Department of Energy & Climate Change

A National Statistics Publication

UK ENERGY IN BRIEF 2014

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UK ENERGY IN BRIEF 2014

This booklet summarises the latest statistics on energy production, consumption, prices and climate change in the United Kingdom. Figures are primarily taken from the 2014 edition of the "Digest of UK Energy Statistics", published on 31 July 2014. Details of the Digest and other Department of Energy and Climate Change (DECC) statistical publications can be found on pages 43 and 44 of this booklet and are available on the Internet at:
www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics

This is a National Statistics publication

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the UK Statistics Authority: Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs
- are well explained and readily accessible
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

Contents

Introduction to the charts and tables

UK Energy in Brief aims to provide a summary of some of the key developments in the UK energy system: how energy is produced and used and the way in which energy use influences greenhouse gas emissions. It takes data from the main Department of Energy and Climate Change (DECC) statistical publications, the Digest of UK Energy Statistics, Energy Trends, Quarterly Energy Prices, Energy Consumption in the UK, the annual Fuel Poverty statistics report and statistical releases on emissions, and combines these with data produced by the Office for National Statistics and other Government Departments.

The booklet contains separate sections on the economics of the energy industry, overall energy production and consumption and trends in production and consumption of the major fuel sources, climate change and fuel poverty. Also discussed are developments in combined heat and power, renewable energy and feed in tariffs. Information is also given on energy efficiency, energy prices and energy expenditure.

The detailed background data on energy production and consumption can be found in the Digest of UK Energy Statistics 2014 available from The Stationery Office, priced £68, but also available free of charge on the Internet at:

www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes

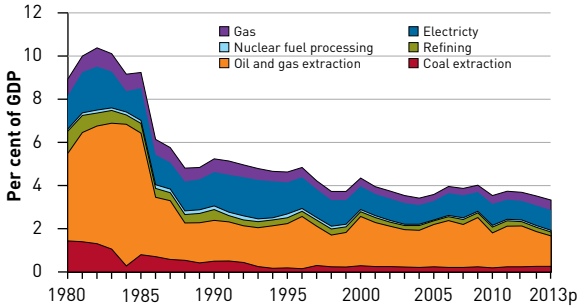
Other statistical outputs produced by DECC and drawn on in this publication are listed on pages 43 and 44.

Energy in the economy

The energy industries' contribution to the UK economy in 2013

- 3.3% of GDP
- 18.1% of total investment (at current prices) in 2013
- 56.1% of industrial investment (at current prices) in 2013
- 2.3% of annual business expenditure on research and development in 2012
- 169,000 people directly employed in 2013 (6.2% of industrial employment) and more indirectly e.g. an estimated 200,000 in support of UK Continental Shelf production.

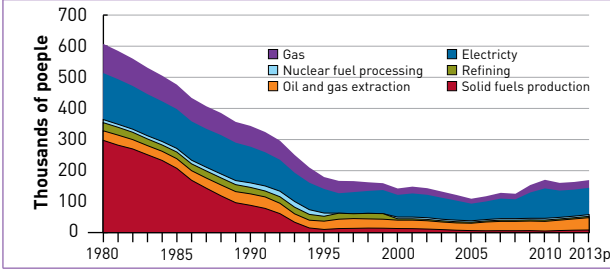
Contribution to GDP by the energy industries, 1980 to 2013



Source: Office for National Statistics

The contribution to the UK economy by the energy industries peaked in 1982 at 10.4%. Despite its significant fall in 1986, oil and gas extraction continue to remain the major energy contributor to the UK economy (with its value dependent both on production and the price of oil and gas) followed by the electricity sector. For 2013, the contribution by the energy industries to the UK economy was 3.3% of GDP (0.2 percentage points lower than in the previous year and the lowest level to date) with oil and gas extraction accounting for 42%, electricity (including renewables) 28% and gas 14% of the energy total.

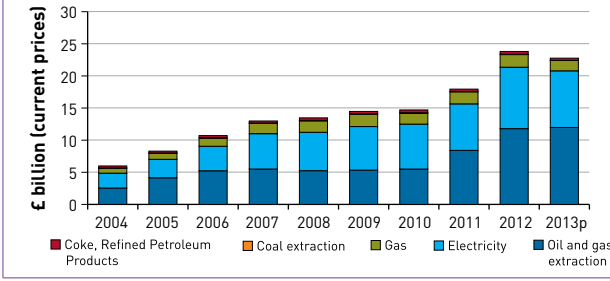
Trends in employment in the energy industries, 1980 to 2013



Source: Source: Office for National Statistics (Data from 1996 onwards based on SIC 2007 classifications)

Employment in the energy production and supply industries fell rapidly throughout the 1980s and mid-1990s largely as a result of closures of coal mines. Between 1995 and mid-2000s employment declined more slowly, however since 2005, it has increased gradually, driven by growth in the electricity sector. In 2013, employment in the energy industries at 169,000 was 3.7 per cent higher than in 2012 (and 55 per cent above the 2005 level) and accounted for 6.2% of all industrial employment.

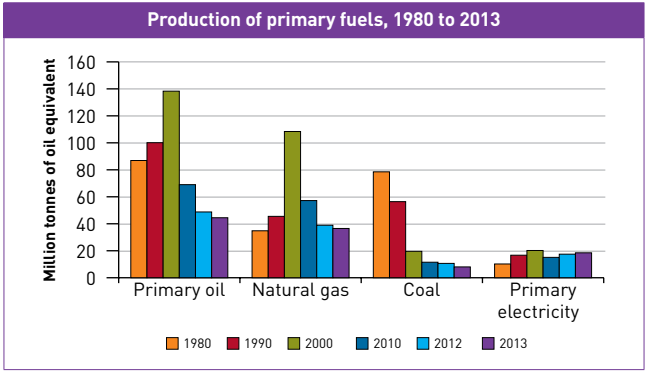
Investment in the energy industries, 2004 to 2013



Source: Office for National Statistics

Since 2004, investment in the energy industries has continued to grow, specifically in the electricity sector. Despite the provisional slight fall in 2013, £22.8 billion (at current prices) was invested in the energy industry of which 53% was in oil and gas extraction, 39% in electricity, 7% in gas with the remaining 2% in coal extraction and coke, refined petroleum products. Investment in 2013 was 55% above the level seen in 2010.

Overall energy



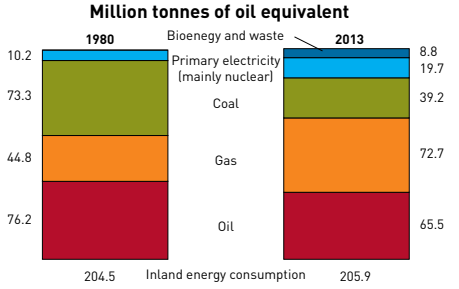
Million tonnes of oil equivalent

	1980	1990	2000	2010	2012	2013
Primary oil	86.9	100.1	138.3	69.0	48.8	44.5
Natural gas	34.8	45.5	108.4	57.2	38.9	36.5
Coal	78.5	56.4	19.6	11.5	10.6	8.0
Primary electricity	10.2	16.7	20.2	15.1	17.5	18.5
Bioenergy & waste	0.0	0.7	2.3	5.2	6.2	6.9
Total	**210.5**	**219.4**	**288.7**	**157.9**	**122.0**	**114.4**

Total production of primary fuels, when expressed in terms of their energy content, fell by 6.3% in 2013 compared to 2012. The sharp fall in 2013 in coal output was due to mine closures while the falls in both oil and gas production were due to a number of maintenance issues and longer term decline. Primary oil (crude oil and NGLs) accounted for 39% of total production, natural gas 32%, primary electricity (consisting of nuclear, wind and natural flow hydro) 16%, coal 7%, while bioenergy and waste accounted for the remaining 6%.

Total production increased rapidly between 1980 and 2000, mainly due to the growth of oil and gas. Production in 2000 was at record levels for natural gas, whilst in 1999 it was at record levels for overall energy and petroleum. Production has since been on the decline as a number of oil and gas fields become exhausted and also due to increased maintenance activity. Production is now 62% lower than its peak in 1999. Since 2000 both oil and gas production have fallen by an average of 8% per year.

Inland energy consumption, 1980 to 2013



Million tonnes of oil equivalent

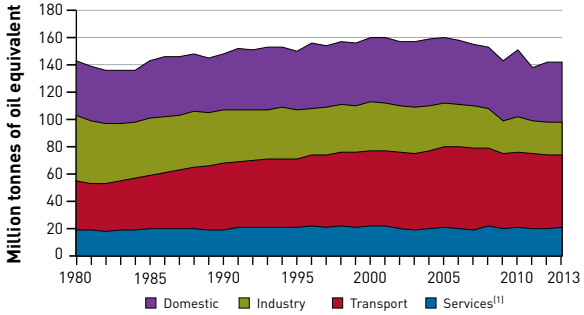
	1980	1990	2000	2010	2012	2013
Total inland primary energy consumption[1]:	**204.5**	**213.7**	**234.8**	**218.7**	**207.2**	**205.9**
Conversion losses:			53.8	50.0	49.3	48.1
Distribution losses	(62.1	66.4)				
and energy industry use:			20.7	18.1	16.6	15.8
Total final energy consumption:	**142.4**	**147.3**	**159.4**	**150.0**	**141.5**	**142.5**
Final consumption of which:						
Industry	48.3	38.7	35.5	26.1	23.6	24.2
Domestic sector	39.8	40.8	46.9	48.6	43.7	43.8
Transport	35.5	48.6	55.5	54.6	53.8	53.4
Services[2]	18.7	19.2	21.5	20.7	20.4	21.0
Temperature corrected total inland consumption:	**206.2**	**221.6**	**239.4**	**212.7**	**207.2**	**203.2**

(1) Excludes non-energy use
(2) Includes agriculture

Primary energy consumption was 0.6% lower in 2013 than in 2012. Consumption fell slightly despite the cold weather at the start of 2013. On a temperature corrected basis, primary energy consumption was 1.8% lower than in 2012, continuing the general fall seen since 2005. In the last 30 years or so, consumption of natural gas and primary electricity has risen considerably, whilst consumption of oil and coal have fallen. However over the past decade or so, consumption of bioenergy and waste has also grown.

Overall energy

Final energy consumption, 1980 to 2013



2013 **Million tonnes of oil equivalent**

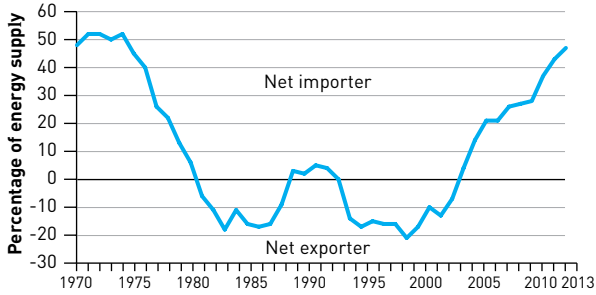
	Industry	Domestic	Transport	Services[1]	Total
Coal & manufactured fuels	2.0	0.7	0.0	0.0	2.8
Gas	8.0	29.6	-	10.3	47.9
Oil	4.4	2.8	52.0	1.2	60.3
Electricity	8.4	9.8	0.4	8.7	27.3
Bioenergy and heat	1.4	0.9	1.1	0.7	4.2
Total	**24.2**	**43.8**	**53.4**	**21.0**	**142.5**

(1) Includes agriculture

Total final energy consumption (excluding non-energy use) was marginally higher in 2013 compared to 2012. By sector, final consumption fell by 1% in transport but rose by 2% in industry and 3% in the service sector. Domestic consumption was broadly the same despite the slightly colder weather in 2013 when the daily average temperature was 9.7 degrees Celsius. Overall, final energy consumption, when adjusted for temperature was down in 2013, continuing the trend of falling consumption since 2004. Since 2004 temperature adjusted domestic consumption has fallen by 20%, whilst total consumption has fallen by 14%.

In terms of fuel types, final consumption of oil fell by 1% with a small reduction in fuel used for transport. Gas use fell marginally in the domestic sector, but this was offset by small increases in both the industrial and service sectors. Electricity consumption was broadly unchanged, with increased use of bioenergy from all sectors.

Import dependency, 1970 to 2013



Percentage

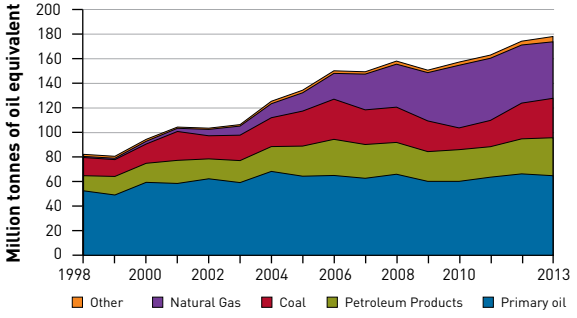
	2000	2009	2010	2011	2012	2013
Coal	39%	78%	52%	63%	70%	82%
Gas	-11%	32%	38%	45%	47%	50%
Oil	-55%	8%	14%	27%	37%	40%
Total	**-17%**	**27%**	**29%**	**37%**	**43%**	**47%**

In the 1970's the UK was a net importer of energy. Following development of oil and gas production in the North Sea, the UK became a net exporter of energy in 1981. Output fell back in the late 1980's following the Piper Alpha disaster, with the UK regaining a position as a net exporter in the mid 1990's. North Sea production peaked in 1999, and the UK returned to being an energy importer in 2004. In 2013, imports of petroleum products exceeded exports following the closure of the Coryton refinery; the UK is now a net importer of all main fuel types though remains a net exporter of some products such as petrol and fuel oil. In 2013, 47% of energy used in the UK was imported, up sharply from the 2010 level, due to the general decline in oil and gas output.

Latest comparable data from Eurostat, for 2012, show that the UK had the ninth lowest level of import dependency in the EU, behind Denmark, which remains a net exporter, Estonia, Romania, Czech Republic, Sweden, Netherlands, Poland and Bulgaria.

Overall energy

Key sources of imports, 1998 to 2013



Since 1999, when UK energy production peaked, there has been a sharp rise in imports. Over this period imports have more than doubled. In 2011 imports exceeded UK production; though as the UK still exports large volumes; net imports still remain below production levels. By fuel type the largest growth in the past 10 years has come from gas imports, though there have been increases from all fuels.

In 2013, the key growth came from coal to meet generators' demand, and for petroleum products to offset the reduction in UK refinery capacity.

Imports are sourced from a wide variety of countries.

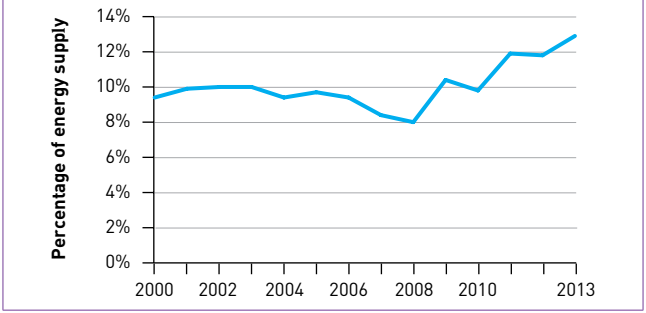
Coal: In 2013 Russia remained the leading source accounting for 41%, with the US 25% and Columbia 23%. The vast majority of coal imported, was steam coal which accounted for an 87% share mainly for electricity generation.

Crude oil: The key source of imports is Norway, which accounted for 40%, with OPEC countries supplying a further 36%.

Petroleum products: The UK imports a wide variety of petroleum products, though remains a net exporter of certain fuels including petrol. The largest source country is the Netherlands, which acts as a major trading hub. Imports of diesel arrive mainly from Europe with Aviation Turbine fuel generally sourced from Asia.

Gas: Norway accounted for 58% of UK gas imports, with pipelines from Netherlands and Belgium supplying 16% and 7% respectively. The remaining 20% arrived as Liquefied Natural Gas (LNG), with over 90% of this arriving from Qatar.

Proportion of UK energy supplied from low carbon sources, 2000 to 2013



Percentage

	2000	2009	2010	2011	2012	2013
Nuclear	8.4%	7.2%	6.4%	7.7%	7.3%	7.5%
Wind	0.0%	0.4%	0.4%	0.7%	0.8%	1.2%
Hydro	0.2%	0.2%	0.1%	0.2%	0.2%	0.2%
Bioenergy	0.9%	2.1%	2.3%	2.6%	2.8%	3.3%
Transport fuels	0.0%	0.5%	0.6%	0.6%	0.5%	0.5%
Other	0.0%	0.0%	0.1%	0.1%	0.2%	0.2%
Total	**9.4%**	**10.4%**	**9.8%**	**11.9%**	**11.8%**	**12.9%**

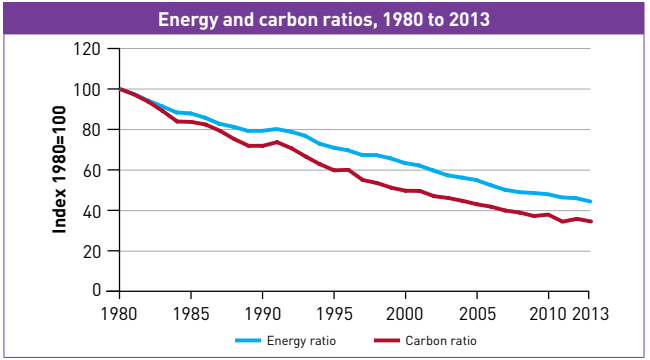
In 2013 the UK obtained 13% of its primary energy from low carbon sources, with just under 60% of this from nuclear power. The second largest component of low carbon was bioenergy, accounting for around a quarter of low carbon energy.

Energy supply from wind increased by 45% on 2012; with generation up by 52% for offshore and 40% for onshore. These increases were due to increased capacity, which were up by 23% for offshore and 27% for onshore. Also though, there was an increase in wind speeds in 2013, which rose from an average of 8.2 knots in 2012 to 8.6 knots in 2013.

The supply of nuclear rose by 1.6% in 2013; however, the thermal efficiency of the nuclear fleet decreased slightly from last year's peak, which has resulted in electricity generation from nuclear increasing only marginally by 0.3%. In energy balances, the nuclear heat is shown, in line with internationally agreed definitions.

The UK had the 10th lowest share amongst EU countries of low carbon energy in 2012, the latest year of comparable data available, with the UK's share of supply being around half that of the EU average of 24%.

Overall energy



Index 1980=100

	1980	1990	2000	2010	2012	2013
Primary energy consumption[1]	100	107.5	116.1	103.4	100.5	98.7
Carbon dioxide emissions	100	97.5	91.1	81.7	78.2	76.6
GDP	100	135.6	183.2	215.5	218.5	222.3
Energy ratio	**100**	**79.3**	**63.4**	**48.0**	**46.0**	**44.4**
Carbon ratio	**100**	**71.9**	**49.7**	**37.9**	**35.8**	**34.5**

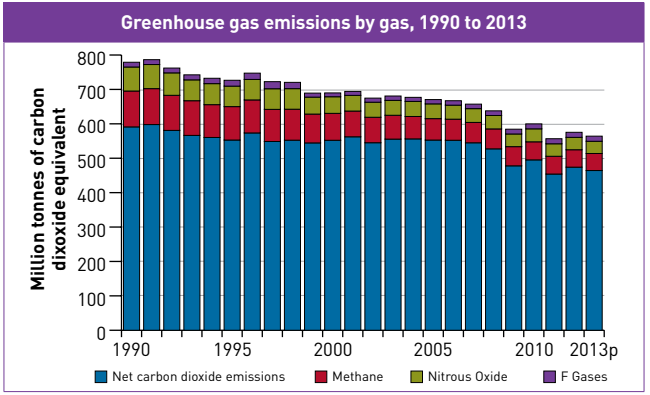
(1) Temperature corrected primary energy consumption.

The energy ratio is calculated by dividing temperature corrected primary energy consumption by GDP at constant prices, with the carbon ratio similarly calculated by dividing carbon dioxide emissions by GDP. Both ratios have fallen steadily, with the energy ratio declining by around 2½% per year, with the carbon ratio declining at a faster pace of around 3% per year.

The downward trends are due to a number of factors, with improvements in energy efficiency and the decline in the relative importance of energy intensive industries, affecting both ratios. The carbon ratio has been improved further by the increased use of more carbon efficient fuels and renewables.

The slight upward tick in the carbon ratio in 2012 is due, in the main, to temperatures, with energy consumption increasing in response to the colder weather. The switch to increased coal use for electricity generation from gas that year also increased the ratio.

Latest International Energy Authority data shows that the energy ratio is falling in all G8 countries. The UK is estimated to have the lowest energy ratio in the G8 (chart 5.7 of UK Energy Sector Indicators www.gov.uk/government/publications/uk-energy-sector-indicators-2013).



Million tonnes of carbon dioxide equivalent

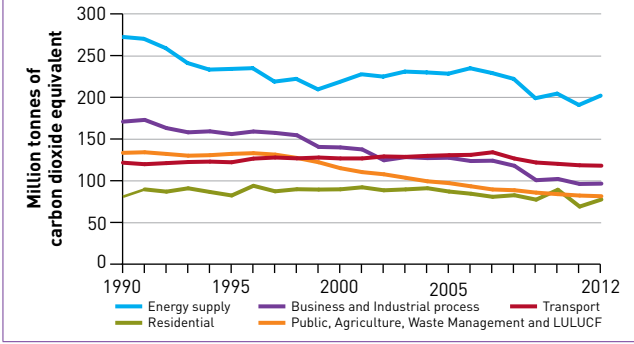
	1990	1995	2000	2005	2010	2013p
Carbon dioxide (net emissions)	591.1	552.9	552.2	552.8	495.2	464.3
Methane	104.3	97.1	78.2	62.3	52.5	49.5
Nitrous oxide	69.8	59.6	48.3	42.9	37.7	35.5
HFC	11.4	15.3	8.8	11.2	13.5	14.2
PFC	1.4	0.5	0.5	0.3	0.2	0.2
SF_6	1.0	1.2	1.8	1.0	0.6	0.5
Kyoto greenhouse gas basket	**777.6**	**725.2**	**692.2**	**676.3**	**606.2**	**569.9**

Kyoto basket total differs slightly from sum of individual pollutants above as the basket uses a narrower definition for the LULUCF sector, and includes emissions from UK Overseas Territories.
Source: Ricardo-AEA, DECC (2013 provisional figures)

In 2013, UK emissions of the basket of six greenhouse gases covered by the Kyoto Protocol were provisionally estimated to be 569.9 million tonnes of carbon dioxide equivalent. This was 1.9% lower than the 2012 figure of 581.1 million tonnes and 27% lower than the 1990 figure of 777.6 million tonnes. In 2013, carbon dioxide emissions were estimated to account for about 81% of total UK anthropogenic greenhouse gas emissions and are primarily created when fossil fuels are burned. Estimates based on energy production and consumption in 2013 indicate that carbon dioxide emissions were 2.1% lower than the previous year and 21% lower than in 1990.

The decrease in emissions since 2012 can largely be attributed to an 8 per cent decrease in emissions from electricity generation. There was a change in the fuel mix used at power stations for electricity generation, with a 9 per cent decrease in coal use for generation and a 7 per cent decrease in gas use.

Greenhouse gas emissions by National Communication sector, 1990 to 2012



Million tonnes of carbon dioxide equivalent

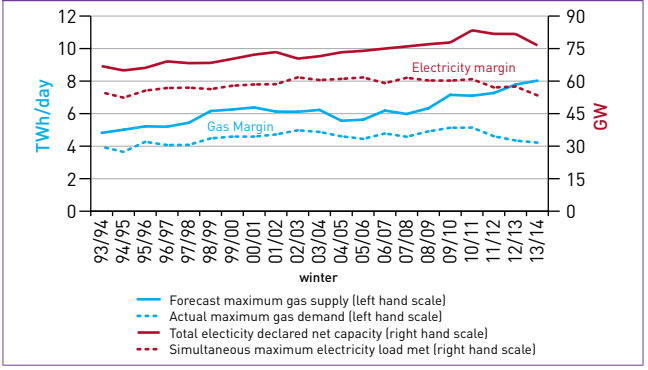
	1990	1995	2000	2005	2010	2012
Energy supply	272.4	234.0	218.4	228.3	204.4	202.0
Residential	80.8	82.3	89.7	87.0	89.2	77.5
Public, Agriculture, Waste Management and LULUCF	133.4	132.2	115.0	97.1	83.9	81.4
Business and Industrial process	170.8	155.9	139.9	127.5	102.1	96.5
Transport	121.6	122.1	126.7	130.6	120.2	118.0
Total greenhouse gas emissions	**778.9**	**726.6**	**689.8**	**670.5**	**599.8**	**575.4**

All figures are for the UK and Crown Dependencies only, and exclude Overseas Territories
Source: Ricardo-AEA, DECC (2012 final figures)

In 2012, UK greenhouse gas (GHG) emissions were estimated to be 575.4 million tonnes of carbon dioxide equivalent ($MtCO_2e$), 26% lower than in 1990. The energy supply sector, at 202.0 $MtCO_2$, was the largest single source of GHG emissions in 2012, accounting for 35%. Between 1990 and 2012, emissions from this sector decreased by 26%. In 2012 GHG emissions from the transport sector, at 118.0 $MtCO_2$, accounted for 21%, compared to 16% in 1990. Emissions from the residential sector accounted for around 13% in 2012; and since 1990 emissions from this sector have decreased by 4%.

Emissions in 2012 were estimated to be 3% higher than 2011. This increase was largely caused by an increase in emissions from the energy supply and residential sectors resulting from lower use of gas and greater use of coal for electricity generation at power stations, combined with an increase in residential gas use, as 2012 was a colder year.

Reliability – gas and electricity capacity margins – maximum supply and maximum demand 1993/94 to 2013/14



Source: National Grid and DECC

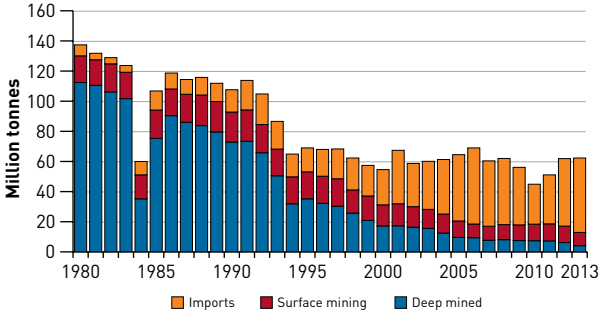
Whilst energy security is complex to measure, and subsequent charts on individual fuels provide fuller insight, this chart aims to provide a view on it, by looking at the difference between maximum supply and demand for gas and electricity.

Since 2007/08, the electricity capacity margin has mainly increased year on year due to both a decrease in peak demand and an increase in capacity. In 2013/14, despite capacity falling by over 5 GW, largely due to the closure of coal plants under the Large Combustion Plant Directive (LCPD), the capacity margin remained at 43%. This was due to a fall in peak demand of 4 GW, largely a result of a milder winter, but improved energy efficiency and increased generation from distribution-system connected capacity also helped reduce the demand on the UK transmission networks.

Between 2008/09 and 2013/14, the gas capacity margin increased year on year, with the large increase seen between 2011/12 and 2012/13 when the margin rose from 58% to 79%. This was brought about by both a reduced demand and an increase in supply. Reductions in gas demand were primarily due to a switch from gas to coal for power generation, whilst improved energy efficiency in the domestic sector also contributed.

Coal

Coal production and imports, 1980 to 2013

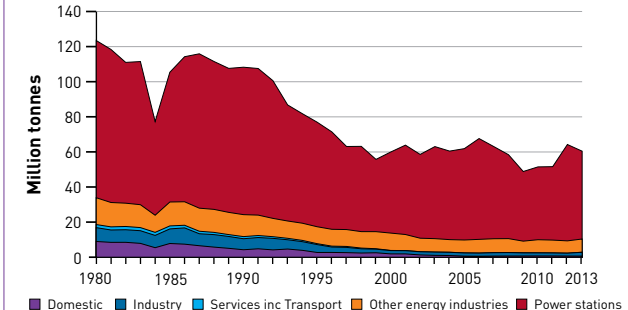


Million tonnes

	1980	1990	2000	2010	2012	2013
Deep mined	112.4	72.9	17.2	7.4	6.2	4.1
Surface mining (including slurry)	17.7	19.9	14.0	11.0	10.9	8.8
Total	**130.1**	**92.8**	**31.2**	**18.4**	**17.0**	**12.8**
Coal imports	7.3	14.8	23.4	26.5	44.8	49.4

In 2013 UK coal production fell to an all-time low of 13 million tonnes. Production was 25% lower in 2013 than in 2012. Deep mined production fell by 34%, due to the closure of a number of mines in 2013 (Maltby, Daw Mill and Unity) and geological conditions at some of the remaining mines. Surface mine production (including a small amount of slurry) decreased by 20% mainly due to the Scottish Coal Company going into liquidation in April 2013 and geological conditions at some mines. Imports started in 1970, and grew steadily to reach 20 million tonnes a year by the late 1990s; very rapid expansion of imports in 2001 meant that imports exceeded the level of UK production for the first time in that year. As annual levels of UK coal production continued to fall, imports continued to grow rapidly and in 2006 reached a new record of 51 million tonnes, representing 75 per cent of total UK coal supply. From this point on, imports fell, mainly as a result of less demand by electricity generators, rather than higher indigenous production. However, from 2011 imports rose again due to a greater demand by electricity generators. In 2013, with low UK production, imports rose to just below the 2006 record to 49 million tonnes and were 10% higher than in 2012.

Coal consumption, 1980 to 2013



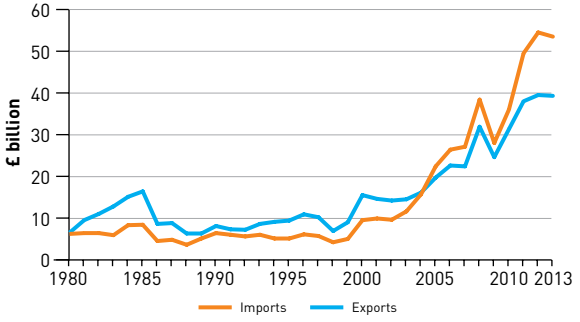
Million tonnes

	1980	1990	2000	2010	2012	2013
Power stations	89.6	84.0	46.2	41.5	54.9	50.0
Domestic	8.9	4.2	1.9	0.7	0.7	0.6
Industry	7.9	6.3	1.9	2.0	1.8	2.1
Services	1.8	1.2	0.08	0.06	0.04	0.05
Other energy industries	15.3	12.5	9.8	7.1	6.6	7.5
Total consumption	**123.5**	**108.3**	**59.9**	**51.4**	**64.0**	**60.4**

Coal use has remained significant in the electricity generation sector in 2013 due to high gas prices, which allowed coal fired stations to generate electricity at a lower cost than some gas fired stations. In 2006, coal use by electricity generators peaked in the decade at 57 million tonnes, representing 85 per cent of total coal demand. Coal use gradually fell between 2007 and 2011 before increasing again in 2012. Coal use in electricity generation fell again in 2013 to 50 million tonnes, as renewables use in electricity generation rose. Coal use in electricity generation represented 83 per cent of total coal demand.

Petroleum

Foreign trade in crude oil and petroleum products, 1980 to 2013



Crude oil and petroleum products **£ billion**

	1980	1990	2000	2010	2012	2013
Exports	6.5	8.1	15.5	31.3	39.5	39.3
Imports	6.2	6.4	9.5	36.0	54.5	53.5*
Net Imports	**-0.3**	**-1.6**	**-5.9**	**4.7**	**15.0**	**14.2**

*Source: Office for National Statistics (*DECC estimate)*

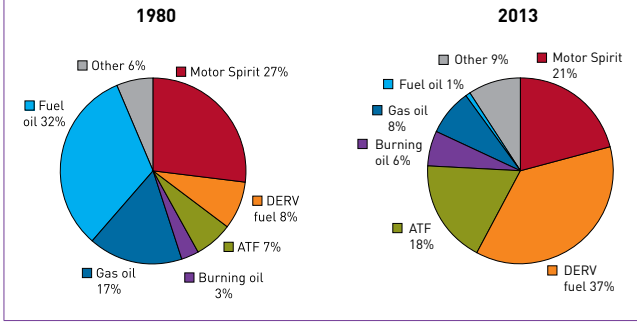
Crude oil and petroleum products **Million tonnes of oil equivalent**

	1980	1990	2000	2010	2012	2013
Exports	58.4	80.4	123.9	74.6	66.7	65.7
Imports	60.4	69.2	74.8	85.9	94.7	95.6
Net Imports	**2.0**	**-11.2**	**-49.1**	**11.4**	**28.0**	**29.9**

Source: DECC

Since the first 'surplus' of £0.3 billion in 1980, oil trade has contributed more than £29 billion to the UK balance of payments. The largest 'surplus' of £8 billion in 1985 reflected high crude oil production and prices. In 1990 the 'surplus' fell from its peak due to lower prices but managed to peak again in 2000 at £5.9 billion. The surplus has since steadily declined and in 2005 the UK became a net importer of oil with a deficit of £2.7 billion, though still an exporter of oil products. In 2013, the deficit was around £14 billion, slightly down on a year earlier.

Demand by Product, 1980 to 2013



Million tonnes

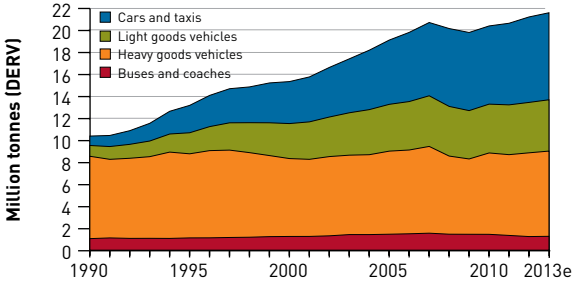
	1980	1990	2000	2010	2012	2013
Energy uses[1]						
Motor spirit (Petrol)	19.2	24.3	21.4	14.6	13.2	12.6
DERV fuel	5.9	10.7	15.6	20.7	21.5	21.9
Aviation turbine fuel	4.7	6.6	10.8	11.1	11.2	11.1
Burning oil	2.1	2.1	3.8	4.0	3.3	3.5
Gas oil	11.6	8.0	6.8	5.1	5.0	4.6
Fuel oil	22.7	14.0	3.3	1.9	1.1	0.9
Other	4.4	5.0	5.3	6.1	5.7	5.3
Total energy uses	**70.5**	**70.6**	**67.1**	**63.6**	**61.1**	**59.9**
Of which:						
Transport fuels	31.7	43.5	49.5	48.1	47.5	47.1
Industry	14.9	7.2	5.5	5.1	4.2	4.1
Refinery fuel use	6.3	5.1	5.3	4.4	4.3	3.8
Non-energy uses	**7.0**	**9.2**	**10.1**	**7.0**	**6.0**	**6.2**
Total demand	**77.5**	**79.8**	**77.2**	**70.6**	**67.1**	**66.1**

(1) Energy uses includes uses for transformation (e.g. electricity generation) and energy industry own use (e.g. refinery fuels)

Demand for oil products has declined since 1980 but more notable is the change in the mix of products consumed. Transport now represents nearly 80% of energy use of oil products, up from 45% in 1980. The main trends have been the declining use of fuel oil for electricity generation, and the growth of both road and air travel. Also noticeable is the switch between petrol and diesel.

Petroleum

Demand for road fuels, 1990 to 2013



Total deliveries of diesel road fuel (DERV) have almost doubled in the past 20 years and increased further this year. The long term trend is mainly caused by the increased use of DERV in cars, taxis and light goods vehicles.

Demand for DERV by Vehicle Type — **Thousand tonnes**

	1990	1995	2000	2010	2012	2013*
Car & taxi	856	2,486	3,813	7,099	7,760	7,900
Light goods vehicles	979	1,912	3,178	4,433	4,577	4,660
Heavy goods vehicles	7,479	7,635	7,072	7,389	7,604	7,740
Buses & coaches	1,047	1,114	1,245	1,438	1,235	1,257
Total	**10,650**	**13,460**	**15,632**	**20,740**	**21,538**	**21,926**

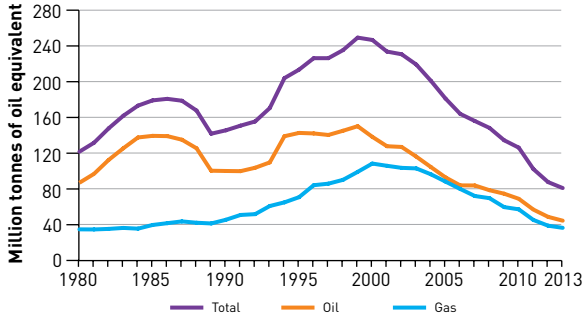
(*2013 estimated. Figures are derived from Ricardo-AEA modelling, total includes off road use of DERV and refers to hydrocarbon fuel only.)

Demand for petrol decreased further in 2013, in line with the on-going trend that has seen the diesel share of road transport increase substantially over the last decade. Despite the increasing dieselisation of the car fleet, petrol consumption by cars and taxis (which is total demand) is still substantially larger than their diesel consumption.

Demand for Petrol — **Thousand tonnes**

	1990	1995	2000	2010	2012	2013
Total	24,310	21,950	21,403	14,602	13,231	12,574

UK Continental Shelf production, 1980 to 2013



Million tonnes of oil equivalent

	1980	1990	2000	2010	2012	2013
Oil	86.9	100.1	138.3	69.0	48.8	44.5
Gas	34.8	45.5	108.4	57.2	38.9	36.5
Total	**121.7**	**145.6**	**246.7**	**126.2**	**87.7**	**81.0**

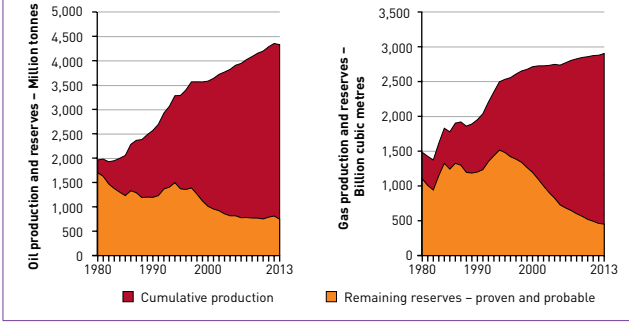
Total indigenous oil and gas production in 2013 recorded its lowest annual production volume since 1977; down almost 8% on 2012, broadly in line with the average decline since UKCS production peaked in 1999.

Oil production in 2013 was 70% lower than the record 150.2 million tonnes in 1999, with output down 9% in 2013. Whilst production continues its downward trend, it does so at a slower rate than that seen in 2011 and 2012. Last year saw fewer significant maintenance issues than 2012 and production constraints were lifted on the Elgin area during March 2013. The Gryphon Floating, Production, Storage and Offloading (FPSO) vessel also returned to production during June 2013 following storm damage sustained during 2011 and a new FPSO started production at Huntington. Quarter 4 of 2013 saw the relatively large Jasmine field starting production.

As with oil, UK gas production is also declining as UK Continental Shelf reserves deplete. Gas production in 2013 was 6% lower than in 2012 and 66% lower than the record levels seen in 2000. During quarter 4 2013 production started from Breagh, one of the largest natural gas discoveries under development in the UK sector of the Southern North Sea.

Oil and gas production

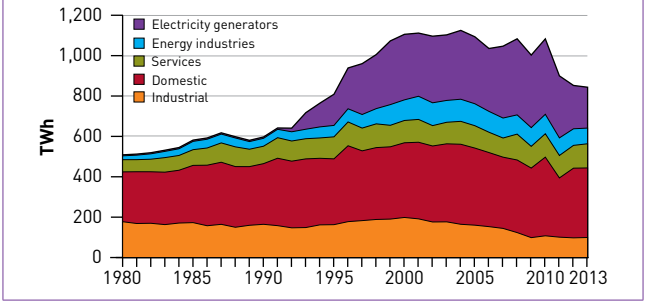
Oil and gas production and reserves, 1980 to 2013



	1980	1990	2000	2010	2012	2013
Oil						**Million tonnes**
Cumulative production	263	1,374	2,570	3,446	3,542	3,583
Proven plus probable reserves	1,700	1,195	1,010	751	811	746
Estimated Ultimate Recovery	1,963	2,569	3,580	4,197	4,353	4,329
Gas						**Billion cubic metres**
Cumulative production	382	752	1,518	2,337	2,417	2,451
Proven plus probable reserves	1,101	1,200	1,195	520	461	452
Estimated Ultimate Recovery	1,483	1,952	2,713	2,857	2,878	2,903

The Estimated Ultimate Recovery (EUR) shows the cumulative total of production to the end of the years given and the total of proven plus probable reserves as estimated at the end of those years. For both oil and gas, EUR has grown substantially since 1980, increasing by 121% for oil and by 96% for gas. This reflects increased new discoveries and the effect of new technology allowing exploitation of resources that were previously regarded as uncommercial. Total cumulative production of oil and gas are 83% and 65% respectively greater than the estimated EUR in 1980. The EUR figures shown do not include estimates for Shale Gas.

Natural gas consumption, 1980 to 2013



TWh

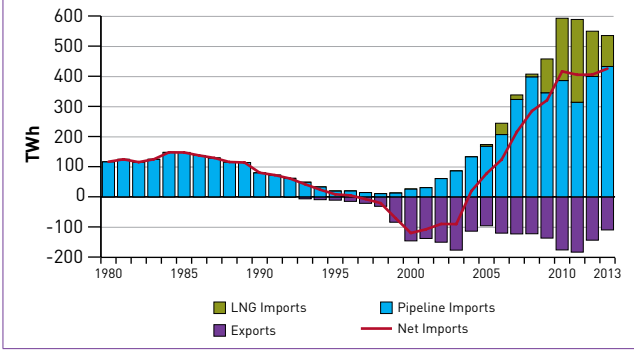
	1980	1990	2000	2010	2012	2013
Electricity generators	4.0	6.5	324.6	373.6	214.6	202.3
Energy Industries	19.1	39.2	102.1	96.3	82.2	77.7
Industry	177.5	164.6	198.5	107.7	97.6	99.3
Domestic	246.8	300.4	369.9	389.6	345.1	344.5
Services	60.4	86.4	110.5	115.9	112.9	119.7
Total	**507.8**	**597.0**	**1,105.5**	**1083.0**	**852.3**	**843.5**

From the early 1970s, following the expansion of UK production of natural gas, gas consumption grew rapidly reaching a record high in 2004 of 1,125 TWh. Since then, consumption has seen an overall decline, and in 2013 total gas consumption was 843.5 TWh, around 25% below its 2004 peak. The longer term trends are driven by structural aspects of commodity prices and changes to energy efficiency whilst the year to year changes are mainly driven by temperature and shorter term fluctuations in prices.

Overall gas demand was down by 1.1 % in 2013 versus 2012. This reflects larger falls in electricity generator and energy industry demand (due to the continued switch away from gas for electricity generation) being partially offset by an increased demand from industry and services (due to the increase in economic output).

Natural gas

UK trade in natural gas, 1980 to 2013



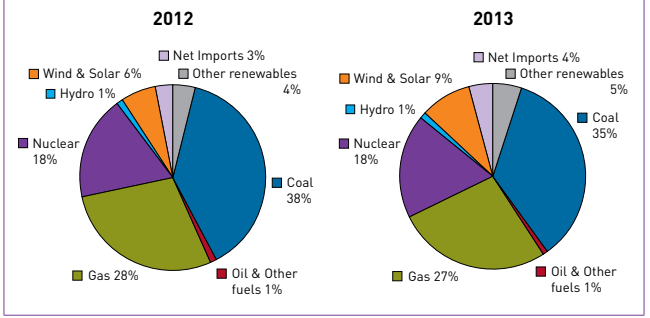
TWh

	1980	1990	2000	2010	2012	2013
Natural gas production	404.8	528.8	1,260.2	664.4	452.1	424.2
Imports	116.3	79.8	26.0	592.6	549.5	535.1
of which LNG	–	–	–	206.8	150.1	102.6
Exports	–	–	-146.3	-176.4	-144.0	-109.7
Net imports(+) or exports(-)	+116.3	+79.8	-120.3	+416.2	+405.5	+425.4

UK gas production peaked in 2000 and has since been declining. With declining production the UK has become increasingly reliant on gas imports to meet demand. Since 2000 net imports have steadily increased year on year, with the exception of 2011 which saw a small decrease on the previous year's levell. In 2013 net imports accounted for 50% of gas demand.

Imports of Liquefied Natural Gas (LNG) through the two terminals at Milford Haven (South Hook and Dragon) and via the Isle of Grain remain substantial, but their shares of total imports have dropped from 27 per cent in 2012 to 19 per cent in 2013. Demand for LNG on the global market remains strong but the UK has a diverse pipeline infrastructure (from Norway, the Netherlands and Belgium) and the proportion delivered through each route will depend on global market conditions.

Electricity supplied by fuel type, 2012 and 2013



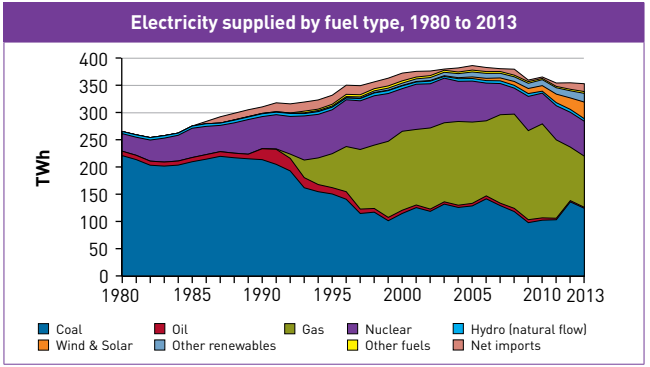
TWh

	1980	1990	2000	2010	2012	2013
Coal	220.8	213.4	114.7	102.3	135.9	124.1
Oil & other fuels[1]	7.9	19.2	9.2	5.6	4.0	4.2
Gas	–	0.4	144.9	172.5	98.3	93.8
Nuclear	32.3	58.7	78.3	56.4	63.9	64.1
Hydro	3.9	5.2	5.1	3.5	5.3	4.7
Wind & Solar	–	–	0.9	10.2	21.0	30.5
Other renewables	–	–	4.1	10.9	13.1	16.0
Net Imports	–	11.9	14.2	2.7	11.9	14.4
Total electricity available for supply	**264.9**	**308.7**	**371.4**	**364.1**	**353.4**	**351.8**

(1) Includes net supply from pumped storage

Between 2012 and 2013, supply of electricity saw a small decrease. Electricity supplied from gas decreased slightly from 28% to 27%, as gas prices continued to increase. Electricity supplied from coal fell from 38% to 35%. Nuclear's share of supply was unchanged at 18%. Wind's share rose from 6% to 9% with much increased capacity. The share of net imports rose from 3% to 4%, due to increased imports from France as well as the Netherlands (via the interconnector which came into full operation in April 2011). In 2013 electricity supplied from wind was around half that produced from nuclear compared to just over a tenth in 2000. Further details on renewable electricity generation can be found on page 30.

Electricity



The mix of fuels used to generate electricity continues to evolve. Since 1990, the decline of coal and oil and the rise of gas and, in more recent years, renewables, have been the most marked features, but none of these fuels have followed a smooth path.

Supply from gas rose most markedly over this period from 0.4 TWh in 1990 to a peak of 173 TWh in 2008, and has fluctuated slightly since. In 2013, gas has fallen for the third consecutive year, due to high gas prices, to its lowest level since 1996.

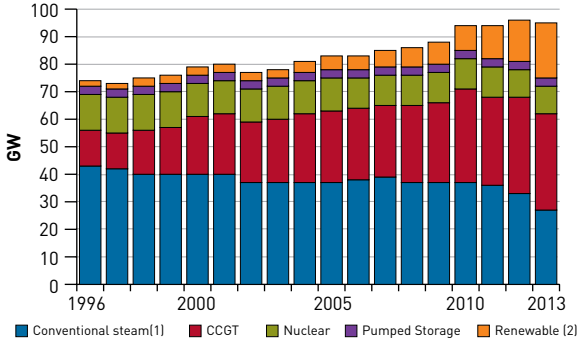
Supply from nuclear grew to a peak in 1998 before falling back, particularly during 2006 to 2008, as station closures and maintenance outages reduced supply, but recovered in 2009, before falling in 2010 due to further outages. In 2011, supply from nuclear began to rise again as stations returned from outages and in 2013 rose to its highest level for seven years.

Coal recorded its highest level for ten years in 2006, making up for the reduced availability of nuclear stations and as a substitute for high priced gas. It fell slightly back again in the next three years before rising in 2010, particularly due to higher winter electricity demand. Again due to high gas prices, supply from coal rose during 2012 but fell slightly again in 2013.

Supply from wind (including solar) has followed an upward trend since 2000, as capacity levels have increased each year. In 2013, wind supplied a record level of 30.5 TWh.

Total electricity supplied rose continuously from 1997 to reach a peak in 2005. It has subsequently fallen, reflecting lower demand due to energy efficiency, economic and weather factors, excluding when in 2010 and 2012 slight increases occurred due in part to particularly cold final quarters. Supply continued to fall in 2013.

Electricity capacity, 1996 to 2013



(1) Mainly coal, includes Gas turbines, oil engines mixed/dual fired and co-firing
(2) Renewable capacity is on an Installed capacity basis. Data for other fuels/technologies relates to Declared Net Capacity from 1996 to 2005, data for 2006 onwards is transmission entry capacity (TEC)

GW

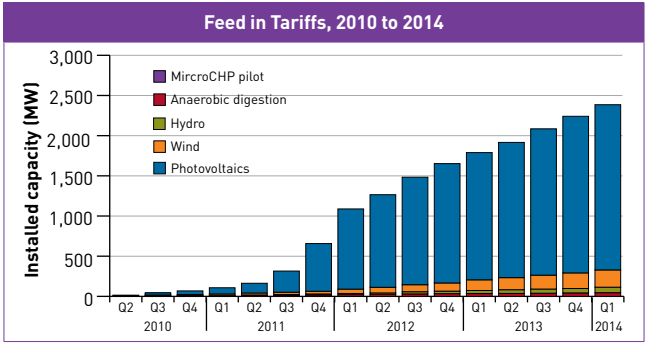
	1996	2000	2005	2010	2011	2012	2013
Conventional Steam	43.0	39.7	37.1	37.1	35.9	32.6	26.6
CCGT	12.7	21.1	25.9	34.0	32.4	35.4	35.1
Nuclear	12.9	12.5	11.9	10.9	10.7	9.9	9.9
Pumped Storage	2.8	2.8	2.8	2.7	2.7	2.7	2.7
Renewable	2.3	3.0	4.5	9.2	12.2	15.5	19.7
Total	**73.6**	**79.0**	**82.1**	**93.9**	**93.9**	**96.2**	**94.1**

Installed capacity in the UK has increased gradually between 1996 and 2013, from 73.6 GW to 94.1 GW. Overall, there has been a decline in conventional steam, initially in favour of CCGT and more recently in favour of an increase in renewables.

Conventional steam declined by 18 per cent between 2012 and 2013 (to 26.6 GW). This is a result of the part-conversion of Drax power station from coal to biomass, as well as plant closures under the Large Combustion Plant Directive (LCPD). CCGT capacity has increased almost threefold over the period 1996-2013, from 12.7 GW to 35.1 GW.

Nuclear and pumped storage capacity has remained fairly constant between 1996 and 2013, at 9.9 GW and 2.7 GW respectively. Renewables capacity has seen a significant increase, with the installed capacity of renewables increasing by almost 9 times the installed capacity in 1996 to 19.7 GW. This is mainly as a result of an increase in wind capacity, particularly from 2009, the growth of photovoltaics and as already mentioned the conversion of coal plants to biomass.

Feed in tariffs



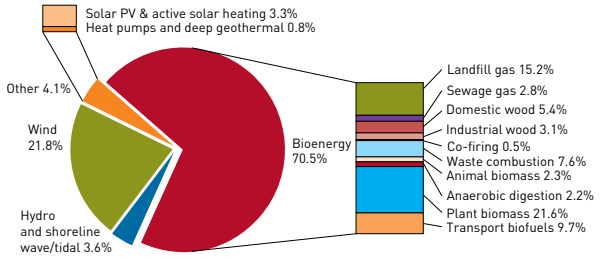
	2011 Q1	2012 Q1	2013 Q1	2014 Q1
	Cumulative Installed capacity (MW)			
Micro CHP	0.1	0.4	0.5	0.5
Anaerobic Digestion	1.8	14	38	68
Hydro	10	22	35	46
Wind	18	54	133	215
Photovoltaics	77	998	1,583	2,056
Total	108	1,088	1,790	2,386

Source: Extracted on 1st April 2014 from the Central Feed-in Tariffs Register (CFR), Ofgem. The register is a live database and is continually being updated and revised, so statistical reports extracted at a later date may not exactly match the totals presented here. Registration on the CFR represents the final stage in the Feed-in Tariff (FiTs) registration process. There will be installations eligible for FiT that have been installed but have not yet been registered onto CFR.

The Feed in Tariff scheme (FiTs) was introduced on 1st April 2010 and is a financial support scheme for eligible low-carbon electricity technologies, aimed at small-scale installations up to a maximum capacity of 5 Megawatts (MW).

At the end of year 4 (2013/14) of the Feed in Tariff scheme, 2,386 MW of capacity (471,000 installations) was confirmed on FiTs, around 33 per cent more capacity than that installed at the end of the previous year, and just over 24 per cent more installations. Of the 596 MW increase (92,000 installations) from the end of year 3 (2012/13), 79 per cent (473 MW, 91,000 installations) were from solar photovoltaics, 14 per cent (82 MW, 742 installations) were from wind installations, with the other technologies (micro-CHP, anaerobic digestion and hydro) contributing to the remaining 7 per cent of this increase. At the end of 2013/14, 65 per cent (1,549 MW) of the total installed capacity was in the domestic sector, 3 percentage points lower than at the end of the previous year, when domestic sector capacity represented 68 per cent (1,216 MW) of total installed capacity.

Renewable energy sources, 2013



Total renewables used = 11,201 thousand tonnes of oil equivalent (ktoe)

Total use of renewables — **Thousand tonnes of oil equivalent**

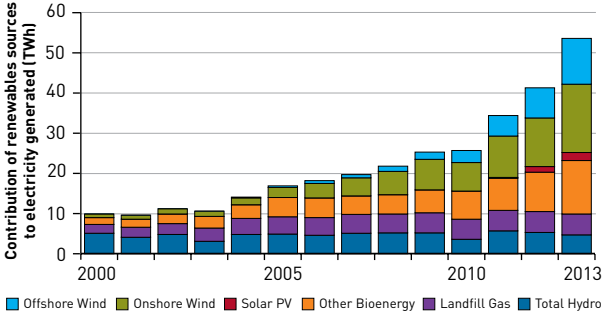
	1990	2000	2010	2012	2013
Solar PV and active solar heating	6	11	101	268	365
Wind	1	81	875	1,691	2,445
Hydro (large & small) and wave	448	437	307	455	404
Landfill gas	80	731	1,666	1,704	1,709
Sewage gas	138	169	286	300	318
Wood (domestic and industrial)	174	458	714	797	943
Municipal waste combustion	101	375	685	873	856
Heat pumps and deep geothermal	1	1	29	69	91
Transport biofuels	-	-	1,217	958	1,091
Cofiring	-	-	625	401	54
Other bioenergy	72	265	1,052	1,773	2,925
Total	**1,021**	**2,529**	**7,560**	**9,287**	**11,201**

In 2013, bioenergy accounted for 70.5% of renewable energy sources used, with most of the remainder coming from hydro and wind generation. Wind (with a 21.8% share) accounted for around six times the shares of hydro (3.6%) in primary input terms.

Of the 11.2 million tonnes of oil equivalent of primary energy use accounted for by renewables, 8.4 million tonnes was used to generate electricity, 1.7 million tonnes was used to generate heat, and 1.1 million tonnes was used for road transport. Renewable energy use grew by 21% between 2012 and 2013 and is now nearly four and a half times the level it was at in 2000.

Renewables

Electricity generation from renewable sources since 2000



Note: Hydro bar includes shoreline wave/tidal (0.006TWh in 2013)

Renewable Electricity Generation, TWh

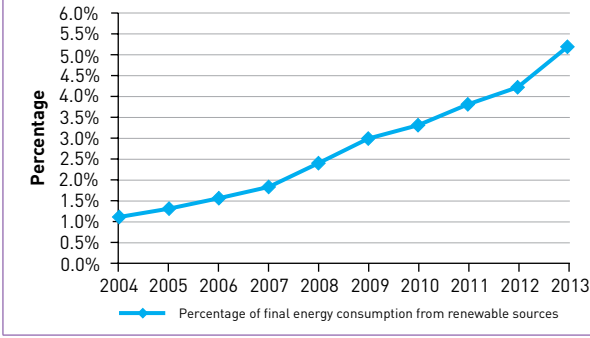
	1990	2000	2010	2012	2013
Onshore wind	–	0.9	7.1	12.1	17.0
Offshore wind	–	–	3.0	7.5	11.4
Solar PV	–	–	–	1.4	2.0
Hydro	5.2	5.1	3.6	5.3	4.7
Landfill Gas	0.1	2.2	5.0	5.2	5.2
Other Bioenergy	0.5	1.7	7.0	9.8	13.3
Total Renewables	**5.8**	**9.9**	**25.8**	**41.2**	**53.7**

At 53.7 TWh, renewables accounted for 14.9% of electricity generated in the UK during 2013, 3.6 percentage points higher than during 2012. Overall generation from renewables increased by 30% between 2012 and 2013. Wind generation also saw large increases – offshore wind up 52% and onshore wind up 40%; whilst bioenergy up 24% reflecting conversion of some coal plants and solar PV up 51%, hydro generation fell by 11%.

A number of weather factors had a major impact on renewable generation during 2013; average rainfall levels in hydro areas were 9% lower than in 2012; average wind speeds were 0.4 knots higher than in 2012, and broadly similar to the average over the last 5 years.

When taking into account only renewable sources eligible under the Renewables Obligation, they accounted for 14.1% of UK electricity sales, up from 10.8% in 2012.

UK progress against 2009 EU Renewable Energy Directive



Progress against the 2009 Renewable Energy Directive

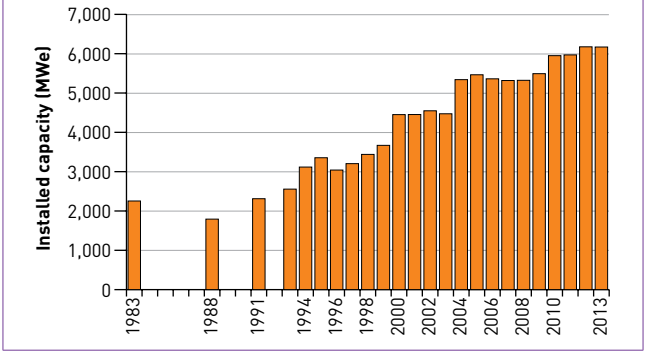
	2008	2009	2010	2011	2012	2013
Percentage of electricity from renewable sources	5.5	6.7	7.4	8.8	10.8	13.9
Percentage of heating and cooling from renewable sources	1.4	1.7	1.9	2.3	2.4	2.8
Percentage of transport energy from renewable sources	2.1	2.6	3.1	2.7	3.7	4.4
Overall renewable consumption as a percentage of capped gross final energy consumption using net calorific values	2.4	3.0	3.3	3.8	4.2	5.2

In March 2007, the European Council agreed to a common strategy for energy security and tackling climate change. An element of this was establishing a target of 20% of the EU's energy to come from renewable sources. In 2009 a new Renewable Energy Directive was implemented on this basis and resulted in agreement of country "shares" of this target. For the UK, by 2020, 15% of **final energy consumption** – calculated on a net calorific basis, and with a cap on fuel used for air transport – should be accounted for by energy from renewable sources.

Provisionally in the UK during 2013, 5.2% of final energy consumption was from renewable sources; this is up from 4.2% in 2012 and 3.8% in 2011. The methodology uses normalised load factors for wind (over 5 years) and hydro (over 15 years) to reduce the impact of unusual weather conditions on the calculations.

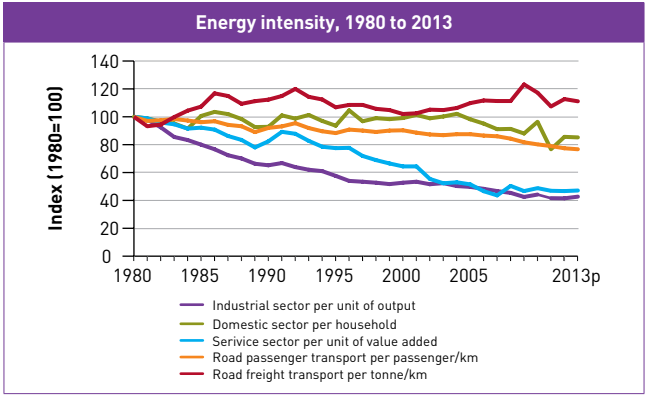
Combined heat and power

Combined heat and power, 1983 to 2013



	1995	2000	2010	2012	2013
CHP electrical capacity (MWe)	3,354	4,451	5,950	6,175	6,170
CHP electrical generation (GWh)	14,778	25,245	26,768	22,950	20,891
CHP heat generation (GWh)	56,833	54,877	48,267	48,244	46,701
Number of CHP sites					
<= 100 kWe	620	560	407	575	603
> 100 kWe to 1 MWe	397	533	765	1,053	1,071
>1 MWe to 2 MWe	26	41	83	105	112
> 2 MWe to 10 MWe	113	141	138	154	159
> 10 MWe +	63	64	66	68	69
Total	**1,219**	**1,339**	**1,459**	**1,955**	**2,014**

In 2013, CHP electrical capacity remained broadly unchanged compared to 2012. Electricity generation in 2013 was 9% lower than in 2012, while heat generation was 3% lower. Around 30% of UK CHP installations are small schemes with an electrical capacity of 100 kWe or less, but account for less than 1% of the total CHP installed electrical capacity. The 3% of schemes larger than 10 MWe account for 80% of the total CHP installed electrical capacity. In 2013, around 5.8% of the total electricity generated in the UK came from CHP plants.



Tonnes of oil equivalent

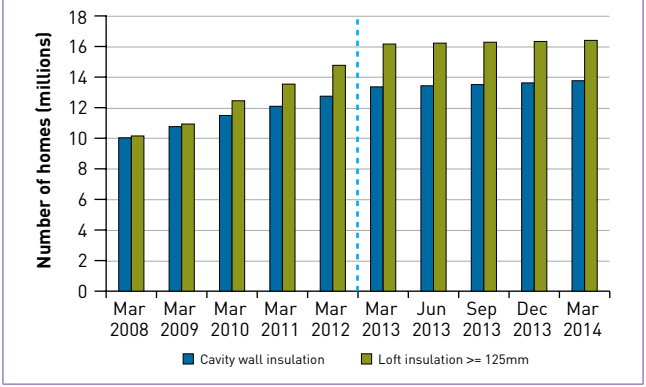
	1980	1990	2000	2010	2012	2013p
Industrial energy consumption per million units of GVA	299.0	195.0	157.5	132.2	124.0	127.6
Domestic energy consumption per household	1.9	1.8	1.9	1.9	1.7	1.7
Service sector energy consumption per million units of GVA	46.4	38.2	29.9	22.6	21.6	21.9
Road passenger energy consumption per million passenger-kilometres*	45.6	41.9	41.1	36.5	35.2	34.9
Road freight energy consumption per million freight-kilometres*	77.2	86.7	78.7	90.6	87.0	85.8

* DECC estimates for 2013

Energy consumption per unit of output, known as energy intensity, gives a broad indication of how efficiently energy is being used over time. Changes in energy intensity can occur for a number of reasons: process change, technological change and structural change (in the case of industry and the service sector) as well as efficiency change. The largest falls in energy intensity over the last thirty years or so have occurred in the industrial sector mainly due to structural change in the period before 2000, and in the service sector due to general energy efficiency improvements. Domestic consumption in 2013 was at a broadly similar level to the previous year, but has been on a general downward trend since 2004.

Energy efficiency

Number of homes with energy efficiency measures, March 2008 to March 2014



Insulated homes in Great Britain (Thousands)

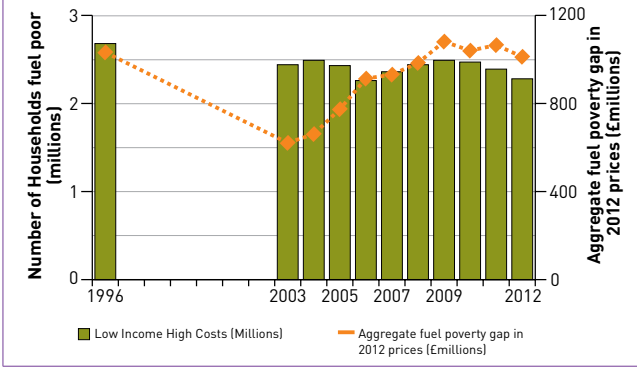
	Mar 2008	Mar 2009	Mar 2010	Mar 2011	Mar 2012	Mar 2013	Mar 2014
Cavity wall insulation	10,030	10,760	11,490	12,090	12,750	13,360	13,760
Loft insulation >= 125mm	10,150	10,930	12,450	13,540	14,770	16,160	16,400

Source: DECC, Green Deal, ECO and Insulation Levels Quarterly Report

Cost effective methods of improving energy efficiency in homes are to install cavity wall and loft insulation where these measures are practical. Building Regulations require new homes to reach thermal efficiency standards which would typically be met by installing these measures. In addition, existing homes have had these measures retrofitted through Government schemes or through a DIY loft insulation. These data show the change in the number of insulated homes as a result of new build and retro fitting insulation.

The number of homes with cavity wall insulation has increased by 37 per cent between the end of March 2008 and March 2014 such that 13.8 million, of the 19.3 million homes with cavities, are insulated. The number of homes with loft insulation, of a depth of at least 125mm, has increased by 62 per cent between the end of March 2008 and March 2014 meaning that 16.4 million of the 23.8 million homes with lofts are insulated to this level.

Number of households in fuel poverty, Low Income High Costs indicator, 1996 to 2012



A household is considered to be fuel poor if:

- they have required fuel costs that are above average (the national median level)
- were they to spend that amount, they would be left with a residual income below the official poverty line.

The LIHC indicator is a twin indicator consisting of:

i) the **number** of households that have both low incomes and high fuel costs and

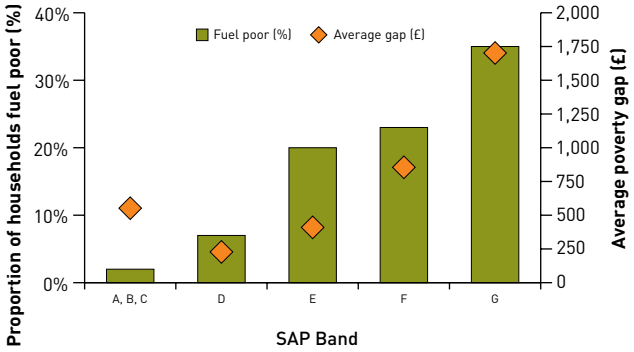
ii) the **depth** of fuel poverty amongst these fuel poor households. This is measured through a fuel poverty gap which represents the difference between the required fuel costs for each household and the median required fuel costs.

The fuel poverty gap for each individual household is then aggregated across all fuel poor households to produce an overall aggregate fuel poverty gap which gives a sense of the depth of fuel poverty on a national level.

In 2012, the number of households in fuel poverty in England was estimated at around 2.28 million, representing approximately 10.4 per cent of all English households. This is a fall from 2.39 million households in 2011 (a reduction of almost 5%). In line with this, the aggregate fuel poverty gap also dropped by around 5%, from £1.06 billion in 2011 to £1.01 billion in 2012.The average fuel poverty gap over this period also decreased from £445 to £443.

Fuel poverty

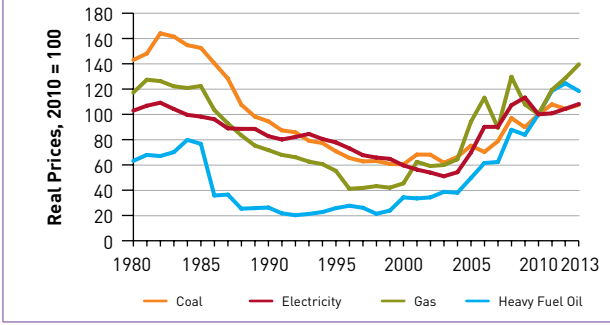
Number of households in fuel poverty by SAP rating, Low Income High Costs indicator, 2012



The energy efficiency of dwellings is a key driver of the likelihood of a household being fuel poor, as it is strongly linked to the fuel costs incurred by the household. This chart shows the fuel poverty rates by different SAP rating bands (based on SAP09 methodology) under the low income high cost indicator.

The chart shows that the depth and likelihood of fuel poverty increases markedly with lower SAP scores. In 2012, 35 per cent of households living in G rated properties were fuel poor compared to only two and seven per cent of households living in A/B/C and D rated properties respectively. The corresponding average fuel poverty gap is also three times higher in G rated properties compared to A-C rated properties and seven times higher than in D rated properties (with an average fuel poverty gap of around £1,702 in G rated properties compared to £552 in A-C rated properties and £228 in D rated properties in 2012).

Fuel price indices for the industrial sector, 1980 to 2013



Real prices, 2010 = 100

	1980	1990	2000	2010	2012	2013
Coal	143.0	94.5	60.4	100.0	104.3	107.5
Electricity	102.9	82.7	59.6	100.0	104.4	108.2
Gas	117.2	71.7	45.4	100.0	128.7	139.6
Heavy fuel oil	63.2	26.3	34.3	100.0	124.5	118.4
Industrial prices	**95.6**	**73.3**	**51.8**	**100.0**	**114.0**	**117.2**

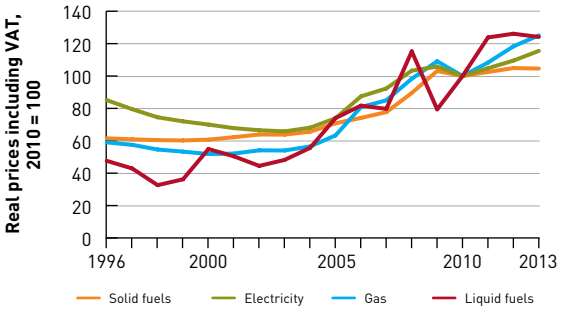
Includes the Climate Change Levy that came into effect in April 2001.

Industrial prices were broadly stable in the early 80's before falling steadily to their lowest aggregate levels in 2003. Since then prices have more than doubled, growing on average by 132% by 2013.

In 2013 compared to 2012, prices for most fuels increased, though heavy fuel oil prices fell back from its 2012 peak. Gas and electricity prices rose by 9% and 4% respectively. Over the last ten years gas and electricity prices have risen by 133% and 112% respectively.

Prices for most fuels are generally driven by changes to the price of crude oil. In the last ten years the price of Brent in $ per barrel (bbl) has increased from around $29/bbl to around $109/bbl in 2013. Crude oil has remained above $100 per barrel in all but one month since January 2011.

Fuel price indices for the domestic sector, 1996 to 2013



Real prices including VAT, 2010 = 100

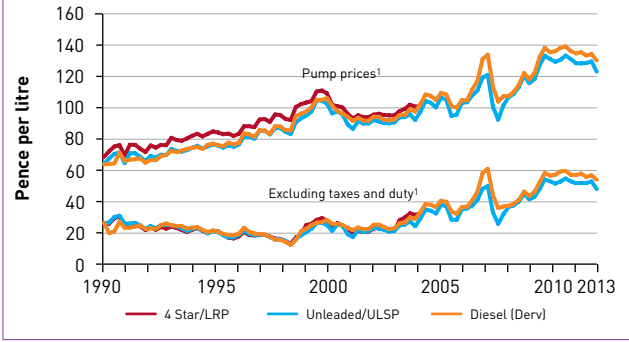
	1996	2000	2005	2010	2012	2013
Solid fuels	61.5	60.7	70.8	100.0	104.9	104.6
Electricity	85.1	70.0	73.9	100.0	109.5	115.5
Gas	59.0	51.8	63.3	100.0	118.3	125.1
Liquid fuels	47.6	54.9	74.0	100.0	126.1	124.1
Domestic fuels	**70.4**	**61.3**	**69.4**	**100.0**	**114.7**	**120.7**

Source: Consumer Price Index, Office for National Statistics

Compared to 2012, total domestic energy prices in 2013 increased in real terms by 5%. Within the overall movement, liquid fuels decreased by 2%, electricity prices increased by 5%, and gas prices increased by 6%. Between 2003 and 2013, real prices for domestic energy doubled (up 101%), with the real price of electricity increasing by 75% and the real price of liquid fuels and gas increasing by 157% and 132% respectively.

Note: in this edition the fuel price indices for the domestic sector have changed from the Retail Prices Index (RPI) to the Consumer Prices Index (CPI), as the RPI had its National Statistics designation removed in 2013. The CPI does not have as extensive a back-series as the RPI and so the chart now starts in 1996 rather than 1980. The base year has also changed from 2005=100 to 2010=100.

Petrol and diesel prices, 1990 to 2013



(1) Deflated using GDP (market prices) deflator (2010 = 100).

Current retail prices **Pence/litre**

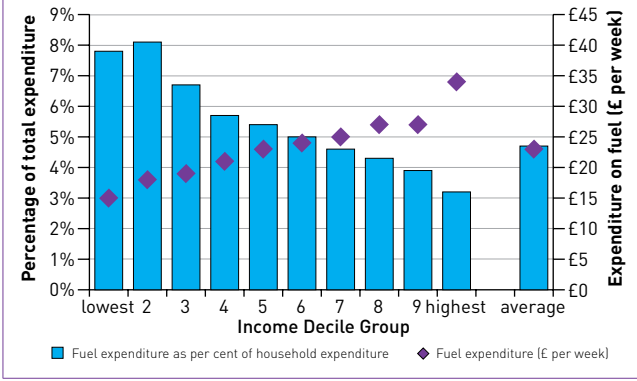
	Unleaded	Diesel
1990	42.0	40.5
1995	53.8	54.2
2000	79.9	81.3
2005	86.8	90.9
2010	116.9	119.3
2011	133.3	138.7
2012	135.4	141.8
2013	134.1	140.4

In cash terms ULSP cost 1.2 pence less in 2013 than in 2012, whilst diesel cost 1.4 pence per litre less. These slight decreases reflect the price of crude oil, which has stayed above $100 per barrel in most months since February 2011, but the average annual price in 2013 was slightly lower than in 2012.

In real terms the price of Ultra Low Sulphur Petrol (ULSP) was 3% lower in 2013 compared to 2012, whilst the price of diesel was also 3% lower.

In 2013, taxes and duty accounted for 60% of the retail price of unleaded and 58% of the price of diesel.

Fuel expenditure of households[1], 2012



Fuel expenditure as a percentage of total household expenditure, 1980 to 2011

Fuel type	1980	1990	2000/01	2004/05	2010	2011	2012
Gas	1.6%	1.7%	1.2%	1.3%	2.0%	2.0%	2.1%
Electricity	2.7%	2.3%	1.6%	1.4%	2.1%	2.1%	2.2%
Coal and Coke	0.9%	0.3%	} 0.3%	0.2%	0.4%	0.4%	0.4%
Heating oil	0.4%	0.2%					
Total	5.6%	4.5%	3.1%	2.9%	4.5%	4.6%	4.7%

Source: Living Costs and Food Survey 2012, Office for National Statistics
(1) Includes non-consuming households

Between 2004/05 and 2009, the proportion of household expenditure spent on fuel increased from 2.9 per cent to 4.7 per cent. Since 2009, it has remained fairly steady. Households in the lowest income decile group (i.e. the 10% of households with the lowest income) spend less than half as much on domestic fuel per week compared to households in the highest income decile group (£15 compared to £34 per week). However, when comparing expenditure on domestic fuels as a proportion of total expenditure in 2012, then those in the lowest income decile group spend more (7.8%) than those in the highest income decile group (3.2%).

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In addition, there is a general enquiry number, which the deaf and hard of hearing can use to contact DECC: 0300 060 4000

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Conversion factors and definitions

To convert from the units on the left hand side to the units across the top multiply by the value in the table.

		to:	**Thousand toe**	**TJ**	**GWh**	**Million therms**
		multiply by				
from:	**Thousand toe**		1	41.868	11.630	0.39683
	TJ		0.023885	1	0.27778	0.0094778
	GWh		0.085985	3.6000	1	0.034121
	Million therms		2.5200	105.51	29.307	1

Data relating to the energy content of fuels are on a gross calorific value basis.

Prices are presented in real terms i.e. the effect of inflation has been removed by adjusting each series using the GDP deflator.

The symbol '-' is used in the tables where the figure is nil or not separately available and '..' is used to indicate 'not available'.

The Department of Energy and Climate Change is the source of all data except where stated.

All data within this publication are classified as National Statistics except for those on page 34 which are classified as experimental official statistics.

All figures are for the United Kingdom, except for pages 34, 35 and 36.

The Department of Energy and Climate Change (DECC) also produces the following statistics publications.

The **Digest of United Kingdom Energy Statistics** is the annual energy statistics publication of DECC. With extensive tables, charts and commentary covering all the major aspects of energy, it provides a detailed and comprehensive picture of the last three years and a detailed picture for the last five years. It includes detailed information on the production and consumption of individual fuels and of energy as a whole. The 2014 edition was published by The Stationery Office on 31 July 2014 and costs £68. It can also be accessed on the Internet at:
www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes

The **Energy Flow Chart** is an annual publication illustrating the flow of primary fuels from home production and imports to their eventual final uses. They are shown in their original state and after being converted into different kinds of energy by the secondary fuel producers. The 2014 edition of the chart, published on 31 July 2014, shows the flows for 2013 and can be accessed on the Internet at:
www.gov.uk/government/collections/energy-flow-charts

Free copies are available from the Publications Orderline 0845 504 9188.

Energy Trends is a quarterly publication of statistics on energy in the United Kingdom. It includes tables, charts and commentary covering all major aspects of energy. It provides a comprehensive picture of energy production and use, to allow readers to monitor trends during the year. It is available on annual subscription together with Quarterly Energy Prices, or material can be accessed on the Internet at: www.gov.uk/government/collections/energy-trends

Single copies are available from the Publications Orderline 0845 504 9188 priced £6. Monthly updates to tables in Energy Trends are split by fuel source and can be accessed on the Internet at:
www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics

Quarterly Energy Prices is a quarterly publication that contains tables, charts and commentary covering energy prices, to domestic and industrial consumers, for all the major fuels. It also presents comparisons of fuel prices in the European Union and G7 countries. It is available on annual subscription together with Energy Trends, or material can be accessed on the Internet at:
www.gov.uk/government/collections/quarterly-energy-prices

Single copies are available from the Publications Orderline 0845 504 9188 priced £8.

References

UK Energy Sector Indicators is designed to show the extent to which secure, diverse and sustainable supplies of energy to UK businesses and consumers, at competitive prices, are ensured. www.gov.uk/government/collections/uk-energy-sector-indicators

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. www.gov.uk/government/collections/energy-consumption-in-the-uk

Sub-National Energy Consumption statistics are produced by DECC to emphasise the importance of local and regional decision making for energy policy in delivering a number of national energy policy objectives. www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics

DECC 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 DECC sub-national energy consumption statistics and records of energy efficiency measures in the Homes 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

Fuel Poverty Statistics are produced by DECC to support the UK Fuel Poverty Strategy. www.gov.uk/government/collections/fuel-poverty-statistics

UK Greenhouse Gas Emissions statistics are produced by DECC 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

Green Deal and Energy Company Obligation Statistics are published by DECC on a range of information relating to the rollout of the Green Deal and ECO policy. This includes number of GD Assessments, number of GD Plans, number of energy efficiency measures installed, data on the amount of GD cashback vouchers issued, data on ECO brokerage, and information on the supply chain. DECC also publishes quarterly statistics on the levels of wall and loft insulation in Great Britain, along with information on the remaining potential for insulation measures www.gov.uk/government/collections/green-deal-and-energy-company-obligation-eco-statistics

The cover illustration used for UK Energy in Brief and other DECC energy statistics publications is from a photograph by Peter Askew. It was a winning entry in the DTI News Photographic Competition in 2002.

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