

## PRESS NOTICE



Department  
of Energy &  
Climate Change



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## STATISTICAL PRESS RELEASE

# UK Energy Statistics

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Energy Trends and Quarterly Energy Prices publications are published today 27 March 2014 by the Department of Energy and Climate Change. The publications cover new data for the fourth quarter of 2013 and thus provisional annual data for 2013. This press release focuses on the 2013 annual data.

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

The key points from 2013 are:

- Total energy production was 6.6 per cent lower than in 2012, due to record low production levels in coal as a number of mines closed, and oil and gas production as a result of maintenance activity, as well as longer-term decline on the UK Continental Shelf.
- Imports in 2013 were at a record high, with exports at their lowest level since 1980. Net import dependency rose to 47 per cent, the highest level since 1975 and for the first time since 1984 (the miner's strike) the UK imported more petroleum products than it exported.
- Total primary energy consumption for energy uses fell by 0.6 per cent from 2012. When adjusted to take account of weather differences between 2012 and 2013, primary consumption fell by 1.8 per cent. Final energy consumption was 0.5 per cent higher than in 2012, but down 0.3 per cent on a temperature corrected basis.
- Of electricity generated in 2013, coal accounted for 36.3 per cent (a decrease of 3.1 percentage points on 2012) and gas 26.8 per cent (a decrease of 0.7 percentage points on 2012), mainly due to high gas prices.
- Renewable generation increased 28 per cent and its share of generation by 3½ percentage points on 2012, to a record 15 per cent. Capacity grew by 25 per cent.
- Average annual household standard electricity bills (fixed consumption of 3,800 kWh per annum) across all payment types in 2013 are £35 higher than in 2012 (up 6.5 per cent to £577), and average gas bills (fixed consumption of 15,000 kWh per annum) across all payment types are £43 higher (up 6.3 per cent to £729).

Other highlights from 2013 include:

- Oil production was 8.8 per cent lower than in 2012, the lowest annual production volume since our current reporting system began. Production of petroleum products was down 5.2 per cent, the closure of Coryton in July 2012 and disruptions at other refineries were key factors as well as increasing competition from foreign imports.
- Natural gas production was 6.2 per cent lower than in 2012 and at its lowest level since 1984. Gas exports and imports were, respectively, 24 per cent and 2.5 per cent lower than in 2012.
- Coal production was 25 per cent lower than in 2012 and at a record low. Coal imports were 10.1 per cent higher and at their highest level since 2006. Generators' demand for coal was lower by 8.8 per cent. Coal stocks were 10.9 per cent higher.
- Within final energy consumption there were rises in the domestic and services sectors but falls in the industrial and transport sectors. On a seasonally and temperature adjusted basis final energy consumption was just under 0.3 per cent lower than in 2012.
- Electricity consumption was 0.5 per cent lower than in 2012 and at its lowest level since 1998.
- Electricity generated in 2013 fell by 2.0 per cent, from 363.8 TWh a year earlier to 356.7 TWh.
- Low carbon electricity's share of generation increased from 30.7 per cent in 2012 to 34.6 per cent in 2013, due to higher renewables and nuclear generation.
- Nuclear's share of generation increased by 0.4 per cent on 2012, to 19.8 per cent of the total. Hydro generation decreased by 10.7 per cent on 2012 as a result of lower rainfall in the main hydro areas, whilst wind rose by 42 per cent, of which offshore wind rose by 46 per cent, due to increased capacity. Overall hydro and wind generation was 31 per cent higher than in 2012.
- UK domestic gas and electricity prices were the lowest and fifth lowest in the EU15 respectively.



The March 2014 edition of Energy Trends also includes articles on:

- Updates to DECC domestic energy bill consumption levels and bill estimates
- Domestic energy bills in 2013: The impact of variable consumption
- Physical gas flows across Europe and diversity of gas supply in 2012
- Supermarket share of retail sales
- Seasonal variations in electricity demand
- Changes to total energy tables in Energy Trends
- UKCS capital expenditure survey 2013

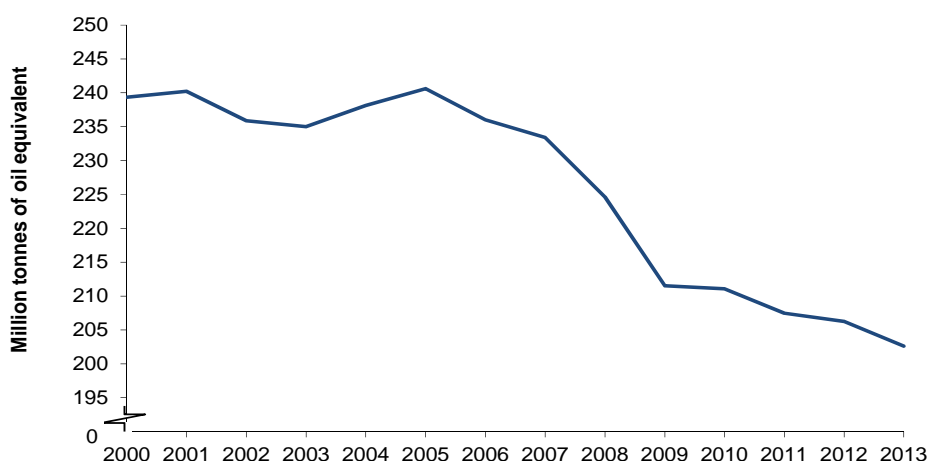
The following are also published today 27 March 2014 by the Department of Energy and Climate Change:

- Greenhouse Gas Emissions, 2013 provisional figures  
[www.gov.uk/government/publications/provisional-uk-emissions-estimates](http://www.gov.uk/government/publications/provisional-uk-emissions-estimates)
- Electricity and gas consumption at middle layer super output area (MSOA) and intermediate geography zone (IGZ) level during 2012  
[www.gov.uk/government/collections/mlsoa-and-lssoa-electricity-and-gas-estimates](http://www.gov.uk/government/collections/mlsoa-and-lssoa-electricity-and-gas-estimates)



## TOTAL ENERGY: 2013

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



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

	2013 Million tonnes of oil equivalent	Percentage change on a year earlier
Total production	114.0	-6.6
Total consumption <i>Unadjusted</i>	205.1	-0.6
<i>Seasonally adjusted and temperature corrected –annual rate</i>	202.6	-1.8
Final energy consumption	149.2	+0.7

- Total energy production in 2013 was 114.0 million tonnes of oil equivalent, 6.6 per cent lower than in 2012, due to significant falls in the production of coal, oil and gas.

When examining seasonally adjusted and temperature corrected annualised rates:

- Total inland consumption on a primary fuel input basis was 202.6 million tonnes of oil equivalent in 2013, 1.8 per cent lower than in 2012.
- Between 2012 and 2013 coal and other solid fuel consumption fell by 5.4 per cent, oil consumption fell by 1.7 per cent, gas consumption fell by 3.6 per cent.
- Bioenergy and waste consumption rose by 17.8 per cent, reflecting higher use in electricity generation, and primary electricity consumption, from nuclear and non-thermal renewables rose by 5.1 per cent.

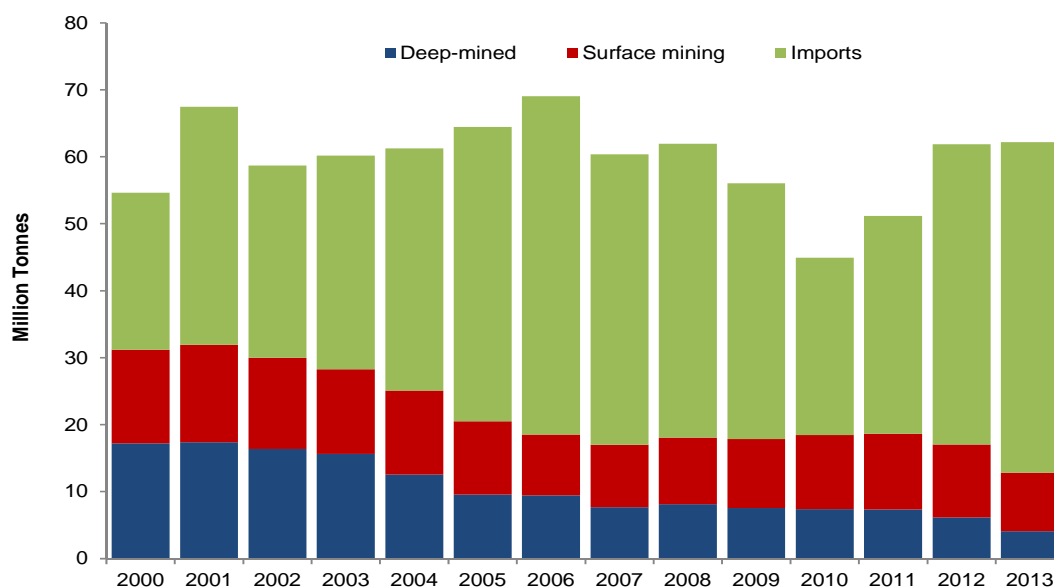
Final energy consumption (excluding non-energy use) was 0.5 per cent higher in 2013, reflecting the slightly cooler weather, with domestic consumption up 1.8 per cent. On a temperature corrected basis, final energy consumption was down 0.3 per cent, with domestic consumption down 1.6 per cent.

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](http://www.gov.uk/government/publications/total-energy-section-1-energy-trends)



## COAL: 2013

### Coal production and imports



	<b>2013</b> <i>Million tonnes</i>	Percentage change on a year earlier
Coal production	12.84	-24.7
Coal imports	49.35	+10.1
Coal demand	60.06	-6.5
- Power stations	50.09	-8.8
- Coke ovens & blast furnaces	6.56	+8.2
- Final users	2.39	+3.1

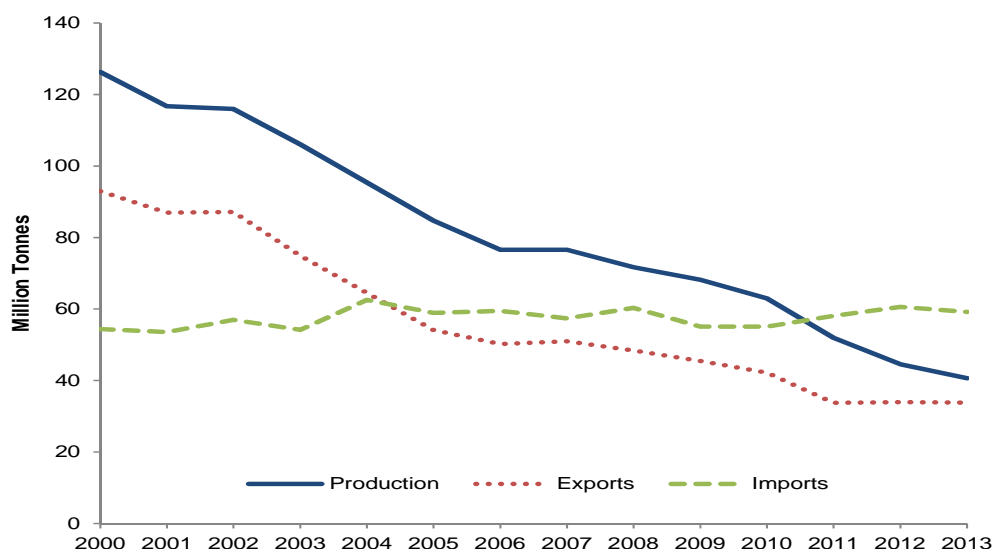
- Provisional figures for 2013, as a whole, show that coal production (including an estimate for slurry) fell to a new record low of 12.8 million tonnes, 25 per cent down on 2012. This was due to a number of collieries/companies closing, and geological conditions at some of the remaining mines. Deep mined production was down 34 per cent at 4.1 million tonnes, the lowest on record due to operational issues at a number of sites. Surface mine production was down by 15 per cent.
- Imports of coal in 2013 as a whole were 10.1 per cent up on 2012 at 49.4 million tonnes, which was the highest level since 2006. This level reflects the declining contribution of domestic production in meeting demand from electricity generators.
- Total demand for coal in 2013 was 60.1 million tonnes, 6.5 per cent lower than in 2012, with consumption by electricity generators down by 8.8 per cent (-4.8 million tonnes). Coal used in blast furnaces was 43 per cent higher in 2013 than 2012 due to the re-opening of Teesside steelworks in April 2012, which has gradually increased operations, and the opening of a new furnace at Port Talbot in February 2013.
- Coal stocks showed a seasonal fall of 1.1 million tonnes during the fourth quarter of 2013 and stood at 14.4 million tonnes, 1.4 million tonnes higher than at the end of December 2012.

Coal quarterly tables ET 2.1 – 2.3 are available on the DECC section of the gov.uk website at: [www.gov.uk/government/publications/solid-fuels-and-derived-gases-section-2-energy-trends](http://www.gov.uk/government/publications/solid-fuels-and-derived-gases-section-2-energy-trends)



## OIL: 2013

### Production and trade of crude oil and NGLs



	2013 Million tonnes	Percentage change on a year earlier
Oil production	40.6	-8.8
Primary demand	65.1	-5.4
Net imports (primary oil)	25.3	-4.8
Net Imports (oil products)	2.0	(+)
Refinery production	66.8	-5.2
Refinery demand	65.5	-1.6
- Motor spirit	12.6	-5.0
- DERV fuel	21.9	+1.8
- Aviation turbine fuel	11.1	-1.2

(+) percentage change greater than 100 per cent

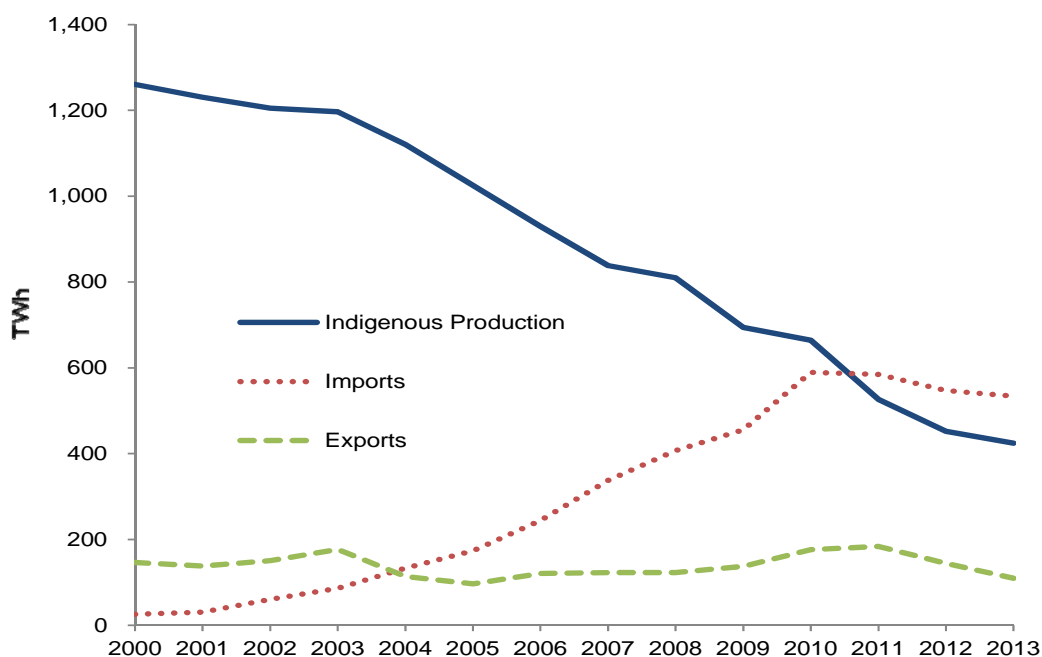
- Indigenous production of primary oils (crude, NGL's & feedstocks) decreased by 8.8 per cent (3.9 million tonnes) compared with 2012; this follows the general long term decline with production decreasing by around 8 per cent on average per annum since 2000.
- Overall demand for primary oils in 2013 was 5.4 per cent lower than last year and indigenous production of petroleum products was 5.2 per cent lower in 2013 compared with 2012. The closure of the Coryton refinery in July 2012 is a contributory factor as Coryton was still operational in the first half of 2012 as well as disruptions at other refineries in 2013.
- Reduced refinery production has led to increased imports of petroleum products (up by 8.6 per cent in 2013) and decreased exports (down by 3.2 per cent). This led to the UK becoming a net importer of petroleum products for the first time since 1984 (the miner's strike resulted in high demand for fuel oils for power generation to substitute for coal).
- In 2013 total deliveries of key transport fuels decreased by 0.9 compared with 2012. Motor Spirit deliveries decreased by 5.0 per cent, aviation fuel was down by 1.2 per cent, while DERV deliveries increased by 1.8 per cent.

Oil quarterly tables ET 3.1 – 3.7 are available on the DECC section of the gov.uk website at: [www.gov.uk/government/publications/oil-and-oil-products-section-3-energy-trends](http://www.gov.uk/government/publications/oil-and-oil-products-section-3-energy-trends)



## GAS: 2013

### Production and trade of natural gas



	2013 TWh	Percentage change on a year earlier
Gas production	424.2	-6.2
Gas imports	533.6	-2.5
Gas exports	109.7	-23.9
Gas demand	850.1	-0.8
- Electricity generation	199.1	-6.8
- Domestic	347.7	+2.5

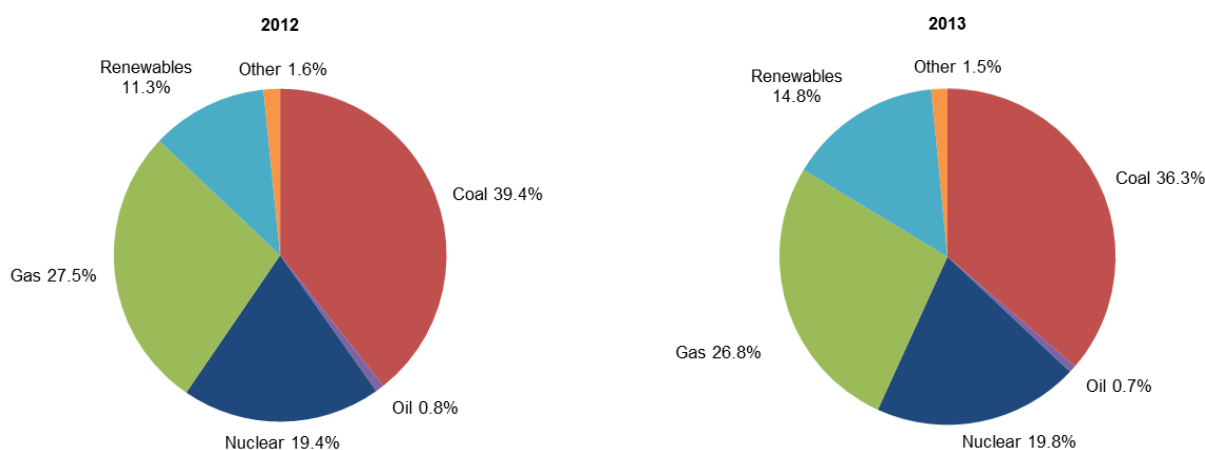
- In 2013, gross production of natural gas was 6.2 per cent lower than in 2012 and, at around 424 TWh, was the lowest production since 1984. This reflects the continuing long-term decline in UK natural gas production.
- Gas exports and imports were, respectively, 23.9 per cent and 2.5 per cent lower than in 2012. LNG imports were 31.6 per cent lower, whereas pipeline imports were 9.8 per cent higher in 2013 versus 2012. The trade position for 2013 showed net imports to be 5.1 per cent higher in 2013 versus 2012.
- Gas demand fell slightly in 2013 versus 2012, down by 0.8 per cent. Gas used for electricity generation continued to fall in 2013 due to the switch away from gas to coal for generation. Domestic and other final users' gas consumption was higher in 2013, driven by a cooler first quarter in 2013 versus 2012.

Gas quarterly table ET 4.1 is available on the DECC section of the gov.uk website at: [www.gov.uk/government/publications/gas-section-4-energy-trends](http://www.gov.uk/government/publications/gas-section-4-energy-trends)



## ELECTRICITY: 2013

### Electricity generated



	2013 <i>TWh</i>	Percentage change on a year earlier
<b>Electricity Generated from</b>		
Coal	129.4	-9.6
Nuclear	70.6	+0.3
Gas	95.7	-4.3
Renewables	52.8	+28.0
Total	356.7	-2.0
<b>Supplied to</b>		
Industry	97.4	-0.4
Domestic	113.2	-1.3
Other final consumers	105.3	+0.2
All	316.0	-0.5

- Generation from coal in 2013 fell by 9.6 per cent, while gas fell by 4.3 per cent compared with a year earlier due to high gas prices. Generation from renewables was up 28.0 per cent, mainly due to increased wind capacity.
- In 2013, coal accounted for 36.3 per cent of generation. Gas's share declined to 26.8 per cent, its lowest also since 1996. Nuclear's share increased marginally to 19.8 per cent, with renewables accounting for 14.8 per cent of generation.
- Low carbon generation (including renewables) accounted for 34.6 per cent of generation in 2013, compared to 30.7 per cent in 2012.
- Total electricity generated in 2013 was 2.0 per cent lower than a year earlier, whilst imports made up 4.1 per cent of electricity supplied.
- Fuel used by generators in 2013 was 4.1 per cent lower than in 2012.
- Final consumption of electricity provisionally fell by 0.5 per cent in 2013. Domestic use decreased by 1.3 per cent.

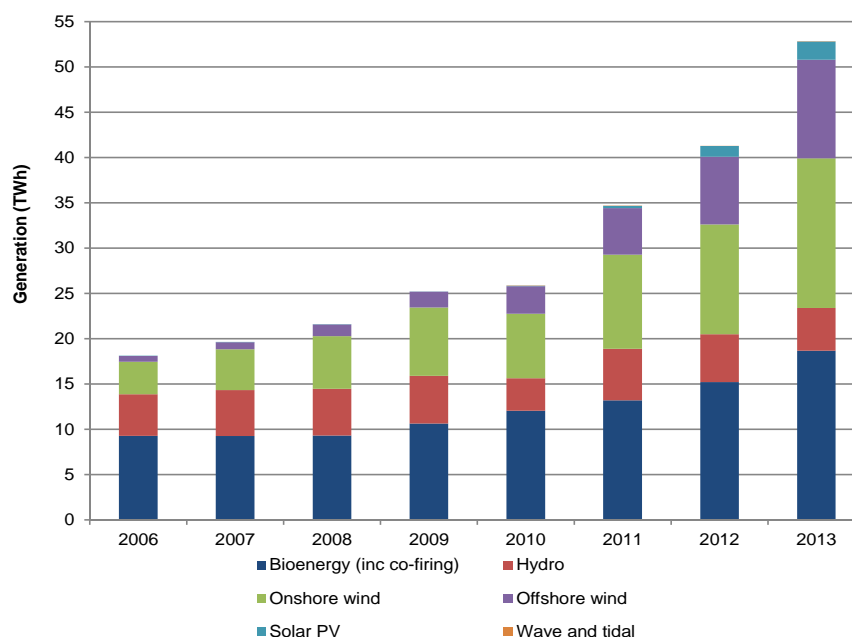
Electricity quarterly tables ET 5.1 – 5.2 are available on the DECC section of the gov.uk website at: [www.gov.uk/government/publications/electricity-section-5-energy-trends](http://www.gov.uk/government/publications/electricity-section-5-energy-trends)





## RENEWABLES: 2013

### Renewable electricity generation



	2013 TWh	Percentage change on a year earlier
Renewable electricity generation		
Onshore wind	16.5	+36.4
Offshore wind	10.9	+45.8
Hydro	4.7	-10.7
Solar PV	2.0	+69.6
Bioenergy (inc. co-firing)	18.7	+22.8
All renewables	52.8	+28.0

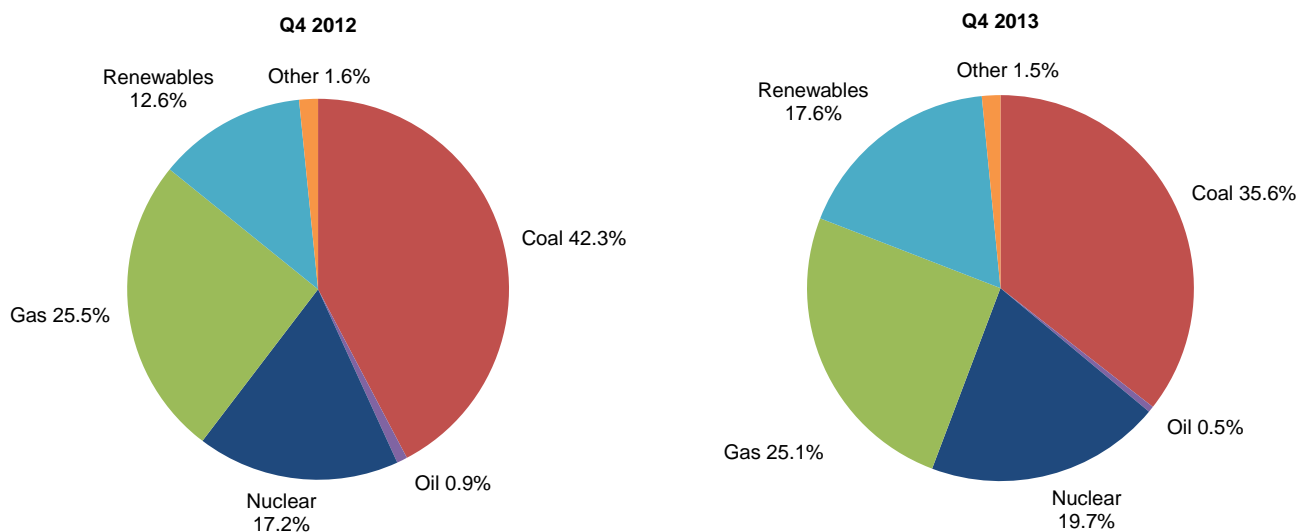
- Renewable electricity generation was 52.8 TWh in 2013, an increase of 28.0 per cent on the 41.3 TWh recorded in 2012. Offshore wind generation rose by 45.8 per cent and onshore wind by 36.4 per cent, due to increased capacity, as well as higher wind speeds. Generation from hydro fell by 10.7 per cent compared with a year earlier, due to lower rainfall in catchment areas in 2013. Generation from bioenergy was up 22.8 per cent due to increased capacity from conversions.
- Renewables' share of electricity generation increased from 11.3 per cent in 2012 to 14.8 per cent in 2013.
- Renewable electricity capacity was 19.4 GW at the end of 2013, a 25.1 per cent increase (3.9 GW) on a year earlier.
- Renewable transport: Liquid biofuels represented 3.5 per cent of petrol and diesel consumed in road transport in 2013, a 0.4 percentage point rise on the share in 2012.

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](http://www.gov.uk/government/publications/renewables-section-6-energy-trends)



## MAIN POINTS FOR THE FOURTH QUARTER OF 2013

### Electricity generated



- Total energy production was broadly unchanged when compared with the fourth quarter of 2012; however, production in Q4 2012 was low as a result of a number of issues which affected oil and gas production.
- Total primary energy consumption for energy uses fell by 5.0 per cent. However, when adjusted to take account of weather differences between the fourth quarter of 2012 and the fourth quarter of 2013, primary energy consumption fell by 0.5 per cent.
- Final energy consumption (excluding non-energy use) was 5.4 per cent lower than in the fourth quarter of 2012. Domestic consumption fell by 12.1 per cent, with average temperatures being 1.4 degrees warmer than 2012. On a seasonally and temperature adjusted basis final energy consumption fell by 0.6 per cent.
- Of electricity generated in the fourth quarter of 2013, gas accounted for 25.1 per cent (its lowest share in the last 15 years) due to high gas prices, whilst coal accounted for 35.6 per cent. Nuclear generation accounted for 19.7 per cent of total electricity generated in the fourth quarter of 2013, up from the 17.2 per cent share in the fourth quarter of 2012, due to increased availability.
- Renewables' share of electricity generation increased to a new record of 17.6 per cent from the 12.6 per cent share in the fourth quarter of 2012. Due to high wind speeds and increased capacity, onshore wind generation rose by 63 per cent and offshore wind by 42 per cent. Overall renewable generation was up 33 per cent compared to the same quarter in 2012.

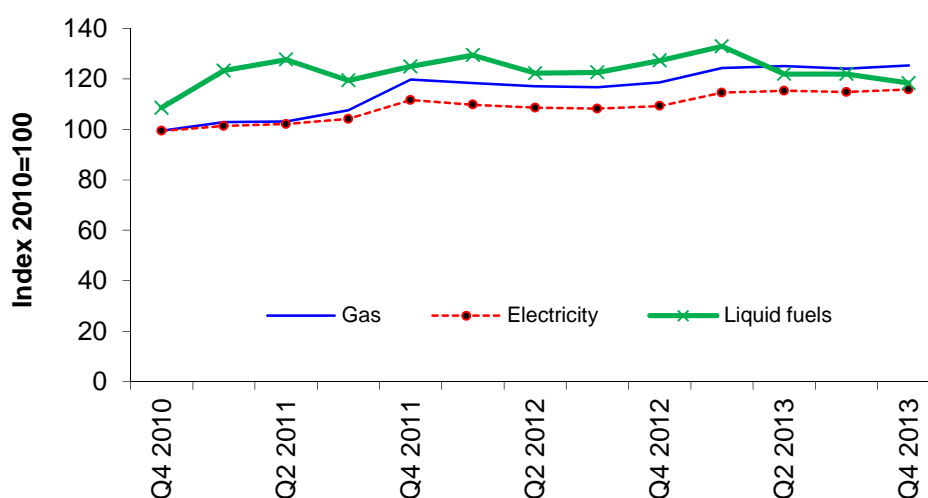
Quarterly tables are available on the DECC section of the gov.uk website at:

[www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics](http://www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics)



## DOMESTIC PRICES: QUARTER 4 2013

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



Consumer price index fuel components in real terms <sup>(1)</sup> 2010=100	2013 Q4	Percentage change on a year earlier
Solid fuels	104.7	+1.2
Gas	125.3	+5.7
Electricity	115.8	+6.0
Liquid fuels	118.3	-7.0
Total domestic fuel	120.7	+5.2

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

- Q4 2013 data shows that the price paid for all domestic fuel by household consumers has risen by 5.2 per cent in real terms between Q4 2012 and Q4 2013, and by 0.8 per cent between Q3 and Q4 2013.
- Domestic electricity prices, including VAT, in Q4 2013 were 6.0 per cent higher in real terms than in Q4 2012, and 0.9 per cent higher than in Q3 2013.
- The price of domestic gas, including VAT, rose by 5.7 per cent in real terms between Q4 2012 and Q4 2013 and by 1.0 per cent between Q3 and Q4 2013.
- All 6 of the major energy suppliers announced price rises for both electricity and gas towards the end of 2013. These took effect between quarter 4 of 2013 and quarter 1 of 2014. Following a Government announcement on action on bills in December, some suppliers have reduced prices from the start of 2014.

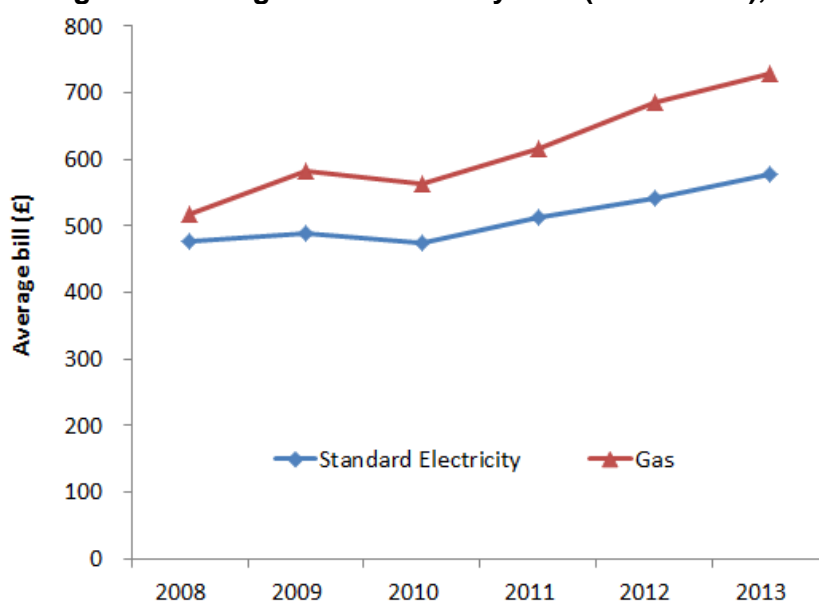
Domestic prices tables are available on the DECC section of the gov.uk website at:

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



## DOMESTIC ENERGY BILLS: 2013

Average domestic gas and electricity bills (cash terms), 2008 to 2013



Average annual domestic fuel bills <sup>(1)</sup>

	2012	2013	Percentage change, cash terms	Percentage change, real terms <sup>(2)</sup>
Gas <sup>(3)</sup>	£686	£729	+6.3	+4.6
Electricity	£542	£577	+6.5	+5.0
Total <sup>(4)</sup>	£1,228	£1,306	+6.4	+4.7

(1) Average annual bills for domestic customers weighted by the proportion of customers on the different payment methods, which include standard credit, direct debit and pre-payment meter. Bills relate to the total bill received in the calendar year and are in cash terms.

(2) To estimate the percentage change in real terms bills were deflated using the GDP (implied) deflator.

(3) In March 2014 DECC revised the fixed levels of household consumption used in bill estimates. Gas bill estimates now assume annual consumption of 15,000 kWh rather than 18,000 kWh, and electricity bill estimates assume 3,800 kWh rather than 3,300 kWh. Full details of the methodology change are available in a March 2014 [Energy Trends article](#).

(4) The average total gas and electricity bill presented should be taken as broadly indicative only. It is not based on individual customers, but is simply the sum of the averages for electricity and gas.

- The average electricity bill in 2013, based on a fixed consumption level of 3,800 kWh/year, increased by £35 to £577. Bills for customers on standard credit tariffs averaged £602, on direct debit £557 and on pre-payment £605.
- For gas, the average 2013 domestic gas bill, based on a fixed consumption level of 15,000 kWh/year, rose by £43 to £729. Bills for customers on standard credit tariffs averaged £767, on direct debit £701 and on pre-payment £758.
- For the period July to December 2013, prices for medium domestic gas and electricity consumers, including tax, were the lowest and fifth lowest in the EU15 respectively.

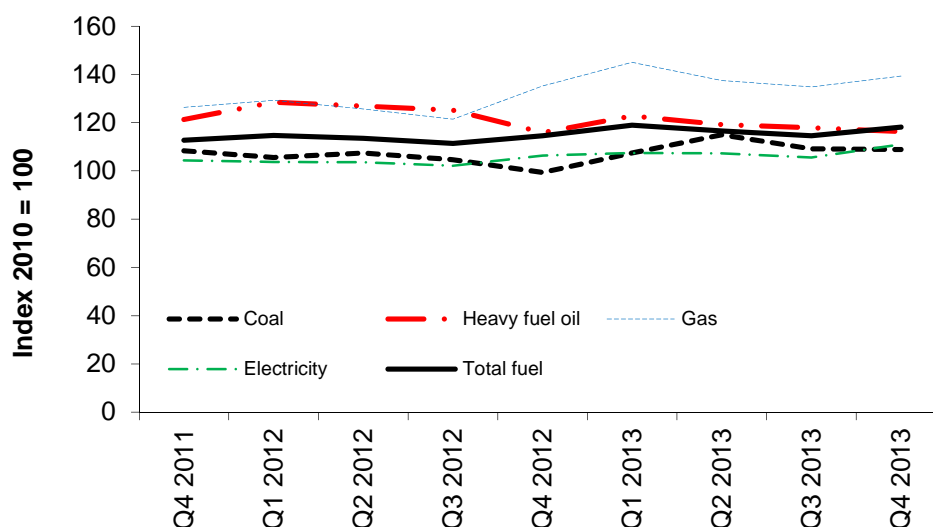
Domestic prices tables are available on the DECC section of the gov.uk website at:

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



## INDUSTRIAL PRICES: QUARTER 4 2013

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



Fuel prices index in real terms <sup>(1)</sup> 2010=100	2013 Q4	Percentage change on a year earlier
Coal	108.9	+9.5
Heavy fuel oil	116.4	+0.4
Gas	139.3	+3.0
Electricity	111.0	+4.3
Total fuel	118.2	+3.2

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

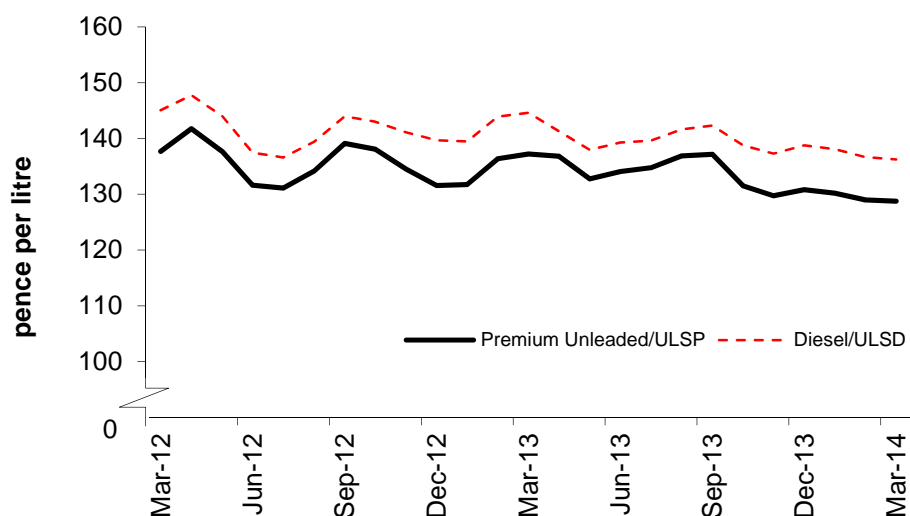
- Average industrial gas prices, including CCL, were 3.0 per cent higher in real terms in Q4 2013 compared to Q4 2012, whilst prices excluding CCL were 3.1 per cent higher.
- Average industrial electricity prices were 4.3 per cent higher including CCL and 5.0 per cent higher excluding CCL, in real terms, in Q4 2013 compared to Q4 2012.
- Average coal prices were 9.5 per cent higher in real terms including CCL and 10.2 per cent higher excluding CCL in Q4 2013 compared to Q4 2012. Heavy fuel oil prices were 0.4 per cent higher in real terms than a year ago.
- For the period July to December 2013, prices for industrial electricity consumers including taxes were above the EU15 median for medium, large and extra large consumers and at the median for small consumers. UK industrial gas prices were amongst the lowest in the EU15 for all sizebands of consumer including and excluding tax.

Industrial prices tables are available on the DECC section of the gov.uk website at: [www.gov.uk/government/collections/industrial-energy-prices](http://www.gov.uk/government/collections/industrial-energy-prices)



## ROAD TRANSPORT FUEL PRICES: QUARTER 4 2013

Typical retail prices of road transport fuels



Retail prices of petroleum products	Mid-March 2014 <sup>(1)</sup> Pence per litre	Percentage change on a year earlier
Unleaded petrol <sup>(2)</sup>	128.8	-6.2
Diesel <sup>(2)</sup>	136.3	-5.8

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

(2) Prices are provisional estimates.

- In mid-March 2014, a litre of unleaded petrol was on average 128.8 pence per litre, 6.2 per cent lower than a year earlier and 9.2 per cent lower than the high of April 2012.
- In mid-March 2014, diesel was on average 136.3 pence per litre, 5.8 per cent lower than a year earlier and 7.8 per cent lower than the high of April 2012.
- In February 2014, the UK retail price for petrol was seventh highest in the EU. UK diesel prices were the highest in the EU.
- The price difference between diesel and petrol in March 2014 is 7.5 pence per litre, slightly lower than the previous month.

Road transport fuel prices tables are available on the DECC section of the gov.uk website at: [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)



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**Notes to editors**

1. More detailed figures of United Kingdom energy production and consumption and of energy prices, for the fourth quarter of 2013 and 2013 as a whole are given in the March 2014 editions of ENERGY TRENDS and QUARTERLY ENERGY PRICES respectively, the Department's statistical bulletins on energy, published on 27 March 2014.

2. Energy Trends and the Quarterly Energy Prices bulletins, published quarterly, are available in hard copy from DECC and on the DECC section of the gov.uk website at [www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics](http://www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics)

Single copies of Energy Trends and Quarterly Energy Prices are available from the DECC Publications Orderline priced £6 and £8 respectively:

Phone: 0845 504 9188

E-mail: [deccteam@decc.ecgroup.net](mailto:deccteam@decc.ecgroup.net)

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

4. More detailed annual data on energy production and consumption for the years 2008 to 2012 are available in the DIGEST OF UNITED KINGDOM ENERGY STATISTICS 2013, published by the Stationery Office on 25 July 2013, priced £65. The 2014 edition of the Digest will be published on 31 July 2014.

All information contained in the Digest is available on the DECC section of the gov.uk website at: [www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes](http://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes)

