## **PRESS NOTICE**





Reference 2015/025 Date 24 September 2015

## STATISTICAL PRESS RELEASE

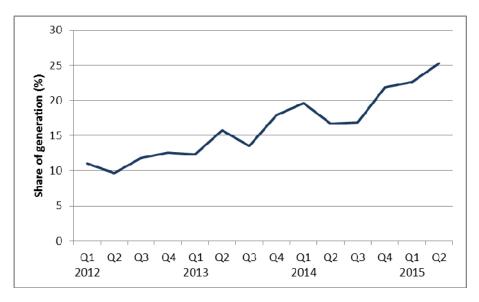
# **UK Energy Statistics, Q2 2015**

Energy Trends and Energy Prices publications are published today 24 September 2015 by the Department of Energy and Climate Change.

Energy Trends covers statistics on energy production and consumption, in total and by fuel, and provides an analysis of the year on year changes. Energy Prices covers prices to domestic and industrial consumers, prices of oil products and comparisons of international fuel prices.

 Total share of electricity generation that came from renewables increased to a record high of 25 per cent in quarter 2 of 2015, due to increased renewable capacity and more favourable weather conditions for renewable generation (higher wind speeds, rainfall and sun hours).
 This is an increase of 8.6 percentage points when compared to a year earlier.

# Share of electricity generation from renewables



The main points for the second quarter of 2015 are:

- Total energy production was 10.8 per cent higher than in the second quarter of 2014. This
  increase is mainly due to rises in oil and gas production, though this was partly due to less
  maintenance activity than a year earlier. The rise also reflects increased renewables output
  following more favourable weather conditions (higher wind speeds, rainfall and sun hours).
- Final consumption was 2.9 per cent higher than in the second quarter of 2014, with domestic consumption 10.8 higher reflecting average temperatures in the second quarter of 2015 being 1.2 degrees Celsius cooler than the same period a year earlier. On a temperature adjusted basis, final energy consumption was down 2.0 per cent, with falls in all sectors except transport which rose by 1.6 per cent.
- Total primary energy consumption rose by 0.6 per cent. However, when adjusted to take
  account of weather differences between the second quarter of 2014 and the second quarter
  of 2015, total primary energy consumption fell by 2.0 per cent continuing the recent downward
  trend.
- Of electricity generated in the second quarter of 2015, gas accounted for 30.2 per cent, whilst coal accounted for 20.5 per cent, nuclear accounted for a further 21.5 per cent. Low carbon generation accounted for 46.8 per cent of generation in Q2 2015, a 7.9 percentage point increase from the same period last year.
- Renewable electricity generation rose by 51.4 per cent in 2015 quarter 2 compared to a year earlier, with increased capacity coupled with high wind speeds, rainfall and solar levels. Solar PV generation rose by 115 per cent, from 1.5 TWh to 3.2 TWh, due to increased capacity, while generation from bioenergy increased by 26.2 per cent, mainly due to the conversion of a second unit of Drax coal power station from coal to dedicated biomass in May 2014. Wind generation rose by 65.2 per cent, due to higher wind speeds and increased capacity from the continued expansion of several large scale offshore wind farms.
- Switching rates increased in Q2 2015, up 9 per cent compared to the levels of a year earlier, based on data provided by Ofgem. An average of over 250,000 households per month switched electricity supplier, with 200,000 households per month switching their gas supplier in the quarter.

For more detailed information on methodology, quality assurance and use of the data, please refer to the methodology notes available by energy sector on the DECC section of the GOV.UK website at: <a href="https://www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics">www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics</a>



The September 2015 edition of Energy Trends also includes articles on:

- Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2014
- Combined Heat and Power in Scotland, Wales, Northern Ireland and the regions of England in 2014
- Large Combustion Plant Directive (LCPD): Running hours during winter 2014/15 and capacity for 2015/16
- Diversity of supply for oil and oil products in OECD countries in 2014
- Coal in 2014
- UK and EU trade of wood pellets

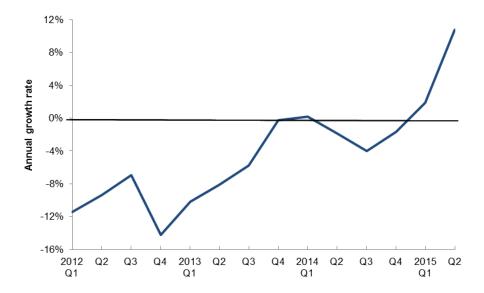
The following statistics are also published today 24 September 2015 by the Department of Energy and Climate Change:

- Sub-national residual fuel use, 2013 www.gov.uk/government/collections/sub-national-consumption-of-other-fuels
- Sub-national total energy use, 2013 <u>www.gov.uk/government/collections/total-final-energy-consumption-at-sub-national-level</u>



# **TOTAL ENERGY: QUARTER 2 2015**

**Total Energy - Production** 



|                                    | <b>2015 Q2</b><br>Million tonnes of oil<br>equivalent | Percentage<br>change on a year<br>earlier |
|------------------------------------|---|---|
| Total production                   | 31.7  | +10.8                                     |
| Oil                                | 12.9  | +14.2                                     |
| Natural gas                        | 10.4  | +12.0                                     |
| Primary electricity <sup>(1)</sup> | 4.8   | +7.4                                      |
| Coal                               | 1.6   | -14.8                                     |

(1) Nuclear and wind & natural flow hydro electricity

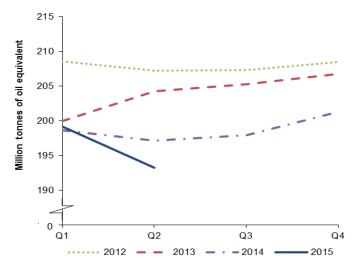
- Total energy production in the second quarter of 2015 was 31.7 million tonnes of oil equivalent, 10.8 per cent high than in the second quarter of 2014.
- Production of oil rose by 14.2 per cent as a result of increased production at a number of fields which were affected by maintenance work in the second quarter of 2014; for similar reasons production of natural gas rose by 12.0 per cent.
- Primary electricity output in the second quarter of 2015 was 7.4 per cent higher than in the second quarter of 2014, within which nuclear electricity output was 3.3 per cent lower, whilst output from wind, solar and natural flow hydro combined was 69 per cent higher than the same period in 2014, due to higher wind speeds and increased solar output.

Total energy quarterly tables ET 1.1 – 1.3 are available on the DECC section of the GOV.UK website at: www.gov.uk/government/publications/total-energy-section-1-energy-trends



# **TOTAL ENERGY: QUARTER 2 2015**

# Total Energy – consumption<sup>(1)</sup>



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

|  | <b>2015 Q2</b><br>Million tonnes of oil<br>equivalent | Percentage<br>change on a year<br>earlier |
|--|---|---|
| Total consumption Unadjusted                                   | 44.2  | +0.6                                      |
| Seasonally adjusted and<br>temperature corrected – annual rate | 193.3   | -2.0                                      |
| Final consumption  | 33.0  | +2.9                                      |

When examining seasonally adjusted and temperature corrected annualised rates:

- Total inland consumption on a primary fuel input basis was 193.3 million tonnes of oil equivalent in the second quarter of 2015, 2.0 per cent lower than the same quarter in 2014.
- Between the second quarter of 2014 and the second quarter of 2015, coal and other solid fuel consumption fell by 25 per cent, driven by decreased coal use in electricity generation.
- Oil consumption rose by 1.3 per cent, whilst gas consumption rose by 0.1 per cent.
- Primary electricity consumption rose by 10.1 per cent.

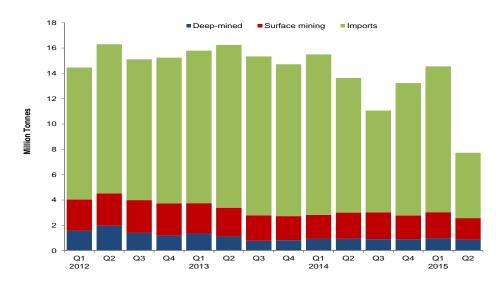
Final consumption was 2.9 per cent higher in the second quarter of 2015 compared to the same quarter a year earlier. The average temperature in the second quarter of 2015 was 1.2 degrees Celsius cooler than the same period a year earlier. On a temperature corrected basis, final energy consumption was down 2.0 per cent over the same period.

Total energy quarterly tables ET 1.1 – 1.3 are available on the DECC section of the GOV.UK website at: <a href="https://www.gov.uk/government/publications/total-energy-section-1-energy-trends">www.gov.uk/government/publications/total-energy-section-1-energy-trends</a>



# **COAL: QUARTER 2 2015**

#### Coal production and imports



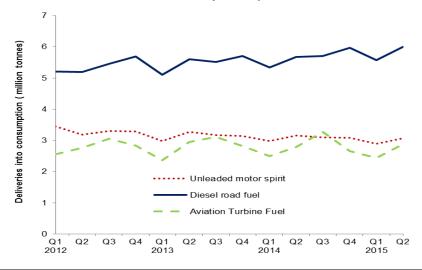
|   | <b>2015 Q2</b><br>Thousand tonnes | Percentage change on a year earlier |
|---|-----------------------------------|-------------------------------------|
| Coal production                                     | 2,574                             | -14.4                               |
| Coal imports  | 5,153                             | -51.5                               |
| Coal demand   | 8,541                             | -21.9                               |
| <ul> <li>Power stations</li> </ul>                  | 6,147                             | -27.2                               |
| <ul> <li>Coke ovens &amp; blast furnaces</li> </ul> | 1,500                             | -9.8                                |
| - Final users                                       | 708                               | +11.1                               |

- Provisional figures for the second quarter of 2015 show that coal production was down 14.4
  per cent on the second quarter of 2014 at 2.6 million tonnes (a record low) due to less
  demand from electricity generators and some mines producing less coal as they approach the
  end of their operating lives.
- Imports of coal in the second quarter of 2015 were 52 per cent lower than in the second quarter of 2014 at 5.2 million tonnes (lowest value for over 15 years), reflecting lower demand from electricity generation.
- Total demand for coal in the second quarter of 2015, at 8.5 million tonnes (a record low), was 22 per cent lower than in the second quarter of 2014. Consumption by electricity generators was down by 27 per cent to 6.1 million tonnes (a record low), due to a number of reasons: the temporary closure of some plants due to market conditions, along with an increase in the carbon price floor from April 2015, the partial closure of Ferrybridge C during 2014, and a second unit of Drax being converted to biomass.
- At the end of June 2015, coal stocks stood at 18.5 million tonnes and were 0.9 million tonnes lower than at the end of March 2015, which was due to power stations using up stocks rather than buying more coal. Coal stocks were 2.1 million tonnes higher than at the end of June 2014.

Coal quarterly tables ET 2.1 – 2.3 are available on the DECC section of the GOV.UK website at: <a href="https://www.gov.uk/government/publications/solid-fuels-and-derived-gases-section-2-energy-trends">www.gov.uk/government/publications/solid-fuels-and-derived-gases-section-2-energy-trends</a>

# **OIL: QUARTER 2 2015**

## Demand for key transport fuels



|   | <b>2015 Q2</b> Thousand tonnes | Percentage change on a year earlier |
|---|--------------------------------|-------------------------------------|
| Primary oil production  | 11,749                         | +14.3                               |
| Refinery production   | 14,533                         | -6.3                                |
| Net imports (all oil)   | 5,900                          | -10.7                               |
| Petroleum demand  | 16,660                         | +1.2                                |
| <ul> <li>Motor spirit (unleaded, including biofuels)</li> </ul> | 3,235                          | -2.8                                |
| <ul> <li>DERV (diesel including biofuels)</li> </ul>            | 6,132                          | +3.9                                |
| - Aviation turbine fuel   | 2,883                          | +3.6                                |

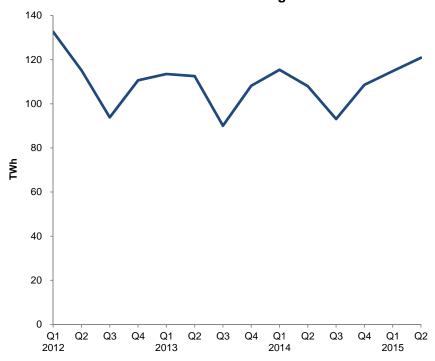
- Indigenous crude oil production was higher by 14.8 per cent in Q2 2015 compared with the same quarter a year ago. This is the highest quarterly increase since production peaked in 1999. Production has been boosted in 2015 by a new field coming online towards the end of 2014. Elsewhere, there was less planned maintenance than in the same guarter of 2014.
- The UK was a net importer for all oil products in the second quarter of 2015 by 5.9 million tonnes, lower than in the same period of 2014 when the UK was a net importer by 6.6 million tonnes. Most of this was the result of lower refinery demand for crude and process oils.
- Production of petroleum products in Q2 2015 was lower by 6.3 per cent lower compared with the same quarter in 2014. There has been a general decline in refinery production for some time. Production was also affected by planned maintenance at a major refinery.
- Overall primary demand for petroleum products in the second quarter of 2014 was 1.2 per cent higher than last year.
- Sales of Motor Spirit (unleaded) decreased by 2.8 per cent in the second quarter of 2015 while sales of DERV (diesel) increased by 3.9 per cent.

Oil quarterly tables ET 3.1 – 3.7 are available on the DECC section of the GOV.UK website at: <a href="https://www.gov.uk/government/publications/oil-and-oil-products-section-3-energy-trends">www.gov.uk/government/publications/oil-and-oil-products-section-3-energy-trends</a>



**GAS: QUARTER 2 2015** 

## Production of natural gas



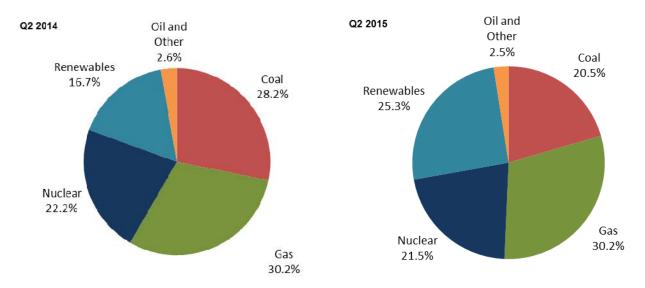
|                          | <b>2015 Q2</b><br><i>TWh</i> | Percentage change on a year earlier |
|--------------------------|------------------------------|-------------------------------------|
| Gas production           | 120.8                        | +12.0                               |
| Gas imports              | 91.8                         | -12.7                               |
| Gas exports              | 38.7                         | -5.7                                |
| Gas demand               | 162.7                        | +5.2                                |
| - Electricity generation | 49.3                         | -2.8                                |
| - Domestic               | 49.7                         | +16.8                               |

- Gross UK production of natural gas in Q2 2015 was 12 per cent higher than in Q2 2014. This
  is the largest increase in gas production since 2000. This increase stands in marked contrast
  to recent years where production has been in general decline since 2000.
- Imports of gas decreased by 12.7 per cent in Q2 2015 compared with the same quarter in 2014, with shipped imports of LNG significantly lower (down 19.2 per cent). This is a result of strong production and reduced demand for exports.
- Overall UK gas demand increased by 5.2 per cent in Q2 2015 compared to Q2 2014. This
  was primarily driven by domestic consumption which was up 16.8 per cent. This reflects the
  cooler temperatures in Q2 2015 versus the previous year. Gas used for electricity generation
  was similar to Q2 2014 (down 2.8 per cent) whilst gas use by the service sector fell by 2.6 per
  cent.

Gas quarterly table ET 4.1 is available on the DECC section of the GOV.UK website at: <a href="https://www.gov.uk/government/publications/gas-section-4-energy-trends">www.gov.uk/government/publications/gas-section-4-energy-trends</a>



# **ELECTRICITY: QUARTER 2 2015**



|                       | <b>2015 Q2</b><br><i>TWh</i> | Percentage change on a year earlier |
|-----------------------|------------------------------|-------------------------------------|
| Electricity           |                              | ,                                   |
| Generated from        |                              |                                     |
| Coal                  | 16.14                        | -27.4                               |
| Nuclear               | 16.92                        | -3.3                                |
| Gas                   | 23.79                        | 0                                   |
| Renewables            | 19.94                        | +51.4                               |
| Total                 | 78.75                        | -0.1                                |
| Supplied to           |                              |                                     |
| Industry              | 22.69                        | +0.8                                |
| Domestic              | 24.16                        | -0.6                                |
| Other final consumers | 25.00                        | +2.8                                |
| All                   | 71.85                        | +1.0                                |

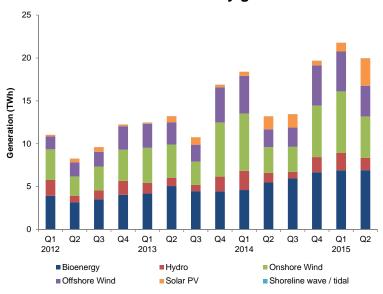
- Fuel used by generators in the second quarter of 2015 was 4.0 per cent lower than in the second quarter of 2014.
- Generation from coal in the second quarter of 2015 fell by 27.4 per cent, while gas was unchanged when compared with a year earlier. Nuclear fell by 3.3 per cent. Renewables generation increased by 51.4 per cent.
- Low carbon generation accounted for 46.8 per cent of generation in Q2 2015, a 7.9 percentage point increase from the same period last year.
- Total electricity generated in the second quarter of 2015 was 0.1 per cent lower than a year earlier.
- Final consumption of electricity provisionally increased by 1.0 per cent in the second quarter of 2015. Domestic use decreased by 0.6 per cent.

Electricity quarterly tables ET 5.1 – 5.2 are available on the DECC section of the GOV.UK website at: www.gov.uk/government/publications/electricity-section-5-energy-trends



# **RENEWABLES: QUARTER 2 2015**

## Renewable electricity generation



|                                  | <b>2015 Q2</b><br>TWh | Percentage change on a year earlier |
|----------------------------------|-----------------------|-------------------------------------|
| Renewable electricity generation |                       |                                     |
| Onshore wind                     | 4.85                  | +61.5                               |
| Offshore wind                    | 3.57                  | +70.4                               |
| Hydro                            | 1.42                  | +27.7                               |
| Solar PV                         | 3.19                  | +114.8                              |
| Bioenergy (inc. co-firing)       | 6.92                  | +26.2                               |
| All renewables                   | 19.95                 | +51.4                               |

- Renewables' share of electricity generation increased from 16.7 per cent in the second quarter of 2014, to 25.3 per cent in the second quarter of 2015.
- Renewable electricity generation was 19.9 TWh in the second quarter of 2015, an increase of 51.4 per cent on the 13.2 TWh in the second quarter of 2014. Solar PV showed the highest absolute increase in generation, by 114.8 per cent, from 1.5 TWh in 2014 Q2 to 3.2 TWh in 2015 Q2. Bioenergy increased by 26.2 per cent, from 5.5 TWh in 2014 Q2 to 6.9 TWh, with increased biomass generation from the full conversion of the second unit at Drax from enhanced co-firing to dedicated biomass. Generation from both onshore and offshore wind rose, by 61.5 per cent and 70.4 per cent respectively, due to higher wind speeds and increased capacity.
- Renewable electricity capacity was 28.4 GW at the end of the second quarter of 2015, a 25.7 per cent increase (5.8 GW) on a year earlier.
- Renewable transport: Liquid biofuels represented 3.0 per cent of petrol and diesel consumed in road transport in the second quarter of 2015.

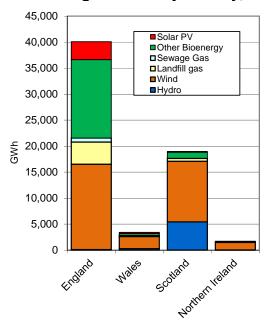
Renewables quarterly tables ET 6.1 – 6.2 are available on the DECC section of the GOV.UK website at: www.gov.uk/government/publications/renewables-section-6-energy-trends



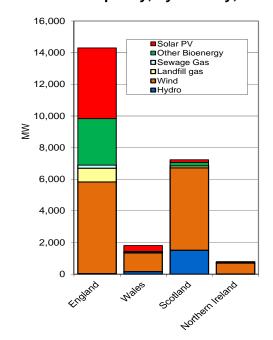
#### RENEWABLE ELECTRICITY IN THE REGIONS

A special feature in the September 2015 edition of Energy Trends looks at renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2014. The article covers all renewables including those that are not eligible for the Renewables Obligation or Feed in Tariffs. It updates a similar article that was published in September 2014. The main features of the latest statistics are:

# Renewable generation by country, 2014



## Renewable capacity, by country, 2014



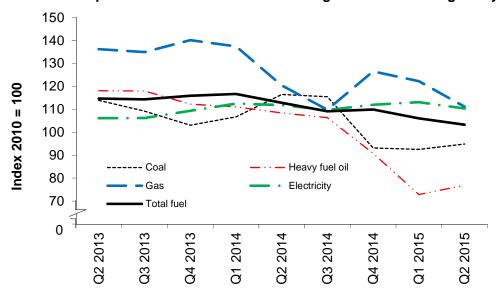
- In capacity terms, at the end of 2014, England had 58 per cent of UK capacity, with 29 per cent in Scotland. Due to the different mix of technologies between the two countries – with England having greater bioenergy capacity, and Scotland with more hydro - generation from renewable sources in England represented 62 per cent of UK output, compared to 29 per cent in Scotland.
- Between 2013 and 2014, capacity in England increased by 28 per cent, including a 86 per cent increase in PV capacity, and a 15 per cent increased in other bioenergy capacity. Over the same time period, capacity in Scotland rose by 9 per cent including increases of 25 per cent and 11 per cent for PV and wind capacity respectively. Overall capacity in Northern Ireland increased by 23 per cent, and in Wales by 54 per cent.
- In 2014, England had 45 per cent of the UK's wind capacity, and produced 51 per cent of the output; Scotland had 40 per cent of wind capacity, but produced 36 per cent of generation; Wales had 9 per cent of capacity and 7 per cent of generation, with Northern Ireland having 5 per cent of both capacity and generation.
- In England, the region with the largest renewable capacity is the East, where 52 per cent of its capacity is from wind, and 33 per cent from solar PV. When combined, the South East, Yorkshire and the Humber and East regions account for over half of England's renewable generating capacity. London and the North East have the lowest capacities.
- In England, the regions with the largest generation from wind (including offshore wind with landfall in that region) were the East, North West, South East and East Midlands; together they comprised 85 per cent of the total for England. The East of England, Yorkshire and the Humber, and West Midlands provided 80 per cent of generation from other bioenergy (mainly biomass from the converted coal stations in those regions).



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# **INDUSTRIAL PRICES: QUARTER 2 2015**

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



| Fuel prices index in real terms <sup>(1)</sup> 2010=100 | 2015 Q2 | Percentage change on a year earlier |
|---|---------|-------------------------------------|
| Coal  | 94.8    | -18.6                               |
| Heavy fuel oil  | 76.9    | -29.1                               |
| Gas   | 111.1   | -7.7                                |
| Electricity   | 110.3   | -1.4                                |
| Total fuel  | 103.3   | -8.5                                |

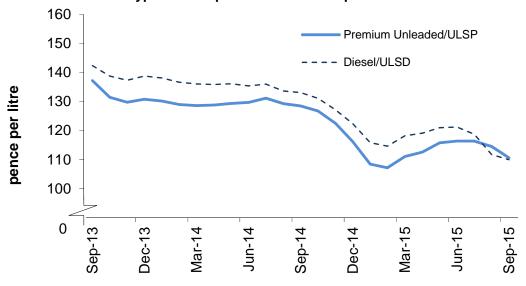
- (1) Deflated using the GDP implied deflator. Includes estimates of the average Climate Change Levy (CCL) paid.
  - Average industrial gas prices, including CCL were 7.7 per cent lower in real terms in Q2 2015 compared to Q2 2014, whilst prices excluding CCL were 8.0 per cent lower.
  - Average industrial electricity prices were 1.4 per cent lower including, and 1.1 per cent lower excluding, CCL in real terms, in Q2 2015 compared to Q2 2014.
  - Average coal prices were 19 per cent lower in real terms including CCL and 20 per cent lower excluding CCL in Q2 2015 compared to Q2 2014. Heavy fuel oil prices were 29 per cent lower in real terms than a year ago.
  - For the period January to June 2015, prices for industrial electricity consumers including taxes
    were above the EU15 median for all consumers. UK industrial gas prices including taxes were
    amongst the lowest in the EU15 for all size bands of consumer.

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



## **ROAD TRANSPORT FUEL PRICES: QUARTER 2 2015**

#### Typical retail prices of road transport fuels



| Retail prices of petroleum products | Mid September 2015 <sup>(1)</sup> Pence per litre | Percentage change on a year earlier |
|-------------------------------------|---|-------------------------------------|
| Unleaded petrol (2)                 | 110.6   | -17.9                               |
| Diesel (2)                          | 109.9   | -23.1                               |

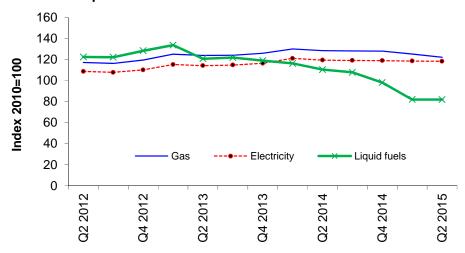
- (1) Prices are for ultra low sulphur versions of these fuels.
- (2) Prices are provisional estimates.
  - In mid September 2015, a litre of unleaded petrol was on average 110.6 pence per litre, 18 pence per litre lower than a year earlier and 31 pence per litre lower than the high reached in April 2012.
  - In mid September 2015, diesel was on average 109.9 pence per litre, 23 pence per litre lower than a year earlier and 38 pence per litre below the peak seen in April 2012.
  - In August 2015, the UK retail price for petrol was ranked highest in the EU, and UK diesel prices were also the highest in the EU.
  - The price difference between diesel and petrol in September 2014 was 0.7 pence per litre, with diesel cheaper than petrol for the frst time since June 2001.

Road transport fuel prices tables are available on the DECC section of the GOV.UK website at: <a href="https://www.gov.uk/government/collections/road-fuel-and-other-petroleum-product-prices">www.gov.uk/government/collections/road-fuel-and-other-petroleum-product-prices</a>



# **DOMESTIC PRICES: QUARTER 2 2015**

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



| Consumer price index fuel components in real terms (1) 2010=100 | 2015 Q2 | Percentage change on a year earlier |
|---|---------|-------------------------------------|
| Solid fuels   | 104.7   | -0.4                                |
| Gas   | 122.2   | -4.9                                |
| Electricity   | 118.4   | -0.9                                |
| Liquid fuels  | 81.9    | -25.8                               |
| Total domestic fuel   | 119.0   | -3.7                                |

- (1) Deflated using the GDP implied deflator. The original source of the indices is ONS.
  - Q2 2015 data shows that the price paid for all domestic fuel by household consumers fell by 3.7 per cent in real terms between Q2 2014 and Q2 2015, and by 1.3 per cent between Q1 and Q2 2015.
  - Domestic electricity prices, including VAT, in Q2 2015 were 0.9 per cent lower in real terms than in Q2 2014. Prices were 0.2 per cent lower than in Q1 2015.
  - The price of domestic gas, including VAT, fell by 4.9 per cent in real terms between Q2 2014 and Q2 2015, and by 2.4 per cent between Q1 and Q2 2015.
  - The price of liquid fuels fell by 26 per cent between Q2 2014 and Q2 2015 and by 0.1 per cent between Q1 and Q2 2015.
  - For the period January to June 2015, prices for medium domestic gas and electricity consumers, including tax, were the third lowest and eighth highest in the EU15 respectively.

#### Switching levels

 Switching rates increased in Q2 2015, up 9 per cent compared to the levels of a year earlier, based on data provided by Ofgem. An average of over 250,000 households per month switched electricity supplier, with 200,000 households per month switching their gas supplier in the quarter.

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



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#### **Notes to editors**

- 1. More detailed figures of United Kingdom energy production and consumption and of energy prices, for the second quarter of 2015 are given in the September 2015 editions of ENERGY TRENDS and ENERGY PRICES respectively, the Department's statistical bulletins on energy, released on 24 September 2015.
- 2. Energy Trends and the Energy Prices bulletins, published quarterly, are available on the DECC section of the GOV.UK website at: <a href="https://www.gov.uk/government/collections/quarterly-energy-prices">www.gov.uk/government/collections/quarterly-energy-prices</a>
- 3. Articles featured in Energy Trends are also available on the DECC section of the GOV.UK website at: www.gov.uk/government/collections/energy-trends-articles
- 4. More detailed annual data on energy production and consumption for the years 2010 to 2014 are available in the DIGEST OF UNITED KINGDOM ENERGY STATISTICS 2015, published by the Stationery Office on 30 July 2015, priced £75. All information contained in the Digest is available on the DECC section of the GOV.UK website at: <a href="https://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes">www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes</a>

