

# Chapter 2

## Solid fuels and derived gases

### Key points

- **Coal production fell more than half compared to last year**, down to an all-time low of 4 million tonnes (Table 2.4). This is the largest ever year-on-year reduction and is a marked step down from the 30 million tonnes produced at the start of the century. The decrease is due to the closure of the last large deep mines in 2015, combined with a steep reduction in demand) as government policy and market forces reduced the use of coal for electricity generation.
- Similarly, **demand for coal halved**, falling from 38 million tonnes in 2015 to 18 million tonnes in 2016 (Table 2.4), with a 59 per cent decrease in the use of coal for electricity generation. Demand last year was around quarter of that seen at the start of the century.
- In 2016 around 67 per cent of demand for coal was from major power producers for electricity generation with around a further 15 per cent used for the manufacture of coke (Table 2.4).
- In 2016 **UK imports were 8.5 million tonnes (the lowest value for 15 years)**, a decrease of 62 per cent on 2015 due to lower demand from generators (Table 2.4).
- In 2016 Columbia was the UK's largest supplier of coal imports with a share of 31 per cent. The other main suppliers were Russia with a 27 per cent share and USA with a 17 per cent share (Table 2B).
- Total stock levels decreased in 2016 to 8 million tonnes, which was 5.7 million tonnes lower than in 2015, due to generators using more stocks for electricity generation. (Table 2.4).

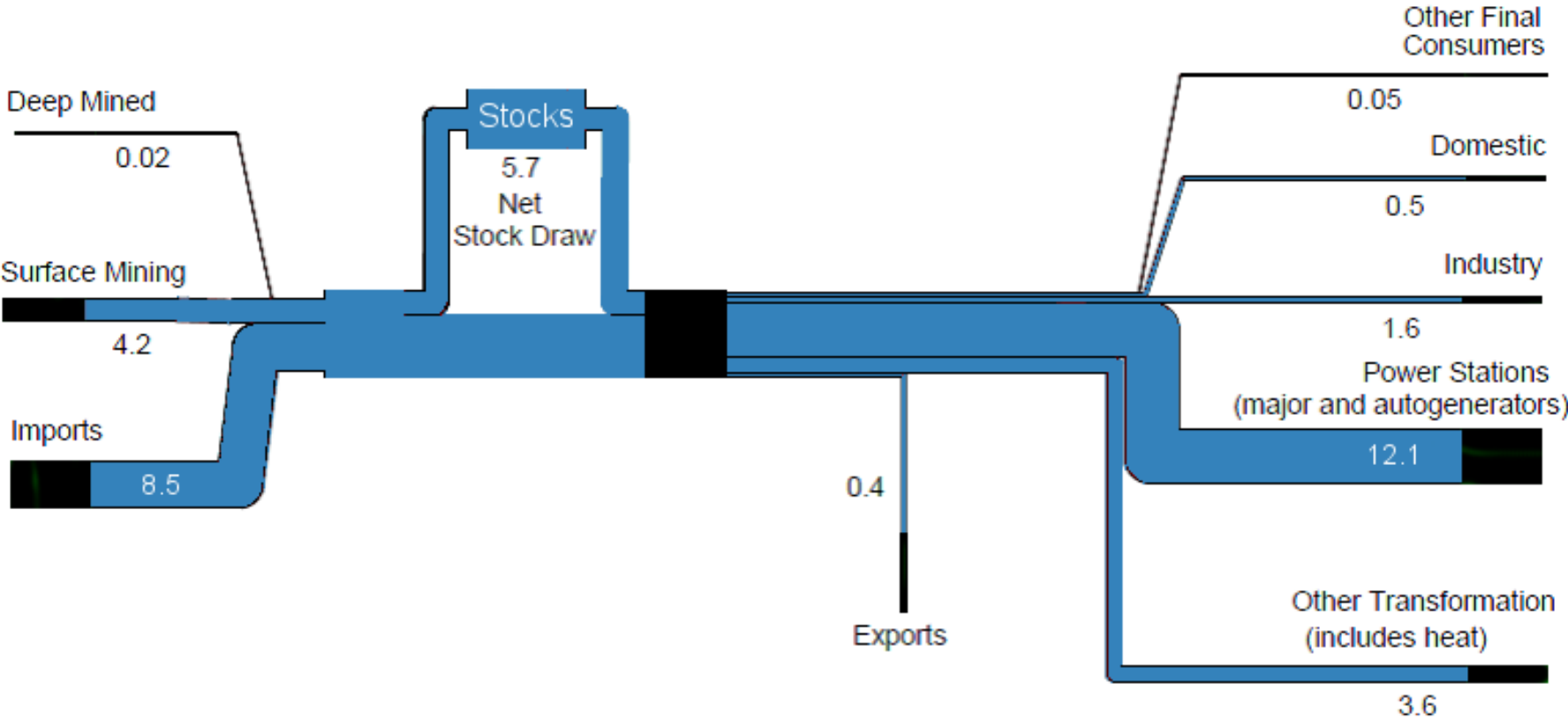
### Introduction

2.1 This chapter presents statistics on supply and demand for coal (tables 2.1 - 2.4) and manufactured solid fuels, including coke oven coke, coke breeze, patent fuel, coke oven gas, blast furnace gas, benzole and tar (tables 2.5 and 2.6). A full list of tables is available at the end of the chapter.

2.2 **In 2016, coal comprised 5.8 per cent of UK primary energy demand, half that of the previous year** and under a third of its recent peak of 19 per cent in 2012. Most coal is used for electricity generation, coke manufacture, or in blast furnaces in the steel industry.

2.3 Overleaf, an energy flow chart for 2016 shows the flows of coal from production and imports through to consumption. It is a way of simplifying the figures that can be found in the commodity balance for coal in Table 2.4. The chart illustrates the flow of coal from the point of supply (on the left) to its eventual final use (on the right).

# Coal flow chart 2016 (million tonnes of coal)

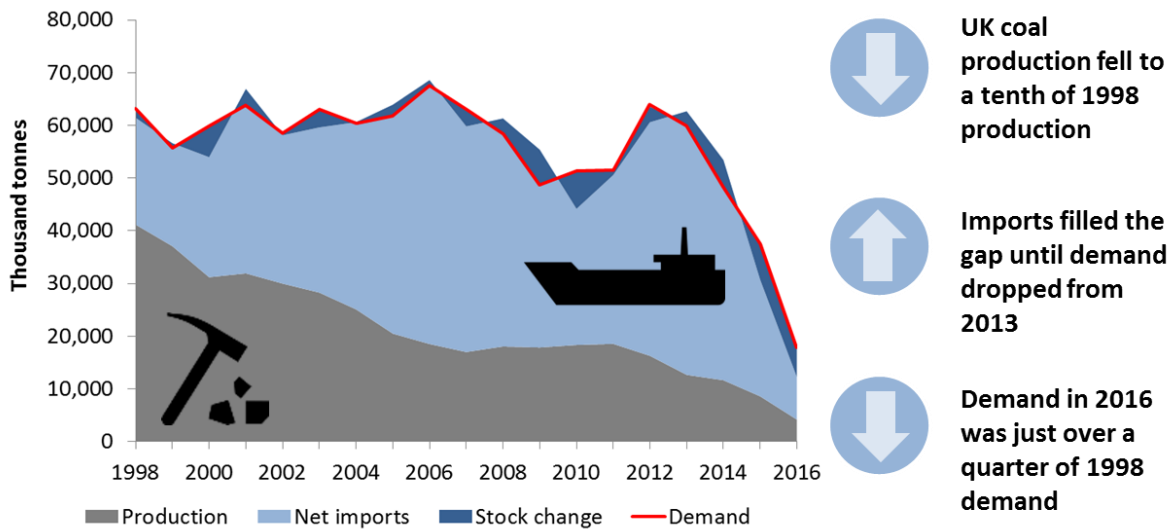


Notes: This flow chart is based on the data that appear in Tables 2.1 and 2.4.

## Coal supply and demand (Table 2.1)

2.4 In 2016, coal production halved (-51 per cent) compared to 2015 to an all-time low of 4.2 million tonnes. Net imports fell 64 per cent to 8.0 million tonnes (Chart 2.1).

Chart 2.1: UK coal supply and demand to 2016



2.5 **Deep mined** production fell to just 0.02 million tonnes in 2016, from 2.8 million tonnes in 2015. Kellingley, the last remaining large deep mine, closed in December 2015 and there are only seven small deep mines left in the UK. Similarly, **surface mine** production decreased by 29 per cent to a new record low of 4.2 million tonnes. This was due to the closure of a number of mines in 2015 and some other mines producing less coal as they are coming to the end of operation. Production from deep mines and surface mines accounted for 23 per cent of UK coal supply, with 45 per cent from net imports and the remaining 32 per cent drawn from stocks held by coal power plants and coke ovens.

2.6 **Steam coal**, mainly used by power stations, accounted for 88 per cent of total coal production in 2016, with 11 per cent **anthracite** and the remainder **coking coal** (Table 2.1). No coal slurry has been produced since the last UK sites closed in 2013.

2.7 Table 2A shows how production of coal is divided between England, Wales and Scotland. In 2016, 59 per cent of coal output was in Wales, 21 per cent in England and 20 per cent in Scotland. Wales overtook England as the main producer of coal as the last remaining large deep mines, which were in England, closed in 2015. There is no longer any deep mining of coal in Scotland (Map 2A).

<sup>1, 2</sup>

		Million tonnes			Number		
		Output			Employment		
		2014	2015	2016	2014	2015	2016
<b>Deep mined</b>	England	3.6	2.8	0.02	1,650	427	42
	Wales	0.04	0.03	0.01	116	50	6
	<b>Total</b>	<b>3.7</b>	<b>2.8</b>	<b>0.02</b>	<b>1,766</b>	<b>477</b>	<b>48</b>
<b>Surface mining</b>	England	2.9	2.2	0.9	505	388	192
	Scotland	2.5	1.3	0.8	647	421	176
	Wales	2.5	2.3	2.4	683	689	415
	<b>Total</b>	<b>7.9</b>	<b>5.7</b>	<b>4.2</b>	<b>1,835</b>	<b>1,498</b>	<b>783</b>
<b>Total</b>	England	6.5	4.9	0.9	2,155	815	234
	Scotland	2.5	1.3	0.8	647	421	176
	Wales	2.5	2.3	2.5	799	739	421
	<b>Total</b>	<b>11.5</b>	<b>8.5</b>	<b>4.2</b>	<b>3,601</b>	<b>1,975</b>	<b>831</b>

Source: The Coal Authority

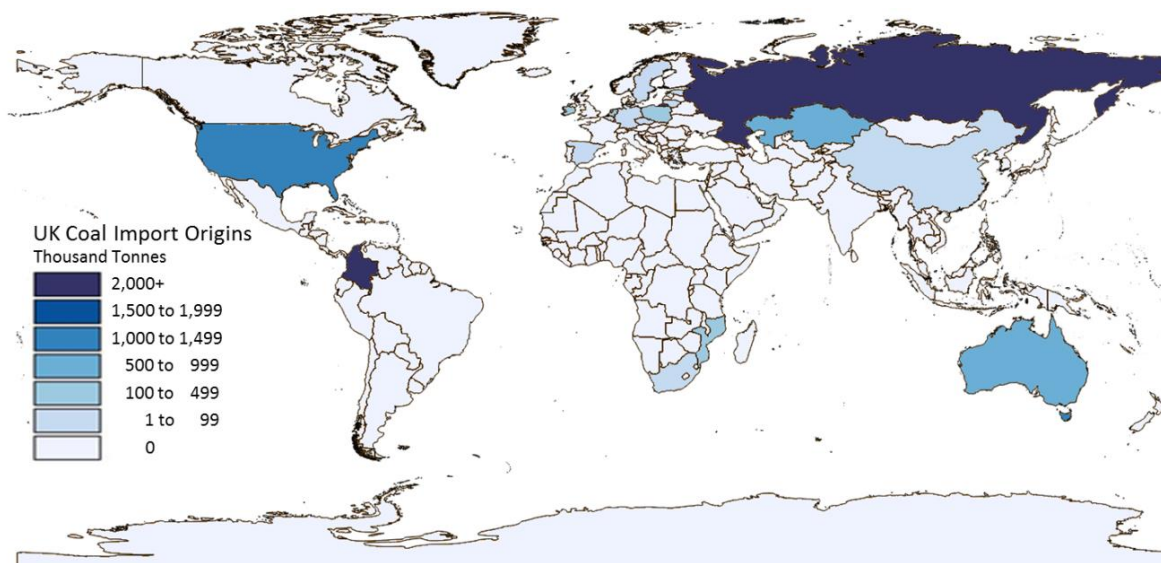
1. Output is the tonnage declared by operators to the Coal Authority, including estimated tonnages. It excludes estimates of slurry recovered from dumps, ponds, rivers, etc.
2. Employment includes contractors and is as declared by licensees to the Coal Authority at 31 December each year.

2.8 Employment in the coal industry has followed a similar pattern to UK production levels. Table 2A also shows how numbers employed in the production of coal have changed over the last three years. **During 2016 total employment, including contractors, was 58 per cent lower than in 2015.** At 31 December 2016, 51 per cent of the 831 people employed in UK coal mining worked in Wales, while 28 per cent were employed in England and 21 per cent in Scotland.

2.9 **In 2016 UK imports were 8.5 million tonnes, a decrease of 62 per cent on 2015** (23 million tonnes). This was the lowest value for 20 years.

2.10 The majority of UK coal imports came from just three countries, as shown by the map below. In 2016, 75 per cent of the UK's total coal imports came from Colombia (2.7 million tonnes), 27 per cent (2.3 million tonnes) came from Russia and 17 per cent (1.4 million tonnes) came from the USA.

**Chart 2.2: UK Coal Imports in 2016**



**Table 2B: Imports of coal in 2016<sup>1</sup>**

	Thousand tonnes			
	Steam coal	Coking coal	Anthracite	Total
Colombia	2,667	-	-	2,667
Russia	1,554	730	8	2,292
United States of America	373	1,044	3	1,420
Australia	-	778	-	778
European Union <sup>2</sup>	337	43	60	439
Republic of South Africa	98	-	-	98
Other countries	589	187	23	799
<b>Total all countries</b>	<b>5,619</b>	<b>2,781</b>	<b>94</b>	<b>8,494</b>

Source: HM Revenue and Customs, ISSB

1. Country of origin basis.

2. Includes non-EU coal routed through the Netherlands.

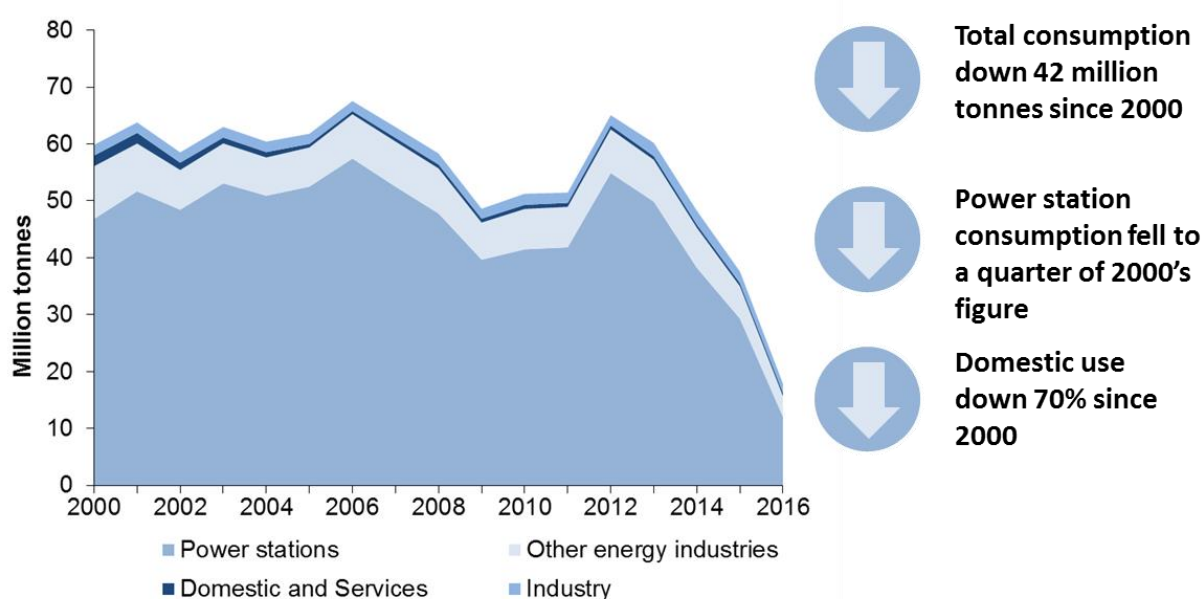
2.11 Steam coal accounted for 66 per cent of the total imports, of the rest, 33 per cent was coking coal, with anthracite accounting for the remainder. Imports from Colombia decreased by 59 per cent in 2016 compared to 2015, from 7 million tonnes to 3 million tonnes. In 2016, Colombia accounted for 47 per cent of total steam coal imports. A further 28 per cent came from Russia. The UK imported 38 per cent of coking coal from the USA with a further 28 per cent from Australia and 26 per cent from Russia. The small volume of imported anthracite was mainly from the European Union (64 per cent) and Canada (12 per cent).

2.12 In 2015, the latest year for which data is available, the UK was the fourth largest importing country in the EU and accounted for 11 per cent of total EU imports (230 million tonnes), after being overtaken by Turkey. The Netherlands was the top importing country in the EU accounting for 25 per cent, followed by Germany with a 24 per cent share and Turkey with a 15 per cent share of the total<sup>1</sup>.

## Coal Consumption

2.13 **The main development this year was yet another significant fall in demand, as coal for electricity generation continued to fall sharply** (Chart 2.3). Consumption by electricity generators was down by 59 per cent to 12 million tonnes (a new record low). The decline was due to reduced coal-fired capacity due to the conversion of a third unit at Drax from coal to high-range co-firing (85 % to <100% biomass) in July 2015 and an increase in the carbon price floor, which made coal-fired generation more expensive relative to gas-fired generation (from April 2015). The price of gas relative to coal was also a key reason for the decline; the price of coal purchased by major power producers rose by 12 per cent in 2016, while the price of gas fell by 20 per cent.<sup>1</sup> Seventy-eight per cent (13 million tonnes) of demand for all coal was for steam coal, 18 per cent (3.2 million tonnes) was for coking coal and the remaining 4 per cent (0.8 million tonnes) was for anthracite. The proportion of steam coal fell from 83 per cent in 2015, and coking coal rose from 14 per cent as use by the iron and steel industry fell less steeply than for electricity generation.

**Chart 2.3: Coal consumption, 2000 to 2016**



2.14 **The transformation sector represented 88 per cent (16 million tonnes) of overall demand for coal in 2016.** Electricity generation accounted for 67 per cent of demand for all types of coal and 86 per cent of demand for steam coal. Most coking coal was used in coke ovens (57 per cent) and the rest in blast furnaces (43 per cent) in the UK iron and steel industry. Coking coal used in blast furnaces decreased by 12 per cent from 1.5 million tonnes in 2015 to 1.4 million tonnes in 2016. An energy balance flow chart for manufactured fuel, similar to that at the start of this chapter, is included in annex H.

2.15 Electricity generation use of coal by major power producers fell by 59 per cent from 29 million tonnes in 2015 to 12 million tonnes (a new record low) in 2016. Coal use by autogenerators was 19 thousand tonnes, which was unchanged from 2015.

2.16 **Coal consumption by final consumers fell 16 per cent compared to 2015, to 2.2 million tonnes. This comprised 12 per cent of total demand.** Final consumption mainly covers steam raising, space or hot water heating, or heat for processing. Steam coal accounted for 81 per cent of this final consumption (down 14 per cent from 2015).

2.17 The industrial sector is the largest final consumer (accounting for 73 per cent of total final consumption in 2016). Eighty six per cent of the coal used in the industrial sector was steam coal and manufacturers of mineral products (e.g. cement, glass and brick) were the largest users.

<sup>1</sup> Quarterly Energy Prices – table 3.2.1, which can be accessed at [www.gov.uk/government/collections/industrial-energy-prices](http://www.gov.uk/government/collections/industrial-energy-prices)

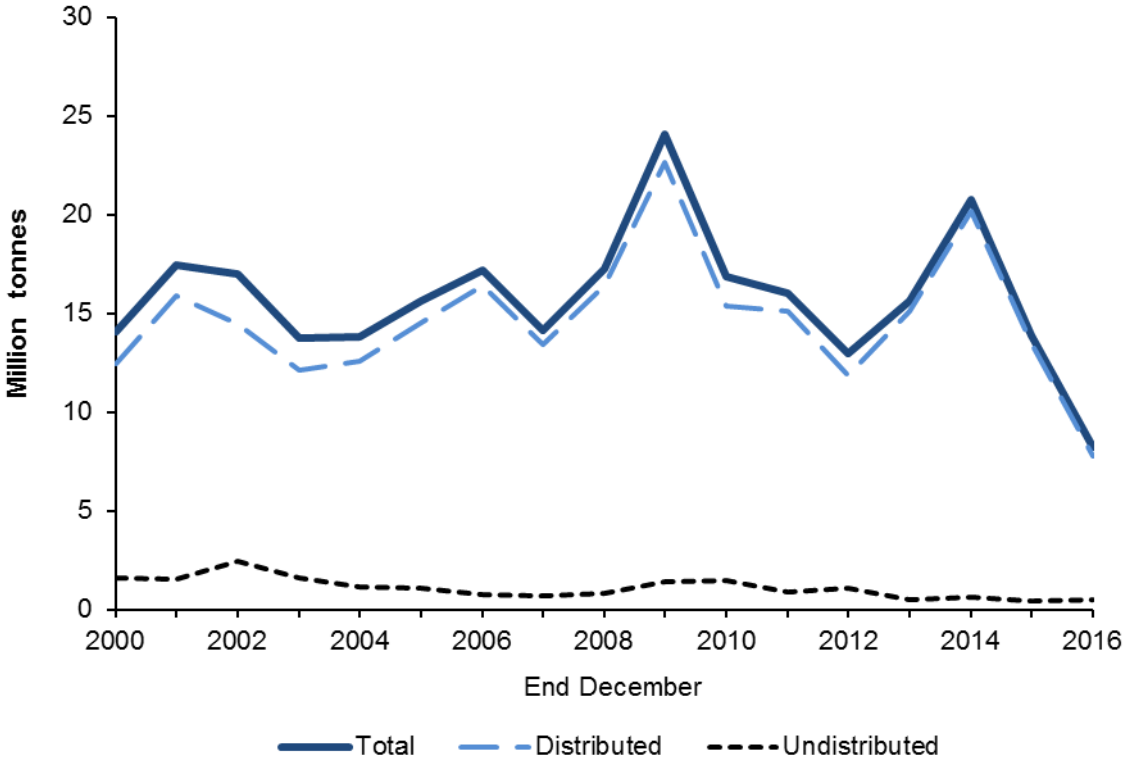
2.18 The domestic sector accounted for 25 per cent of the final consumption of coal, with 66 per cent of this demand being for steam coal and the remainder for anthracite. Domestic consumption fell slightly, by 0.4 per cent in 2016 compared with 2015.

2.19 In 2015, the UK was the third largest consumer of coal among the EU countries, accounting for 13 per cent (39 million tonnes) of total coal consumption in the EU (289 million tonnes). The top consumer was Poland accounting for 23 per cent (65 million tonnes) of total EU consumption, while Germany was second accounting for 22 per cent (64 million tonnes)<sup>1</sup>.

**Coal Stocks**

2.20 Coal stocks fell 41 per cent in 2016 to 8.3 million tonnes, compared to 13.9 million tonnes in 2015. (Chart 2.4). The fall was due to major power stations depleting their stocks whilst purchasing less coal from the UK and overseas. Stocks at major power stations fell 45% from 12.6 million tonnes to 7.0 million tonnes. Stocks held by coke ovens increased 11 per cent to 0.6 million tonnes. Undistributed stocks (stocks held at collieries and surface mine sites) of 0.49 million tonnes at the end of 2016 were slightly higher than 0.44 million tonnes a year earlier.

**Chart 2.4: Coal stocks in the UK 2000 to 2016**



## Coal Resources

2.21 The Coal Authority estimates that overall there are 3,365 million tonnes of coal resources, including prospects (Table 2C), down from 3,560 million tonnes assessed in June 2016. Of the economically recoverable and minable coal resource in current operations (including those in the planning or pre-planning process) 471 million tonnes is in underground mines and 67 million tonnes in surface mines. Overall England had a 66 per cent share of UK current mines and licenced resources, followed by Scotland with 28 per cent and Wales 7 per cent.

2.22 In prospects, there were 2,000 million tonnes suitable for underground mining and 777 million tonnes suitable for surface mining. Table 2C gives details of the resource assessment by England, Scotland and Wales as at 14 June 2017.

**Table 2C: Identified GB coal resource assessment at 14 June 2017**

<b>UNDERGROUND MINING</b>				
	<b>Million tonnes</b>			
	<b>England</b>	<b>Scotland</b>	<b>Wales</b>	<b>Total</b>
Operational mines	1	0	25	26
Planning granted	5	0	0	5
In planning process	340	0	0	340
Pre-planning	0	100	0	100
Prospects	2,000	0	50	2,050
Closed mines still in licence	0	0	0	0
<b>Total</b>	<b>2,346</b>	<b>100</b>	<b>75</b>	<b>2,521</b>

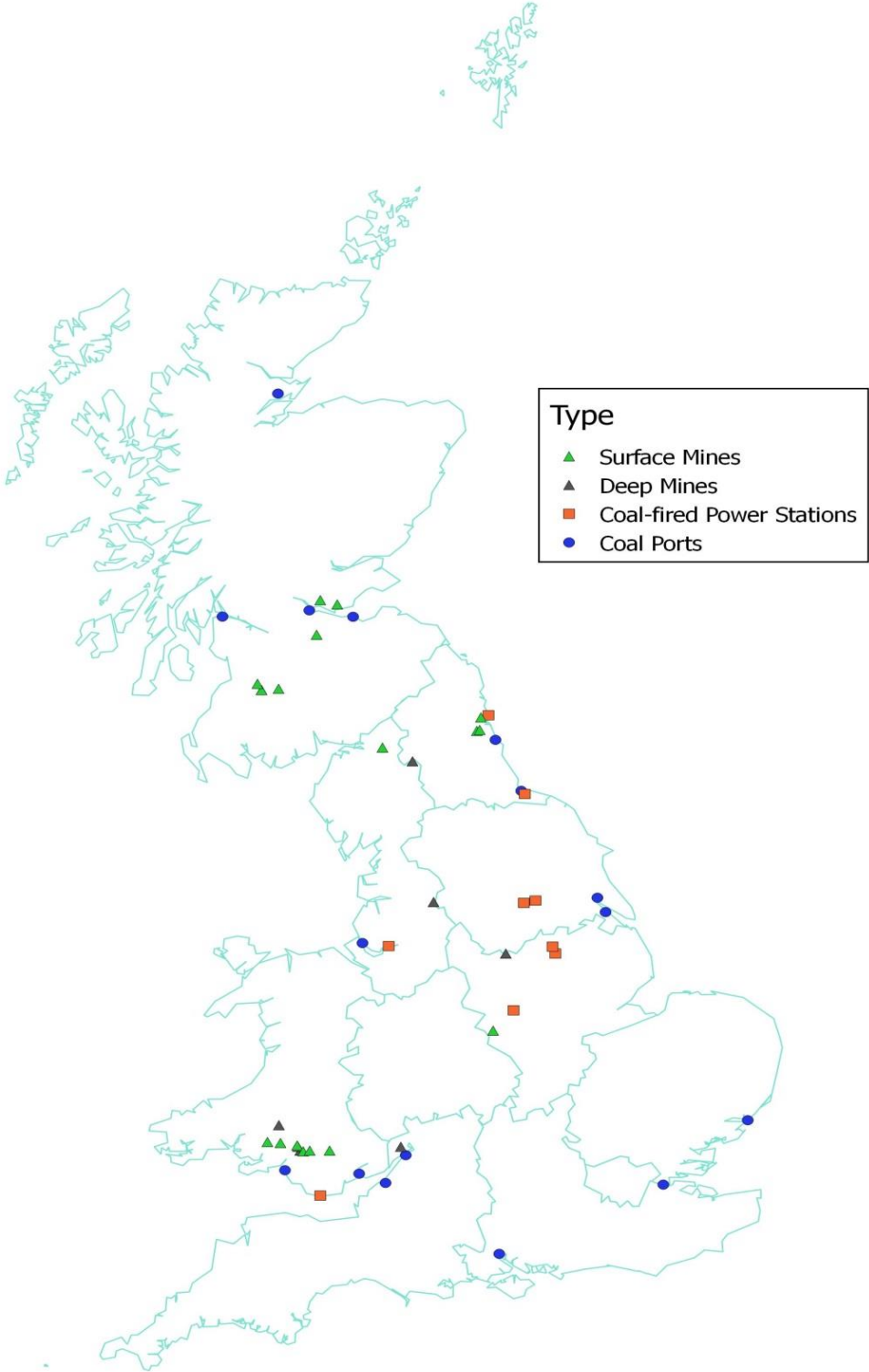
  

<b>SURFACE MINING</b>				
	<b>Million tonnes</b>			
	<b>England</b>	<b>Scotland</b>	<b>Wales</b>	<b>Total</b>
Operational mines	1	3	9	13
Planning granted	3	5	1	9
In planning process	3	1	1	5
Pre-planning	0	40	0	40
Prospects	516	115	147	777
<b>Total</b>	<b>523</b>	<b>164</b>	<b>158</b>	<b>844</b>

Source: Coal Authority



Map 2A: UK coal production sites and ports as at the end of December 2016<sup>2</sup>



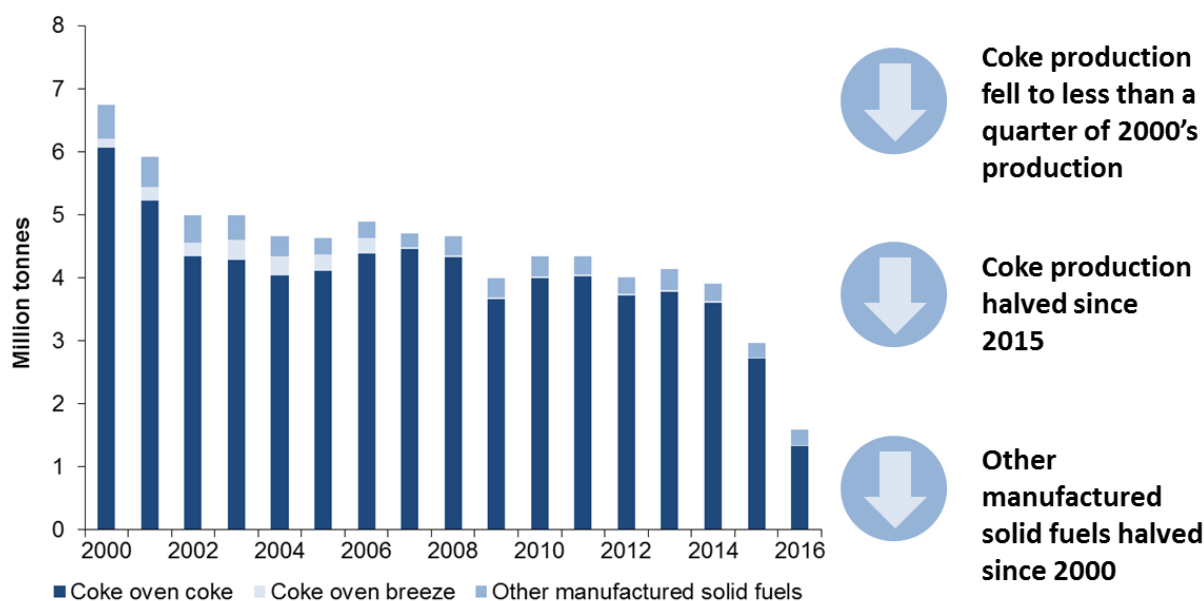
<sup>2</sup> Includes non-coastal ports: Immingham (River Humber), Avonmouth (River Avon) and Tilbury (River Thames)

## Manufactured Solid Fuels (Tables 2.5 and 2.6)

### Production, Trade and Consumption

2.23 Between 2015 and 2016, home produced coke oven coke decreased by 51 per cent to 1.3 million tonnes (Chart 2.5). Monckton Coke and Chemicals, the only dedicated coke plant in the UK closed in December 2014. However, coke is still being produced and used at steelworks, mainly Port Talbot and Scunthorpe. In 2016, 71 per cent of the UK's supply of coke oven coke was home produced, with the remainder being imported.

**Chart 2.5: Total manufactured solid fuels production in the UK 2000 to 2016**



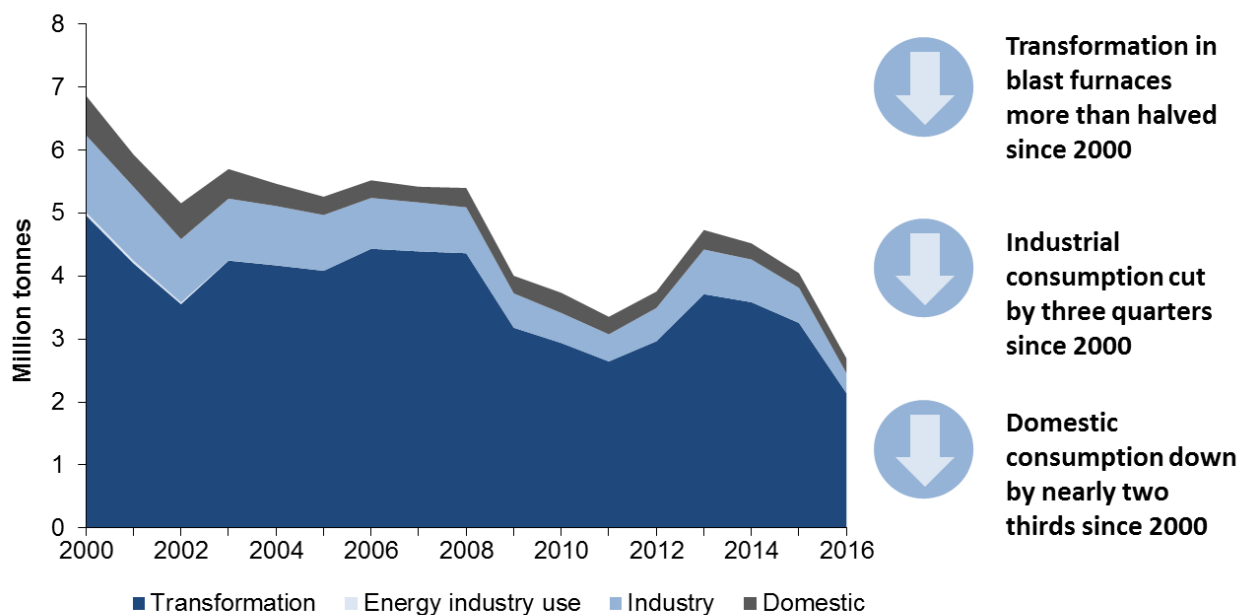
2.24 The main purpose of coke oven coke is for use in blast furnaces in the UK iron and steel industry. In 2016, blast furnace use had fallen to 1.9 million tonnes, down 34 per cent from 2015. The fall in blast furnace use was due to reduced steel production in the UK. Notably, SSI steelworks at Redcar ceased production in mid-September 2015 (with the subsequent closure in October).

2.25 Most of the supply of **coke breeze** is from re-screened coke oven coke, with direct production accounting for only 2.7 per cent of total supply in 2016. In that year, 48 per cent of coke breeze was used in blast furnaces (0.3 million tonnes) for transformation and 52 per cent used for final consumption (Chart 2.5).

2.26 Other manufactured solid fuels (patent fuels) are manufactured smokeless fuels, produced mainly for the domestic market. A small amount of these fuels (only 12 per cent of total supply in 2016) was imported, but exports generally exceed this.

2.27 The carbonisation and gasification of solid fuels in coke ovens produces coke oven gas as a by-product. In 2016, production of coke oven gas was 3.5 TWh, 50 per cent lower than in 2014 (6.9 TWh). Some of this (27 per cent) was used to fuel the coke ovens themselves. Another 24 per cent was used for electricity generation, 36 per cent for iron and steel and other industrial processes (including heat production), 8 per cent in blast furnaces and 5 per cent was lost.

**Chart 2.6: Total manufactured solid fuels consumption in the UK 2000 to 2016**



2.28 Blast furnace gas is a by-product of iron smelting in a blast furnace. A similar product is obtained when steel is made in basic oxygen steel (BOS) converters and “BOS” gas is included in this category. Most of these gases are used in other parts of integrated steel works. Production decreased by 29 per cent in 2016 compared with 2015. The generation of electricity in 2016 used 53 per cent of total blast furnace gas and BOS gas, while 35 per cent was used in coke ovens and blast furnaces themselves, 1.8 per cent used in general heat production, 9.1 per cent was lost or burned as waste and a further 0.9 per cent was used in the iron and steel industry.

2.29 Demand for benzole and tars decreased by 53 per cent from 1,136 GWh in 2015 to 531 GWh in 2016, all of which was met by domestic production. From 2009, based on information from the EU-ETS, all consumption of these products has been allocated to non-energy use – see also paragraph 2.51 (d) and (e).

## List of DUKES coal tables

Table	Description	Period
<a href="#">2.1-2.3</a>	Commodity balances for coal – supply, demand & final consumption	1998-2016
<a href="#">2.4</a>	Supply and consumption of coal	2016
<a href="#">2.5</a>	Supply and consumption of coke oven coke, coke breeze and other manufactured solid fuels	1996-2016
<a href="#">2.6</a>	Supply and consumption of coke oven gas, blast furnace gas, benzole and tars	1996-2016
<a href="#">2.7</a>	Deep mines and surface mines in production, December 2016.	2016

<a href="#">2.1.1</a>	Coal production and stocks	1970-2016
<a href="#">2.1.2</a>	Inland consumption of solid fuels	1970-2016

2A	Output from UK coal mines and employment in UK coal mines	2014-2016
2B	Imports of coal in 2016, by grade and origin	2016
2C	Identified GB coal resource assessment at 6 June 2016	6 <sup>th</sup> June 2016

## Technical notes and definitions

2.30 These notes and definitions are in addition to the technical notes and definitions covering all fuels and energy as a whole in Chapter 1. Additional guidance on the compilation of the solid fuels and derived gases statistics can be found in the document ‘Data Sources and Methodologies’, available on the BEIS section of the GOV.UK website at: [www.gov.uk/government/collections/coal-statistics](http://www.gov.uk/government/collections/coal-statistics). For notes on the commodity balances and definitions of the terms used in the row headings see Annex A. While the data in the printed and bound copy of this Digest cover only the most recent 5 years, these notes also cover data for earlier years that are available on the BEIS website.

### Coal production

2.31 **Deep mined:** The statistics cover saleable output from deep mines including coal obtained from working on both revenue and capital accounts. All licensed collieries (and British Coal collieries prior to 1995) are included, even where coal is only a subsidiary product.

2.32 **Surface mines:** The figures cover saleable output and include the output of sites worked by operators under agency agreements and licences, as well as the output of sites licensed for the production of coal as a subsidiary to the production of other minerals. The term ‘surface mining’ has now replaced opencast production as defined in DUKES pre-2011. Opencast production is a particular type of surface mining technique.

2.33 **Other sources/Slurry:** Estimates of slurry etc recovered and disposed of from dumps, ponds, rivers, etc.

### Steam coal, coking coal and anthracite

2.34 **Steam coal** is coal classified as such by UK coal producers and by importers of coal. It tends to have calorific values at the lower end of the range.

2.35 **Coking coal** is coal sold by producers for use in coke ovens and similar carbonising processes. The definition is not therefore determined by the calorific value or caking qualities of each batch of coal sold, although calorific values tend to be higher than for steam coal.

2.36 **Anthracite** is coal classified as such by UK coal producers and importers of coal. Typically it has a high heat content making it particularly suitable for certain industrial processes and for use as a domestic fuel. Some UK anthracite producers have found a market for their lower calorific value output at power stations.

### Allocation of imported coal

2.37 Although data are available on consumption of home produced coal, and also on consumption of imported coal by secondary fuel producers, there is only very limited direct information on consumption of imported coal by final users. Guidance on how BEIS allocate imports to final users is outlined in paragraph 3.2.5 of the 'Data Sources and Methodologies' document. This guidance can be found on the BEIS section of the GOV.UK website at: [www.gov.uk/government/collections/coal-statistics](http://www.gov.uk/government/collections/coal-statistics).

### Coal consumption

2.38 Figures for actual consumption of coal are available for all fuels and power producers and for final use by the iron and steel industry. The remaining final users' consumption figures are based on information on disposals to consumers by producers and on imports.

2.39 Annex A of this Digest outlines the principles of energy and commodity balances and defines the activities that fall within these parts of the balances. However, the following additional notes relevant to solid fuels are given below:

**Transformation: Blast furnaces:** Coking coal injected into blast furnaces is shown separately within the balance tables.

**Transformation: Low temperature carbonisation plants and patent fuel plants:** Coal used at these plants for the manufacture of domestic coke such as Coalite and of briquetted fuels such as Phurnacite and Homefire.

**Consumption: Industry:** The statistics comprise sales of coal by the six main coal producers and a few small producers to the iron and steel industry (excluding those used at coke ovens and blast furnaces) and to other industrial sectors, estimated proportions of anthracite and steam coal imports, and submission made to the EU Emissions Trading Scheme. The figures exclude coal used for industries' own generation of electricity, which appear separately under transformation.

**Consumption: Domestic:** Some coal is supplied free of charge to retired miners and other retired eligible employees through the National Concessionary Fuel Scheme (NCFS). The concessionary fuel provided in 2015 is estimated at 34.9 thousand tonnes. This estimate is included in the domestic steam coal and domestic anthracite figures.

### Stocks of coal

2.40 Undistributed stocks are those held at collieries and surface mine sites. It is not possible to distinguish these two locations in the stock figures. Distributed stocks are those held at power stations and stocking grounds of the major power producing companies (as defined in Chapter 5, paragraphs 5.62 and 5.63), coke ovens, low temperature carbonisation plants and patent fuel plants.

### Coke oven coke (hard coke), hard coke breeze and other manufactured fuels

2.41 The statistics cover coke produced at coke ovens owned by Corus plc, Coal Products Ltd and other producers. Low temperature carbonisation plants are not included (see paragraph 2.39). Breeze (as defined in paragraph 2.42) is excluded from the figures for coke oven coke.

2.42 Breeze can generally be described as coke screened below 19 mm ( $\frac{3}{4}$  inch) with no fines removed, but the screen size may vary in different areas and to meet the requirements of particular markets. Coke that has been transported from one location to another is usually re-screened before use to remove smaller sizes, giving rise to further breeze.

2.43 The coke screened out by producers as breeze and fines appears as transfers in the coke breeze column of the balances. Transfers out of coke oven coke have not always been equal to transfers into coke oven breeze. This was due to differences arising from the timing, location of measurement and the practice adopted by the iron and steel works. Since 2000, however, the Iron

and Steel Statistics Bureau have been able to reconcile these data. Since 2007, most of the supply of coke breeze was reclassified to coke oven coke following better information received by the Iron and Steel Statistics Bureau.

2.44 Figures are derived from returns made to HM Revenue and Customs and are broken down in greater detail in Annex G on the BEIS 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).

2.45 In Table 2.5, the export figures used for hard coke, coke breeze and other manufactured solid fuels for the years before 1998 (as reported on the BEIS web site) are quantities of fuel exported as reported to BEIS or its predecessor Departments by the companies concerned, rather than quantities recorded by HM Revenue and Customs in their Trade Statistics. A long-term trend commentary and tables on exports are on the BEIS 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).

2.46 In 1998, an assessment using industry data showed that on average over the previous five years 91 per cent of imports had been coke and 9 per cent breeze and it is these proportions that have been used for 1998 and subsequent years in Table 2.5.

2.47 The calorific value for coke breeze has been set the same as for coke oven coke. This is following information from the iron and steel industry on the similarities between the two types of manufactured fuels.

2.48 Imports and exports of manufactured smokeless fuels can contain small quantities of non-smokeless fuels.

2.49 Other manufactured solid fuels are mainly solid smokeless fuels for the domestic market for use in both open fires and in boilers. A smaller quantity is exported (although exports are largely offset by similar quantities of imports in most years). Manufacture takes place in patented fuel plants and low-temperature carbonisation plants. The brand names used for these fuels include Homefire, Phurnacite, Ancit and Coalite.

2.50 Consumption of coke and other manufactured solid fuels: These are disposals from coke ovens to merchants. The figures also include estimated proportions of coke imports.

### **Blast furnace gas, coke oven gas, benzole and tars**

2.51 The following definitions are used in the tables that include these fuels:

**(a) Blast furnace gas:** includes Basic Oxygen Steel furnace (BOS) gas. Blast furnace gas is the gas produced during iron ore smelting when hot air passes over coke within the blast ovens. It contains carbon monoxide, carbon dioxide, hydrogen and nitrogen. In a BOS furnace the aim is not to introduce nitrogen or hydrogen into the steel making process, so pure oxygen gas and suitable fluxes are used to remove the carbon and phosphorous from the molten pig iron and steel scrap. A similar fuel gas is thus produced.

**(b) Coke oven gas:** is a gas produced during the carbonisation of coal to form coke at coke ovens. In 2009, some coke oven gas was produced using a combination of gases other than natural gas and blast furnace gas. This total has been added to the production of coke oven gas rather than transfers because it is specifically defined as the mixture of natural gas, blast furnace gas and BOS gas. See the paragraph below on synthetic coke oven gas for a complete definition of this.

**(c) Synthetic coke oven gas:** is mainly natural gas that is mixed with smaller amounts of blast furnace and BOS gas to produce a gas with almost the same qualities as coke oven gas. The transfers row of Table 2.6 shows the quantities of blast furnace gas used for this purpose and the total input of gases to the synthetic coke oven gas process. There is a corresponding outward transfer from natural gas in Chapter 4, Table 4.1.

**(d) Benzole:** a colourless, liquid, flammable, aromatic hydrocarbon by-product of the iron and steel making process. It is used in the UK as a solvent in the manufacture of styrenes and phenols. All consumption of benzole has been allocated to non-energy use from 2009 onwards.

**(e) Tars:** viscous materials usually derived from the destructive distillation of coal, which are by-products of the coke and iron making processes. . All consumption of tars has been allocated to non-energy use from 2009 onwards.

Contact: *Chris Michaels*  
*Energy Statistics Team*  
[coalstatistics@beis.gov.uk](mailto:coalstatistics@beis.gov.uk)  
0300 068 5050

## 2.1 Commodity balances 2016

### Coal

	Thousand tonnes			
	Steam coal	Coking coal	Anthracite	Total
<b>Supply</b>				
Production	3,664	53	461	4,178
Other sources	-	-	-	-
Imports	5,619	2,781	94	8,494
Exports	-356	-1	-86	-443
Marine bunkers	-	-	-	-
Stock change (1)	+5,811	-58	-98	+5,655
Transfers	-	-	-	-
<b>Total supply</b>	<b>14,737</b>	<b>2,775</b>	<b>371</b>	<b>17,883</b>
Statistical difference (2)	+806	-409	-404	-6
<b>Total demand</b>	<b>13,930</b>	<b>3,184</b>	<b>775</b>	<b>17,889</b>
<b>Transformation</b>	<b>12,139</b>	<b>3,184</b>	<b>355</b>	<b>15,678</b>
Electricity generation	11,926	-	132	12,058
Major power producers	11,908	-	132	12,040
Autogenerators	19	-	-	19
Heat generation	213	-	-	213
Petroleum refineries	-	-	-	-
Coke manufacture	-	1,821	-	1,821
Blast furnaces	-	1,364	-	1,364
Patent fuel manufacture and low temperature carbonisation	-	-	223	223
<b>Energy industry use</b>	-	-	-	-
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	-	-	-	-
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
<b>Losses</b>	-	-	-	-
<b>Final consumption</b>	<b>1,791</b>	-	<b>420</b>	<b>2,211</b>
<b>Industry</b>	<b>1,383</b>	-	<b>232</b>	<b>1,615</b>
Unclassified	-	-	-	-
Iron and steel	2	-	33	35
Non-ferrous metals	18	-	-	18
Mineral products	813	-	0	813
Chemicals	67	-	-	67
Mechanical engineering etc.	11	-	-	11
Electrical engineering etc.	5	-	-	5
Vehicles	53	-	-	53
Food, beverages etc	30	-	14	44
Textiles, leather etc.	68	-	-	68
Paper, printing etc.	130	-	-	130
Other industries	182	-	185	367
Construction	5	-	-	5
<b>Transport</b>	<b>15</b>	-	-	<b>15</b>
Air	-	-	-	-
Rail (3)	15	-	-	15
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
<b>Other</b>	<b>394</b>	-	<b>188</b>	<b>581</b>
Domestic	362	-	188	550
Public administration	20	-	-	20
Commercial	5	-	-	5
Agriculture	-	-	-	-
Miscellaneous	7	-	-	7
<b>Non energy use</b>	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) Estimate revised following research carried out into heritage railways.



## 2.2 Commodity balances 2015

### Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
<b>Supply</b>				
Production	7,668r	72r	858r	8,598r
Other sources	-	-	-	-
Imports	17,665r	4,750	102	22,518r
Exports	-303r	-1	-81r	-385r
Marine bunkers	-	-	-	-
Stock change (1)	6,590r	248r	25r	6,862r
Transfers	-	-	-	-
<b>Total supply</b>	<b>31,620r</b>	<b>5,069r</b>	<b>904r</b>	<b>37,593r</b>
Statistical difference (2)	467r	-148r	-337r	-18r
<b>Total demand</b>	<b>31,153r</b>	<b>5,217r</b>	<b>1,242r</b>	<b>37,612r</b>
<b>Transformation</b>	<b>29,070r</b>	<b>5,217r</b>	<b>701r</b>	<b>34,988r</b>
Electricity generation	28,857r	-	473r	29,330r
Major power producers	28,838r	-	473r	29,310r
Autogenerators	19r	-	-	19r
Heat generation	213r	-	-	213r
Petroleum refineries	-	-	-	-
Coke manufacture	-	3,673r	-	3,673r
Blast furnaces	-	1,544r	-	1,544r
Patent fuel manufacture and low temperature carbonisation	-	-	228r	228r
<b>Energy industry use</b>	-	-	-	-
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	-	-	-	-
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
<b>Losses</b>	-	-	-	-
<b>Final consumption</b>	<b>2,084r</b>	-	<b>541r</b>	<b>2,624r</b>
<b>Industry</b>	<b>1,707r</b>	-	<b>336r</b>	<b>2,043r</b>
Unclassified	-	-	-	-
Iron and steel	1r	-	43	44r
Non-ferrous metals	21r	-	-	21r
Mineral products	1,048r	-	0	1,048r
Chemicals	74r	-	-	74r
Mechanical engineering etc.	11r	-	-	11r
Electrical engineering etc.	5r	-	-	5r
Vehicles	60r	-	-	60r
Food, beverages etc.	33r	-	21	54r
Textiles, leather etc.	66r	-	-	66r
Paper, printing etc.	133r	-	-	133r
Other industries	248r	-	272r	520r
Construction	6	-	-	6
<b>Transport</b>	<b>13r</b>	-	-	<b>13r</b>
Air	-	-	-	-
Rail (3)	13r	-	-	13r
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
<b>Other</b>	<b>363r</b>	-	<b>205r</b>	<b>568r</b>
Domestic	347r	-	205r	552r
Public administration	4r	-	-	4r
Commercial	5	-	-	5
Agriculture	-	-	-	-
Miscellaneous	7r	-	-	7r
<b>Non energy use</b>	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) Estimate revised following research carried out into heritage railways.

## 2.3 Commodity balances 2014

### Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
<b>Supply</b>				
Production	10,161r	99	1,388r	11,648r
Other sources	-	-	-	-
Imports	35,754	6,344	127	42,225
Exports	-343r	-1r	-81	-425r
Marine bunkers	-	-	-	-
Stock change (1)	-4,833r	-276	-22r	-5,131r
Transfers	-	-	-	-
<b>Total supply</b>	<b>40,739r</b>	<b>6,166</b>	<b>1,412r</b>	<b>48,316r</b>
Statistical difference (2)	529r	-325	-183r	21r
<b>Total demand</b>	<b>40,210r</b>	<b>6,490</b>	<b>1,595r</b>	<b>48,295r</b>
<b>Transformation</b>	<b>37,811r</b>	<b>6,490</b>	<b>953r</b>	<b>45,255r</b>
Electricity generation	37,539r	-	695r	38,234r
Major power producers	37,521	-	695r	38,215r
Autogenerators	19r	-	-	19r
Heat generation	272	-	-	272
Petroleum refineries	-	-	-	-
Coke manufacture	-	4,977r	-	4,977r
Blast furnaces	-	1,513r	-	1,513r
Patent fuel manufacture and low temperature carbonisation	-	-	259r	259r
<b>Energy industry use</b>	<b>1r</b>	<b>-</b>	<b>-</b>	<b>1r</b>
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	1r	-	-	1r
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
<b>Losses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Final consumption</b>	<b>2,398r</b>	<b>-</b>	<b>641r</b>	<b>3,040r</b>
<b>Industry</b>	<b>2,002r</b>	<b>-</b>	<b>439r</b>	<b>2,442r</b>
Unclassified	-	-	-	-
Iron and steel	2r	-	52r	54r
Non-ferrous metals	25	-	-	25
Mineral products	1,238r	-	0	1,239r
Chemicals	108r	-	-	108r
Mechanical engineering etc.	14r	-	-	14r
Electrical engineering etc.	7r	-	-	7r
Vehicles	70	-	-	70
Food, beverages etc.	44r	-	18r	62r
Textiles, leather etc.	74	-	-	74
Paper, printing etc.	166r	-	-	166r
Other industries	246r	-	369r	615r
Construction	7r	-	-	7r
<b>Transport</b>	<b>13</b>	<b>-</b>	<b>-</b>	<b>13</b>
Air	-	-	-	-
Rail (3)	13	-	-	13
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
<b>Other</b>	<b>383r</b>	<b>-</b>	<b>202r</b>	<b>585r</b>
Domestic	347r	-	202r	549r
Public administration	24r	-	-	24r
Commercial	5	-	-	5
Agriculture	-	-	-	-
Miscellaneous	7r	-	-	7r
<b>Non energy use</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) Estimate revised following research carried out into heritage railways.

## 2.4 Supply and consumption of coal

Thousand tonnes

	2012	2013	2014	2015	2016
<b>Supply</b>					
Production	16,287	12,673	11,648	8,598	4,178
Deep-mined	6,153	4,089	3,685	2,784	22
Surface mining (1)	10,134	8,584	7,962	5,814	4,156
Other sources (2)	680	95	-	-	-
Imports	44,815	50,611r	42,225	22,518r	8,494
Exports	-488	-595r	-425	-385	-443
Stock change (3)	+2,966	-2,641r	-5,131r	+6,862r	+5,655
<b>Total supply</b>	<b>64,259</b>	<b>60,143r</b>	<b>48,316r</b>	<b>37,593r</b>	<b>17,883</b>
<b>Statistical difference (4)</b>	<b>+217</b>	<b>-62r</b>	<b>+21r</b>	<b>-18r</b>	<b>-6</b>
<b>Total demand</b>	<b>64,042</b>	<b>60,206r</b>	<b>48,295r</b>	<b>37,612r</b>	<b>17,889</b>
<b>Transformation</b>	<b>61,498</b>	<b>57,192r</b>	<b>45,255</b>	<b>34,988r</b>	<b>15,678</b>
Electricity generation	54,901	49,873r	38,234	29,330r	12,058
Major power producers	53,837	49,840r	38,215	29,310r	12,039
Autogenerators	1,064	33	19	19	19
Heat generation	461	362	272	213	213
Coke manufacture	4,965	5,288	4,977	3,673r	1,821
Blast furnaces	987	1,411	1,513	1,544r	1,364
Patent fuel manufacture and low temperature carbonisation	184	259	259	228r	223
<b>Energy industry use</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>-</b>
Coal extraction	4	3	1	-	-
<b>Final consumption</b>	<b>2,541</b>	<b>3,011r</b>	<b>3,040r</b>	<b>2,624r</b>	<b>2,211</b>
<b>Industry</b>	<b>1,826</b>	<b>2,323r</b>	<b>2,442r</b>	<b>2,043r</b>	<b>1,615</b>
Unclassified	-	-	-	-	-
Iron and steel	51	53	54	44	35
Non-ferrous metals	21	21r	25	21	18
Mineral products	1,123	1,338r	1,239r	1,048r	813
Chemicals	76	84r	108r	74	67
Mechanical engineering, etc	11	11r	14	11	11
Electrical engineering, etc	5	5r	7	5	5
Vehicles	50	60r	70	60	53
Food, beverages, etc	44	55r	62r	54	44
Textiles, leather, etc	62	66r	74	66	68
Paper, printing, etc	138	143r	166r	133r	130
Other industries	239	480r	615r	520r	367
Construction	6	6	7	6	5
<b>Transport</b>	<b>16</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>15</b>
<b>Other</b>	<b>698</b>	<b>675r</b>	<b>585r</b>	<b>568r</b>	<b>581</b>
Domestic	674	640r	549r	552	550
Public administration	12	24r	24r	4r	20
Commercial	5	5	5	5	5
Agriculture	1	-	-	-	-
Miscellaneous	6	7	7	7	7
<b>Non energy use</b>					
<b>Stocks at end of year (5)</b>					
Distributed stocks	11,883	15,114r	20,142r	13,471r	7,766
Of which:					
Major power producers	9,561	11,871	17,091	12,595r	6,962
Coke ovens	831	518	795	547r	605
Undistributed stocks	1,120	530r	633r	441r	492
<b>Total stocks (6)</b>	<b>13,003</b>	<b>15,644r</b>	<b>20,775r</b>	<b>13,913r</b>	<b>8,258</b>

(1) The term 'surface mining' has now replaced opencast production. Opencast production is a surface mining technique.

(2) Estimates of slurry etc. recovered from ponds, dumps, rivers, etc.

(3) Stock fall (+), stock rise (-).

(4) Total supply minus total demand.

(5) Excludes distributed stocks held in merchants' yards, etc., mainly for the domestic market, and stocks held by the industrial sector.

(6) For some years, closing stocks may not be consistent with stock changes, due to additional stock adjustments.

## 2.5 Supply and consumption of coke oven coke, coke breeze and other manufactured solid fuels

	Thousand tonnes				
	2012	2013	2014	2015	2016
<b>Coke oven coke</b>					
<b>Supply</b>					
Production	3,712	3,769	3,601	2,716	1,332
Imports	147	764	823	1,006	1,110
Exports	-450	-75	-85	-83	-
Stock change (1)	+341	+178	-64	+184	-110
Transfers	-1,021	-1,277	-1,075	-970	-459
<b>Total supply</b>	<b>2,728</b>	<b>3,358</b>	<b>3,199</b>	<b>2,853</b>	<b>1,872</b>
<b>Statistical difference (2)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total demand</b>	<b>2,728</b>	<b>3,358</b>	<b>3,199</b>	<b>2,853</b>	<b>1,872</b>
<b>Transformation</b>					
Blast furnaces	2,674	3,271	3,144	2,823	1,860
<b>Energy industry use</b>					
<b>Final consumption</b>	<b>55</b>	<b>87</b>	<b>55</b>	<b>30</b>	<b>12</b>
<b>Industry</b>	<b>48</b>	<b>82</b>	<b>49</b>	<b>27</b>	<b>12</b>
Unclassified	35	69	35	13	0
Iron and steel	13	13	14	15	12
Non-ferrous metals	-	-	-	-	-
<b>Other</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>3</b>	<b>0</b>
Domestic	7	6	6	3	0
<b>Stocks at end of year (3)</b>	<b>393</b>	<b>215</b>	<b>280</b>	<b>95</b>	<b>206</b>
<b>Coke breeze</b>					
<b>Supply</b>					
Production (4)	31	32	31	18	16
Imports	46	55	103	107	112
Exports	-71	-11	-3	-7	-
Stock change (1)	-255	-283	-132	-123	+1
Transfers	1,021	1,277	1,071	967	455
<b>Total supply</b>	<b>772</b>	<b>1,069</b>	<b>1,070</b>	<b>962</b>	<b>584</b>
<b>Statistical difference (2)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total demand</b>	<b>772</b>	<b>1,069</b>	<b>1,070</b>	<b>962</b>	<b>584</b>
<b>Transformation</b>					
Coke manufacture	-	-	-	-	-
Blast furnaces	293	442	440	433	280
<b>Energy industry use</b>					
<b>Final consumption</b>	<b>479</b>	<b>627</b>	<b>629</b>	<b>528</b>	<b>304</b>
<b>Industry</b>	<b>479</b>	<b>627</b>	<b>629</b>	<b>528</b>	<b>304</b>
Unclassified	10	14	9	4	-0
Iron and steel	469	613	620	525	304
<b>Stocks at end of year (3)</b>	<b>437</b>	<b>720</b>	<b>852</b>	<b>975</b>	<b>974</b>
<b>Other manufactured solid fuels</b>					
<b>Supply</b>					
Production	258	336	274	231	245
Imports	15	15	14	20	29
Exports	-32	-30	-24	-22	-22
Stock change (1)	+7	-17	-15	+3	-16
<b>Total supply</b>	<b>248</b>	<b>303</b>	<b>249</b>	<b>232</b>	<b>236</b>
<b>Statistical difference (2)</b>	<b>-5</b>	<b>-1</b>	<b>-1</b>	<b>+0</b>	<b>+0</b>
<b>Total demand</b>	<b>253</b>	<b>304</b>	<b>250</b>	<b>232</b>	<b>236</b>
<b>Transformation</b>					
Energy industry use	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
<b>Final consumption</b>	<b>253</b>	<b>304</b>	<b>250</b>	<b>232</b>	<b>236</b>
<b>Industry</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Unclassified	-	-	-	-	-
<b>Other</b>	<b>253</b>	<b>304</b>	<b>250</b>	<b>232</b>	<b>236</b>
Domestic	253	304	250	232	236
<b>Stocks at end of year (3)</b>	<b>24</b>	<b>42</b>	<b>57</b>	<b>54</b>	<b>70</b>

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) Producers stocks and distributed stocks.

(4) See paragraph 2.25.

## 2.6 Supply and consumption of coke oven gas, blast furnace gas, benzole and tars

	GWh				
	2012	2013	2014	2015	2016
<b>Coke oven gas</b>					
<b>Supply</b>					
Production	8,257	8,479	8,473	6,890	3,468
Imports	-	-	-	-	-
Exports	-	-	-	-	-
Transfers (1)	+60	+64	+146	+439	+360
<b>Total supply</b>	<b>8,317</b>	<b>8,544</b>	<b>8,620</b>	<b>7,329</b>	<b>3,828</b>
<b>Statistical difference (2)</b>	<b>-1</b>	<b>-1</b>	<b>-3</b>	<b>28</b>	<b>1</b>
<b>Total demand</b>	<b>8,318</b>	<b>8,545</b>	<b>8,622</b>	<b>7,301</b>	<b>3,827</b>
<b>Transformation</b>					
Electricity generation	2,858	2,741	2,538	2,067	1,322
Heat generation	2,440	2,322	2,119	1,649	903
Other	418	418	418	418	418
Other	-	-	-	-	-
<b>Energy industry use</b>	<b>4,567</b>	<b>4,525</b>	<b>4,599</b>	<b>3,879</b>	<b>1,337</b>
Coke manufacture	3,816	3,643	3,725	3,185	1,049
Blast furnaces	751	882	874	694	289
Other	-	-	-	-	-
<b>Losses</b>	<b>192</b>	<b>389</b>	<b>682</b>	<b>768</b>	<b>203</b>
<b>Final consumption</b>	<b>701</b>	<b>890</b>	<b>804</b>	<b>586</b>	<b>965</b>
<b>Industry</b>					
Unclassified	701	890	804	586	965
Iron and steel	198	174	165	-	-
Iron and steel	504	716	639	586	965
<b>Blast furnace gas</b>					
<b>Supply</b>					
Production	11,694	15,576	15,386	14,131	10,090
Imports	-	-	-	-	-
Exports	-	-	-	-	-
Transfers (1)	-4	-4	-7	-19	-16
<b>Total supply</b>	<b>11,690</b>	<b>15,572</b>	<b>15,380</b>	<b>14,111</b>	<b>10,074</b>
<b>Statistical difference (2)</b>	<b>-48</b>	<b>+17</b>	<b>-34</b>	<b>+13</b>	<b>+8</b>
<b>Total demand</b>	<b>11,738</b>	<b>15,555</b>	<b>15,414</b>	<b>14,099</b>	<b>10,066</b>
<b>Transformation</b>					
Electricity generation	7,052	8,782	8,686	7,637	5,554
Heat generation	6,873	8,602	8,507	7,457	5,374
Other	179	179	179	179	179
Other	-	-	-	-	-
<b>Energy industry use</b>	<b>3,569</b>	<b>4,516</b>	<b>4,732</b>	<b>4,451</b>	<b>3,509</b>
Coke manufacture	672	751	711	641	632
Blast furnaces	2,898	3,765	4,021	3,810	2,877
Other	-	-	-	-	-
<b>Losses</b>	<b>817</b>	<b>2,111</b>	<b>1,835</b>	<b>1,878</b>	<b>912</b>
<b>Final consumption</b>	<b>300</b>	<b>146</b>	<b>160</b>	<b>133</b>	<b>91</b>
<b>Industry</b>					
Unclassified	300	146	160	133	91
Iron and steel	-	-	-	-	-
Iron and steel	300	146	160	133	91
<b>Benzole and tars (3)</b>					
<b>Supply</b>					
Production	1,543	1,630	1,582	1,136	531
<b>Final consumption (4)</b>	<b>1,543</b>	<b>1,630</b>	<b>1,582</b>	<b>1,136</b>	<b>531</b>
Unclassified	-	-	-	-	-
Iron and steel	-	-	-	-	-
Non energy use	1,543	1,630	1,582	1,136	531

(1) To and from synthetic coke oven gas, see paragraph 2.51.

(2) Total supply minus total demand.

(3) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

(4) From 2009, unclassified final consumption has been recorded under non energy use

## 2.7 Deep mines and surface mines in production at 31 December 2016

### Deep mines<sup>(1)</sup>

Licensee	Site Name	Location
Ayle Colliery Company Ltd	Ayle Colliery	Northumberland
European Coal Products Ltd	Eckington Colliery	Derbyshire
Grimebridge Colliery Company Ltd	Hill Top Colliery	Lancashire
NH Colliery Ltd	Nant Hir No.2 Colliery	Neath Port Talbot
Three D's Mining Ltd	Dan-y-Graig No.4 Colliery	Neath Port Talbot

### Surface mines<sup>(2)</sup>

Licensee	Site Name	Location
Bryn Bach Coal Ltd	Glan Lash	Carmarthenshire
Celtic Energy Ltd	East Pit	Neath Port Talbot
Glenmuckloch Restoration Ltd	Glenmuckloch Site	Dumfries & Galloway
H J Banks & Company Ltd	Brenkley Lane	Newcastle upon Tyne
	Rusha Site	West Lothian
	Shotton	Northumberland
Hargreaves Surface Mining Ltd	Muir Dean Site	Fife
H M Project Developments Ltd	Halton Lea Gate Remediation Scheme	Northumberland
Kier Minerals Ltd	Greenburn Project	East Ayrshire
Land Engineering Services Ltd	Comrie Colliery Site	Fife
Miller Argent (South Wales) Ltd	Ffos-y-Fran Land Reclamation Scheme	Merthyr Tydfil
OCCW (Broken Cross) Ltd	Broken Cross Site	South Lanarkshire
OCCW (House of Water) Ltd	House of Water Site	East Ayrshire
OCCW (Netherton) Ltd	Netherton	East Ayrshire
PB Restoration Ltd	Potland Burn	Northumberland
Tower Regeneration Ltd	Tower Colliery Surface Mining Site	Rhondda Cynon Taff
UKCSMR Ltd	Minorca	Leicestershire

(1) In addition, there were 3 underground mines on care & maintenance :-

Aberpergwm Colliery in Neath Port Talbot licensed to Energybuild Mining Ltd

Monument Colliery in the Forest of Dean licensed to Messrs Ashly, Daniels and Jones

Redding's Level No.2 Mine in the Forest of Dean licensed to Mr A J Warren

(2) In addition, there were 2 surface mines on care & maintenance :-

Bwlch Ffos site in Neath Port Talbot licensed to Horizon Mining Ltd (in administration)

Nant Helen Remainder in Powys licensed to Celtic Energy Ltd

Selar site in Neath Port Talbot licensed to Celtic Energy Ltd

**Source: The Coal Authority**