based on various consumption levels
- Table 2.4.1: Percentage of domestic electricity customers by region by supplier type
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- Table 2.6.1: Total household expenditure on energy in the UK
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- Table 3.1.1: Prices of fuels purchased by manufacturing industry in Great Britain
- Table 3.1.2: Prices of fuels purchased by manufacturing industry in Great Britain (p/kWh)
- Table 3.1.3: Annual prices of fuels purchased by manufacturing industry (original units)
- Table 3.1.4: Annual prices of fuels purchased by manufacturing industry (p/kWh)
- Table 3.2.1: Average prices of fuels purchased by the major UK power producers
- Table 3.3.1: Fuel price indices for the industrial sector in current terms excluding CCL
- Table 3.3.1: Fuel price indices for the industrial sector in real terms excluding CCL
- Table 3.3.2: Fuel price indices for the industrial sector in current terms including CCL
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- Table 3.4.1: Prices of fuels purchased by non-domestic consumers in the UK excl.CCL
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Table 4.1.3: Typical January retail prices of petroleum products

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Table 5.3.1: Industrial electricity prices in the IEA

Table 5.4.1: Industrial electricity prices in the EU for small consumers, excluding tax

Table 5.4.1: Industrial electricity prices in the EU for small consumers, including tax

Table 5.4.2: Industrial electricity prices in the EU for medium consumers, excluding tax

Table 5.4.2: Industrial electricity prices in the EU for medium consumers, including tax

Table 5.4.3: Industrial electricity prices in the EU for large consumers, excluding tax

Table 5.4.3: Industrial electricity prices in the EU for large consumers, including tax

Table 5.4.4: Industrial electricity prices in the EU for extra large consumers, excluding tax

Table 5.4.4: Industrial electricity prices in the EU for extra large consumers, including tax

Table 5.5.1: Domestic electricity prices in the IEA

Table 5.6.1: Domestic electricity prices in the EU for small consumers, excluding tax

Table 5.6.1: Domestic electricity prices in the EU for small consumers, including tax

Table 5.6.2: Domestic electricity prices in the EU for medium consumers, excluding tax

Table 5.6.2: Domestic electricity prices in the EU for medium consumers, including tax

Table 5.6.3: Domestic electricity prices in the EU for large consumers, excluding tax

Table 5.6.3: Domestic electricity prices in the EU for large consumers, including tax

Table 5.7.1: Industrial gas prices in the IEA

Table 5.8.1: Industrial gas prices in the EU for small consumers, excluding tax

Table 5.8.1: Industrial gas prices in the EU for small consumers, including tax

Table 5.8.2: Industrial gas prices in the EU for medium consumers, excluding tax

Table 5.8.2: Industrial gas prices in the EU for medium consumers, including tax

Table 5.8.3: Industrial gas prices in the EU for large consumers, excluding tax

Table 5.8.3: Industrial gas prices in the EU for large consumers, including tax

Table 5.9.1: Domestic gas prices in the IEA

Table 5.10.1: Domestic gas prices in the EU for small consumers, excluding tax

Table 5.10.1: Domestic gas prices in the EU for small consumers, including tax

Table 5.10.2: Domestic gas prices in the EU for medium consumers, excluding tax

Table 5.10.2: Domestic gas prices in the EU for medium consumers, including tax

Table 5.10.3: Domestic gas prices in the EU for large consumers, excluding tax

Table 5.10.3: Domestic gas prices in the EU for large consumers, including tax

## Update Timetable

Below are the update timetables for the four key areas covered in the Quarterly Energy Prices release. These underlying tables are published at various times of the year and sometimes outside of a quarterly full publication (which are published March, June, September and December each year).

## Domestic Tables

Tables for the [Domestic energy prices](#) area:

Topic	Area	Freq.	No.	Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Domestic Energy Prices	Domestic energy price indices	Monthly	2.1.1	Consumer prices index: fuel components													
		Monthly	2.1.2	Consumer prices index: fuel components, relative to GDP deflator													
		Monthly	2.1.3	Consumer prices index: fuel components, monthly figures													
	Domestic Energy Bills Electricity	Annual	2.2.1	Average annual domestic electricity bills by home and non-home supplier			R										
		Annual	2.2.2	Average annual domestic electricity bills for UK countries			R										
		Annual	2.2.3	Average annual domestic standard electricity bills in 2017 for UK regions with average unit costs			R										
		Annual	2.2.4	Average variable unit costs and fixed costs for electricity for UK regions			R										
		Annual	2.2.5	Average annual domestic electricity bills by various consumption levels								R					
	Domestic Energy Bills Gas	Annual	2.3.1	Average annual domestic gas bills by home and non-home supplier			R										
		Annual	2.3.2	Average annual domestic gas bills for GB countries			R										
		Annual	2.3.3	Average annual domestic gas bills for GB regions with average unit costs			R										
		Annual	2.3.4	Average variable unit costs and fixed costs for gas for GB regions			R										
		Annual	2.3.5	Average annual domestic gas bills by various consumption levels								R					
	Customer numbers Electricity	Quarterly	2.4.1	Percentage of domestic electricity customers by region and supplier type													
		Quarterly	2.4.2	Regional variation of payment method for standard electricity													
		Quarterly	2.4.3	Regional variation of payment method for Economy 7 electricity													
	Customer numbers Gas	Quarterly	2.5.1	Percentage of domestic gas customers by region and supplier type													
		Quarterly	2.5.2	Regional variation of payment method for gas													
	Household Data	Annual	2.6.1	Total household expenditure on energy													
		Annual	2.6.2	Average expenditure each week on fuel per consuming household													
Switch	Quarterly	2.7.1	Domestic energy switching statistics														

## Industrial Tables

Tables for the [Industrial energy prices](#) area:

Topic	Area	Freq.	No.	Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Industrial Energy Prices	Manufacturing industry	Quarterly	3.1.1	Prices of fuels purchased by manufacturing industry in Great Britain (original units)													
		Quarterly	3.1.2	Prices of fuels purchased by manufacturing industry in Great Britain (p/kWh)													
		Annual	3.1.3	Annual Prices of fuels purchased by manufacturing industry in Great Britain (original units)							R						
		Annual	3.1.4	Annual Prices of fuels purchased by manufacturing industry in Great Britain (p/kWh)							R						
	Power Producer	Quarterly	3.2.1	Average prices of fuels purchased by the major UK power producers													
	Industrial energy price indices	Quarterly	3.3.1	Fuel price indices for the industrial sector in current terms excluding the Climate Change Levy													
		Quarterly	3.3.2	Fuel price indices for the industrial sector in current terms including the Climate Change Levy													
	Industrial Energy Bills	Quarterly	3.4.1	Prices of fuels purchased by non-domestic consumers in the UK excluding the Climate Change Levy													
		Quarterly	3.4.2	Prices of fuels purchased by non-domestic consumers in the UK including the Climate Change Levy													



## Fuel Tables

Tables for the [Road fuel prices](#) area:

Topic	Area	Freq.	No.	Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Fuel Prices	Road Fuels and Petroleum Products	Monthly	4.1.1	Typical retail prices of petroleum products and a crude oil price index													
		Annual	4.1.2	Average annual retail prices of petroleum products and a crude oil price index	R												
		Annual	4.1.3	January prices of road fuels and petroleum products		R											

## International Tables

Tables for the [International energy price comparisons](#) area:

Topic	Area	Freq.	No.	Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
International Prices	ULSP EU	Monthly	5.1.1	International road fuel prices Premium unleaded petrol prices in the EU													
	ULSD EU	Monthly	5.2.1	International road fuel prices Diesel prices in the EU													
	Ind. IEA Elec	Quarterly	5.3.1	Industrial electricity prices in the IEA													
	Industrial Prices EU Electricity	Biannual	5.4.1	Industrial electricity prices in the EU for small consumers (both excluding and including tax)													
		Biannual	5.4.2	Industrial electricity prices in the EU for medium consumers (both excluding and including tax)													
		Biannual	5.4.3	Industrial electricity prices in the EU for large consumers (both excluding and including tax)													
		Biannual	5.4.4	Industrial electricity prices in the EU for extra-large consumers (both excluding and including tax)													
	Dom. IEA Elec	Quarterly	5.5.1	Domestic electricity prices in the IEA													
	Domestic Prices EU Electricity	Biannual	5.6.1	Domestic electricity prices in the EU for small consumers (both excluding and including tax)													
		Biannual	5.6.2	Domestic electricity prices in the EU for medium consumers (both excluding and including tax)													
		Biannual	5.6.3	Domestic electricity prices in the EU for large consumers (both excluding and including tax)													
	Ind. IEA Gas	Quarterly	5.7.1	Industrial gas prices in the IEA													
	Industrial Prices EU Gas	Biannual	5.8.1	Industrial gas prices in the EU for small consumers (both excluding and including tax)													
		Biannual	5.8.2	Industrial gas prices in the EU for medium consumers (both excluding and including tax)													
		Biannual	5.8.3	Industrial gas prices in the EU for large consumers (both excluding and including tax)													
	Dom IEA Gas	Quarterly	5.9.1	Domestic gas prices in the IEA													
	Domestic Prices EU Gas	Biannual	5.10.1	Domestic gas prices in the EU for small consumers (both excluding and including tax)													
		Biannual	5.10.2	Domestic gas prices in the EU for medium consumers (both excluding and including tax)													
Biannual		5.10.3	Domestic gas prices in the EU for large consumers (both excluding and including tax)														

### Key:

The colours on the time table indicate the frequency and status of the data series:

R	<b>Revised</b>
	<b>Monthly</b>
	<b>Quarterly</b>
	<b>Biannual</b>
	<b>Annual</b>

# Technical information

Information in this publication is sourced from various surveys of the energy industry conducted by the Energy Prices Analysis team or on behalf of the Department for Business, Energy and Industrial Strategy (BEIS).

- The domestic bills information is collected as part of the Domestic Fuels Inquiry which surveys key energy suppliers to provide a representative sample of the market.
- The majority of the non-domestic data are sourced from the Quarterly Fuels Inquiry return, run by ONS on behalf of BEIS.
- International comparisons data are sourced from returns BEIS sends to energy companies that collect data for the International Energy Association and European Union.

Further information on the data sources, processing methods, uses of and quality assurance of the data can be found in the associated Methodology documents:

[Domestic energy prices: data sources and methodology](#)

[Industrial price statistics: data sources and methodologies](#)

[International comparisons: data sources and methodologies](#)

[Road fuel price statistics: data sources and methodologies](#)

These are due for review and republication in time for the next Quarterly Energy Prices publication in September.

## Changes to methodology

**Please note** we are intending to change the methodology of the representative rate of consumption for calculating tariffs paid by households in the domestic bills section of the release in 2019.

This will take effect from the next publication of domestic bills information in the Q3 2019 release that will be released on 19 December 2019.

We are proposing to adjust down the fixed annual consumption levels of 3,800kWh for standard electricity use and 15,000kWh for gas and intend to use levels similar to the medium typical domestic consumption values Ofgem uses (which are 3,100kWh for electricity and 12,000kWh for gas).

The methodology notices will be updated accordingly, though if you have any input or questions please [contact us](#). For information please find Ofgem's Typical Domestic Consumption Values here:

<https://www.ofgem.gov.uk/gas/retail-market/monitoring-data-and-statistics/typical-domestic-consumption-values>

# Further information

## Future updates to these statistics

On Thursday 26 September 2019 the next issue of the Quarterly Energy Prices release will be released. Underlying data tables will be released as outlined in the [Accompanying Tables](#) section.

## Related statistics

### Energy Trends

Energy Trends contains quarterly data on production and consumption of overall energy and of the individual fuels in the United Kingdom. Also includes data on foreign trade in fuels.

[www.gov.uk/government/collections/energy-trends](http://www.gov.uk/government/collections/energy-trends)

### Digest of UK Energy Statistics (DUKES)

Also available from The Stationery Office and can be ordered through Government Bookshops. DUKES contains annual data on production and consumption of overall energy and of the individual fuels in the United Kingdom. Also includes a commentary covering all the major aspects of energy and gives a comprehensive picture of energy production and use over the last five years with key series taken back to 1970.

[www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes](http://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes)

### UK Energy in Brief

An annual publication summarising the latest statistics on energy production, consumption and prices in the United Kingdom. The figures are taken from the “Digest of UK Energy Statistics”. Available at: [www.gov.uk/government/collections/uk-energy-in-brief](http://www.gov.uk/government/collections/uk-energy-in-brief)

### Fuel Poverty Statistics

An annual publication outlining the number of households living in fuel poverty in England, with additional analysis of the composition of the fuel poor group and future projections of the number of households in fuel poverty. Available at:

<https://www.gov.uk/government/collections/fuel-poverty-statistics>

## Revisions policy

The [BEIS statistical revisions policy](#) sets out the revisions policy for these statistics, which has been developed in accordance with the UK Statistics Authority [Code of Practice for Statistics](#).

## Uses of these statistics

The data associated with this release is used in internal analysis to help form policy decisions and is also used by industry and academia to monitor trends in the prices market.

Currently the department has an obligation to provide processed data to the European Union (EU) and International Energy Association (IEA). The data within and associated with this publication are also used to answer Parliamentary questions and Freedom of Information requests.

## User engagement

Users are encouraged to provide comments and feedback on how these statistics are used and how well they meet user needs. Comments on any issues relating to this statistical release are welcomed, please direct any suggestions about changes to the content or scope of this publication to William Nye ([William.Nye@beis.gov.uk](mailto:William.Nye@beis.gov.uk))

The BEIS statement on [statistical public engagement and data standards](#) sets out the department's commitments on public engagement and data standards as outlined by the [Code of Practice for Statistics](#).

## National Statistics designation

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

Information in this release undergoes the level of quality checks expected of a [National Statistics](#) release. The full detail of the measure we take are in the associated [methodology documents](#). The continued designation of these statistics as National Statistics was confirmed in September 2018 following a [compliance check](#) by the Office for Statistics Regulation. The statistics last underwent a [full assessment](#) against the [Code of Practice for Statistics](#) in June 2014.

Data presented in the tables are in cash terms, however, some tables also present prices data in real terms. Real terms data are those from which the effects of inflation, as measured by the Gross Domestic Product (GDP) market prices deflator, have been removed. The GDP deflator provides an index of inflation for the whole economy and is applicable to domestic and industrial prices.

For most fuels there are differences in the prices paid by the smaller consumers, typically households, and those paid by the larger consumers, usually those in the industrial sector. There are also differences in the prices of fuels paid between large and small users within the industrial sector.

## Pre-release access to statistics

Some ministers and officials receive access to some key figures within these statistics up to 24 hours before release. Details of the arrangements for doing this and a list of the ministers and officials that receive pre-release access to these statistics can be found in the [BEIS statement of compliance](#) with the Pre-Release Access to Official Statistics Order 2008.

## Contact

- Responsible statistician: William Nye
- Email: [William.Nye@beis.gov.uk](mailto:William.Nye@beis.gov.uk)
- Media enquiries: : 020 7215 1000
- Public enquiries: 0207 215 5073

This publication, including historical data, is available on the internet at:  
[www.gov.uk/government/collections/quarterly-energy-prices](http://www.gov.uk/government/collections/quarterly-energy-prices)

Quarterly Energy Prices is prepared by the Energy Prices Analysis team in BEIS:

### **Responsible Statistician for this release**

William Nye

Tel: 0207 215 5073

Email: [William.Nye@beis.gov.uk](mailto:William.Nye@beis.gov.uk).

### **Household Energy Prices**

Lilian Oluwakuyide

Tel: 0300 068 8491

Email: [Lilian.Oluwakuyide@beis.gov.uk](mailto:Lilian.Oluwakuyide@beis.gov.uk)

### **Industrial Energy Prices and Petrol Prices**

Anwar Annut

Tel: 0300 068 5060

Email: [Anwar.Annut@beis.gov.uk](mailto:Anwar.Annut@beis.gov.uk)

### **International Energy Prices**

Rukshan Rajamanthri

Tel: 0300 068 5057

Email: [Rukshan.Rajamanthri@beis.gov.uk](mailto:Rukshan.Rajamanthri@beis.gov.uk)

More information on BEIS energy publications is available on the BEIS website  
[www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics](http://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics)

## Other Useful Websites

<b>Ofgem</b>	<a href="http://ofgem.gov.uk">ofgem.gov.uk</a>
<b>HM Revenue and Customs</b>	<a href="http://gov.uk/government/organisations/hm-revenue-customs">gov.uk/government/organisations/hm-revenue-customs</a>
<b>Office for National Statistics</b>	<a href="http://ons.gov.uk">ons.gov.uk</a>
<b>International Energy Agency</b>	<a href="http://iea.org">iea.org</a>
<b>Eurostat</b>	<a href="http://ec.europa.eu/eurostat">ec.europa.eu/eurostat</a>
<b>UK Petroleum Industry Assoc.</b>	<a href="http://ukpia.com">ukpia.com</a>
<b>DEFRA</b>	<a href="http://gov.uk/government/organisations/department-for-environment-food-rural-affairs">gov.uk/government/organisations/department-for-environment-food-rural-affairs</a>

# Annex A - Technical Notes

## Tables 2.1.1 to 2.1.3

A1. The source of the prices in these tables is the Consumer Prices Index (CPI), published by the Office for National Statistics (ONS) and is the fuel components within the CPI. Table A1 below provides the weights within the total index, in parts per 1,000 of the fuel components. The CPI is calculated using prices collected on the second or third Tuesday of each month.

**Table A1: Retail price index, fuel component weights**

	All items	Domestic fuels	Solid fuels	Gas	Electricity	Liquid fuels	Motor fuels and oil
1996	1,000	45	2	20	22	1	40
2000	1,000	33	1	13	17	2	38
2005	1,000	28	1	12	14	1	27
2010	1,000	47	1	25	19	2	41
2011	1,000	44	1	22	19	2	43
2012	1,000	56	1	32	20	3	46
2013	1,000	48	1	26	19	2	40
2014	1,000	45	1	21	21	2	35
2015	1,000	42	1	20	20	1	34
2016	1,000	35	1	16	17	1	32
2017	1,000	34	1	15	17	1	33
2018	1,000	34	1	15	17	1	31

A2. Quarterly data are published three months in arrears. Any revised data are marked with an “r”. Annual data is published in the March edition of QEP. The real terms series in Table 2.1.2 are updated when the GDP deflator becomes available from ONS.

### Table 2.1.1

A3. Solid fuels - Retail prices for the standard grade of household coal and for the smokeless fuel type grade for a boiler/room heater, obtained from local retailers in up to 146 areas throughout the United Kingdom.

A4. Gas – average of the major gas companies’ tariffs, plus butane gas.

A5. Electricity - average of the major electricity companies’ tariffs.

A6. Liquid fuels – Retail prices of domestic kerosene heating oil provided by retailers in up to 146 areas throughout the United Kingdom.

A7. Motor fuel and oil – Ultra-low sulphur petrol (ULSP), ultra-low sulphur diesel (ULSD) and motor oil - Retail prices of the different grades of motor spirit and engine oil obtained weekly from oil companies and supermarkets throughout the United Kingdom, with the weekly data averaged to produce a monthly figure.

## Tables 2.2.1 to 2.5.2

A8. Tables 2.2.1 and 2.3.1 show the average annual bills split by fixed and variable tariffs and are experimental statistics. Fixed tariff - as the name implies - is the price of a tariff kept fixed for a set period of time. Variable tariffs, on the other hand, are tariffs that are not defined as fixed and include the 'standard' variable tariff as well as any other variable tariffs.

A9. Tables 2.2.4 and 2.3.4 are experimental statistics. They are used in the energy consumption model to calculate household notional energy bills for modelling fuel poverty level in England. These data are not suitable for calculating the average bills of low use consumers. The data reported are an average of the fixed and variable costs across the four quarters in the year. In the calculation, more weights are given to costs in Q1 and Q4, when it is assumed that more electricity and gas are consumed (and hence the price at this time should contribute more to the average). As a result these values should not be used to determine current average bills. For more information see the Fuel Poverty Methodology Handbook on the BEIS website at [www.gov.uk/government/publications/fuel-poverty-statistics-methodology-handbook](http://www.gov.uk/government/publications/fuel-poverty-statistics-methodology-handbook)

A10. Tables 2.2.3 and 2.3.3 show representative electricity and gas bills, by payment type, in each of the 15 Public Electricity Supply (PES) regions in the UK. The unit cost is the cost to the consumer per unit consumed and is calculated by dividing the bill amount by the number of units consumed (3,800 kWh for electricity, 15,000 kWh for gas). Data on regional electricity and gas bills from 2013 onwards are based on PES regions as opposed to selected towns and cities within the PES regions and the gas Local Distribution Zones (LDZ). This change has been made because most energy suppliers now charge for gas according to the PES area of a household. It is not possible to present historical data on gas bills in this way, as data for the previous years were collected differently. Table A2 maps the selected towns and cities to their corresponding gas LDZ and PES regions.

**Table A2: Towns and cities by LDZ and PES area**

	Gas LDZ	Electricity PES area
Aberdeen	Scotland	Northern Scotland
Belfast	n/a	Northern Ireland
Birmingham	West Midlands	West Midlands
Canterbury	South East	South East
Cardiff	Wales	South Wales
Edinburgh	Scotland	Southern Scotland
Ipswich	Eastern	Eastern
Leeds	North East	Yorkshire
Liverpool	North West	Merseyside & North Wales
London	London	London
Manchester	North West	North West
Newcastle	Northern	North East
Nottingham	East Midlands	East Midlands
Plymouth	South West	South West
Southampton	Southern	Southern

A11. Provisional annual data is published in the December edition of QEP, with final data published in March.



A12. Bills and unit costs are based on published prices and include standing charges where applicable. No allowances are made for introductory offers or non-cash benefits that may be available from new suppliers. Both electricity and gas bills and costs reflect the prices of all the suppliers in the survey. This basis is used for all the domestic bills and costs data in Tables 2.2.1 to 2.3.3. The bills shown relate to the total bill including VAT in cash terms received during the calendar year, for the tariff type shown, including all tariff changes and rebates. Averages are weighted by the number of domestic customers. An annual consumption of 3,800 kWh is used for electricity and 15,000 kWh for gas.

A13. The weighted average for all supplier gas bills is based on equivalent tariffs of British Gas and other gas supply companies. From 2007 onwards, due to a methodology change, the estimates are based on bills received during the calendar year. As part of this methodology change, it is now assumed that, of the 15,000 kWh of gas consumed per annum (see A8), 6,000 kWh are consumed in the first quarter, 3,000 kWh in the second quarter, 1,500 kWh in the third quarter and 4,500 kWh in the fourth.

A14. Tables 2.4.2, 2.4.3 and 2.5.2 show data for the 'Economy 7' tariffs, where a lower unit cost is applied to off-peak (night) consumption. Of the total consumption of 6,000 kWh, off-peak consumption has been considered as 3,000 kWh.

### **Table 2.6.1**

A15. Household final consumption expenditure comprises household expenditure in the United Kingdom on the specified fuels and fuel purchases by foreign tourists. It excludes expenditure on fuels by businesses. VAT was levied on domestic fuels at 8 per cent in April 1994. It was then reduced to 5 per cent in September 1997 and is included in the table from 1994 onwards. For coal, coke and petroleum products it was assumed that all consumers paid VAT from the date of its introduction. For electricity and gas it was estimated that 5 per cent of electricity sales and 4 per cent of gas sales were covered by customers pre-paying their bills to avoid VAT in 1994 and 1995. Figures for total consumers' expenditure are also shown for comparison.

Due to reclassification of the Household Expenditure to conform to the European Systems of Accounts 1995 (ESA 95), the COICOP (Classification of Individual Consumption by Purpose) headings have been reviewed.

The following notes apply to Table 2.6.1:

A16. **Solid Fuels** – Household final consumption expenditure on these fuels is based on estimates of inland sales of solid fuels to domestic consumers. Expenditure in Northern Ireland is estimated based on values of colliery despatches of house coal to Northern Ireland.

A17. **Gas** - Personal consumption in the United Kingdom is taken as sales to domestic premises. Estimates of the quantity and value of liquid gases purchased by domestic consumers are provided by the petroleum industry. The average price used is the average revenue per kWh for the public supply sales of gas to domestic consumers.

A18. **Electricity** - Sales from the public electricity supply system to domestic consumers in the United Kingdom plus estimates of the domestic element included in sales to dual use premises. Sales are valued at the average revenue per unit for electricity sold to domestic consumers, which takes into account discounts and lump sum rebates.

A19. **Liquid fuels** (domestic heating and lighting oil) - For fuel oils and heating oils, information is available from the petroleum industry on quantities delivered to domestic consumers. The figures for domestic consumption are then valued using monthly prices collected from oil companies by the department.

A20. **Vehicle fuels and lubricants** (petrol, diesel, LPG, oil and lubricants, brake and other fluids, coolants) – Estimates of the quantity and value of lubricating oil purchased by domestic customers are provided by the petroleum industry. For motor spirit and diesel, estimates of business purchases of the fuels are made and deducted from the total deliveries in order to arrive at purchases by domestic consumers. The figures for domestic consumption are then valued using monthly prices collected by the department from oil companies.

### **Table 2.6.2**

A21. Figures for Table 2.6.2 are taken from the Expenditure and Food Survey (EFS) conducted by the ONS. The figures are estimates based upon a representative sample of households. The averages in the table have been calculated based on those households consuming the fuels only, i.e. only those households who consumed the specified fuels are included in the calculation of the average expenditure. These estimates therefore differ from those published by the ONS in their "Family Spending" report, where the total of all households is used to calculate the average fuel expenditure. After the 1993 data publication, the survey moved to a financial year basis until 2005/06, but then returned to a calendar year basis from 2006 to 2014. However, from 2015, ONS returned back to reporting on a financial year basis as a result for 2015/16, Quarter 1 2015 is not reported in our tables. For ease of comparison, the data on expenditure of fuel as a proportion of total expenditure in Table 2.6.2 are based on all households and not just those consuming fuels.

### **Tables 3.1.1 to 3.1.4**

A22. Prices in those tables are derived from information collected via the Quarterly Fuels Inquiry survey on fuel purchases from a panel of about 600 establishments within the manufacturing industry (excluding electricity generation). The panel consists of companies purchasing fuels in small to large quantities. To maximise the coverage on each fuel type and minimise the burden on business, larger users are surveyed proportionally more than smaller users.

A23. Provisional quarterly data is published three months in arrears, with final data published six months in arrears. Revised data are marked with an "r". Provisional annual data are published in the March edition of QEP, with final annual data published in June. The entire year's quarterly data is reviewed in June to ensure that each of the contributors who supply data have been allocated to the correct size band based upon their actual annual consumption. This means that there can be revisions made to data from Q1 to Q4 at this time.

A24. For each size of consumer, the average fuel price (exclusive of VAT) is calculated by dividing the total quantity of fuel purchased into their total value. The "all consumers average" price uses base weighting to weight the prices for each size band according to purchases by businesses in the size band recorded in the 1984 Purchases Inquiry (a large-scale survey conducted every 5 years until 1989 and conducted annually for a rotating selection of industries from 1994 to 1999). The weights are reviewed when more comprehensive up-to-date purchases data become available. The size bands for each fuel

are determined according to the approximate range of annual purchases covered (see Table A3).

A25. As described above the prices given are representative of market prices. This means that trades, which because of their size or dominance of total consumption, that would produce an unrepresentative price, are excluded. Coal purchased by the iron and steel sector is excluded, as is gas purchased for electricity generation.

A26. For some fuels, the relative size in volume terms of the largest users can result in the weighted average moving more towards the large user price. This is true for gas where, because of the growth in consumption, the weights provided by the 1984 purchases survey may be out of date. Therefore, for some fuels (e.g. gas and gas oil), the median price (the price at which 50 per cent of the prices paid are higher and 50 per cent lower) may be more appropriate than the average price.

A27. From Q1 2010 published coal prices are restricted to only average prices and prices for large consumers due to the small number of companies reporting data. Data for medium fuel oil, liquefied petroleum gases and hard coke were discontinued from Q1 2005, and there were no sub-divisions into size bands due to the small number of sites purchasing each of these fuels. The small sample sizes reflect the small overall consumption, relative to the major fuels covered, which meant that, although the prices were still representative, they could be subject to more sample effects than the other fuels (e.g. if a relatively large purchaser switches fuel).

A28. To enable coal prices to be calculated in common units, companies also record and report the calorific value of the coal they purchase. Conversion factors for fuel oil (both heavy and medium), gas oil, liquefied petroleum gas and hard coke are given in Annex B.

A29. The 10 per cent, median and 90 per cent deciles prices for each fuel are presented in addition to the prices for each size band. The 10 per cent decile is the point within the complete range of prices below which the lowest 10 per cent of those prices fall. Similarly, the 90 per cent decile is the point above which the highest 10 per cent of the prices occur. These values give some indication of the spread of prices paid by purchasers. The deciles and the median are calculated by giving equal "weight" to each purchaser but are scaled to represent the mix of fuel users by size in the industrial population using those represented by the panel. From Q1 2007, decile information is only published for gas and electricity.

**Table A3: Range of annual purchases for the Quarterly Fuels Inquiry**

Fuel	Large Greater than	Of which:		Medium 760 to 7,600	Small Less than
		Extra large Greater than	Moderately large		
Coal (tonnes)	7,600	..	..	760 to 7,600	760
Heavy fuel oil (tonnes)	4,900	..	..	490 to 4,900	490
Gas oil (tonnes)	175	..	..	35 to 175	35
Electricity (thousand kWh)	8,800	150,000	8,800 to 150,000	880 to 8,800	880
Gas(1) (thousand kWh)	8,800	..	..	1,500 to 8,800	1,500

<sup>(1)</sup> Respondents purchasing more than one type of supply (tariff, firm contract and interruptible contract) are treated as separate entities with respect to each type of supply.

### Table 3.2.1

A30. The prices for fuels used in electricity generation are collected via a quarterly survey of electricity generators in the United Kingdom which covers companies that produce electricity from nuclear sources plus all companies whose prime purpose is the generation of electricity. The companies are: AES Electric Ltd., Centrica plc., Coryton Energy Company Ltd., Eggborough Power Ltd., E.On UK plc., Fellside Heat and Power Ltd., Fibrogen Ltd., Fibropower Ltd., Fibrothetford Ltd., International Power, Premier Power Ltd., Rocksavage Power Company Ltd., RWE Npower plc., Scottish Power plc., Scottish and Southern Energy plc., SELCHP Ltd., Spalding Energy Company Ltd.

A31. The data reported are the value and volume of fuel purchased during the quarter and may not always reflect the fuel actually used (i.e. there can be stocking and destocking, especially for coal). The prices reported are typically for long-term contracts, with price escalator factors, some of which may have already been implemented. As such, the prices can be higher than those paid by large industrial users who typically negotiate contracts each year.

A32. Provisional quarterly data is published three months in arrears, with final data published six months in arrears. Any revised data are marked with an "r". Provisional annual data for the most recent year is published in the March edition of QEP, with final data published in June.

### Tables 3.3.1 and 3.3.2

A33. Data for these indices are taken from a number of sources: electricity data are taken from a monthly survey run by BEIS; gas data are taken from the monthly Producer Price Index (PPI) gas series created by BEIS; coal and heavy fuel oil data are taken from the Quarterly Fuels Inquiry (QFI) survey used to create Tables 3.1.1 – 3.1.4.

A34. Provisional quarterly data is published three months in arrears, with final data being published six months in arrears. Any revised data is marked with an "r". Provisional annual data is published in the March edition of QEP, with final data being published in June. The entire year's quarterly data for coal and HFO is reviewed in June to ensure that each of the contributors who supply data to the Quarterly Fuels Inquiry have been placed in the correct

size band based upon their annual consumption. This means that there can be revisions made to data from Q1 to Q4 at that time.

A35. The Climate Change Levy (CCL) came into effect in April 2001. The rates were increased in April 2007, 2008 and 2009 and then annually in April of each successive year since 2011. The rates are shown in Table A4.

**Table A4: Climate Change Levy rates from April 2001**

	<b>Coal</b>	<b>Electricity</b>	<b>Gas</b>	<b>LPG</b>
Apr-2001	£11.70/tonne	0.430 p/kWh	0.150 p/kWh	£9.60/tonne
Apr-2007	£12.01/tonne	0.441 p/kWh	0.154 p/kWh	£9.85/tonne
Apr-2008	£12.42/tonne	0.456 p/kWh	0.159 p/kWh	£10.18/tonne
Apr-2009	£12.81/tonne	0.470 p/kWh	0.164 p/kWh	£10.50/tonne
Apr-2011	£13.21/tonne	0.485 p/kWh	0.169 p/kWh	£10.83/tonne
Apr-2012	£13.87/tonne	0.509 p/kWh	0.177 p/kWh	£11.37/tonne
Apr-2013	£14.29/tonne	0.524 p/kWh	0.182 p/kWh	£11.72/tonne
Apr-2014	£14.76/tonne	0.541 p/kWh	0.188 p/kWh	£12.10/tonne
Apr-2015	£15.12/tonne	0.554 p/kWh	0.193 p/kWh	£12.40/tonne
Apr-2016	£15.26/tonne	0.559 p/kWh	0.195 p/kWh	£12.51/tonne
Apr-2017	£15.51/tonne	0.568 p/kWh	0.198 p/kWh	£12.72/tonne
Apr-2018	£15.91/tonne	0.583 p/kWh	0.203 p/kWh	£13.04/tonne

### **Tables 3.4.1 and 3.4.2**

A36. The prices for gas and electricity consumed by non-domestic users in the United Kingdom are collected via a quarterly inquiry of gas and electricity suppliers. The data reported are the value and volume of energy sold during the quarter in each of the size bands. The average price (excluding VAT) for each size band of consumer is obtained by dividing the total quantity of purchases for each fuel into their total value.

A37. The electricity and gas size bands shown in Tables 3.4.1 and 3.4.2 are defined in terms of the approximate annual purchases of the consumer band, as shown in Table A5. The size bands from Q1 2006 onwards differ slightly from those published previously as the average electricity price from Q1 2007 includes the Extra-Large size band. This has introduced a discontinuity in the averages for previous quarters' series. Also, some electricity size bands were renamed in Q1 2008; however the consumptions remained unchanged.

**Table A5: Range of annual purchases for the Price Transparency survey**

		Annual consumption MWh			Annual consumption MWh
<b>Electricity</b>	Very Small	0 - 20	<b>Gas</b>	Very Small	<278
	Small	20 - 499		Small	278 – 2,777
	Small/Medium	500 - 1,999		Medium	2,778 – 27,777
	Medium	2,000 - 19,999		Large	27,778 – 277,777
	Large	20,000 - 69,999		Very Large	277,778 – 1,111,112
	Very Large	70,000 – 150,000			
	Extra Large	>150,000			

A38. Quarterly data are combined to produce annual average prices by size band which are also published within the table spreadsheet.

### Tables 4.1.1 to 4.1.3

A39. The data published are national average prices calculated using prices supplied by all major motor fuel marketing companies. Prior to 1977 prices data were collated from a variety of sources, mainly the published wholesale prices of the oil companies to which retailers' margins were added. The results of various consumers' surveys were also taken into consideration in arriving at a typical price. From January 1995 sales by super/hyper markets are included in the price estimates.

A40. Crude oil prices are shown in Table 4.1.1 as an index based on a "basket" of both indigenous and imported crude oil prices also used as an input, along with other fuel prices, for the Producer Prices Index (PPI) produced by ONS. The index represents the average price paid by refineries for the month and is calculated in pounds sterling on a cost, insurance and freight (cif) basis.

A41. Provisional monthly prices are usually revised in the month following their original publication, with revisions marked with an "r". Provisional annual prices are published in December with revisions made during the following two months as more data become available.

### Tables 5.1.1 to 5.10.3

A42. International comparisons are based on data published by international organisations.

A43. Motor fuel prices are taken from the European Commission's 'Oil Bulletin' and converted from euros to pound sterling. Data in these tables show prices of unleaded petrol and diesel in the EU, with and without tax, on or about the 15th of the month, with the UK ranked within the EU 15 and EU 28.

A44. Annual electricity and gas prices in Tables 5.3.1, 5.5.1, 5.7.1 and 5.9.1 are collated and published by the International Energy Agency (IEA) in 'Energy Prices and Taxes'. Prices are shown excluding and including taxes in sterling, with the UK price compared to the IEA median price and ranked within the IEA and G7. Methodology can vary between countries. From December 2013, prices for all IEA countries are shown, rather than for just the EU and G7 countries as previously published.

A45. The data presented in Tables 5.4.1, 5.6.1, 5.8.1 and 5.10.1 are derived from Eurostat's Statistics in Focus series. Eurostat publishes data on gas and electricity prices around six months after the end of the reference period. Prices are shown excluding and including taxes in sterling, with the UK price compared to the EU 15 and EU 28 median price and ranked within the EU 15 and EU 28.

A46. From 1st January 2008, data are average prices over 6-month periods (January - June and July - December) and each size band covers a range of consumption. Prior to 2008, the data were for a single point in time (1st January and 1st July), and each size band was represented by a single consumption figure. Eurostat's change to the methodology created a discontinuity within the price series. The new methodology prices are published within the original tables, with a clear distinction between old and new data. Whilst prices using the old methodology is not comparable with the new one, the UK ranking and UK price relative to the EU median should be broadly comparable across the old and new data. The size bands for consumers from January 2008 onwards are shown in Table A6.

**Table A6: Eurostat size bands**

<b>Industrial Electricity</b>	<b>Eurostat size band</b>	<b>Annual consumption (MWh)</b>
Small	Band IB	20 – 499
Medium	Band ID	2,000 - 19,999
Large	Band IE	20,000 - 69,999
Very Large	Band IF	70,000 – 150,000

<b>Industrial Gas</b>	<b>Eurostat size band</b>	<b>Annual consumption (MWh)</b>
Small	Band I2	278 – 2,777
Medium	Band I3	2,778 – 27,777
Large	Band I4	27,778 – 277,777

<b>Domestic Electricity</b>	<b>Eurostat size band</b>	<b>Annual consumption (kWh)</b>
Small	Band DB	1,000 – 2,499
Medium	Band DC	2,500 – 4,999
Large	Band DD	5,000 – 15,000

**Table A6: Eurostat size bands  
Cont'd**

<b>Domestic Gas</b>	<b>Eurostat size band</b>	<b>Annual consumption (kWh)</b>
Small	Band D1	< 5,557
Medium	Band D2	5,557 – 55,557
Large	Band D3	>55,557

A47. It is important when comparing international prices to bear in mind the impact of the exchange rates (as the data are presented in a common pound sterling basis, the changing level of the pound will cause some changes in the relative prices) and inflation rates in individual countries. The relative strength of the pound in 1997, 1998 and 1999 (e.g. as sterling appreciated by 21 per cent against the German Mark between 1996 and 1999) to some extent will have had an adverse effect on comparisons of UK data with other countries.

A48. For Tables 5.3.1 to 5.10.3, where data is not available, we have estimated the price in relation to the median for that table. A '+' indicates that the price is likely to exceed the median price, '+/-' indicates that the price is likely to be around the median, '-' indicates that the price is likely to be below the median price. This methodology is intended to give a better indication of the UK position when compared with those countries where up-to-date data are not available.

A49. When determining which tables to use to compare international gas and electricity prices, the 6-monthly Eurostat tables (5.4, 5.6, 5.8 and 5.10) provide prices for different sizes of consumer, and in general have more timely data reflecting changes on a shorter timescale, but comparisons with non-EU countries require the use of the annual IEA tables (5.3.1, 5.5.1, 5.7.1 and 5.9.1). Rankings may differ between the IEA and Eurostat tables.

A50. For 2015 onwards, prices from Eurostat for both domestic and industrial are those that both exclude and include the environmental and social levies and taxes covering the Climate Change Levy, Renewable Obligation support costs, Capacity Market support costs, Contract for Difference support costs, Feed in Tariffs, EU ETS, Assistance for Areas with high Electricity Distribution Costs (AAHEDC) and Smart Meters and Better Billing costs. It is a new methodology which EU countries have to report to Eurostat the environmental and social levies incurred in their prices.



# Annex B - Calorific Values and Conversion Factors

## B1: Estimated average gross calorific values of fuels 2018

	GJ per tonne			GJ per tonne		Moisture content
	net	gross		net	gross	
Coal:			Renewable sources:			
All consumers (weighted average) (1)	25.9	27.3	Domestic wood (3)	14.7	16.3	20%
Power stations (2)	25.2	26.5	Industrial wood (4)	19.0	20.3	0%
Coke ovens (1)	30.2	31.8	Straw	13.5	15.8	15%
Low temperature carbonisation plants and manufactured fuel plants	26.9	28.4	Poultry litter (5)	7.6	9.5	20%
Collieries	27.4	28.9	Meat and bone	15.2	17.1	11%
Agriculture	28.1	29.5	General industrial waste	15.2	16.0	5%
Iron and steel	28.9	30.4	Hospital waste	13.3	14.0	5%
Other industries (weighted average)	25.4	26.7	Municipal solid waste (6)	7.0	10.0	30%
Non-ferrous metals	23.7	25.0	Refuse derived waste (6)	13.0	18.5	30%
Food, beverages and tobacco	27.9	29.3	Short rotation coppice (7)	12.6	14.2	30%
Chemicals	25.2	26.5	Tyres	30.4	32.0	5%
Textiles, clothing, leather etc.	28.0	29.4	Wood pellets	16.9	18.3	10%
Pulp, paper, printing etc.	23.0	24.2	Biodiesel	37.2	38.7	4%
Mineral products	26.2	27.6	Bioethanol	26.8	29.7	10%
Engineering (mechanical and electrical engineering and vehicles)	27.9	29.4	Petroleum:			
Other industries	30.9	32.5	Crude oil (weighted average)	43.4	45.7	
Domestic			Petroleum products (weighted average)	43.9	46.2	
House coal	25.1	26.5	Ethane	46.6	50.7	
Anthracite and dry steam coal	30.8	32.4	Butane and propane (LPG)	45.9	49.3	
Other consumers	25.1	26.4	Light distillate feedstock for gasworks	45.4	47.8	
Imported coal (weighted average)	26.9	28.4	Aviation spirit and wide cut gasoline	44.9	47.3	
Exports (weighted average)	26.6	28.0	Aviation turbine fuel	43.9	46.2	
Coke (including low temperature carbonisation cokes)	29.8	29.8	Motor spirit	44.7	47.1	
Coke breeze	29.8	29.8	Burning oil	43.9	46.2	
Other manufactured solid fuels	28.1	29.6	Gas/diesel oil	42.6	45.3	
			DERV	42.9	45.7	
			Fuel oil	40.7	43.3	
			Power station oil	40.7	43.3	
			Non-fuel products (notional value)	40.8	42.9	
			MJ per cubic metre			
			net	gross		
			Natural gas produced (8)	35.7	39.7	
			Natural gas consumed (9)	35.5	39.5	
			Coke oven gas	16.2	18.0	
			Blast furnace gas	3.0	3.0	
			Landfill gas (10)	19-23	21-25	
			Sewage gas (10)	19-23	21-25	
			Anaerobic Digestion - farm/food food (7)	19-24	21-26	

1) Applicable to UK consumption - based on calorific value for home produced coal plus imports and, for "All consumers" net of exports.

(2) Home produced plus imports

(3) On an "as received" basis; seasoned logs at 20% moisture content. On a "dry" basis 20.3 GJ per tonne.

(4) Data reported on an oven dry basis of 20.3 GJ per tonne.

(5) The calorific value of poultry litter typically ranges on a net basis from 5 GJ/tonne to 10 GJ/tonne depending upon the moisture content of the fuel. For poultry manure, much lower calorific values should be used.

(6) Average figure based on survey returns.

(7) On an "as received" basis; at 30% moisture content. On a "dry" basis 18.6 GJ per tonne.

(8) The gross calorific value of natural gas can also be expressed as 11.126 kWh per cubic metre. This value represents the average calorific value seen for gas when extracted. At this point it contains not just methane, but also some other hydrocarbon gases (ethane, butane, propane). These gases are removed before the gas enters the National Transmission System for sale to final consumers.

(9) UK produced and imported gas. This weighted average of calorific values will approximate the average for the year of gas entering the National Transmission System. It can also be expressed as 11.007 kWh per cubic metre.

(10) Calorific value varies depending on the methane content of the gas.

Note: The above estimated average calorific values apply only to the year 2018. For calorific values of fuels in earlier years see Tables A.2 and A.3 and previous issues of Digest of United Kingdom Energy Statistics (DUKES). See the notes in Chapter 1, paragraph 1.55 regarding net calorific values. The difference between the net and gross thermal content is the amount of energy necessary to evaporate the water present in the fuel or formed during the combustion process. The calorific values for coal other than imported coal are based on estimates provided by the main coal producers, but with some exceptions as noted on Table A.2. The calorific values for petroleum products have been calculated using the method described in Chapter 1, paragraph 1.31. Data reported in DUKES in 'thousand tonnes of oil equivalent' have been prepared on the basis of 1 tonne of oil equivalent having an energy content of 41.868 gigajoules (GJ), (1 GJ = 9.478 therms) - see notes in Chapter 1, paragraph 1.28.

## Effective rates of duty

### B2: Estimated average gross calorific values of fuels 1980,1990,2000,2010 and 2015 to 2018

	GJ per tonne (gross)						
	1980	1990	2000	2010	2016	2017	2018
<b>Coal</b>							
All consumers (1)(2)	25.6	25.5	26.2	25.8	26.0	25.9	25.9
All consumers - home produced plus imports minus exports (1)	..	..	27.0	27.1	27.2	27.3	27.3
Power stations (2)	23.8	24.8	25.6	24.9	26.5r	26.5r	26.5
Power stations - home produced plus imports (1)	..	..	26.0	25.8	26.5r	26.5r	26.5
Coke ovens (2)	30.5	30.2	31.2	30.5	31.8	31.8	31.8
Coke ovens - home produced plus imports (1)	..	..	30.4	30.5	31.8	31.8	31.8
Low temperature carbonisation plants and manufactured fuel plants	19.1	29.2	30.3	30.2	28.4	28.4	28.4
Collieries	27.0	28.6	29.6	29.3	29.0	28.9	28.9
Agriculture	30.1	28.9	29.2	28.0	29.5	29.5	29.5
Iron and steel industry (3)	29.1	28.9	30.7	30.4	30.4	30.4	30.4
Other industries (1)	27.1	27.8	26.7	27.7	26.7	26.7	26.7
Non-ferrous metals	..	23.1	25.1	25.4	25.1	25.0	25.0
Food, beverages and tobacco	28.6	28.1	29.5	28.6	29.4	29.3	29.3
Chemicals	25.8	27.3	28.7	26.7	26.5	26.5	26.5
Textiles, clothing, leather and footwear	27.5	27.7	30.4	29.5	29.5	29.4	29.4
Pulp, paper, printing, etc.	26.5	27.9	28.7	24.1	24.2	24.2	24.2
Mineral products (4)	..	28.2	27.0	27.6	27.9	27.6	27.6
Engineering (5)	27.7	28.3	29.3	29.5	29.5	29.4	29.4
Other industry (6)	28.4	28.5	30.2	32.6	32.8	32.5	32.5
Unclassified	..	27.1	..	..	..	..	..
<b>Domestic</b>							
House coal	30.1	30.2	30.9	29.8	28.6r	27.0r	26.5
Anthracite and dry steam coal	33.3	33.6	33.5	34.7	34.4	32.4r	32.4
Other consumers	27.5	27.5	29.2	25.5	26.4	26.4	26.4
Transport - Rail	..	..	..	30.3	30.2	30.1	30.1
Imported coal (1)	..	28.3	28.0	27.9	28.8r	28.5r	28.4
of which Steam coal	..	..	26.6	26.5	26.5r	26.5r	26.5
Coking coal	..	..	30.4	32.1	31.8	31.8	31.8
Anthracite	..	..	31.2	31.0	31.6	31.5	31.5
Exports (1)	..	29.0	32.0	32.3	30.4r	29.4r	28.0
of which Steam coal	..	..	31.0	31.2	29.9r	28.7r	27.0
Anthracite	..	..	32.6	33.2	32.5	32.5	32.5
<b>Coke (7)</b>	28.1	28.1	29.8	29.8	29.8	29.8	29.8
<b>Coke breeze</b>	24.4	24.8	24.8	29.8	29.8	29.8	29.8
<b>Other manufactured solid fuels (1)</b>	27.6	27.6	30.8	32.6	29.6r	29.6r	29.6
<b>Petroleum</b>							
Crude oil (1)	45.2	45.6	45.7	45.7	45.7	45.7	45.7
Liquified petroleum gas	49.6	49.3	49.1	49.2	49.3	49.3	49.3
Ethane	52.3	50.6	50.7	50.7	50.7	50.7	50.7
LDF for gasworks/Naphtha	47.8	47.9	47.6	47.8	47.9	47.8	47.8
Aviation spirit and wide-cut gasoline (AVGAS and AVTAG)	47.2	47.3	47.3	47.4	47.4	47.4	47.3
Aviation turbine fuel (AVTUR)	46.4	46.2	46.2	46.2	46.2	46.2	46.2
Motor spirit	47.0	47.0	47.0	47.1	47.1	47.1	47.1
Burning oil	46.5	46.2	46.2	46.2	46.2	46.2	46.2
Vaporising oil	45.9	45.9	..	..	..	..	..
Gas/diesel oil (8)	45.5	45.4	45.6	45.3	45.3	45.3	45.3
DERV (8)	..	..	..	45.6	45.7	45.7	45.7
Fuel oil	42.8	43.2	43.1	43.3	43.3	43.3	43.3
Power station oil	42.8	43.2	43.1	43.3	43.3	43.3	43.3
Non-fuel products (notional value)	42.2	43.2	43.8	43.1	42.8	43.0	42.9
Petroleum coke (Power stations)	..	..	..	30.9	28.6	28.6	28.6
Petroleum coke (Other)	..	39.5	35.8	35.8	35.8	35.8	35.8
<b>Natural Gas (9)</b>	..	38.4	39.4	40.0	40.0r	39.8	39.7
<b>Renewable sources</b>							
Domestic wood	..	..	10.0	13.9	16.3	16.3	16.3
Industrial wood	..	..	11.9	13.7	20.3	20.3	20.3
Straw	..	..	15.0	15.8	15.7	15.4	15.8
Poultry litter	..	..	8.8	9.1	9.5	9.9	9.5
Meat and bone	..	..	17.3	20.0	19.0	18.3	17.1
General industrial waste	..	..	16.0	16.0	16.0	16.0	16.0
Hospital waste	..	..	14.0	14.0	14.0	14.0	14.0
Municipal solid waste	..	..	9.5	9.5	9.8	9.3	10.0
Refuse derived waste	..	..	18.6	18.5	18.5	18.5	18.5
Short rotation coppice	..	..	10.6	11.1	14.2	14.2	14.2
Tyres	..	..	32.0	32.0	32.0	32.0	32.0
Wood pellets	..	..	..	17.2	18.3	18.3	18.3
Biodiesel	..	..	..	38.7	38.7	38.7	38.7
Bioethanol	..	..	..	29.7	29.7	29.7	29.7

(1) Weighted averages.

(2) Home produced coal only.

(3) From 2001 onwards almost entirely sourced from imports.

(4) Based on information provided by the British Cement Industry Association; almost all coal used by this sector in the latest 4 years was imported.

(5) Mechanical engineering and metal products, electrical and instrument engineering and vehicle manufacture.

(6) Includes construction.

(7) Since 1995 the source of these figures has been the ISSB.

(8) Derv included within gas/diesel oil until 2005.

(9) Natural Gas figures are shown in MJ per cubic metre.

Effective rates of duty

### **B3: Standard conversion factors**

1 tonne of oil equivalent (toe) = 107 kilocalories  
= 396.83 therms  
= 41.868 GJ  
= 11,630 kWh

1 therm = 100,000 British thermal units (Btu)

The following prefixes are used for multiples of joules, watts and watt hours:

kilo (k)	= 1,000	or $10^3$
mega (M)	= 1,000,000	or $10^6$
giga (G)	= 1,000,000,000	or $10^9$
tera (T)	= 1,000,000,000,000	or $10^{12}$
peta (P)	= 1,000,000,000,000,000	or $10^{15}$

### **Weight**

1 kilogramme (kg)	= 2.2046 pounds (lb)
1 pound (lb)	= 0.4536 kg
1 tonne (t)	= 1,000 kg = 0.9842 long ton = 1.102 short ton
1 Statute or long ton	= 2,240 lb = 1.016 ton = 1.120 short ton
1 barrel	= 159.0 litres = 34.97 UK gal = 42 US gal

### **Volume**

1 cubic metre (cu m)	= 35.31 cu ft
1 cubic foot (cu ft)	= 0.02832 cu m
1 litre	= 0.22 Imperial gallons
1 UK gallon	= 8 UK pints = 1.201 U.S. gallons = 4.54609 litres

### **Length**

1 mile	= 1.6093 kilometres
1 kilometre (km)	= 0.62137 miles

### **Temperature**

1 scale degree Celsius (C)	=	1.8 scale degrees Fahrenheit (F)
For conversion of temperatures: °C	=	$5/9 (°F - 32)$ ; $°F = 9/5 °C + 32$

Effective rates of duty

**B4: Average conversion factors for petroleum 2018**

	Litres per tonne		Litres per tonne
<b>Crude oil:</b>		<b>DERV fuel:</b>	
Indigenous	1,199	0.005% or less sulphur	1,193
Imported	1,181		
Average of refining throughput	1,192	Gas /Marine diesel oil	1,172
Ethane	2,730	<b>Fuel oil (1% or less sulphur)</b>	
Propane	1,944	<b>All grades:</b>	1,015
Butane	1,733	Light	..
Naphtha	1,482	Medium	..
		Heavy	..
Aviation gasoline	1,386	<b>Lubricating oils:</b>	
<b>Motor spirit:</b>		White	1,157
All grades	1,355	Greases	..
Super1	1,359		
Premium1	1,370	Bitumen	980
Middle distillate feedstock	..	Petroleum coke	..
		Petroleum waxes	1,184
<b>Kerosene:</b>		Industrial spirit	1,247
Aviation turbine fuel	1,250	White spirit	1,251
Burning oil	1,248		

**Note:** The above conversion factors, which for refined products have been compiled by BEIS using data from UK Petroleum Industry Association companies, apply to the year 2018. The litres to tonnes conversions are made at a standard temperature of 15°C.

.. Denotes commercially sensitive as too few companies are producing this to be able to report it.

# Annex C - Effective Rates of Duty on Principal Hydrocarbon Oils

## Effective rates provided 1979 to 2018<sup>(1)</sup>

Date from which duty effective		Motor spirit <sup>(2)(3)</sup>					Pence per litre	
		Leaded	Lead replacement	Unleaded	Super unleaded	Ultra low sulphur	Regular	Ultra low sulphur
13 June	1979	8.100	..	..	..	..	9.200	..
26 March	1980	10.000	..	..	..	..	10.000	..
10 March	1981	13.820	..	..	..	..	13.820	..
2 Julv	1981	..	..	..	..	..	11.910	..
9 March	1982	15.540	..	..	..	..	13.250	..
15 March	1983	16.300	..	..	..	..	13.820	..
13 March	1984	17.160	..	..	..	..	14.480	..
19 March	1985	17.940	..	..	..	..	15.150	..
19 March	1986	19.380	..	..	..	..	16.390	..
17 March	1987	..	..	18.420	..	..	..	..
15 March	1988	20.440	..	..	..	..	17.290	..
14 March	1989	..	..	17.720	..	..	..	..
20 March	1990	22.480	..	19.490	..	..	19.020	..
19 March	1991	25.850	..	22.410	..	..	21.870	..
10 March	1992	27.790	..	23.420	..	..	22.850	..
16 March	1993	30.580	..	25.760	..	..	25.140	..
30 November	1993	33.140	..	28.320	..	..	27.700	..
29 November	1994	35.260	..	30.440	..	..	30.440	..
1 Januarv	1995	36.140	..	31.320	..	..	31.320	..
28 November	1995	39.120	..	34.300	..	..	34.300	..
15 Mav	1996	..	..	..	37.620	..	..	..
26 November	1996	41.680	..	36.860	40.180	..	36.860	..
2 Julv	1997	45.100	..	40.280	43.600	..	40.280	..
17 March	1998	49.260	..	43.990	48.760	..	44.990	42.990
9 March	1999	52.880	..	47.210	52.330	..	50.210	47.210
1 October	1999	..	49.210	..	49.210	..	..	..
21 March	2000	54.680	50.890	48.820	50.890	..	51.820	48.820
1 October	2000	..	..	..	..	47.820	..	..
7 March	2001	..	(4)	46.820	(4)	45.820	..	45.820
15 June	2001	..	..	48.820	..	..	..	..
1 October	2003	56.200	..	50.190	..	47.100	53.270	47.100
..	2004	..	(5)	..	(5)	..	..	..
7 December	2006	57.680	..	51.520	..	48.350	54.680	48.350
1 October	2007	60.070	..	53.650	..	50.350	56.940	50.350
1 April	2008	..	..	(5)	..	..	(9)	..
1 December 2008	2008	62.070	..	..	..	52.350	..	52.350
1 April	2009	..	..	..	..	54.190	..	54.190
1 Mav	2009	63.910	..	..	..	..	..	..
1 September	2009	65.910	..	..	..	56.190	..	56.190
1 April	2010	66.910	..	..	..	57.190	..	57.190
1 October	2010	67.910	..	..	..	58.190	..	58.190
1 Januarv	2011	68.670	..	..	..	58.950	..	58.950
23 March	2011	67.670	..	..	..	57.950	..	57.950

(1) Duty rates remain the same unless otherwise stated.

(2) These fuels became liable to Value Added Tax (VAT) as follows:-

- (i) 10% with effect from 1 April 1974
- (ii) 8% with effect from 29 July 1974
- (iii) For motor spirit 25% with effect from 18 November 1974
- (iv) For motor spirit 12.5% with effect from 12 April 1976
- (v) 15% with effect from 18 June 1979
- (vi) 17.5% with effect from 1 April 1991
- (vii) 15% with effect from 1 December 2008
- (viii) 17.5% with effect from 1 January 2010
- (viii) 20% with effect from 4 January 2011 (Notes continued on following page)

(3) From 14 March 1989 until 20 March 1990, the rate of duty for 2-star and 3-star leaded motor spirit was 21.220 pence per litre.

(4) With the separate duty rate abolished, duty on these fuels is now charged at the rate appropriate to unleaded petrol or ultra low sulphur petrol, dependent upon the sulphur and aromatic content of the fuel.

## Effective rates of duty

### Effective rates provided 1979 to 2018<sup>(1)</sup> (continued)

Date from which duty effective		Aviation gasoline <sup>(2)</sup>	LPG for use as road fuel <sup>(2)(8)</sup>	Fuel oil <sup>(6)</sup>	Gas oil <sup>(6)(7)</sup>	Pence per litre Kerosene <sup>(6)</sup>
13 June	1979	8.100	4.050	0.660	0.660	
26 March	1980	10.000	5.000	0.770	0.770	
10 March	1981	13.820	6.910			
2 July	1981					
9 March	1982	7.770	7.770			
15 March	1983	8.150	8.150			
13 March	1984	8.580	8.580			zero
19 March	1985	8.970	8.970			
19 March	1986	9.690	9.690		1.100	
17 March	1987					
15 March	1988	10.220	10.220			
14 March	1989					
20 March	1990	11.240	11.240	0.830	1.180	
19 March	1991	12.930	12.930	0.910	1.290	
10 March	1992	13.900	13.900	0.950	1.350	
16 March	1993	15.290	15.290	1.050	1.490	
30 November	1993	16.570	16.570	1.160	1.640	
29 November	1994	17.630	33.140	1.660	2.140	
1 January	1995	18.070				
28 November	1995	19.560	28.170	1.810	2.330	
15 May	1996					
26 November	1996	20.840	21.130	1.940	2.500	
2 July	1997	22.550		2.000	2.580	
17 March	1998	24.630		2.180	2.820	
9 March	1999	26.440	15.000	2.650	3.030	
1 October	1999					
21 March	2000	27.340		2.740	3.130	
7 March	2001		9.000			
15 June	2001					
9 April	2003			3.820	4.220	
1 October	2003	28.100				
3 December 2004	2004			4.820	5.220	
6 December	2005			6.040	6.440	
7 December	2006	28.840	12.210	7.290	7.690	
1 October	2007	30.030	16.490	9.290	9.690	
1 December	2008	31.030	20.770	9.660	10.070	
1 April	2009		24.820	10.000	10.420	
1 May	2009	33.340				
1 September	2009	34.570	27.670	10.370	10.800	
1 April	2010	38.350	30.530	10.550	10.990	
1 October	2010		31.950	10.740	11.180	
1 January	2011		33.040	10.880	11.330	
23 March	2011	37.700	31.610	10.700	11.140	

(5) Duty now charged at the rate appropriate to ultra low sulphur petrol.

(6) For industrial and commercial consumers these fuels became liable to the standard rate of VAT on 1 July 1990 (see note 2), recoverable by the majority of such consumers. These fuels attracted VAT for domestic consumers from 1 April 1994 at an initial rate of 8%. This was reduced to 5% from 1 September 1997.

(7) AVTUR (aviation turbine fuel) attracted the gas oil rate until 18 March 1986 after which it was zero-rated.

(8) From 29 November 1994 this duty is priced in pence per kilogram as the relative calorific values of the different types of road fuel gases are very similar when related to mass (kilogram). The conversion rate for LPG is approx. 1kg = 2 litres.

(9) Duty now charged at the rate appropriate to ultra low sulphur diesel

# Annex D – Further Sources of Information

## D1 Energy prices

A quarterly publication containing tables, charts and commentary covering energy prices to domestic and industrial consumers for all the major fuels as well as presenting comparisons of fuel prices in the European Union and G7 countries. Available at:

[www.gov.uk/government/collections/quarterly-energy-prices](http://www.gov.uk/government/collections/quarterly-energy-prices)

## D2 Fuel Poverty

The 2019 fuel poverty statistics report was published in June 2019 and includes statistics for the number of fuel poor households in 2017. This is published here:

[www.gov.uk/government/collections/fuel-poverty-statistics](http://www.gov.uk/government/collections/fuel-poverty-statistics)

## D3 Department for Business, Energy and Industrial Strategy publications on energy

All titles can be found on the BEIS site here:

[www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics](http://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics)

## Statistical publications

### Energy Trends

Energy Trends contains quarterly data on production and consumption of overall energy and of the individual fuels in the United Kingdom. Also includes data on foreign trade in fuels.

[www.gov.uk/government/collections/energy-trends](http://www.gov.uk/government/collections/energy-trends)

### Digest of UK Energy Statistics (DUKES)

Also available from The Stationery Office and can be ordered through Government Bookshops. DUKES contains annual data on production and consumption of overall energy and of the individual fuels in the United Kingdom. Also includes a commentary covering all the major aspects of energy and gives a comprehensive picture of energy production and use over the last five years with key series taken back to 1970.

[www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes](http://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes)

### Energy Consumption in the UK

Energy consumption in the United Kingdom brings together statistics from a variety of sources to produce a comprehensive review of energy consumption and changes in efficiency, intensity and output since the 1970s, with a particular focus on trends since 1990. The information is presented in five sections covering overall energy consumption and energy consumption in the transport, domestic, industrial and service sectors. Available at:

[www.gov.uk/government/collections/energy-consumption-in-the-uk](http://www.gov.uk/government/collections/energy-consumption-in-the-uk)

### Energy Flow Chart

An annual publication illustrating the flow of primary fuels from home production and imports to their eventual final uses, in their original state and after being converted into different kinds of energy by the secondary fuel producers. Available at:

[www.gov.uk/government/collections/energy-flow-charts](http://www.gov.uk/government/collections/energy-flow-charts)

## **UK Energy in Brief**

An annual publication summarising the latest statistics on energy production, consumption and prices in the United Kingdom. The figures are taken from the “Digest of UK Energy Statistics”. Available at: [www.gov.uk/government/collections/uk-energy-in-brief](http://www.gov.uk/government/collections/uk-energy-in-brief)

## **Sub-National Energy Consumption Statistics**

Sub-National data are produced by BEIS to emphasise the importance of local and regional decision making for energy policy in delivering a number of national energy policy objectives. Data is available at: [www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics](http://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics)

## **National Energy Efficiency Data-framework (NEED)**

BEIS has constructed a National Energy Efficiency Data-framework (NEED) to enable detailed statistical analysis of energy efficiency. The data framework matches the gas and electricity consumption data collected for BEIS sub-national energy consumption statistics and records of energy efficiency measures in the Home Energy Efficiency Database (HEED) run by the Energy Saving Trust (EST), as well as typographic data about dwellings and households. [www.gov.uk/government/collections/national-energy-efficiency-data-need-framework](http://www.gov.uk/government/collections/national-energy-efficiency-data-need-framework)

## **Household Energy Efficiency**

BEIS publishes a range of information relating to the Energy Company Obligation (ECO) and Green Deal (GD). The headline release presents monthly updates of ECO measures and quarterly updates of in-depth ECO statistics, carbon savings and the Green Deal schemes. The detailed report presents annual updates on in-depth Green Deal statistics and insulation levels. Data is available at: [www.gov.uk/government/collections/household-energy-efficiency-national-statistics](http://www.gov.uk/government/collections/household-energy-efficiency-national-statistics)

## **UK Greenhouse Gas Emissions Statistics**

Emissions data are produced by BEIS to show **progress against the UK’s goals, both international and domestic, for reducing greenhouse gas emissions.** [www.gov.uk/government/collections/uk-greenhouse-gas-emissions-statistics](http://www.gov.uk/government/collections/uk-greenhouse-gas-emissions-statistics)

## **UK Energy and CO2 emissions projections**

The Updated Energy Projections (UEP) are published annually by BEIS. They provide updated projections and analysis of energy use and carbon dioxide emissions in the UK. The UEP exercise incorporates all firm environmental policy measures and is based on updated assumptions consistent with the most recent UK Budget announcements. The latest report is available at: [www.gov.uk/government/collections/energy-and-emissions-projections](http://www.gov.uk/government/collections/energy-and-emissions-projections)

## **The Clean Growth Strategy**

On 12 October 2017 The Clean Growth Strategy was published. The strategy sets out proposals for decarbonising all sectors of the UK economy through the 2020s. It explains how the whole country can benefit from low carbon opportunities, while meeting national and international commitments to tackle climate change. The strategy is available at: [www.gov.uk/government/publications/clean-growth-strategy](http://www.gov.uk/government/publications/clean-growth-strategy)



## Policy publications

**The Department for Business, Energy and Industrial Strategy** is responsible for business, industrial strategy, science, research & innovation, energy and clean growth and climate change. The policy that the department works on and the associated documentation can be found on the GOV.UK site [here](#).

## D4 Energy related websites

The BEIS section of the GOV.UK website can be found here:

[www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy](http://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy)

The energy information and statistics section is here:

[www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics](http://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy/about/statistics)

## Other Government websites

Ministry of Housing, Communities and Local Government	<a href="http://www.gov.uk/government/organisations/department-for-communities-and-local-government">www.gov.uk/government/organisations/department-for-communities-and-local-government</a>
Department for Environment, Food and Rural Affairs	<a href="http://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs">www.gov.uk/government/organisations/department-for-environment-food-rural-affairs</a>
Department for Transport	<a href="http://www.gov.uk/government/organisations/department-for-transport">www.gov.uk/government/organisations/department-for-transport</a>
HM Government Online	<a href="http://www.gov.uk/">www.gov.uk/</a>
HM Revenue & Customs	<a href="http://www.gov.uk/government/organisations/hmrevenue-customs">www.gov.uk/government/organisations/hmrevenue-customs</a>
Northern Ireland Executive	<a href="http://www.northernireland.gov.uk">www.northernireland.gov.uk</a>
Ofgem (The Office of Gas and Electricity Markets)	<a href="http://www.ofgem.gov.uk/">www.ofgem.gov.uk/</a>
The Scottish Government	<a href="http://www.gov.scot/">www.gov.scot/</a>
The Scottish Parliament	<a href="http://www.scottish.parliament.uk/">www.scottish.parliament.uk/</a>
UK Parliament	<a href="http://www.parliament.uk/">www.parliament.uk/</a>
UK Statistics Authority	<a href="http://www.statisticsauthority.gov.uk/">www.statisticsauthority.gov.uk/</a>
Welsh Government	<a href="http://gov.wales/">http://gov.wales/</a>

### Other useful energy related web sites

BP	<a href="http://www.bp.com">www.bp.com</a>
British Geological Survey	<a href="http://www.bgs.ac.uk">www.bgs.ac.uk</a>
Building Research Establishment	<a href="http://www.bre.co.uk">www.bre.co.uk</a>
The Coal Authority	<a href="http://www.gov.uk/government/organisations/thecoal-authority">www.gov.uk/government/organisations/thecoal-authority</a>
Energy Institute	<a href="http://www.energyinst.org/home">www.energyinst.org/home</a>
Energy Networks Association	<a href="http://www.energynetworks.org">www.energynetworks.org</a>
Energy UK	<a href="http://www.energy-uk.org.uk">www.energy-uk.org.uk</a>
Europa (European Union Online)	<a href="http://europa.eu">europa.eu</a>
Eurostat	<a href="http://ec.europa.eu/eurostat">ec.europa.eu/eurostat</a>
Interconnector	<a href="http://www.interconnector.com">www.interconnector.com</a>
International Energy Agency (IEA)	<a href="http://www.iea.org">www.iea.org</a>
International Steel Statistics Bureau (ISSB)	<a href="http://www.issb.co.uk">www.issb.co.uk</a>
National Grid	<a href="http://www.nationalgrid.com">www.nationalgrid.com</a>
Oil & Gas UK	<a href="http://www.oilandgasuk.co.uk">www.oilandgasuk.co.uk</a>
Renewable UK	<a href="http://www.renewableuk.com">www.renewableuk.com</a>
Ricardo - AEA	<a href="http://www.ricardo-aea.com/cms">www.ricardo-aea.com/cms</a>
The Stationery Office	<a href="http://www.tso.co.uk">www.tso.co.uk</a>
UK-AIR: Air Information Resource	<a href="http://uk-air.defra.gov.uk">uk-air.defra.gov.uk</a>
UK Petroleum Industry Association	<a href="http://www.ukpia.com/home.aspx">www.ukpia.com/home.aspx</a>
United Nations Statistics Division	<a href="http://unstats.un.org/unsd/">unstats.un.org/unsd/</a>
US Department of Energy	<a href="http://energy.gov">energy.gov</a>
US Energy Information Administration	<a href="http://www.eia.gov">www.eia.gov</a>



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