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United Kingdom Minerals Yearbook 2018

Minerals and Waste Programme
Open Report OR/19/018



BRITISH GEOLOGICAL SURVEY

MINERALS AND WASTE PROGRAMME
OPEN REPORT OR/19/018

United Kingdom Minerals Yearbook 2018

Statistical data to 2017

T. Bide, T. J. Brown, N. Idoine and J.M. Mankelow

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Front cover: Brick production at
Ibstock's Dorket Head Quarry
and Brickyard, Mapperley,
Nottingham

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Explanatory notes

Coverage: Except where otherwise stated all the statistics shown relate to the United Kingdom of Great Britain and Northern Ireland.

The Channel Islands and the Isle of Man are also included in the 'United Kingdom' overseas trade statistics, but are excluded from the production statistics. The UK part of the Continental Shelf is included in both the overseas trade and the production statistics.

All figures for the latest year shown are provisional and subject to revision.

Rounding of figures: In tables where figures have been rounded to the nearest final digit, there may be a slight discrepancy between the sums of the constituent items and the total as shown.

Units: The statistics in this volume are expressed in metric units. The following factors are given for converting from or into non-metric units:

<i>Troy ounce</i>	<i>Kilogram</i>
1	= 0.0311035
32.1507	= 1
<i>Pound</i>	<i>Kilogram</i>
1	= 0.453592
2.20462	= 1
<i>Hundredweight</i>	<i>Kilogram</i>
1	= 50.8023
0.019684	= 1
<i>Long ton</i>	<i>Tonne</i>
1	= 1.01605
0.984206	= 1
<i>Square yard</i>	<i>Square metre</i>
1	= 0.836127
1.19599	= 1
<i>Cubic yard</i>	<i>Cubic metre</i>
1	= 0.764555
1.30795	= 1
<i>UK gallon</i>	<i>Litre</i>
1	= 4.54596
0.2199755	= 1

Symbols: The following symbols are used throughout:

- ... Figures not available
- 0 Quantity less than half the unit shown
- Nil
- nes Not elsewhere specified
- BGS British Geological Survey

Apparent consumption: BGS estimates of apparent consumption of metals are based on the formula: production (primary and secondary) plus imports minus exports. All the main traded forms of the metal are taken into account, for example, ores, concentrates, intermediate products, unwrought metal and alloys, oxides, etc. Figures are given in terms of metal content. No information is available for stock changes. Such estimates of apparent consumption are made for metals for which there are no reported consumption statistics: in this edition data are given for chromium, cobalt, manganese, molybdenum, titanium and zirconium.

Trade: Trade figures from INTRASTAT, the system for measuring intra-EC trade became available from 1993. This was introduced following the abolition of customs controls as a result of the Single Market and trade figures are now compiled from data provided directly from companies instead of Customs documents. Extra-EC trade continues to be collected from Customs declarations as before. The transition from one system to another has produced some anomalous figures in terms of the size of the trade in and unit value of certain commodities. These factors should be taken into consideration when evaluating trends. Figures given in this edition are the combined intra and extra-EC trade data.

Values of commodities are c.i.f. (Cost, Insurance and Freight) for imports and f.o.b. (free on board) for exports.

The terms 'scrap', 'unwrought' and 'wrought' metal include alloys unless these are separately shown.

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Sources of information

In compiling this volume the BGS has largely relied upon data originally collected by other bodies. A list of the departments and organisations concerned is given below, together with the titles of principal publications that have been used. In many cases the BGS has also been provided with supplementary or unpublished information. Interested readers are strongly advised to consult the original sources themselves wherever possible and in this connection may wish to refer not only to the publications as listed here, but also earlier issues in the same series, some of which were published under different titles.

Information about the production of minerals in the United Kingdom is given from 1853 to 1881 in a series of Geological Survey Memoirs entitled *Mineral Statistics*, by Robert Hunt, Keeper of Mining Records; earlier information for certain metalliferous minerals is also available. Since 1873 all collieries and metalliferous mines have been required by statute to complete annual returns of production, and since 1895 the same has applied to quarries. These returns were made to the Home Office, which, in 1882, was made responsible for the publication of *Mineral Statistics*. In 1920 responsibility for collection of returns was transferred to the Mines Department (Board of Trade) and statistics were subsequently published in the Annual Reports of the Secretary of Mines. The Mines Department was incorporated into the Ministry of Fuel and Power in 1942 and statistics from 1938 to 1972 were published in their Statistical Digests (subsequently the Digests of Energy Statistics of the Department of Trade and Industry). In 1973 responsibility for the collection of returns relating to most minerals other than fuels was transferred to the Business Statistics Office (formerly part of the Department of Trade and Industry, now the Office for National Statistics). The Annual Minerals Raised Inquiry was conducted by the Office for National Statistics and published annually as *Mineral Extraction in Great Britain* until early 2016 (the last year of data is 2014). For 2015 onwards this volume has attempted to obtain data from alternative sources to fill as many of the data gaps as possible. These sources include the Mineral Products Association and the British Ceramics Confederation (amongst others). The Department of Energy and Climate Change (now the Department for Business, Energy and Industrial Strategy), collects statistics relating to hydrocarbons (natural gas and crude petroleum). Statistics on coal production are collected by The Coal Authority. Details of mineral production in Northern Ireland since 1922 have been obtained by the Northern Ireland Government.

1853–1881 *Mineral Statistics*, by Robert Hunt, Keeper of Mining Records; Memoirs of the Geological Survey

1882–1896 *Mineral Statistics*; Home Office

1897–1919 *Mines and Quarries: General Report with Statistics*; Home Office

1920 *Mines and Quarries: General Report with Statistics*; Mines Department, Board of Trade

1921–1938 *Annual Report of the Secretary of Mines*; Mines Department, Board of Trade (Great Britain only from 1922)

1938–1972 *Statistical Digest*; Ministry of Fuel and Power (Great Britain only)

1973–2017 *Digest of United Kingdom Energy Statistics*; Department for Business, Energy and Industrial Strategy (formerly published by Department of Energy and Climate Change, Department for Business Enterprise and Regulatory Reform, Department of Trade and Industry or Department of Energy)

1973–1993 *Minerals (PA1007)*; Central Statistical Office

1994–2014 *Mineral Extraction in Great Britain (PA 1007)*; Office for National Statistics

1922–1949 *Annual Report of the Mining and Quarrying industries in Northern Ireland*; Ministry of Commerce (Northern Ireland)

1950–1981 *Mineral Production in Northern Ireland*; Department of Commerce (Northern Ireland)

1982–1995 *Mineral Production in Northern Ireland*; Department of Economic Development (Northern Ireland)

1996–1998 *Annual Minerals Statement*; Department of Economic Development (Northern Ireland)

1999–2010 *Annual Mineral Statement*; Department of Enterprise, Trade and Investment (Northern Ireland)

2015–2016 *Annual Mineral Statement*; Department for the Economy (Northern Ireland)

Advisory and Finance Committee (Guernsey)

British Ceramic Confederation

Department for Business, Energy & Industrial Strategy: *Digest of United Kingdom Energy Statistics (annual)*

Department for Business, Energy & Industrial Strategy: *Monthly Statistics of Building Materials and Components, BEIS website for construction information*

Department for the Economy (Northern Ireland), *Annual Mineral Statement*

Department for Enterprise (Isle of Man)

The Coal Authority

The Crown Estate

HM Revenue and Customs, website: www.uktradeinfo.com/Pages/Home.aspx, Overseas Trade Statistics (monthly, quarterly and annual), Guide to the Classification for Overseas Trade Statistics

International Fertilizer Industry Association

Mineral Products Association (MPA)

Office for National Statistics, UK Statistics Authority, Website: <http://www.statisticsauthority.gov.uk> or www.statistics.gov.uk, Monthly Digest of Statistics, Mineral Extraction in Great Britain (annual), United Kingdom National Accounts, UK Manufacturers' Sales by Product (PRODCOM)

UK Iron and Steel Statistics Bureau, Annual Statistics

World Bureau of Metal Statistics, World Metal Statistics (monthly)

Changes to previous editions

Many of the tables in previous editions of the UK minerals yearbook were reliant on the Annual Mineral Raised Inquiry (AMRI), an annual survey conducted by the Office for National Statistics, completed by minerals operators, that measured sales of minerals extracted in Great Britain (assumed to be equivalent to mineral production). The AMRI survey ceased in early 2016 (the last year of data is 2014) resulting in the interruption of several data series.

The results of this survey were the only source of data for sales by end-use and sales of individual rock types (e.g. sandstone, limestone or igneous rock). The end-use data included sales for industrial uses, building stone, agricultural uses, different types of aggregate uses such as concrete or asphalt, etc.

Furthermore, production data for some mineral commodities now relies on estimates as opposed to reported data, e.g. salt, or is absent altogether because an estimate is not feasible, e.g. peat.

As a consequence, the following tables from previous editions of the UK Minerals Yearbook are not included in this book:

- Great Britain estimated consumption of natural aggregates
- Great Britain production of crushed rock by end-use
- Great Britain production of crushed rock, gravel and sand for use in concrete
- Great Britain production of crushed rock for use as roadstone
- Great Britain production of crushed rock for railway ballast
- England production of crushed rock by end-use
- Wales production of crushed rock by end-use
- Scotland production of crushed rock by end-use
- England production of igneous rock by end-use
- Wales production of igneous rock by end-use
- Scotland production of igneous rock by end-use
- Great Britain production of limestone and chalk for cement
- Great Britain production of limestone, dolomite and chalk for agricultural uses
- Great Britain Production of limestone dolomite and chalk for industrial uses
- Great Britain production of limestone dolomite and chalk for industrial uses by end-use
- Great Britain production of limestone dolomite and chalk for calcination
- Great Britain production of limestone dolomite and chalk for iron & steel making
- England production of limestone by end-use
- Wales production of limestone by end-use
- Scotland production of limestone by end-use
- Great Britain production of dolomite by end-use
- England production of chalk by end use
- Great Britain production of sand and gravel by end-use and area of origin
- England production of sand and gravel by end-use
- Wales production of sand and gravel by end-use
- Scotland (land-won) production of sand and gravel by end-use
- England production of sandstone by end-use
- Wales production of sandstone by end-use
- Scotland production of sandstone by end-use
- Great Britain production of silica sand by end-use and area of origin

In addition to these tables, rows for production in published tables for several commodities, such as igneous rock, sandstone, chalk and limestone are no longer available for years from 2015 onwards.

Trade in minerals and mineral-based products compared with total trade 2011–2017

£ million

SITC section		2011	2012	2013	2014	2015	2016	2017
Imports (c.i.f.)								
0, 1	Food, beverages, tobacco	36,068.8	36,832.9	39,226.3	38,705.2	38,756.3	41,728.6	45,245.7
2, 4	Basic materials	12,418.4	11,186.1	11,740.3	11,171.4	10,099.4	10,368.9	11,777.4
	of which: Minerals	5,674.3	4,784.6	5,003.5	4,298.5	3,369.2	3,296.3	3,779.3
3	Fuels and related materials	56,753.1	60,498.6	56,009.5	48,890.1	33,325.2	29,392.1	40,085.7
	of which: Mineral-based	56,285.8	59,824.5	55,072.6	47,867.7	32,375.4	28,609.7	39,211.4
	Manufactured goods:							
5, 6	Semi-manufactures	99,988.3	101,430.9	96,591.8	95,193.4	93,613.1	99,707.2	111,349.6
	of which: Mineral-based	45,038.1	45,428.1	38,629.2	33,426.4	30,663.0	32,171.9	38,566.3
7, 8	Finished manufactures	186,824.7	190,943.8	201,707.6	210,948.2	219,755.1	239,979.2	253,386.7
	All traded goods	Total	392,053.5	400,892.4	405,275.6	404,908.3	395,549.0	421,175.9
	of which: Mineral-based		106,998.2	110,037.2	98,705.3	85,592.6	66,407.6	64,077.9
	As % of all traded goods		27.3	27.4	24.4	21.1	16.8	15.2
Exports (f.o.b.)								
0, 1	Food, beverages, tobacco	18,125.2	17,917.4	18,860.8	18,899.7	18,316.9	20,284.7	22,041.0
2, 4	Basic materials	8,941.0	8,390.4	7,414.0	6,830.7	5,894.2	6,255.7	7,602.3
	of which: Minerals	5,574.8	4,921.1	4,337.0	4,020.2	3,396.9	3,666.0	4,681.3
3	Fuels and related materials	40,674.5	41,664.1	39,615.7	33,538.4	21,540.9	19,151.5	27,421.1
	of which: Mineral-based	40,536.4	41,562.3	39,447.7	33,414.9	21,463.0	19,048.3	27,247.8
	Manufactured goods:							
5, 6	Semi-manufactures	87,742.3	84,916.0	81,764.9	77,135.5	79,167.0	78,973.8	86,412.7
	of which: Mineral-based	38,755.8	35,332.6	33,300.0	28,669.6	29,007.8	26,558.1	30,721.5
7, 8	Finished manufactures	136,474.3	139,692.2	146,888.8	146,670.1	149,442.9	162,543.5	177,989.4
	All traded goods	Total	291,957.3	292,580.1	294,544.2	283,074.4	274,361.8	287,209.3
	of which: Mineral-based		84,867.0	81,816.0	77,084.7	66,104.7	53,867.7	49,272.4
	As % of all traded goods		29.1	28.0	26.2	23.4	19.6	17.2
								19.5

This table no longer includes Section 9 'other commodities' as the data for monetary gold is no longer available, Section 9 has been removed from previous years so comparisons can be maintained.

A small percentage of trade figures are confidential, these are not included in the above figures

Balance of trade in minerals and mineral-based products 2013–2017

£ million (a)

SITC (R3) divisions	2013	2014	2015	2016	2017
27 Crude minerals and fertilisers:					
imports	616.1	505.6	500.1	562.4	719.4
exports	442.4	452.1	392.4	405.2	460.7
	-173.7	-53.5	-107.7	-157.2	-258.7
28 Metal ores and scrap:					
imports	4,387.4	3,793.0	2,869.1	2,733.9	3,059.9
exports	3,894.6	3,568.1	3,004.5	3,260.8	4,220.6
	-492.8	-224.9	+135.4	+526.9	+1 160.7
32 Coal, coke and briquettes:					
imports	3,023.5	2,358.5	1,317.9	681.8	989.3
exports	158.5	111.7	84.0	86.4	76.4
	-2 864.9	-2 246.8	-1 233.9	-595.4	-912.9
33 Petroleum, petroleum products and related materials:					
imports	43,445.0	37,758.4	24,254.8	21,611.2	29,518.6
exports	36,023.8	30,323.2	18,464.1	16,804.3	24,322.9
	-7 421.2	-7 435.2	-5 790.7	-4 807.0	-5 195.8
34 Gas, natural and manufactured:					
imports	8,604.1	7,750.9	6,802.8	6,316.7	8,703.5
exports	3,265.3	2,979.9	2,915.0	2,157.7	2,848.6
	-5 338.8	-4 771.0	-3 887.8	-4 159.0	-5 854.9
51 Organic chemicals:					
imports	8,261.6	6,985.7	6,220.3	6,452.7	7,401.3
exports	7,626.8	6,823.8	8,616.3	7,443.5	7,918.8
	-634.8	-161.9	+2 396.1	+990.8	+517.5
52 Inorganic chemicals:					
imports	2,501.8	2,237.8	2,198.8	1,893.0	2,045.7
exports	2,450.7	1,746.5	1,616.7	1,512.7	1,515.9
	-84.4	-491.3	-582.1	-380.2	-529.8
56 Manufactured fertilisers:					
imports	282.3	300.8	239.0	230.7	287.1
exports	197.9	190.0	184.5	193.5	197.3
	-84.4	-110.8	-54.4	-37.2	-89.8
53–59 Miscellaneous chemical products:					
(part) imports	6,510.8	6,478.5	5,638.1	6,030.2	7,094.4
exports	5,087.9	5,362.0	4,989.0	4,932.4	5,462.8
	-1 422.9	-1 116.5	-649.1	-1 097.7	-1 631.6
66 Non-metallic mineral products:					
imports	6,944.5	4,576.7	4,914.1	5,309.4	5,841.2
exports	5,903.8	2,962.1	3,121.3	3,182.6	3,754.7
	-1 040.7	-1 614.6	-1 792.8	-2 126.8	-2 086.6
67 Iron and steel:					
imports	4,012.0	4,391.8	3,684.9	3,789.4	4,827.0
exports	4,615.1	4,538.8	3,301.7	2,461.6	3,191.3
	+603.1	+147.0	-383.1	-1 327.8	-1 635.7
68 Non-ferrous metals:					
imports	9,751.6	8,107.9	7,400.4	8,089.7	10,649.1
exports	7,120.1	6,743.0	6,843.5	6,434.2	8,246.8
	-2 631.5	-1 364.9	-556.8	-1 655.5	-2 402.4
69 Manufactures of metal:					
imports (b)	364.6	347.3	367.5	376.9	420.4
exports (b)	297.8	303.4	334.7	397.6	434.0
	-66.8	-43.9	-32.8	+20.8	+13.6
96 Coin other than gold:					
imports	6.6	4.7	4.2	4.5	5.4
exports	18.7	23.6	29.3	9.8	14.9
	+12.1	+18.9	+25.0	+5.2	+9.5
Total (excluding gold)					
imports	98,711.9	85,597.6	66,411.8	64,082.4	81,562.5
exports	77,103.4	66,128.2	53,897.0	49,282.2	62,665.6
	-21 608.5	-19 469.1	-12 514.9	-14 800.2	-18 896.9

(a) Imports are valued c i f and exports are valued f o b.

As of 2011 information regarding trade in gold is no longer available .

Approximate value (a) of minerals produced in the United Kingdom 2011–2017

£ million

Mineral	2012	2013	2014	2015	2016	2017
Coal	1,131	780	660	419	227	225
Natural gas	7,855	7,755	6,655	7,035	5,315	6,260
Natural gas liquids	... (b)	... (b)	... (b)	... (b)	... (b)	... (b)
Crude petroleum	22,975	21,330	18,185	12,985	12,385	15,545
Tin	—	—	—	—	2	4
Tungsten	—	—	—	5	23	31
Gold	3	1	—	—	0	—
Silver	0	0	—	—	0	—
Other non-ferrous metals	0	0	0	0	0	0
Sand and gravel	555	584	643	781	852	844
Limestone and dolomite	565	545	663			
Igneous rock	300	320	333			
Sandstone	110	115	122			
Chalk	54	77	57			
Clay and shale	20	41	59	26	26	28
China clay	128	129	129	121	121	137
Ball clay	49	50	48	50	47	47
Salt	326	317	225	212	175	173
Silica sand	57	59	55	62	67	82
Potash	259	248	226	137	89	45
Polyhalite	—	—	—	25	25	63
Fluorspar	—	4	4	3	2	1
Gypsum and anhydrite	10	8	15	23	19	18
Miscellaneous minerals	40	35	70	50	49	43
	34,438	32,398	28,149	23,068	20,791	24,960
At 2016 constant prices						
Coal	1,201	813	676	428	227	220
Oil and gas	32,728	30,328	25,451	20,429	17,700	21,336
Metals	4	1	0	5	25	34
Construction and industrial minerals	2,626	2,640	2,714	2,678	2,839	2,833
	36,558	33,783	28,841	23,539	20,791	24,423

(a) Calculated on an ex-works sales basis.

(b) Included in gas and petroleum figures.

Source: British Geological Survey.

United Kingdom mining and quarrying: Gross value added (a) 2010–2017

£ million

	2010	2011	2012	2013	2014	2015	2016	2017
Production								
Mining and quarrying								
Mining and quarrying of energy producing materials								
Mining of coal and lignite	993	399	359	107	211	164	116	132
Extraction of crude petroleum and natural gas	25,325	26,572	22,151	22,035	18,595	14,686	12,747	15,889
Other mining and quarrying	2,129	2,525	3,076	3,053	3,140	2,957	3,277	3,636
Total mining and quarrying	30,584	32,167	28,398	27,603	24,286	20,093	18,275	22,012
All industries	1,429,621	1,468,323	1,514,910	1,573,223	1,645,955	1,692,039	1,756,045	1,842,331
of which: minerals related (%)	2.1	2.2	1.9	1.8	1.5	1.2	1.0	1.2

(a) At current basic prices.

Source: Office for National Statistics.

Individual industry sectors do not sum to the total mining and quarrying figure due to the exclusion of mining support service activities.

United Kingdom production of minerals 2011–2017

Thousand tonnes

Mineral	2011	2012	2013	2014	2015	2016	2017
Coal:							
Deep-mined	7,312	6,153	4,089	3,685	2,784	22	20
Opcast	10,580	10,134	8,584	7,962	5,814	4,156	3,021
Other (a)	660	680	95	—	—	—	—
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	58	52	52	34	30	38	42
Onshore	27	15	10	38	183	179	184
Offshore	45,204	38,850	35,268	35,690	38,633	39,663	39,792
Crude oil							
Onshore	678	870	1,003	1,014	962	966	836
Offshore	47,893	41,182	37,453	36,461	41,864	43,340	41,344
Condensates and other (c)							
Onshore	0	13	20	19	18	17	14
Offshore	3,401	2,495	2,170	2,435	2,444	3,122	3,442
Non-ferrous ores (metal content):							
Tin	—	—	—	—	—	0.2	0.3
Tungsten	—	—	—	—	0.2	0.9	1.4
Lead (h)	0.3	0.1	0.1	0.1	0.1	0.1	0.1
Gold (kg)	202	102	42	—	—	(m) 6	—
Silver (kg)	531	230	82	—	—	(m) 14	—
Clay and shale (e)	6,154	5,497	6,464	6,806	4,552	4,694	5,544
Chalk (e)	3,996	3,473	3,528	3,312			
Igneous rock (j) (k)	(l) 44 400	(l) 40 200	(l) 40 500	(l) 43 700			
Limestone (excluding dolomite)	(l) 58 100	(l) 54 800	(l) 56 900	(l) 66 300			
Dolomite (excluding limestone)	4,490	4,896	3,432	3,730			
Sandstone	(l) 12 300	(l) 11 500	(l) 11 500	(l) 12 500			
Slate (g)	763	701	885	868			
Sand and gravel:							
Land	(l) 45 800	(l) 41 800	(l) 43 400	(l) 46 800	51,053	51,231	(l) 50 000
Marine (i)	17,287	14,840	14,577	14,327	15,390	16,844	17,402
Ball clay (sales) (h)	930	748	740	733	740	753	850
Barytes	31	30	30	44	50	56	55
China clay (sales) (d) (h)	1,290	1,150	1,110	1,090	1,014	940	970
Fireclay (e)	162	96	105	129	...	...	...
Fluorspar (h)	—	—	16	25	17	12	11
Gypsum (natural) (h)	1,400	800	700	1,100	1,800	1,600	1,300
Peat (000 m ³)	825	568	1,254	795	...	...	...
Potash (b)	(h) 770	(h) 900	(h) 540	576	594	432	216
Polyhalite	—	—	—	—	200	200	500
Salt	6,060	6,460	6,930	4,690	(h) 4 700	(h) 4 100	(h) 4 100
Silica sand	3,969	3,888	3,961	3,948	3,822	4,251	4,490
Talc	4	4	3	5	5	3	4

(a) Slurry etc. recovered from dumps, ponds, rivers etc.

(b) Marketable product (KCl).

(c) Including ethane, propane and butane, in addition to condensates.

(d) Dry weight.

(e) Excluding a small production in Northern Ireland.

(f) BGS estimates based on data from producing companies.

(g) Slate figures include waste used for constructional fill and powder and granules used in industry.

(h) BGS estimate.

(i) Including marine-dredged landings at foreign ports (exports).

(j) Excluding a small production of granite in Northern Ireland.

(k) In addition, the following amounts of igneous rock were produced in Guernsey (thousand tonnes): 2011: 156; 2012: 169; 2013: 149; 2014: 117; 2015: 116; 2016: 88; 2017: 105 and Jersey: 2011: 220; 2012: 239; 2013: 176; 2014: 243; 2015: 275; 2016: 258; 2017: 247.

(l) Including an estimate for production in Northern Ireland.

(m) Production from metallurgical testwork.

Sources: Mineral Products Association; Office for National Statistics; Department of Business, Energy & Industrial Strategy; Department for Economy (Northern Ireland); Crown Estate Commissioners; and company data.

Minerals produced in Northern Ireland, the Isle of Man, Guernsey and Jersey 2013-2017

Thousand tonnes

	2013	2014	2015	2016	2017
Northern Ireland					
Gold (kg)	42	0	0	0	0
Silver (kg)	82	0	0	0	0
Lead (tonnes)	36	0	0	0	0
Limestone	...	...	1,709	2,146	...
Sand and gravel	...	...	2,481	2,354	...
Basalt and igneous rock (a)	...	...	2,587	4,216	...
Sandstone	...	...	3,946	5,043	...
Granite	...	...	...	...	...
Clay and shale	...	...	...	...	...
Others (b)	...	...	1,044	1,264	...
Total	...	...	11,766	15,023	...
Isle of Man					
Limestone	56	53	58	50	48
Sand and gravel	96	97	101	106	109
Igneous rock	110	98	94	89	86
Slate	17	26	33	28	39
Total	279	274	286	272	281
Guernsey					
Igneous rock	149	117	116	88	105
Jersey					
Igneous rock (c)	176	243	275	258	247
Sand and gravel	44	48	51	46	47

(a) Excluding granite.

(b) Including rock salt, chalk, dolomite, fireclay and granite.

(c) BGS estimates.

Sources: Department for the Economy (Northern Ireland), Department of Economic Development (Isle of Man), Company data (Guernsey and Jersey).

Number of mineral workings in the United Kingdom, by commodity (a) (b)

Number

Commodity	Region												England Total	Wales	Scotland	Isle of Man	Northern Ireland	Channel Islands	Total
	North East England	Yorkshire & the Humber	North West England	East Midlands	West Midlands	East of England	Greater London	South East England	South West England	England Total	Wales	Scotland							
Abandoned mine methane	—	6	—	9	2	—	—	—	—	17	1	—	—	—	—	—	18		
Anhydrite	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	1		
Ball clay	—	—	—	—	—	—	—	—	19	19	—	—	—	—	—	—	19		
Barytes	—	—	—	2	—	—	—	—	—	2	—	1	—	—	—	—	3		
Bauxite	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1		
Chalk	—	17	—	3	—	13	—	15	1	49	—	—	—	4	—	—	53		
China clay	—	—	—	—	—	—	—	—	18	18	—	—	—	—	—	—	18		
China clay waste	—	—	—	—	—	—	—	—	9	9	—	—	—	—	—	—	9		
Clay & shale	5	30	16	18	25	6	—	22	9	131	11	4	—	15	—	—	161		
Coal, underground	1	—	1	1	—	—	—	—	—	3	1	—	—	—	—	—	4		
Coal, opencast	4	—	—	—	—	—	—	—	—	4	3	2	—	—	—	—	9		
Coalbed methane	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1		
Fireclay	—	4	1	1	1	—	—	—	—	7	—	1	—	—	—	—	8		
Flint	—	1	—	—	3	—	5	—	2	—	8	—	—	—	—	—	8		
Fluorspar	1	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	4		
Gold	—	—	—	—	—	—	—	—	—	0	—	1	—	1	—	—	2		
Gypsum (c)	—	—	1	3	1	—	—	1	—	6	—	—	—	—	—	—	6		
Igneous & metamorphic rock	8	—	4	8	4	—	—	—	14	38	15	123	2	46	4	—	228		
Iron ore - ironstone	—	—	—	—	—	—	—	3	1	4	—	—	—	—	—	—	4		
Lead	—	—	—	2	—	—	—	—	—	2	—	—	—	1	—	—	3		
Limestone / dolomite	20	29	17	64	8	4	—	17	89	248	35	14	2	21	—	—	320		
Marble	—	—	—	—	—	—	—	—	—	0	—	1	—	—	—	—	1		
Mine drainage gas	—	1	—	1	—	—	—	—	—	2	—	—	—	—	—	—	2		
Natural gas	—	10	1	3	—	—	—	1	1	16	—	—	—	—	—	—	16		
Oil	—	1	—	44	—	—	—	22	4	71	—	—	—	—	—	—	71		
Peat	1	2	8	—	—	1	—	—	39	51	2	28	—	8	—	—	89		
Polyhalite	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1		
Potash	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1		
Salt	—	2	3	—	—	—	1	—	—	6	—	—	—	1	—	—	7		
Sand	5	11	7	1	3	15	2	36	9	89	2	21	—	3	1	—	116		
Sand & gravel	5	22	23	41	31	90	14	58	28	312	15	106	3	83	—	—	519		
Sandstone	18	58	36	17	18	7	—	5	23	182	22	53	—	34	—	—	291		
Serpentine	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	1		
Silica sand	—	2	5	1	1	14	—	6	1	30	1	5	—	—	—	—	36		
Silver	—	—	—	—	—	—	—	—	—	0	—	—	—	1	—	—	1		
Slate	—	—	10	—	—	—	—	—	11	21	13	—	3	1	—	—	38		
Slate waste	—	—	3	—	—	—	—	—	—	3	16	1	—	—	—	—	20		
Talc	—	—	—	—	—	—	—	—	—	0	—	1	—	—	—	—	1		
Tin	—	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—	2		
Tungsten	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	1		
Total	68	198	137	222	95	155	17	188	280	1,360	137	362	10	220	5	2,094			

(a) As at July 2018.

(b) Double counting may occur because some workings produce more than one mineral.

(c) Excludes desulphogypsum manufacture.

Source: British Geological Survey.

Abrasives, natural

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Carats					£ thousand														
Abrasives																				
<i>Imports</i>																				
Natural abrasives																				
Industrial diamonds	6 399 457	4 270 299	2 397 330	2 181 458	2 705 618	29 588	20 464	9 455	7 725	11 585										
 Tonnes																				
Dust and powder of precious and semi-precious stones	775	33	100	103	31	11 621	10 330	7 469	7 694	10 898										
Pumice	3 406	2 353	4 634	8 034	2 699	954	724	1 126	989	863										
Other	17 304	13 280	13 422	13 164	11 609	4 113	3 319	2 757	3 038	3 455										
 Carats																				
<i>Exports</i>																				
Natural abrasives																				
Industrial diamonds	2 001 018	2 430 399	943 964	686 369	1 156 793	19 219	15 236	8 604	7 862	9 719										
 Tonnes																				
Dust and powder of precious and semi-precious stones	103	18	12	68	15	14 156	13 043	9 830	10 801	13 694										
Pumice	138	121	100	254	328	176	159	130	244	301										
Other	1 609	3 352	1 183	1 555	1 274	1 507	2 112	1 068	1 008	1 008										

Aggregates

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Aggregates																				
<i>Production*</i>																				
Sand and gravel (a)	(c) 58 100 000	(c) 61 300 000	66 443 000	68 075 000	(c) 67 400 000															
Crushed rock (b)	(c) 90 600 000	(c) 108 200 000	116 401 000	125 301 000	(c) 125 900 000															
Total	(c) 148 700 000	(c) 169 500 000	182 845 000	193 376 000	(c) 193 300 000															
 Imports																				
Natural aggregates-																				
Sand and gravel	493 102	549 584	722 068	879 166	631 921	15 483	13 749	14 737	17 793	18 704										
Crushed rock (d)	430 464	381 694	281 400	433 084	356 707	19 243	21 191	15 788	19 290	18 168										
Total	923 566	931 278	1 003 468	1 312 250	988 628	34 726	34 940	30 525	37 082	36 872										
 Exports																				
Natural aggregates-																				
Sand and gravel (e)	4 326 631	3 518 314	2 223 131	2 445 821	2 409 597	34 708	31 179	22 694	26 552	26 473										
Crushed rock	4 896 911	4 966 129	4 251 512	3 815 671	4 353 247	37 802	46 097	30 156	29 431	35 901										
Total	9 223 816	8 484 443	6 474 643	6 261 492	6 762 844	72 510	77 276	52 851	55 984	62 374										

* Source: 2013-2014 ONS, 2015-2017 Mineral Products Association

(a) Including production from marine dredging.

(b) Includes small quantities for other purposes in Northern Ireland.

(c) Includes an estimate for Northern Ireland.

(d) For a number of years, a significant amount of armourstone imports were believed to be wrongly classified as 'granite, crude'. Care should be taken when comparing long time trends.

(e) Principally marine-dredged sand and gravel.

Source: HM Revenue and Customs.

However, the Crown Estate Commissioners give the following figures for marine-dredged sand and gravel landed at foreign ports (tonnes):
2013: 4 089 687; 2014: 2 994 538; 2015: 2 153 146; 2016: 2 767 125; 2017: 3 127 371.

Aluminium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Aluminium																				
<i>Production</i>																				
Unwrought-																				
Primary	45 000	41 000	48 000	46 000	48 000															
Secondary	148 800	148 800	148 800	148 800	148 800															
<i>Consumption</i>																				
Unwrought-																				
Primary (a)	270 000	270 000	270 000	241 200	241 200															
Secondary	320 400	320 400	320 400	320 400	320 400															
<i>Imports</i>																				
Ash and residues	1 502	679	435	1 163	218	488	181	490	263	244										
Unwrought	144 616	154 942	145 297	162 946	162 676	210 078	191 242	173 276	196 694	265 288										
Unwrought alloys	70 720	62 549	68 646	71 127	72 035	109 761	96 538	102 809	102 918	128 121										
Scrap	113 461	168 299	113 549	113 780	135 710	97 962	132 107	104 570	97 151	123 991										
<i>Exports</i>																				
Ash and residues	86	143	75	465	222	19	86	345	328	292										
Unwrought	8 510	6 364	3 164	3 326	4 614	10 474	7 779	5 200	4 846	8 609										
Unwrought alloys	188 996	219 143	278 215	287 882	270 009	290 451	335 466	405 567	412 070	470 822										
Scrap	402 060	452 620	405 504	437 637	370 082	469 859	483 869	404 838	424 272	439 567										

(a) Estimate.

Aluminium compounds

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Aluminium compounds																				
<i>Imports</i>																				
Oxide (alumina)	50 376	69 337	58 619	153 964	140 836	39 555	41 226	32 620	41 642	112 740										
Hydroxide	80 674	81 787	46 081	51 957	51 690	30 167	34 496	20 829	23 023	26 481										
Fused Oxide (a)	33 610	40 512	29 713	27 178	30 185	21 967	24 615	16 960	15 668	17 586										
Fluorides	1 235	791	389	953	736	1 268	704	271	734	637										
<i>Exports</i>																				
Oxide (alumina)	3 247	4 116	4 953	9 706	3 365	3 625	2 635	2 835	3 796	3 200										
Hydroxide (b)	1 600	2 000	5 500	5 100	2 600	900	1 863	2 400	1 800	1 300										
Fused Oxide (a)	6 269	6 675	6 670	7 567	10 427	7 185	5 607	5 055	6 471	7 489										
Fluorides	476	499	298	0	0	359	382	245	4	9										

(a) Artificial corundum.

(b) BGS estimates, based on known imports into certain countries.

Antimony

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Antimony																				
<i>Imports</i>																				
Ores & concentrates	25	25	—	—	1	16	12	—	—	6										
Metal	280	375	128	307	189	2 127	2 380	979	1 491	1 714										
Oxide	1 688	1 916	1 912	1 628	1 690	10 340	9 410	7 496	7 671	9 978										
<i>Exports</i>																				
Ores & concentrates	0	0	52	1	—	0	0	70	4	—										
Metal	425	525	431	477	660	3 076	4 245	3 345	3 792	5 688										
Oxide	152	127	180	209	78	970	951	843	981	574										

Arsenic

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Arsenic																				
<i>Imports</i>																				
Elemental	11	7	6	4	3	200	172	207	268	289										
<i>Exports</i>																				
Elemental	7	7	5	3	2	30	139	50	16	21										

Asbestos

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Asbestos																				
<i>Imports</i>																				
Fabricated asbestos	13	12	11	17	2	393	247	122	239	75										
Friction material with a basis of asbestos etc.	7 138	6 761	5 778	5 622	5 971	61 357	60 355	50 095	45 239	43 015										
Articles of asbestos cement etc.	127 843	170 364	163 162	172 991	189 683	48 781	63 844	62 922	70 850	80 820										
<i>Exports</i>																				
Fabricated asbestos	163	75	12	165	119	2 104	1 673	1 112	2 055	918										
Friction material with a basis of asbestos etc.	2 946	3 068	3 495	2 471	2 384	48 447	51 928	51 218	50 185	72 960										
Articles of asbestos cement etc.	15 805	12 372	14 121	21 419	19 260	7 730	5 691	6 564	10 210	11 111										

Asphalt, natural

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Asphalt, natural										
<i>Imports</i>	11 730	7 858	26 765	33 394	27 354	4 806	1 412	4 906	4 335	6 236
<i>Exports</i>	41 162	133 784	70 584	48 224	47 063	2 787	6 589	2 384	1 862	2 054

Ball clay

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Ball clay										
<i>Production (sales) (a)</i>	740 000	733 000	740 000	753 000	850 000					
<i>Imports</i>	6 848	6 256	7 390	3 580	4 534	2 362	2 418	2 331	1 545	1 990
<i>Exports</i>	560 843	555 049	560 370	570 678	643 779	37 582	35 939	35 701	40 449	46 483

(a) BGS estimate based on exports.

Barytes

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Barytes										
<i>Production</i>										
Barium minerals -										
Barytes (a)	30 000	44 000	50 000	56 000	55 000					
<i>Imports</i>										
Barium minerals (b)	102 274	75 984	61 136	44 363	41 245	14 733	10 187	8 414	8 464	9 142
<i>Exports</i>										
Barium minerals (b)	13 854	13 550	12 738	13 089	17 572	5 304	4 970	4 185	3 910	5 305

(a) BGS estimate

(b) Mainly barites with some witherite.

Bauxite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Bauxite										
<i>Imports</i> (a)	41 256	34 299	35 850	19 808	14 029	12 395	11 631	10 155	6 156	5 459
<i>Exports</i> (a)	4 804	4 339	3 455	4 879	4 495	2 338	1 976	3 252	1 968	1 824

(a) Excluding refractory grade bauxite.

Bentonite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Bentonite										
<i>Imports</i>	173 094	151 570	120 841	122 153	128 865	14 860	12 687	10 513	12 366	13 396
<i>Exports</i>	37 694	31 347	28 938	28 856	31 921	11 834	10 724	8 939	9 701	15 119

Beryllium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Beryllium										
<i>Imports</i>										
Metal	4	25	7	33	72	2 037	872	1 042	1 243	2 180
Oxides and hydroxides	1	2	4	3	8	11	234	610	395	1 275
<i>Exports</i>										
Metal	0	3	5	3	39	158	180	303	300	959
Oxides and hydroxides	0	0	—	0	3	12	7	—	1	55

Bismuth

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Bismuth										
<i>Imports</i>										
Metal	441	321	259	161	53	5 135	4 336	2 397	1 128	555
<i>Exports</i>										
Metal	407	348	444	634	210	7 481	7 851	6 887	6 869	3 872

Boron

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Boron										
<i>Imports</i>										
Boron minerals (a)	2 576	4 515	3 975	4 363	4 322	891	1 236	952	1 197	1 289
<i>Exports</i>										
Boron minerals (a)	42	2	4	111	459	28	4	7	89	425

(a) Including crude natural borates and concentrates, and crude natural boric acid.

Bricks

Great Britain production of bricks, blocks and tiles 2009–2017

Material	2009	2010	2011	2012	2013	2014	2015	2016	2017
Million bricks									
Bricks (all types):	1,257	1,430	1,554	1,459	1,555	1,824	1,915	1,800	1,877
Million square metres									
Concrete building blocks:									
Dense aggregate	23	22	23	22	24	25	26	27	27
Lightweight aggregate	13	14	15	14	17	17	19	20	22
Aerated concrete	14	17	16	16	15	15	20	23	25
Total	50	54	55	52	56	58	65	71	74
Roofing tiles:									
Concrete	14	18	18	17	19	24	25	25	26

Source: Department for Business, Energy and Industrial Strategy

Bromine

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Bromine										
<i>Imports</i>	6 834	5 932	5 271	6 557	6 634	8 533	6 474	6 788	10 970	10 707
<i>Exports</i>	646	751	161	1 268	3 202	1 094	1 249	399	2 166	3 841

Building and dimension stone

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Building and dimension stone																				
<i>Production</i>																				
Sandstone	281 000	286 000	...	...	...												
Igneous rock	(a) 165 000	159 000	...	...	...												
Limestone (b)	477 000	585 000	...	...	...												
Dolomite (c)	...	...	...	...	...										
Total	(a) 923 000	1 030 000	...	...	...												
<i>Imports</i>																				
Unworked-																				
Marble & other calcareous stone	13 660	10 388	9 006	15 981	30 167	11 229	9 835	6 084	8 190	11 745										
Granite (d)	1 189 686	1 937 720	2 744 898	3 068 883	2 363 599	46 260	51 928	54 355	53 843	47 786										
Sandstone	283 669	297 327	359 374	442 582	398 535	55 494	58 290	66 376	68 210	88 930										
Other stone	52 779	92 460	77 319	60 874	109 927	11 068	15 107	15 303	11 803	13 811										
Worked-																				
Marble & other calcareous stone	87 454	82 157	67 020	62 073	55 704	58 785	55 139	44 916	46 773	49 320										
Granite	91 555	99 354	93 690	95 086	91 188	68 971	66 801	66 545	68 240	67 780										
Other stone	31 410	32 294	23 622	24 527	23 991	20 386	20 839	18 221	22 465	24 270										
Paving stones and flagstones	107 253	141 694	221 917	227 864	272 669	19 402	28 206	44 025	47 052	64 286										
<i>Exports</i>																				
Unworked-																				
Marble & other calcareous stone	437	563	437	578	834	626	378	294	413	465										
Granite	5 708	7 167	5 961	7 547	13 915	1 017	1 057	674	1 154	2 172										
Sandstone	2 175	4 329	9	299	206	203	396	15	94	73										
Other stone	1 358	178	499	255	208	442	70	617	262	225										
Worked-																				
Marble & other calcareous stone	919	1 367	1 428	896	809	2 337	4 226	7 201	3 155	3 417										
Granite	749	1 025	3 505	660	1 059	1 354	2 323	5 332	1 214	1 698										
Other stone	2 500	2 825	2 081	2 477	6 935	4 572	5 983	4 092	1 738	2 511										
Paving stones and flagstones	7 469	8 830	4 532	3 417	3 687	1 948	3 364	1 568	1 460	1 377										

(a) BGS estimate.
 (b) Including dolomite.

(c) Included within Limestone.
 (d) Figures in some years believed to be too high. May include aggregates.

Cadmium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Cadmium										
<i>Consumption</i>	83	137	10	10	10					
<i>Imports</i>										
Metal	304	346	216	224	252	487	600	237	280	417
Oxide	182	241	120	72	96	345	536	122	133	199
<i>Exports</i>										
Metal	99	22	12	7	15	358	138	166	85	172

Cement

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Cement										
<i>Production</i>										
Cement, clinker	(a) 6 712 000	(a) 7 197 000	7 804 000	8 056 000	7 824 000					
Cement, finished	(a) 8 203 000	(a) 8 958 000	9 235 000	9 370 000	9 359 000					
	Cubic metres									
Ready-mixed concrete	23 774 000	24 430 000	25 456 000	26 575 000	26 063 000					
	Tonnes									
<i>Consumption (home deliveries)</i>										
Finished cement (a)	11 535 000	12 433 000	13 967 000	15 004 000	15 269 000					
<i>Imports</i>										
Portland cement clinkers	290 071	981 457	743 671	527 391	532 977	33 679	49 970	43 218	43 707	48 267
Portland cement	1 776 713	2 314 549	2 181 195	2 338 637	2 422 996	97 890	127 928	115 597	128 063	139 185
Aluminous cement	15 558	15 415	14 360	15 105	12 802	4 621	4 969	4 517	4 449	4 174
Other cement	16 940	24 317	23 133	29 470	34 677	2 279	2 998	1 894	3 438	2 697
<i>Exports</i>										
Portland cement clinkers	24 056	21 059	6 899	47 928	23 649	925	3 557	1 308	3 029	1 540
Portland cement	85 405	68 225	67 218	93 513	138 181	10 124	9 262	10 276	11 278	15 680
Aluminous cement	67 704	64 748	59 833	58 218	62 746	30 736	29 641	24 931	26 821	30 628
Other cement	9 147	6 421	3 522	2 680	5 591	3 192	1 894	1 532	1 183	2 475

(a) Great Britain only.

Chalk (see Limestone)

China clay

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
China clay										
Production (sales) (a)	1 110 000	1 090 000	1 014 000	940 000	970 000					
Imports (b)	85 534	92 426	76 443	74 357	68 664	15 335	14 998	12 498	14 148	15 752
Exports (b)	1 003 841	984 272	913 371	846 617	873 633	116 672	116 105	108 488	109 226	119 421

(a) BGS estimate.

(b) Excludes HS code 2507 00 80 'Other kaolinitic clays' which are shown in this volume under Ball clay.

China stone (see Feldspar)

Chromium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Chromium										
Apparent consumption (a)	37 200	39 900	30 700	27 000	36 500					
<i>Imports</i>										
Ores & concentrates	10 033	8 111	5 100	5 092	5 460	2 800	2 057	1 378	1 285	1 740
Ferro-chrome										
Under 4% carbon	8 773	8 871	7 005	5 232	7 005	15 634	14 335	13 135	10 468	13 135
4%-6% carbon	50	...	100	37	100	55	...	192	52	192
Over 6% carbon	39 764	54 404	34 504	31 674	34 504	31 403	38 969	23 450	21 351	23 450
Ferro-silico-chrome	163	307	402	47	12	268	451	612	82	55
Oxides and hydroxides	(b) 14 900	(b) 8 600	15 267	13 833	14 915	(b) 26 400	(b) 13 700	30 782	30 237	39 143
Metal	1 751	1 829	1 608	1 422	1 227	10 846	9 381	8 617	9 254	9 311
<i>Exports</i>										
Ores & concentrates	50	57	83	106	71	130	26	16	54	124
Ferro-chrome										
Under 4% carbon	301	372	272	220	272	1 663	1 569	1 341	1 163	1 341
4%-6% carbon	260	804	681	281	681	375	531	416	107	416
Over 6% carbon	1 547	2 361	2 169	1 653	2 169	2 227	3 055	2 623	2 262	2 623
Ferro-silico-chrome	168	362	474	114	545	386	741	1 154	278	1 269
Oxides and hydroxides	625	(c) 890	1 161	526	467	1 988	(c) 2 600	2 855	1 458	1 582
Metal	7 061	7 216	6 416	6 933	7 153	47 432	51 510	48 005	50 756	63 391

(a) BGS estimates; see explanatory notes.

(b) BGS estimates, based on known exports from certain countries.

(c) BGS estimates, based on known imports into certain countries.

Clays

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Clays																				
<i>Production *</i>																				
Clay and shale	6 464 000	6 806 000	4 551 500	4 694 300	5 543 900															
<i>Imports</i>																				
Unspecified clays	141 489	149 468	158 222	139 925	147 165	23 181	23 442	21 590	21 587	24 266										
<i>Exports</i>																				
Unspecified clays	101 659	161 079	131 067	114 027	98 227	8 137	15 009	8 717	8 913	9 534										

* Source: 2013-2014 ONS, 2015-2017 British Ceramic Confederation

Great Britain production of clay and shale by end-use 2002–2017

Thousand tonnes

Year	Bricks, pipes and tiles	Cement	Lightweight aggregate	Construc- tional use	Other uses	Total
2002	6,985	2,194	...	956	...	10,306
2003	7,090	2,215	...	1,181	...	10,680
2004	7,629	...	—	...	234	11,164
2005	7,741	1,937	—	798	422	10,898
2006	6,772	...	—	...	...	10,432
2007	6,869	2,348	—	785	102	10,104
2008	4,969	2,013	—	1,318	159	8,459
2009	2,797	1,397	—	998	118	5,310
2010	...	1,353	—	769	...	5,934
2011	3,983	1,474	—	561	136	6,154
2012	3,569	1,415	—	491	23	5,497
2013	4,088	1,440	—	839	97	6,464
2014	4,712	1,453	—	570	71	6,806
2015 (a)	4,380	163	—	9	...	4,552
2016 (a)	4,371	156	—	167	...	4,694
2017 (a)	5,215	173	—	156	...	5,544

(a) A different source has been used for 2015 onwards and consequently the data may not be consistent with earlier years.

Source: 2015–2017 British Ceramic Confederation,
2002–2014 Office for National Statistics.

Great Britain production of clay and shale for use in bricks, pipes and tiles by region 2009–2017

Thousand tonnes

Year	England	Wales	Scotland	Great Britain
2009	2,785	1	10	2,797
2010	3,678	—	...	...
2011	...	...	—	3,983
2012	...	...	...	3,569
2013	...	1	...	4,088
2014	...	—	...	4,712
2015 (a)	4,380	...	...	...
2016 (a)	4,371	...	...	...
2017 (a)	5,215	...	...	...

(a) Data from 2015 onwards is not comparable to previous years due to changes in data collection
Source: British Ceramic Confederation and Office for National Statistics.

Coal

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Coal																				
<i>Production</i>																				
Bituminous (a)	12 673 000	11 648 000	8 598 000	4 178 000	3 041 000															
<i>Consumption</i>	60 206 000	48 295 000	37 451 000	17 745 000	14 183 000															
<i>Imports</i>																				
Anthracite	23 059	111 197	22 069	32 108	32 416	5 222	14 729	4 538	4 140	6 042										
Bituminous & Other	44 867 788	38 420 305	21 507 833	7 437 409	7 300 751	2 871 275	2 182 585	1 121 749	467 974	708 280										
Total	44 890 847	38 531 502	21 529 902	7 469 517	7 333 167	2 876 497	2 197 314	1 126 287	472 114	714 322										
Briquettes of coal	14 662	14 382	9 666	24 130	56 251	2 148	1 973	1 000	3 188	7 706										
Lignite (including agglomerated)	1 685	1 510	1 710	3 367	1 705	614	545	752	1 122	355										
<i>Exports</i>																				
Anthracite	143 133	81 353	77 292	82 512	88 637	28 232	10 624	9 616	9 004	10 207										
Bituminous & Other	456 259	343 800	275 364	327 687	374 174	62 157	46 813	33 517	37 119	44 465										
Total	599 392	425 153	352 656	410 199	462 811	90 389	57 437	43 133	46 123	54 672										
Briquettes of coal	106 133	108 328	73 768	56 053	34 185	19 589	20 074	12 943	8 897	6 012										
Lignite (including agglomerated)	1 855	1 245	816	636	414	658	655	416	358	149										

(a) Including anthracite.

Cobalt

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Cobalt																				
<i>Apparent consumption (a)(b)</i>																				
	1 500	2 100	1 200	2 200	1 500															
<i>Imports</i>																				
Ore	137	151	127	83	34	253	269	307	145	106										
Unwrought	4 475	3 920	391	527	1 115	53 585	50 547	3 301	4 096	13 216										
Wrought	444	336	2 222	671	505	12 758	11 706	13 829	14 842	15 586										
Oxides	180	160	129	264	166	2 044	2 073	1 660	2 261	4 043										
Scrap	296	304	3 118	4 691	5 114	2 997	2 300	36 519	39 074	89 464										
<i>Exports</i>																				
Ore	22	9	9	8	16	43	124	170	180	690										
Unwrought	732	615	558	589	1 135	17 954	17 476	6 419	6 040	14 314										
Wrought	1 704	494	584	923	1 011	23 155	19 107	20 622	27 484	38 045										
Oxides	1 493	1 434	1 153	1 257	1 241	20 856	19 498	16 608	17 940	35 586										
Scrap	700	887	851	991	787	5 734	12 164	18 852	19 577	30 007										

(a) Metal content.

(b) BGS estimates; see explanatory notes.

Coke and breeze

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Coke and breeze																				
<i>Production</i>																				
Coke oven - coke	3 769 000	3 601 000	2 716 000	1 332 000	1 361 000															
Coke oven - breeze	32 000	31 000	18 000	16 000	18 000															
<i>Consumption</i>																				
Coke oven coke	3 358 000	3 199 000	2 853 000	1 872 000	1 764 000															
Breeze	1 069 000	1 070 000	962 000	584 000	549 000															
<i>Imports</i>																				
Coke from coal	600 870	71 638	52 391	44 584	41 871	106 796	11 822	8 780	7 995	10 099										
Coke from lignite	1 051	942	10 956	73 713	2 269	469	463	1 615	7 751	1 335										
<i>Exports</i>																				
Coke from coal	239 487	190 855	129 207	227 117	24 892	38 191	26 501	15 752	20 855	5 407										
Coke from lignite	28	20	133	46	15	19	17	77	34	19										

Copper

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Copper																				
<i>Consumption</i>																				
Unwrought-																				
Refined	22 800	22 800	23 026	21 895	19 032															
Copper in scrap for direct use (a)	120 000	120 000	120 000	120 000	120 000															
<i>Imports</i>																				
Ores & concentrates	113	248	76	0	37	239	187	93	57	161										
Matte & cement	144	78	41	59	28	612	358	109	307	155										
Scrap	25 055	28 243	27 083	34 681	32 075	67 485	68 275	62 952	85 786	92 942										
Ash and residues	202	431	209	134	16	332	610	221	159	27										
Unwrought-																				
Unrefined	409	754	435	36	35	945	1 240	671	206	240										
Refined	34 723	19 339	22 747	62 043	21 613	169 240	82 053	84 650	195 284	100 234										
Alloys	5 934	4 475	5 218	4 468	2 191	24 426	17 500	16 002	20 030	12 802										
Master Alloys	228	340	362	290	472	1 192	1 824	1 600	1 286	2 454										
<i>Exports</i>																				
Ores & concentrates	3	8	778	146	331	61	11	2 366	495	1 432										
Matte & cement	31	34	141	116	1 069	491	338	551	428	4 627										
Scrap	291 924	295 741	263 655	309 613	284 990	814 330	732 130	592 150	677 228	782 594										
Ash and residues	106	1 228	206	453	2 219	42	3 352	366	1 005	8 444										
Unwrought-																				
Unrefined	206	201	212	209	221	3 486	3 352	3 416	3 592	4 323										
Refined	17 332	997	601	28 474	20 779	83 752	4 698	2 713	115 782	103 507										
Alloys	7 632	6 154	4 615	4 026	7 476	38 326	29 207	18 217	12 316	17 720										
Master Alloys	6 677	6 918	6 578	5 150	5 314	31 318	29 394	24 396	17 117	23 159										

(a) Estimate.

Crushed rock (see also Aggregates)

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Crushed rock										
Production* (a)	(b)90 600 000	(b)108 200 000	116 401 000	125 301 000	(b)125 900 000					
Imports (c)	430 464	381 694	281 400	433 084	356 707	19 243	21 191	15 788	19 290	18 168
Exports	4 896 911	4 966 129	4 251 512	3 815 671	4 353 247	37 802	46 097	30 156	29 431	35 901

* Source: 2013-2014 ONS, 2015-2017 Mineral Products Association

(a) Includes small quantities for other purposes in Northern Ireland.

(b) Includes an estimate for Northern Ireland.

(c) For a number of years a significant amount of armourstone imports are believed to be wrongly classified as 'granite, crude'. Care should be taken when comparing long time trends.

Great Britain production of crushed rock by region 1983–2017

Thousand tonnes

Year	North East (a)	North West (b)	Yorks. & the Humber	West Midlands	East Midlands	East of England (c)	South East (d)	South West	England	Wales	Scotland	Great Britain
1983	8,978	5,311	11,481	9,192	19,206	...	...	23,178	79,541	18,835	13,706	112,082
1984	9,668	5,116	9,557	8,861	19,142	...	...	25,107	79,650	16,965	14,063	110,678
1985	9,823	5,330	9,444	8,589	21,429	674	1,404	26,510	83,203	17,423	14,370	114,995
1986	9,861	5,469	11,201	8,780	23,038	500	1,597	29,194	89,640	17,881	14,844	122,365
1987	10,375	5,328	15,407	10,015	26,355	772	1,601	34,443	104,296	20,950	16,990	142,237
1988	11,453	6,849	14,885	12,519	32,026	853	2,589	39,108	120,283	23,102	17,629	161,014
1989	13,497	7,078	16,895	12,519	32,646	611	3,254	37,589	124,088	23,581	21,125	168,794
1990	14,602	7,533	15,449	11,047	34,143	709	1,320	33,073	117,875	22,646	21,094	161,615
1991	13,378	6,320	14,269	10,009	29,862	676	1,625	28,037	104,177	22,123	21,707	148,007
1992	12,669	5,899	12,812	8,783	29,879	...	...	28,564	100,553	21,482	21,932	143,967
1993	12,724	6,748	12,734	8,225	31,522	625	1,168	29,848	103,595	23,237	22,743	149,576
1994	13,365	7,892	15,576	8,839	33,713	1,705	1,433	32,141	114,665	24,346	22,746	161,757
1995	10,930	8,077	15,664	...	31,881	629	...	27,419	103,475	23,139	24,224	150,838
1996	10,385	6,448	12,350	6,514	29,001	595	1,210	22,940	89,444	21,273	22,177	132,894
1997	10,619	7,086	12,484	6,416	29,925	536	1,352	23,117	91,535	20,585	21,667	133,787
1998	10,246	6,348	13,745	6,028	26,933	607	1,358	23,411	88,675	19,903	23,138	131,716
1999	9,298	5,829	11,689	5,996	30,724	575	1,343	23,183	88,637	20,429	23,531	132,598
2000	5,441	10,381	11,748	5,533	28,679	475	1,624	24,146	88,027	19,044	23,236	130,307
2001	6,338	9,601	11,718	5,688	30,780	452	1,984	28,067	94,630	17,765	21,364	133,759
2002	5,390	9,426	11,620	5,835	29,604	372	1,068	24,332	87,647	16,724	22,198	126,568
2003	6,081	8,887	10,652	5,538	28,443	(e) 350	(e) 1 008	22,998	83,957	16,837	22,092	122,885
2004	6,455	9,182	11,457	4,861	28,445	423	1,351	23,479	85,653	16,528	25,494	127,674
2005	5,333	7,993	10,875	4,416	27,468	238	1,090	23,180	80,593	16,535	24,732	121,860
2006	5,352	8,996	10,811	4,824	29,658	496	1,059	22,526	83,722	18,429	24,744	126,895
2007	5,482	9,351	10,834	4,750	28,530	591	1,011	22,374	82,922	18,487	28,168	129,577
2008	4,928	7,962	10,045	3,850	24,328	683	1,029	22,355	75,179	15,685	24,215	115,079
2009	3,194	5,629	6,868	2,808	21,575	(e) 289	1,085	18,218	59,666	10,542	20,895	91,103
2010	3,354	4,329	6,681	2,927	17,036	274	800	14,715	50,115	11,001	21,193	82,309
2011	3,400	...	...	...	20,670	...	...	...	57,744	12,034	21,151	90,928
2012	...	...	...	...	...	...	...	...	52,980	10,901	19,004	82,885
2013	2,763	...	...	...	18,647	...	...	16,538	53,417	11,706	17,310	82,433
2014	...	...	...	...	...	...	...	...	63,835	14,830	19,759	98,423
2015	4,678	6,299	10,449	3,699	24,097	—	1,364	22,459	73,044	12,503	22,613	108,160
2016	5,239	6,224	11,140	4,094	26,508	—	5	24,425	77,634	12,376	23,886	113,897
2017	5,084	5,357	10,949	4,419	27,206	—	51	25,895	78,961	12,319	23,190	114,469

(a) From 2000, excludes Cumbria.

(e) BGS estimate.

(b) From 2000, includes Cumbria.

(c) From 2000, includes Essex, Hertfordshire and Bedfordshire.

Sources: For years to 2014: Office for National Statistics.

For years from 2015: GB industry via Mineral Products Association.

Diamond

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Carats					£ thousand				
Diamond										
<i>Imports</i>										
Unsorted	12 754 564	14 833 453	17 328 419	18 126 079	21 689 101	823 603	497 713	441 507	480 845	589 370
Gem-										
Rough	29 495 262	823 336	229 247	1 603 129	8 848 292	2 556 982	29 271	31 747	346 358	577 414
Cut	1 494 267	5 254 159	342 389	298 987	305 845	833 250	934 982	1 061 796	773 858	680 413
Industrial	6 399 457	4 270 299	2 397 330	2 181 458	2 705 618	29 588	20 464	9 455	7 725	11 585
Dust	25 157 153	25 481 253	19 117 231	21 960 382	28 874 346	10 678	9 595	7 196	7 539	10 559
<i>Exports</i>										
Unsorted	11 165 256	14 606 086	17 027 561	18 105 603	29 614 238	469 959	492 070	433 772	476 592	1 115 508
Gem-										
Rough	34 651 963	581 879	127 790	241 586	445 121	3 164 872	30 818	21 555	243 698	50 147
Cut	284 182	470 026	178 953	148 331	423 553	645 403	681 894	913 861	614 440	548 485
Industrial	2 001 018	2 430 399	943 964	686 369	1 156 793	19 219	15 236	8 604	7 862	9 719
Dust	28 709 324	19 103 486	16 835 755	24 983 180	29 947 667	13 094	12 195	9 290	10 237	13 265

Diatomite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Diatomite										
<i>Imports (a)</i>	19 713	25 542	12 011	16 155	15 022	5 243	6 686	2 817	4 049	4 369
<i>Exports (a)</i>	497	734	456	655	542	437	334	458	602	421

(a) Officially recorded under the heading 'Siliceous fossil meals and similar siliceous earths'. Excludes flux calcined.

Dolomite (see Limestone)

Feldspar

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Feldspar										
<i>Imports</i>										
Feldspar	24 568	19 154	5 602	3 722	8 443	3 113	3 002	972	957	1 314
Nepheline-syenite	36 080	33 646	35 009	34 477	38 645	3 272	3 233	3 032	3 117	3 491
<i>Exports</i>										
Feldspar	84	118	77	85	85	43	71	34	32	25
Nepheline-syenite	311	288	313	513	537	96	54	128	130	113

Fireclay

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Fireclay										
<i>Production</i>	(a) 105 000	(a) 129 000	...	...	...		
<i>Imports</i>										
Fireclay	4 142	3 076	2 394	2 603	6 275	1 289	899	802	815	1 998
Fireclay bricks etc	2 745	2 882	3 972	1 548	3 517	2 143	2 487	1 945	1 064	3 345
Refractory hollow-ware	2 071	1 977	1 653	1 499	1 200	5 795	5 630	5 068	4 575	3 861
<i>Exports</i>										
Fireclay	1 022	1 303	990	1 140	1 203	596	704	623	723	806
Fireclay bricks etc	2 244	2 519	2 459	3 818	3 836	2 729	2 538	2 458	5 641	5 376
Refractory hollow-ware	688	662	727	575	564	12 855	14 081	13 889	13 117	14 185

(a) Great Britain only. There is a small, undisclosed production in Northern Ireland.

Fluorspar

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Fluorspar										
<i>Production</i> (a)	16 000	25 000	17 000	12 000	11 000					
<i>Imports</i>										
	(b) 15 600	(b) 12 100	(b) 2 900	(b) 18 500	3 363	(b) 2 600	(b) 2 300	(b) 500	(b) 2 500	441
<i>Exports</i>	16 127	49 078	17 088	11 604	10 809	3 512	6 513	5 215	2 481	2 241

(a) Estimates
(b) BGS estimates, based on known exports from certain countries.

Gas, natural (see Petroleum)

Germanium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Germanium										
<i>Imports</i>										
Metal	1	2	0	0	1	310	515	168	89	141
<i>Exports</i>										
Metal	1	92	11	31	14	589	757	368	166	156

Gold

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Gold										
<i>Production</i>	(a) 0	—	—	(a) 0	—					
<i>Imports</i>										
Waste & scrap	102	72	172	190	214	81 929	101 386	18 385	22 584	28 532
Unwrought (b)	23	70	3	3	3	661 744	1 723 487	63 869	76 704	102 801
Semi-manufactured	311	427	490	1 450	835	9 055 726	10 601 342	12 169 683	42 797 688	26 650 976
<i>Exports</i>										
Waste & scrap	388	726	250	407	528	692 538	445 203	98 208	342 237	337 404
Unwrought (b)	37	216	1	2	2	1 139 800	5 309 000	10 514	2 738	61 021
Semi-manufactured	1 701	730	1 066	404	423	49 447 489	17 511 501	25 190 007	11 502 820	13 140 230

(a) Small quantities have been produced as follows: 2013: 42 kilograms in Northern Ireland; 2016: 6 kilograms during metallurgical test work in Scotland.

(b) Mainly refined gold bullion in the form accepted in inter-bank transactions.

Granite (see Igneous rock)

Graphite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Graphite										
<i>Imports</i>										
Natural graphite	4 951	5 277	3 451	2 667	3 815	5 245	4 905	2 778	2 436	3 432
Artificial graphite	19 373	14 656	24 088	8 819	10 019	23 586	20 056	17 274	12 349	17 703
Graphite crucibles etc	698	272	152	148	158	3 191	1 781	1 016	1 009	1 145
<i>Exports</i>										
Natural graphite	2 011	1 608	1 762	1 592	1 851	3 205	2 644	2 784	3 210	3 055
Artificial graphite	7 994	(a) 7 800	5 864	100 515	30 200	12 477	(a) 11 800	13 279	17 258	15 344
Graphite crucibles etc	6 128	779	5 563	4 547	5 552	13 684	4 514	12 880	9 972	12 238

(a) BGS estimates, based on known imports into certain countries.

Gypsum

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Gypsum																				
<i>Production</i>																				
Gypsum, natural (a)																				
	700 000	1 100 000	1 800 000	1 600 000	1 300 000															
<i>Imports</i>																				
Gypsum	376 972	516 377	730 856	1 591 274	1 523 565	8 027	7 379	9 143	19 715	20 659										
Gypsum (plasters)	33 620	41 106	26 660	96 760	820 059	9 028	11 797	7 405	11 015	21 973										
<i>Exports</i>																				
Gypsum	4 745	4 296	5 609	4 619	9 202	1 422	1 505	1 609	1 399	2 042										
Gypsum (plasters)	19 481	19 957	20 146	20 575	26 365	7 396	8 035	7 607	8 849	11 998										

(a) BGS Estimates.

Hafnium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Hafnium																				
<i>Imports</i>																				
	6	11	6	18	22	1 400	1 924	1 817	5 414	8 194										
<i>Exports</i>																				
	11	12	12	28	93	495	540	957	1 309	1 362										

Igneous rock

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Igneous rock – see also Building and dimension stone																				
<i>Production (a)(b)</i>																				
	40 500 000	43 700 000	...	...	...												
<i>Imports</i>																				
Granite-																				
Worked	91 555	99 354	93 690	95 086	91 188	68 971	66 801	66 545	68 240	67 780										
Unworked	1 189 686	1 937 720	2 744 898	3 068 883	2 363 599	46 260	51 928	54 355	53 843	47 786										
<i>Exports</i>																				
Granite-																				
Worked	749	1 025	3 505	660	1 059	1 354	2 323	5 332	1 214	1 698										
Unworked	5 708	7 167	5 961	7 547	13 915	1 017	1 057	674	1 154	2 172										

(a) Excluding a small production of granite in Northern Ireland.

(b) Includes an estimate for Northern Ireland.

Insulating materials

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Insulating materials																				
<i>Imports</i>																				
Mineral wools (a)	20 123	16 714	14 368	19 107	28 160	29 919	33 832	29 675	31 506	34 665										
Expanded minerals (b)	33 566	14 799	17 039	20 425	35 349	9 534	7 413	8 138	8 188	8 530										
Other (c)	35 501	46 884	44 921	43 086	48 851	45 222	66 044	54 432	56 685	73 990										
<i>Exports</i>																				
Mineral wools (a)	39 865	75 644	38 347	32 853	47 246	54 003	76 677	72 959	81 831	75 722										
Expanded minerals (b)	13 768	13 953	13 265	13 801	12 608	23 847	24 759	22 562	22 129	21 602										
Other (c)	60 269	66 887	40 311	28 571	30 491	83 215	84 766	53 000	54 712	88 304										

- (a) Slag wool, rock wool and similar mineral wools.
 (b) Exfoliated vermiculite, expanded clays, foaming slag and similar expanded mineral materials.
 (c) Mixtures and articles of heat-insulating, sound-insulating or sound-absorbing mineral materials.

Iodine

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Iodine																				
<i>Imports</i>																				
Imports	1 136	1 129	743	600	938	27 542	19 288	13 564	9 870	14 623										
<i>Exports</i>																				
Exports	191	305	114	205	241	6 177	4 802	1 718	3 300	3 544										

Iron compounds and earth colours

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Iron compounds and earth colours																				
<i>Imports</i>																				
Earth colours containing 70% or more ferric oxide	98	374	488	596	72	155	498	354	374	26										
Other iron compounds-Oxides and hydroxides	28 448	35 355	32 481	29 590	30 056	22 007	26 492	28 108	26 528	27 190										
<i>Exports</i>																				
Earth colours containing 70% or more ferric oxide	49	183	170	50	80	87	219	167	113	136										
Oxides and hydroxides	5 956	8 834	4 974	4 758	5 693	7 785	7 677	7 436	8 253	10 768										

Iron ore

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Iron ore										
Consumption	14 034 200	14 352 900	12 975 100	9 116 600	9 020 500					
Imports										
Iron ore	14 136 967	14 468 932	12 044 607	9 281 194	9 128 731	1 133 300	904 485	495 481	422 027	611 301
Fe content (a)	8 500 000	8 700 000	7 200 000	5 600 000	5 500 000					
Exports										
Iron ore	71 801	3 842	91 853	3 722	2 205	4 298	3 301	3 134	989	594

(a) BGS estimates.

Iron and steel

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Iron and steel										
Production										
Pig iron	9 470 600	9 704 600	8 773 500	6 142 400	5 997 000					
Crude steel-										
Alloy qualities	554 700	616 400	502 300	404 500	466 100					
Other	11 302 800	11 417 100	10 404 400	7 230 400	7 025 200					
Total	11 857 500	12 033 500	10 906 700	7 634 900	7 491 300					
Consumption										
Pig iron (a)	9 909 000	9 678 000	8 737 000	6 082 000	5 920 000					
Finished steel (b)	8 462 000	9 997 000	9 615 000	9 851 000	9 895 000					
Scrap	4 084 600	4 145 300	3 699 800	2 550 800	2 691 800					
Imports										
Pig iron	38 057	52 780	40 920	32 063	42 350	14 344	18 225	16 147	7 814	14 469
Shot, powder, sponge etc	49 095	28 660	36 452	30 459	21 310	37 791	34 841	33 130	25 797	32 352
Ferro-alloys	216 722	235 941	180 427	147 268	163 971	232 815	261 001	169 833	128 084	202 586
Iron and steel-										
Ingots and other primary forms	443 657	340 628	353 841	417 001	422 137	262 865	240 495	189 724	203 481	254 965
Scrap	302 580	351 436	238 363	226 250	321 663	104 908	113 335	67 137	68 287	112 448
Exports										
Pig iron	1 652	1 758	2 525	346	4 470	1 147	1 619	1 911	196	787
Shot, powder, sponge etc	57 491	50 745	36 638	59 228	44 528	62 972	57 809	47 689	48 605	57 180
Ferro-alloys	47 949	47 413	35 071	34 285	38 592	220 673	240 999	142 485	121 163	197 018
Iron and steel-										
Ingots and other primary forms	3 164 861	3 197 397	2 412 446	470 230	476 459	1 439 914	1 424 193	916 498	427 734	549 308
Scrap	6 777 534	6 934 918	7 155 388	7 928 339	8 567 251	1 820 752	1 711 018	1 408 537	1 460 245	2 168 719

(a) Consumption in steel making only.

(b) Net home disposals.

Consumption in the United Kingdom iron and steel industry 2008–2017

	Thousand tonnes									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Iron ore –										
Home produced (a)	0	—	—	—	—	—	—	—	—	—
Imported (b)	15,343	11,192	10,572	9,735	10,511	14,037	14,353	12,975	9,126	9,023
Manganese ore	4	21	—	—	—	3	—	—	10	2
Iron and steel scrap (f)	4,888	3,459	3,713	3,890	3,675	4,085	4,145	3,700	2,551	2,692
Pig iron (f)	9,931	7,540	7,088	6,610	7,325	9,909	9,678	8,737	6,082	5,920
Alloy metals (c) –										
Nickel	12	8	10	12	10	...	...	...	...	...
Molybdenum	3	1	1	2	2	...	...	...	...	...
Tungsten	0	0	0	0	0	...	...	...	...	...
Vanadium	0	0	0	0	0	...	...	...	...	...
Cobalt	0	0	0	0	0	...	...	...	...	...
Chromium	69	24	34	44	42	...	...	...	...	...
Niobium	1	0	0	0	0	...	...	...	...	...
Ferro-alloys –										
Ferro-manganese	94	70	67	66	66	...	...	...	...	...
Ferro-silico-manganese	23	17	16	16	16	...	...	...	...	...
Ferro-aluminium	3	2	2	2	2	...	...	...	...	...
Ferro-chromium	(d)	(d)	(d)	(d)	(d)	...	...	...	...	...
Ferro-silico-chromium	(d)	(d)	(d)	(d)	(d)	...	...	...	...	...
Ferro-silicon	37	27	26	26	26	...	...	...	...	...
Ferro-silico-zirconium	0	0	0	0	0	...	...	...	...	...
Calcium silicide	0	0	0	0	0	...	...	...	...	...
Ferro-phosphorus	1	1	1	1	1	...	...	...	...	...
Ferro-niobium	(d)	(d)	(d)	(d)	(d)	...	...	...	...	...
Ferro-titanium	1	1	1	1	1	...	...	...	...	...
Dolomite (raw and burnt) (e)	420	369	399	344	556	759	793	790	494	1,131
Limestone (e)	1,664	1,095	948	932	912	1,147	1,255	1,041	680	653
Lime (e)	496	378	371	395	379	387	461	415	294	233
Zinc for galvanising	52	41	49	48	42	...	...	...	...	...
Tin for tinplating	3	2	3	2	2	...	...	...	...	...

Average Fe content: (a) 55%, (b) 62%.

(e) Restricted to consumption in blast furnaces, sinter plants and steel furnaces.

(c) Metal content.

(f) Consumption in steel making only.

Source: Iron and Steel Statistics Bureau.

Lead

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Lead																				
<i>Production</i>																				
Concentrate-																				
Pb content (a)	(b) 100	(c) 100	(c) 100	(c) 100	(c) 100															
Unwrought-																				
Bullion	36 000	36 000	36 000	36 000	36 000															
Refined																				
Primary (d)	174 200	110 000	199 200	216 600	193 800															
Secondary	155 000	157 000	158 000	158 000	160 000															
Consumption																				
Refined	273 963	207 548	217 198	284 564	294 627															
<i>Imports</i>																				
Ores & concentrates	0	2 048	2 779	996	1 242	1	2 342	2 790	1 781	2 867										
Ash and residues	—	18	1	236	37	—	15	11	290	36										
Unwrought																				
Unrefined-																				
Base bullion (e)	145 762	94 990	181 923	133 917	149 358	295 977	168 773	294 539	258 379	353 902										
Other	253	0	0	1 552	1 128	426	8	1	1 344	2 451										
Refined	25 153	35 146	17 889	19 069	30 717	35 885	47 424	22 572	27 324	57 305										
Alloys	1	62	9	—	10	3	258	24	—	33										
Scrap	4 169	7 236	6 419	4 904	2 998	4 598	8 312	5 959	5 600	3 890										
<i>Exports</i>																				
Ores & concentrates	31	666	4 172	1 824	1 914	68	455	3 782	2 634	2 843										
Ash and residues	420	1 489	2 293	1 953	3 674	387	1 988	262	402	742										
Unwrought																				
Unrefined-																				
Base bullion	926	...	0	—	258	1 602	...	6	—	1 388										
Other	68 847	55 611	29 543	81 750	74 746	114 849	84 620	41 570	134 363	156 728										
Refined	74 945	91 654	152 109	100 035	87 047	112 151	133 247	206 002	148 443	168 709										
Alloys	5 521	3 006	5 790	9 057	10 649	8 140	4 226	8 016	13 934	21 135										
Scrap	53 746	56 432	42 405	62 815	62 057	61 674	59 158	40 307	53 948	82 703										

(a) BGS estimate.

(b) By-product of Pennine fluorspar operations and of gold mining in Northern Ireland.

(c) By-product of Pennine fluorspar operations.

(d) Refined from imported bullion including lead content of alloys.

(e) Containing substantial quantities of silver.

Limestone, dolomite and chalk

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Limestone																				
<i>Production</i>																				
Limestone (a)	56 900 000	66 300 000	...	...	...												
Dolomite	3 432 000	3 730 000	...	...	...												
<i>Imports</i>																				
Limestone flux (b)	5 784	18 893	174 781	190 632	462 833	915	1 325	11 243	13 124	25 251										
Lime	10 789	12 872	10 406	6 680	8 101	1 866	2 351	1 679	1 115	1 821										
Dolomite	206 405	198 084	206 463	161 213	242 606	7 695	5 727	5 271	4 658	8 227										
<i>Exports</i>																				
Limestone flux (b)	267 649	276 336	225 348	187 926	209 183	2 552	2 930	2 763	2 688	3 406										
Lime	153 202	133 357	141 971	129 803	131 872	19 423	18 773	23 549	24 306	26 831										
Dolomite (c)	240 500	210 700	172 600	136 700	176 400	15 600	15 600	13 500	14 700	20 300										
Chalk																				
<i>Production (d)</i>																				
Production (d)	3 528 000	3 312 000	...	...	...												
<i>Imports</i>																				
Imports	46 225	22 055	12 363	12 597	13 217	3 008	1 763	1 094	1 219	1 532										
Exports	31 621	46 153	52 182	35 291	25 151	1 849	2 412	2 371	2 800	2 711										

(a) Includes an estimate for Northern Ireland.

(b) Including calcareous stone commonly used for the manufacture of lime or cement.

(c) BGS estimates based on known imports into certain countries.

(d) Great Britain only. There is a small, undisclosed production in Northern Ireland.

Great Britain consumption of dolomite, limestone and lime in iron and steel production, 1980–2017

Thousand tonnes

Year	Dolomite, incl. calcined dolomite (dolime)		Limestone			Lime	
	Blast furnaces and sinter plants	Steel furnaces	Blast furnaces and sinter plants	Steel furnaces	Other purposes	Steel Furnaces	Other purposes
1980	389	182	611	7	—	663	—
1981	400	308	1,031	2	—	911	—
1982	280	255	888	2	—	799	—
1983	400	298	1,164	1	—	865	—
1984	405	310	1,143	1	—	824	—
1985	425	284	1,562	—	—	801	—
1986	333	270	1,494	2	—	680	—
1987	405	275	1,827	—	—	761	—
1988	477	319	1,948	—	—	810	—
1989	430	315	2,062	—	—	822	—
1990	410	287	1,992	—	—	778	—
1991	323	264	2,124	—	—	696	—
1992	391	246	2,033	—	—	682	—
1993	276	238	2,077	—	—	719	—
1994	201	264	2,236	—	—	767	—
1995	67	316	2,318	—	—	787	—
1996	59	397	2,225	—	—	744	—
1997	42	462	2,445	—	—	751	—
1998	3	492	2,411	—	—	739	—
1999	5	364	2,408	—	—	698	—
2000	1	337	2,166	—	—	660	—
2001	7	254	1,889	—	—	561	—
2002	8	215	1,684	—	—	501	—
2003	8	246	2,019	—	—	530	—
2004	3	260	2,068	—	—	584	—
2005	0	243	1,951	—	—	593	—
2006	183	262	2,028	—	—	631	—
2007	184	291	1,822	—	—	585	—
2008	166	254	1,664	—	—	496	—
2009	145	224	1,095	—	—	378	—
2010	156	243	948	—	—	371	—
2011	127	217	932	—	—	395	—
2012	383	174	912	—	—	379	—
2013	543	217	1,147	—	—	387	—
2014	542	251	1,255	—	—	461	—
2015	422	368	1,041	—	—	415	—
2016	303	191	680	—	—	294	—
2017	268	862	653	—	—	233	—

Source: Iron and Steel Statistics Bureau.

This table shows the consumption of fluxes used in iron and steelmaking. Dolomite and limestone are used in blast furnaces and in sinter plants, whilst lime and calcined dolomite, or dolime, are used in steelmaking. These figures do not entirely agree with those shown elsewhere for the production of limestone, dolomite and chalk for iron and steelmaking, even allowing for the conversion of lime and dolime to carbonate.

Lithium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Lithium																				
<i>Imports</i>																				
Oxide and hydroxide	281	384	93	263	324	904	3 503	863	5 375	5 118										
Carbonate	364	434	405	1 095	1 919	1 822	2 030	1 870	6 953	13 859										
<i>Exports</i>																				
Oxide and hydroxide	39	65	47	113	228	279	462	317	1 417	2 994										
Carbonate	86	138	294	447	768	378	600	1 280	3 217	8 287										

Magnesia

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Magnesia																				
<i>Imports</i>																				
Magnesite	5 015	5 258	4 955	5 438	5 696	1 223	1 110	1 088	1 289	1 262										
Magnesia-																				
Dead burned	6 966	8 367	1 491	1 802	5 163	3 190	3 710	964	878	2 409										
Caustic-calcinced	53 987	46 005	25 816	25 961	26 358	12 397	10 235	6 535	7 719	8 464										
Other	8 869	11 358	20 220	11 732	8 629	5 956	5 945	6 097	4 045	4 255										
Kieserite	13 610	15 011	12 658	11 859	13 990	2 729	2 990	2 500	2 214	2 888										
Magnesite or chrome-magnesite																				
refractory bricks and shapes (a)(b)	22 667	369 255	19 513	14 413	12 758	21 164	29 055	14 050	11 069	10 702										
<i>Exports</i>																				
Magnesite	1 744	1 266	408	682	627	1 980	1 317	462	737	929										
Magnesia-																				
Dead burned	1 394	893	795	844	1 185	734	677	610	798	1 252										
Caustic-calcinced	5 947	2 498	2 016	2 899	2 466	2 660	959	771	585	658										
Other	6 676	8 140	7 328	6 159	5 730	8 509	10 536	9 336	7 493	8 025										
Kieserite	47	98	14	112	133	27	65	8	47	51										
Magnesite or chrome-magnesite																				
refractory bricks and shapes (a)(b)	4 107	4 332	1 385	470	2 329	871	1 199	694	437	1 826										

(a) Including dolomite bricks.

(b) Fired bricks and shapes only: unfired (chemically bonded) products excluded.

Magnesium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Magnesium																				
<i>Imports</i>																				
Ferro-silico-magnesium	1 211	948	844	209	309	1 173	963	557	187	296										
Scrap	289	961	197	295	359	204	995	114	275	252										
Unwrought	2 567	4 116	3 172	2 485	3 212	5 052	6 919	4 935	4 000	5 839										
Unwrought alloys	4 827	5 565	8 034	8 804	3 661	9 976	9 548	13 772	16 253	7 918										
Wrought	8 108	8 710	6 431	3 531	5 127	24 504	27 766	23 212	23 317	29 272										
<i>Exports</i>																				
Ferro-silico-magnesium	240	119	37	68	64	384	169	108	84	85										
Scrap	4 470	3 654	7 147	6 173	2 926	8 063	5 995	10 969	12 198	6 370										
Unwrought	116	219	50	63	6	220	219	63	185	120										
Unwrought alloys	1 859	2 114	1 870	1 422	1 636	16 155	17 141	14 852	15 178	16 182										
Wrought	896	847	507	512	541	7 152	6 073	5 419	7 697	12 483										

Manganese

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Manganese																				
<i>Consumption in Iron and Steel</i>																				
<i>Industry</i>																				
Ore	2 800	—	—	9 700	2 400															
Apparent consumption (a)	80 000	78 000	66 000	50 000	44 000															
<i>Imports</i>																				
Ores & Concentrates (b)	2 168	3 232	3 045	2 634	3 689	1 199	1 696	1 365	959	1 683										
Ferro-manganese	59 517	54 814	39 129	29 248	21 903	42 857	37 687	25 205	18 004	25 909										
Ferro-silico-manganese	43 823	47 122	45 039	35 044	31 735	30 871	30 955	25 847	18 092	30 286										
Scrap	58	25	71	51	15	108	36	106	69	25										
Unwrought	3 402	3 459	3 012	3 038	3 393	5 999	5 853	4 285	4 751	5 078										
Wrought	336	145	0	19	82	779	256	10	41	159										
Oxides	8 554	8 373	7 767	5 218	6 317	4 261	3 689	3 596	2 717	4 075										
<i>Exports</i>																				
Ores & Concentrates	284	3 983	517	419	375	255	980	576	394	374										
Ferro-manganese	407	2 721	1 695	1 561	2 132	546	6 505	3 017	1 693	4 802										
Ferro-silico-manganese	3 626	791	402	789	156	919	232	117	178	188										
Oxides	4 228	2 917	2 298	1 648	1 349	2 542	1 625	1 553	947	1 089										
Metal (c)	1 200	700	900	1 300	800	2 700	1 400	1 700	1 800	2 100										

(a) BGS estimates; see explanatory notes.

(b) Including manganiferous iron ore.

(c) BGS estimates, based on known imports into certain countries.

Marble

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Marble																				
<i>Imports</i>																				
Dimension stone-																				
Unworked	13 660	10 388	9 006	15 981	30 167	11 229	9 835	6 084	8 190	11 745										
Worked	87 454	82 157	67 020	62 073	55 704	58 785	55 139	44 916	46 773	49 320										
Crushed and powdered	153 186	162 521	128 552	129 724	126 492	11 128	12 356	9 870	10 094	8 893										
<i>Exports</i>																				
Dimension stone-																				
Unworked	437	563	437	578	834	626	378	294	413	465										
Worked	919	1 367	1 428	896	809	2 337	4 226	7 201	3 155	3 417										
Crushed and powdered	273	206	400	261	387	103	51	142	73	46										

Mercury

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Mercury																				
<i>Imports</i>																				
Elemental	42	4	2	9	0	121	28	29	58	27										
<i>Exports</i>																				
Elemental	3	10	0	37	0	19	14	23	89	13										

Mica

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Mica																				
<i>Imports</i>																				
Crude (a)	131	160	164	100	514	210	187	41	34	151										
Ground	7 307	7 891	6 960	7 059	8 072	2 438	2 497	1 864	2 495	3 042										
Waste	24	0	0	0	—	13	2	9	9	—										
Worked	1 194	994	1 102	1 329	1 099	5 428	4 276	3 984	4 446	4 781										
<i>Exports</i>																				
Crude (a)	1	4	0	0	10	12	4	1	8	107										
Ground	4 678	4 706	4 035	4 259	4 590	4 324	4 393	3 307	3 786	4 716										
Waste	...	0	0	—	2	...	6	4	—	15										
Worked	824	625	564	902	919	8 753	7 788	7 527	10 453	11 306										

(a) Including sheets or splitting.

Molybdenum

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Molybdenum										
<i>Apparent consumption (a)(b)</i>	3 500	5 000	3 600	1 600	3 300					
<i>Imports</i>										
Roasted molybdenite concentrates	14 156	16 326	11 709	10 117	15 701	135 914	156 129	82 918	62 197	127 191
Other ores and concentrates	240	303	223	204	33	2 180	2 932	1 650	1 298	321
Ferro-molybdenum	259	303	307	72	220	3 024	3 347	2 993	674	1 796
Scrap	744	1 169	1 410	1 207	1 519	11 338	13 675	10 957	14 000	22 374
Powders	176	178	136	165	144	3 787	3 721	2 095	3 250	3 208
Unwrought	108	42	64	137	231	2 461	932	1 147	1 665	4 573
Wrought	243	260	119	66	75	2 369	2 912	2 401	1 753	2 717
Oxides and hydroxides	2 101	2 723	1 624	730	1 573	18 901	26 256	11 173	4 165	12 641
<i>Exports</i>										
Roasted molybdenite concentrates	—	—	44	—	0	—	—	18	—	1
Other ores and concentrates	—	0	1	0	0	1	16	18	23	3
Ferro-molybdenum	11 922	12 491	9 712	9 620	12 833	126 828	145 844	77 322	75 010	125 981
Scrap	355	514	313	599	1 186	5 304	8 100	4 661	7 497	16 860
Powders	44	253	37	40	54	975	1 329	870	950	980
Unwrought	2	9	10	3	34	131	179	118	84	586
Wrought	71	21	15	46	3	1 892	1 420	1 432	1 545	787
Oxides and hydroxides	0	2	120	0	0	0	23	933	37	14

(a) Metal content.

(b) BGS estimates; see explanatory notes.

Nepheline syenite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Nepheline syenite										
<i>Imports</i>	36 080	33 646	35 009	34 477	38 645	3 272	3 233	3 032	3 117	3 491
<i>Exports</i>	311	288	313	513	537	96	54	128	130	113

Nickel

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Nickel										
Production (a)	42 400	39 100	38 804	45 194	25 781					
Consumption										
Total (b)(c)	15 500	21 788	18 070	24 384	24 256					
<i>Imports</i>										
Ores & concentrates	864	1	1	24	28	8 399	20	143	148	231
Mattes, sinters etc.	63 129	59 194	59 668	68 651	52 114	408 942	374 755	357 155	331 699	327 204
Scrap	9 887	11 000	9 125	11 960	8 337	54 790	58 717	50 651	44 563	50 473
Ferro-nickel	13 439	22 480	7 782	7 618	7 272	32 375	59 157	15 674	14 129	15 149
Unwrought	8 130	9 031	8 740	8 653	10 330	78 697	88 129	76 105	59 795	83 126
Unwrought alloys	4 309	3 771	3 180	3 044	4 530	67 318	55 197	38 651	31 364	69 764
Oxides	67	4	7	9	32	148	68	104	89	174
<i>Exports</i>										
Ores & concentrates	35	3	0	0	5	655	49	16	9	75
Mattes, sinters etc.	381	584	555	237	226	2 330	3 403	4 570	1 959	2 620
Ash and residues	11 117	11 124	10 532	11 547	9 986	61 309	88 669	100 907	111 851	100 252
Scrap	20 994	15 772	11 932	14 443	11 442	85 518	94 413	73 695	70 633	87 575
Ferro-nickel	183	68	14	427	291	1 463	32	74	136	290
Unwrought	31 742	27 358	28 518	30 034	26 493	319 122	282 759	233 126	215 878	234 309
Unwrought alloys	7 324	7 629	7 085	7 833	7 437	110 051	104 504	99 329	101 658	99 385
Oxides	3	2	2	0	1	145	78	91	14	37

(a) Nickel content of refinery products.

(b) Metal content.

(c) Including the nickel content of ferro-nickel and other smelter products.

Niobium (see Tantalum and Niobium)

Peat

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Thousand cubic metres					£ thousand				
Peat										
Production	1 254	795	...	...	...		
<i>Imports</i>										
Peat and agglomerated peat	450 827	476 301	428 362	509 911	503 240	33 192	33 722	23 946	30 115	33 058
<i>Exports</i>										
Peat and agglomerated peat	65 266	56 338	46 715	47 014	41 817	7 691	5 659	4 775	5 190	5 653

Perlite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Perlite										
<i>Imports</i> (a)	59 424	77 419	31 484	28 945	22 333	7 087	9 937	4 477	5 052	6 134
<i>Exports</i> (a)	1 459	935	600	672	1 089	772	557	387	513	592

(a) Figures also include vermiculite and chlorites.

Petroleum (also see Primary fuels)

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Petroleum										
<i>Production</i>										
Crude petroleum	38 456 000	37 474 000	42 826 000	44 306 000	42 180 000					
Condensates and other (a)	2 190 000	2 454 000	2 462 000	3 139 000	3 456 000					
Refined petroleum products	65 397 000	60 392 000	60 929 000	59 986 000	59 824 000					
<i>Consumption (inland deliveries)</i>										
<i>of refined products</i>										
Used as fuels-										
Refineries	3 759 000	3 198 000	3 352 000	3 377 000	3 407 000					
Power Generation	1 177 000	1 054 000	1 097 000	1 078 000	1 029 000					
Elsewhere	56 467 000	56 980 000	58 310 000	59 315 000	59 702 000					
Not used as fuels	5 930 000	5 873 000	6 525 000	6 721 000	6 644 000					
Total	66 156 000	66 051 000	68 187 000	69 413 000	69 753 000					
<i>Imports</i>										
Crude petroleum	48 380 730	46 831 399	44 138 446	43 320 697	50 351 691	25 293 893	21 600 909	12 050 230	10 585 049	16 074 046
Partly refined petroleum and refined products	29 557 157	29 709 394	34 823 771	35 803 762	33 839 960	17 738 676	15 948 891	12 072 223	10 705 765	12 792 546
<i>Exports</i>										
Crude petroleum	35 581 067	37 109 307	37 530 691	39 927 139	45 743 284	18 791 993	17 457 656	10 556 745	9 710 798	14 683 669
Partly refined petroleum and refined products	30 325 654	25 286 521	23 817 716	23 190 368	23 732 942	17 096 758	12 755 964	7 728 866	6 907 997	9 223 996

(a) Including ethane, propane and butane, in addition to condensates.

Natural gas

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Natural gas																				
<i>Production</i>																				
Methane																				
Colliery (a)	52 000	34 000	30 000	38 000	42 000															
Offshore and onshore (a)	35 279 000	35 728 000	38 817 000	39 842 000	39 977 000															
Consumption (b)	72 439 000	66 463 000	68 378 000	77 125 000	74 838 000															
<i>Imports</i>																				
Liquefied natural gas (c)	8 823 781	10 654 401	13 104 630	10 516 825	6 891 182															
Natural gas in gaseous state (c)	37 448 187	30 357 864	29 750 122	35 242 070	38 143 892															
Total (c)	46 271 968	41 012 265	42 854 752	45 758 895	45 035 074	10 985 000	7 635 000	6 990 000	6 150 000	7 565 000										
Other natural gas (d)	590 607	478 690	736 763	1 198 131	1 065 836	334 237	253 833	203 986	295 282	387 896										
<i>Exports</i>																				
Liquefied natural gas and																				
natural gas in gaseous state (c)	8 562 558	9 968 929	13 444 013	9 827 570	10 704 617	2 510 000	2 000 000	2 310 000	1 350 000	1 830 000										
Other natural gas (d)	2 041 603	2 467 647	2 447 025	3 390 326	2 976 609	1 106 861	1 119 308	650 148	851 269	1 053 820										

(a) Oil equivalent: converted from original data at 397 therms = 1 tonne.

(b) Tonnes oil equivalent: excluding minor consumption for non-energy use.

(c) Tonnes of oil equivalent, converted from GWh using 85.985 tonnes of oil equivalent to 1 GWh. Source: Department of Business, Energy and Industrial Strategy.

(d) Includes propane, liquefied propane, butane, liquefied butane, ethylene, gaseous hydrocarbons.

Phosphorus

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Phosphorus																				
<i>Imports</i>																				
Phosphate rock	3 186	3 515	2 445	801	558	1 388	1 215	605	364	284										
Ammonium phosphates	132 834	164 387	131 665	138 256	165 383	47 017	52 510	46 137	41 649	49 060										
Superphosphates	142 280	156 066	128 374	154 397	...	35 455	35 454	33 198	35 711	...										
Other phosphatic fertilisers	6 417	8 023	6 239	5 893	10 149	995	1 121	949	920	1 565										
Elemental phosphorus	3 845	1 888	824	1 360	1 658	9 010	4 407	1 901	2 984	5 283										
Phosphoric acids	67 209	85 096	91 195	75 949	82 254	41 433	40 783	49 322	41 901	44 489										
Calcium phosphates	89 196	90 439	70 210	81 672	85 221	35 458	35 288	30 491	40 389	38 386										
Sodium phosphates and orthophosphates	8 514	10 196	8 930	10 015	8 751	8 379	9 587	9 128	9 293	8 878										
Polyphosphates including ammonium and sodium	28 914	33 274	17 426	34 052	26 642	25 657	25 318	20 315	25 051	25 450										
<i>Exports</i>																				
Phosphate rock	52	23	119	771	234	259	112	114	490	215										
Ammonium phosphates	410	1 970	503	487	786	643	1 141	529	553	507										
Superphosphates	128	12	39	75	...	147	3	26	243	...										
Other phosphatic fertilisers	260	5 908	10 130	9 477	5 769	588	1 064	949	1 893	1 202										
Elemental phosphorus	22	0	0	0	0	74	23	31	27	19										
Phosphoric acids	2 411	8 355	1 260	1 967	1 916	2 184	5 705	1 534	1 960	1 784										
Calcium phosphates	4 131	3 137	1 455	4 169	4 515	2 796	2 694	4 064	6 494	3 967										
Sodium phosphates and orthophosphates	1 157	1 418	1 012	830	870	1 822	1 906	1 385	1 338	1 472										
Polyphosphates including ammonium and sodium	1 513	1 476	1 276	1 497	1 439	2 222	2 748	2 792	3 398	3 720										

Platinum group metals

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Platinum group metals																				
<i>Imports</i>																				
Unwrought or partly worked-																				
Platinum	40	52	155	204	339	1 154 606	1 282 639	839 657	1 108 904	1 399 896										
Palladium	49	34	62	216	422	634 338	523 443	515 339	495 410	1 054 226										
Other platinum metals	7	5	27	79	23	80 352	54 528	70 172	64 784	145 127										
Waste & scrap	1 186	838	777	340	1 281	748 929	458 926	218 270	222 215	201 653										
<i>Exports</i>																				
Unwrought or partly worked-																				
Platinum	43	74	78	120	91	1 286 837	1 572 799	1 478 439	1 618 559	2 099 626										
Palladium	55	61	84	91	89	828 143	950 467	1 224 311	1 276 426	1 906 302										
Other platinum metals	18	20	55	60	23	227 089	232 617	215 877	195 277	319 628										
Waste & scrap	1 194	3 815	2 607	2 811	2 265	18 977	33 725	25 809	27 191	39 697										

Potassium compounds

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Potassium compounds																				
<i>Production</i>																				
Chloride (K ₂ O Content)	(a) 540 000	576 000	594 000	432 000	216 000															
Polyhalite	—	—	200 000	200 000	500 000															
<i>Imports</i>																				
Sulphate	10 905	16 513	15 795	11 743	12 270	4 510	5 894	5 728	4 843	4 688										
Chloride	149 121	201 039	154 689	156 456	362 278	40 967	45 445	35 544	32 290	75 128										
Other potassic fertilisers	8 484	8 875	3 948	6 598	6 713	1 264	1 271	597	1 103	1 638										
<i>Exports</i>																				
Sulphate	428	469	567	1 497	1 269	186	160	193	520	370										
Chloride (b)	54 000	85 000	205 000	188 000	357 000	4 200	5 600	11 300	19 800	24 500										
Other potassic fertilisers	29 558	53 838	86 428	160 420	224 884	3 827	5 631	7 014	9 301	21 337										

(a) BGS estimates.

(b) BGS estimates, based on known imports into certain countries.

Precious and semi-precious stones

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Precious and semi-precious stones (excluding diamond) (a)																				
<i>Imports</i>																				
Natural stones	270	281	382	330	498	152 345	192 402	230 277	152 908	158 284										
Synthetic stones	31	41	25	40	29	5 407	3 609	3 242	3 721	10 559										
Dust and powder	4	3	2	1	2	943	735	273	154	339										
<i>Exports</i>																				
Natural stones	21	21	64	(b) 28	56	146 823	200 998	247 854	(b) 117 000	163 444										
Synthetic stones	21	18	7	8	6	3 842	8 635	12 603	10 605	18 837										
Dust and powder	6	4	1	(b) 8	1	1 062	861	540	(b) 580	429										

(a) Unworked, cut or otherwise worked, but not mounted, set or strung.

(b) BGS estimates, based on known imports into certain countries.

Primary Fuels

United Kingdom production of primary fuels 1987–2017 (energy supplied basis)

Year	Coal	Petroleum	Natural gas (b)	Bioenergy & waste (c)	Nuclear electricity	Wind and hydro-electricity (d)	Million tonnes of oil equivalent (a)
1987	63	135	44	0	14	0	257
1988	63	126	42	1	17	0	249
1989	61	100	41	1	18	0	221
1990	56	100	46	1	16	0	219
1991	58	100	51	1	17	0	227
1992	52	104	52	1	19	1	227
1993	42	110	61	1	22	1	235
1994	30	139	65	2	21	0	257
1995	33	143	71	2	21	1	270
1996	31	142	84	2	22	0	282
1997	30	140	86	2	23	0	282
1998	26	145	90	2	23	1	287
1999	23	150	99	2	22	1	298
2000	20	138	108	2	20	1	289
2001	20	128	106	3	21	0	277
2002	19	127	104	3	20	1	273
2003	18	116	103	3	20	0	260
2004	16	105	96	3	18	1	238
2005	13	93	88	4	18	1	217
2006	11	84	80	4	17	1	197
2007	11	84	72	4	14	1	186
2008	11	79	70	4	12	1	177
2009	11	75	60	5	15	1	167
2010	11	69	55	6	14	1	157
2011	12	57	44	6	16	2	136
2012	11	49	37	7	15	2	121
2013	8	45	35	8	15	3	114
2014	7	44	36	8	14	4	113
2015	5	50	39	11	16	5	125
2016	3	52	40	12	15	5	126
2017	2	51	40	13	15	6	127

(a) Based on a standard 'tonne of oil equivalent' equal to 397 therms.

Source: Department for Business, Energy and Industrial Strategy.

(b) Including colliery methane.

(c) Includes solid renewable sources (wood, straw and waste), a small amount of renewable primary heat sources (solar, geothermal, etc.), liquid biofuels, landfill gas and sewage gas

(d) Includes generation by solar PV. Excludes generation from pumped storage stations

United Kingdom consumption of energy (primary fuel input) 1987–2017 (energy supplied basis)

Million tonnes of oil equivalent (a)

Year	Coal	Petroleum	Natural gas (b)	Bioenergy & waste (c)	Nuclear electricity	Wind and hydro-electricity (d)	Net imports of electricity	Total
1987	72	69	54	0	14	0	1	211
1988	70	74	51	0	17	0	1	213
1989	67	75	49	1	18	0	1	211
1990	67	77	51	1	16	0	1	214
1991	67	77	55	1	17	0	1	220
1992	63	78	55	1	19	1	1	217
1993	55	78	63	1	22	1	1	221
1994	51	77	65	1	21	0	2	218
1995	50	76	71	2	21	0	1	221
1996	46	76	83	2	22	0	1	231
1997	41	74	84	2	22	0	1	225
1998	41	75	87	2	23	1	1	231
1999	36	76	93	2	22	1	1	231
2000	38	77	96	2	20	1	1	234
2001	41	76	96	3	21	0	1	237
2002	38	73	94	3	20	1	1	230
2003	40	73	95	3	20	0	0	231
2004	39	75	97	3	18	1	1	234
2005	40	78	94	4	18	1	1	236
2006	43	77	89	4	17	1	1	233
2007	41	76	90	5	14	1	0	228
2008	38	74	93	6	12	1	1	226
2009	31	71	86	7	15	1	0	212
2010	33	70	94	8	14	1	0	220
2011	32	68	78	8	16	2	1	204
2012	41	67	73	8	15	2	1	208
2013	39	66	73	10	15	3	1	207
2014	32	66	66	11	14	4	2	194
2015	25	67	68	14	16	5	2	197
2016	12	69	77	15	15	5	2	195
2017	10	67	75	16	15	6	1	192

(a) Based on a standard 'tonne of oil equivalent' equal to 397 therms.

Source: Department for Business, Energy and Industrial Strategy

(b) Including colliery methane.

(c) Includes solid renewable sources (wood, straw and waste), a small amount of renewable primary heat sources (solar, geothermal, etc.), liquid biofuels, landfill gas and sewage gas

(d) Includes generation by solar PV. Excludes generation from pumped storage stations

Pumice

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Pumice										
<i>Imports</i>	3 406	2 353	4 634	8 034	2 699	954	724	1 126	989	863
<i>Exports</i>	138	121	100	254	328	176	159	130	244	301

Pyrite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Pyrite										
<i>Imports</i>										
Iron pyrites (incl.cupreous)-										
Unroasted	435	962	467	648	798	228	272	118	156	180
Roasted	193	237	155	311	77	30	83	81	103	68
<i>Exports</i>										
Iron pyrites (incl.cupreous)-										
Unroasted	26	31	14	2 979	3 014	17	22	15	800	939
Roasted	10	18	—	0	0	8	5	—	2	3

Quartz and quartzite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Quartz and quartzite										
<i>Imports</i>										
Quartzite	477	700	553	524	410	329	365	320	251	280
Quartz	9 751	14 032	14 040	15 815	25 431	8 515	9 120	8 225	11 405	19 860
<i>Exports</i>										
Quartzite	1	0	0	—	14	17	14	2	—	31
Quartz	594	715	489	346	419	657	358	231	319	544

Radioactive and associated materials

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Radioactive and associated materials																				
<i>Imports</i>																				
Natural and enriched uranium, plutonium, artificial radioactive isotopes, and their compounds	1 067 459	701 096	832 713	563 863	246 120										
<i>Exports</i>																				
Natural and enriched uranium, isotopes, and their compounds	1 487 558	900 144	915 982	713 043	216 866										

Rare earths

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Rare earths																				
<i>Imports</i>																				
Metals (a)	128	127	42	10	6	4 372	3 399	1 261	245	154										
Cerium compounds	633	603	693	502	1 302	4 503	4 735	6 232	8 600	12 143										
Other rare earth compounds (b)	654	591	565	341	628	16 977	10 528	14 478	6 582	16 235										
Ferro-cerium & other pyrophoric alloys	50	28	29	67	41	193	186	153	170	101										
<i>Exports</i>																				
Metals (a)	65	18	17	9	13	1 145	836	1 248	412	512										
Cerium compounds	48	24	280	38	775	1 110	854	1 027	1 073	12 899										
Other rare earth compounds (b)	220	275	259	165	278	7 097	3 980	4 212	4 121	6 733										
Ferro-cerium & other pyrophoric alloys	40	152	47	1	25	153	372	226	170	330										

(a) Including yttrium and scandium.

(b) Including yttrium and scandium compounds.

Salt

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Salt																				
<i>Production</i>																				
Production	6 930 000	4 690 000	(a) 4 700 000	(a) 4 100 000	(a) 4 100 000															
<i>Imports</i>																				
Imports	738 670	356 289	536 067	445 477	703 377	54 395	39 714	43 267	52 363	72 200										
<i>Exports</i>																				
Exports	497 670	386 486	350 744	243 433	352 195	42 109	40 881	37 940	37 974	47 594										

(a) BGS estimate.

Sand and gravel (see also Aggregates)

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Sand and gravel																				
<i>Production*</i>																				
Sand & gravel (a)	(b) 58 100 000	(b) 61 300 000	66 443 000	68 075 000	(b) 67 400 000															
<i>Consumption</i>																				
Building sand (c)	6 275 000	6 960 000	...	...	...												
Concreting sand (c)	20 361 000	22 335 000	...	...	...												
Gravel and hoggin (c)	25 289 000	26 834 000	...	...	...												
Total (c)	51 925 000	56 129 000	...	...	...												
<i>Imports</i>	493 102	549 584	722 068	879 166	631 921	15 483	13 749	14 737	17 793	18 704										
<i>Exports</i> (d)	4 326 631	3 518 314	2 223 131	2 445 821	2 409 597	34 708	31 179	22 694	26 552	26 473										

* Source: 2013-2014 ONS, 2015-2017 Mineral Products Association

(a) Including production from marine dredging.

(b) Includes an estimate for Northern Ireland.

(c) Great Britain: production for the home market including landings of marine dredged materials at British ports.

(d) Principally marine dredged sand and gravel. Source: HM Revenue and Customs. However, the Crown Estate Commissioners give the following figures for marine dredged sand and gravel landed at foreign ports (tonnes): 2013: 4 089 687; 2014: 2 994 538; 2015: 2 153 146; 2016: 2 767 125 and 2017: 3 127 371.

United Kingdom production of sand and gravel 1992–2017

Million tonnes

Year	Land-based production			Marine-dredged		Total production United Kingdom	For beach replenish- ment (c) (f)
	Great Britain (a)	Northern Ireland (b)	Total	For home market (a)	For export (c)		
1992	78.3	3.7	82.0	10.6	6.3	16.9	98.9
1993	79.4	4.3	83.7	10.1	6.2	16.3	100.0
1994	86.3	5.1	91.5	11.3	6.6	18.0	109.4
1995	78.0	5.3	83.3	11.6	6.8	18.4	101.7
1996	70.5	5.3	75.7	11.5	6.7	18.2	93.9
1997	74.4	5.1	79.5	12.0	6.9	18.9	98.4
1998	73.0	5.3	78.3	13.0	7.0	20.0	98.3
1999	74.8	5.5	80.3	13.4	7.2	20.7	101.0
2000	74.9	5.1	80.0	14.4	7.3	21.7	101.6
2001	74.6	6.2	80.8	13.6	7.0	20.6	101.4
2002	69.9	5.5	75.4	12.8	6.2	19.0	94.4
2003	68.1	4.9	73.0	12.1	6.1	18.2	91.2
2004	73.1	5.1	78.1	13.0	6.1	19.2	97.3
2005	69.4	5.8	75.2	13.0	6.5	19.5	94.7
2006	66.3	5.2	71.5	14.0	6.7	20.7	92.1
2007	64.7	8.1	72.8	13.8	6.6	20.4	93.2
2008	59.5	7.1	66.6	12.6	6.2	18.8	85.5
2009	46.1	4.9	51.0	9.6	5.7	15.3	66.2
2010	45.0	2.2	47.2	9.3	5.2	14.5	61.7
2011	43.8	(d) 2.0	45.8	11.2	6.1	17.3	63.1
2012	39.8	(d) 2.0	41.8	10.3	4.5	14.8	56.6
2013	41.4	(d) 2.0	43.4	10.5	4.1	14.6	58.0
2014	44.8	(d) 2.0	46.8	11.3	3.0	14.3	61.1
2015	(e) 48.6	2.5	48.9	(c) 13.2	2.2	15.4	66.4
2016	(e) 48.9	2.4	48.5	(c) 14.1	2.8	16.8	68.1
2017	(e) 47.5	(d) 2.5	46.9	(c) 14.3	3.1	17.4	67.4

Sources:

- (a) Office for National Statistics (to 2014 only).
- (b) Department of Enterprise, Trade & Investment; Department of Economy.
- (c) Crown Estate.
- (d) BGS estimate.
- (e) Mineral Products Association reported figures minus marine-dredged landed at GB ports

(f) These figures for marine-dredged sand and gravel used for beach replenishment and contract fill may be included in home market production, and have therefore not been included in the totals.

Great Britain production of sand and gravel (a) by region 1982–2017

Thousand tonnes

Year	North East (b)	North West (c)	Yorks. & the Humber	West Midlands	East Midlands	East of England (d)	South East (e)	South West	England	Wales	Scotland	Great Britain
1982	2,685	3,410	4,397	9,892	9,100	7,026	35,374	6,017	77,901	3,444	9,861	91,206
1983	3,087	3,730	4,690	9,847	10,470	7,581	39,035	8,017	86,457	4,033	10,309	100,799
1984	3,062	4,080	4,680	10,827	10,604	6,934	38,862	7,010	86,060	3,437	10,178	99,675
1985	2,717	3,823	4,537	10,728	10,609	7,540	39,930	6,981	86,865	3,420	11,320	101,605
1986	2,863	4,036	4,686	10,486	11,743	7,547	42,192	7,152	90,706	4,083	10,710	105,498
1987	2,932	4,006	4,780	11,095	13,348	8,306	43,563	8,495	96,525	4,793	10,311	111,629
1988	3,291	4,156	5,306	14,138	15,603	11,361	50,970	9,843	114,667	4,734	10,753	130,154
1989	3,802	4,709	5,722	14,020	15,892	10,145	51,208	9,142	114,640	4,588	12,004	131,232
1990	3,951	4,641	5,485	12,581	14,051	8,762	42,516	7,559	99,547	3,990	12,634	116,172
1991	3,017	4,243	4,960	10,698	12,683	7,288	33,318	6,045	82,253	3,439	12,226	97,918
1992	2,732	3,894	4,028	9,976	12,072	6,456	28,590	6,171	73,290	3,205	11,774	88,898
1993	2,856	4,028	4,539	10,345	12,364	5,962	28,600	6,138	74,833	3,278	11,359	89,470
1994	3,268	4,843	4,907	12,207	12,860	6,947	31,140	6,765	82,937	3,312	11,423	97,672
1995	3,086	4,529	4,333	10,722	11,556	6,550	28,046	6,684	75,506	3,260	10,889	89,656
1996	2,909	3,792	3,923	9,633	10,827	5,623	26,485	5,790	68,983	3,111	9,904	81,997
1997	3,109	4,294	4,041	9,966	10,899	5,899	29,154	6,054	73,416	3,050	9,900	86,366
1998	3,056	3,579	4,381	9,721	10,416	5,979	29,637	6,166	72,935	2,959	10,074	85,968
1999	3,117	3,801	4,872	9,901	10,216	6,395	30,821	6,016	75,139	3,039	10,031	88,209
2000	2,003	4,003	4,559	9,879	10,253	15,637	22,553	7,385	76,272	2,939	10,022	89,234
2001	1,566	3,402	5,171	9,894	9,716	15,694	22,004	7,126	74,572	2,886	10,753	88,210
2002	1,344	3,890	4,999	9,159	9,608	15,317	19,872	7,131	71,320	2,758	8,643	82,721
2003	1,254	5,220	4,770	9,590	9,842	14,381	17,915	6,413	69,385	2,733	8,103	80,221
2004	1,576	3,992	5,197	9,401	10,906	15,461	19,885	8,065	74,482	3,120	8,455	86,057
2005	1,575	3,674	5,248	9,250	9,235	15,561	19,362	6,934	70,838	2,746	8,808	82,392
2006	1,471	3,599	5,016	9,396	8,979	13,588	20,194	6,793	69,035	2,615	8,592	80,242
2007	1,411	3,592	5,098	10,025	8,485	13,283	18,442	6,801	67,137	2,339	9,025	78,501
2008	1,288	2,813	5,014	10,476	7,477	12,060	16,582	5,960	61,669	2,361	8,097	72,127
2009	1,110	2,121	3,235	6,397	5,798	9,980	13,211	4,677	46,529	1,668	7,512	55,709
2010	1,150	1,841	3,195	6,074	5,503	9,711	13,145	4,714	45,332	1,633	7,365	54,330
2011	...	...	3,441	6,418	...	...	...	...	47,039	1,610	6,366	55,015
2012	...	...	3,191	...	...	...	...	...	42,909	1,364	5,772	50,044
2013	...	...	3,079	...	...	...	...	...	45,709	1,305	4,911	51,925
2014	...	...	...	...	...	...	...	...	49,470	1,548	5,111	56,129
2015	1,613	2,843	2,636	5,996	6,511	12,937	17,819	3,707	54,062	2,076	5,670	61,809
2016	1,390	3,121	2,555	5,948	6,692	13,593	18,042	3,432	54,773	1,943	6,238	62,954
2017	1,872	2,788	2,489	6,166	6,046	13,483	17,964	3,491	54,299	1,654	5,859	61,811

(a) Including marine-dredged material landed at GB ports.

Sources: For years to 2014: Office for National Statistics.

(b) From 2000, excludes Cumbria.

For years from 2015: GB industry via Mineral Products Association.

(c) From 2000, includes Cumbria.

(d) From 2000, includes Essex, Hertfordshire and Bedfordshire.

(e) Includes London. From 2000, excludes Essex, Hertfordshire and Bedfordshire.

Sandstone

United Kingdom summary 2013–2017

Commodity	2013	2014	2015	2016	2017
Tonnes					

Sandstone – see Building and dimension stone

Production (a) 11 500 000

(a) 12 500 000

...

...

...

(a) Includes an estimate for Northern Ireland.

Selenium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Selenium										
<i>Imports</i>										
Elemental	497	493	457	325	238	17 043	9 364	6 864	2 575	1 464
<i>Exports</i>										
Elemental	265	276	221	214	46	11 379	10 621	5 562	3 029	1 065

Silica sand

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Silica sand										
<i>Production</i> (a)	3 961 000	3 948 000	3 822 107	4 251 219	4 490 367					
<i>Imports</i>	100 057	139 874	140 865	111 060	154 051	9 854	15 682	9 002	9 900	11 974
<i>Exports</i>	87 289	93 849	61 234	63 227	91 001	3 569	5 039	5 638	4 222	4 012

(a) Silica sands for glass making, moulding and other non-constructional uses.

Silicon

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Silicon										
<i>Imports</i>										
Elemental silicon-										
Containing not less than										
99.99% silicon	12 959	37 518	32 614	1 372	889	68 833	120 249	102 477	22 681	18 812
Other	84 565	73 607	73 405	88 450	97 083	135 883	113 794	121 952	141 137	161 849
Ferro-silico-chrome	163	307	402	47	12	268	451	612	82	55
Ferro-silico-magnesium	1 211	948	844	209	309	1 173	963	557	187	296
Ferro-silico-manganese	43 823	47 122	45 039	35 044	31 735	30 871	30 955	25 847	18 092	30 286
Ferro-silicon	42 966	43 209	38 385	32 652	34 399	42 016	41 350	30 672	25 316	33 554
Doped silicon	484	553	366	1 112	279	51 971	57 452	60 564	59 871	55 454
<i>Exports</i>										
Elemental silicon-										
Containing not less than										
99.99% silicon	3 526	2 695	2 914	2 168	1 012	48 985	34 911	35 655	27 619	13 227
Other	1 453	2 727	1 618	2 044	2 408	2 814	4 754	2 628	2 964	3 984
Ferro-silico-chrome	168	362	474	114	545	386	741	1 154	278	1 269
Ferro-silico-magnesium	240	119	37	68	64	384	169	108	84	85
Ferro-silico-manganese	3 626	791	402	789	156	919	232	117	178	188
Ferro-silicon	5 109	3 400	1 409	3 676	2 964	8 654	6 307	3 427	5 832	5 499
Doped silicon	616	721	263	181	204	84 870	84 972	81 329	87 703	104 774

Sillimanite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Sillimanite																				
<i>Imports</i>																				
Sillimanite minerals (a)	6 058	6 814	5 983	6 130	8 526	1 918	2 111	1 767	1 890	2 689										
Chamotte earth (b)	26 579	19 936	14 816	12 891	10 865	4 912	3 575	2 756	2 587	2 375										
Mullite	3 746	7 306	6 269	5 531	4 656	1 872	2 636	2 305	2 603	2 473										
<i>Exports</i>																				
Sillimanite minerals (a)	26	107	198	238	346	20	46	61	80	111										
Chamotte earth (b)	4 272	3 276	848	871	1 059	1 185	871	274	303	415										
Mullite	1 432	958	1 010	1 419	2 099	1 563	1 142	1 377	2 057	2 507										

(a) Andalusite, kyanite and sillimanite.

(b) Calcined refractory clay including flint clay.

Silver

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Silver																				
Production																				
(a) 0	—	—	—	(a) 0	—	—	—	—	—	—										
<i>Imports</i>																				
Ores & concentrates	72	395	328	962	7	189	169	260	5 024	2 321										
Waste & scrap	6 669	5 108	6 014	7 366	8 525	484 233	568 268	449 793	538 484	691 254										
Unwrought	5 537	4 163	3 853	3 890	4 559	2 928 645	1 588 002	1 291 673	1 618 543	1 967 094										
Partly worked	562	577	915	924	830	213 956	118 845	92 300	132 603	152 233										
Silver in unrefined lead bullion (b)	290	190	364	268	299	—	—	—	—	—										
<i>Exports</i>																				
Ores & concentrates	2	2	0	18	32	1 051	668	14	1 672	1 386										
Waste & scrap	17 177	11 221	8 537	10 614	10 742	439 430	278 025	254 402	321 037	358 966										
Unwrought	3 894	3 347	3 968	1 359	1 340	1 820 206	1 156 822	1 228 992	498 122	581 668										
Partly worked	326	170	262	335	121	93 183	41 352	22 669	40 131	41 688										

(a) Small quantities have been produced as follows 2013: 82 kilograms: in Northern Ireland; 2016: 14 kilograms during metallurgical test work in Scotland.

(b) BGS estimates of silver content of unrefined lead bullion imported.

Slate

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Slate																				
<i>Production</i>																				
Architectural & cladding uses,																				
roofing & damp proofing courses	25 000	48 000	...	...	...												
Powder and granules	30 000	33 000	...	...	...												
Crude blocks	32 000	39 000	...	...	...												
Fill and other uses	798 000	748 000	...	...	...												
Total	885 000	868 000	...	...	...												
<i>Imports</i>																				
Unworked (a)	23 949	28 984	36 682	48 468	77 562	6 211	7 090	8 577	11 050	18 666										
Worked-																				
Roofing and wall tiles	158 221	170 864	145 770	150 190	135 458	62 445	65 819	53 177	59 568	59 058										
Other worked slate (b)	29 492	25 637	27 735	27 666	28 340	12 180	10 375	11 346	12 230	13 153										
<i>Exports</i>																				
Unworked (a)	22 273	48 856	45 598	27 753	68 360	1 652	1 796	1 818	1 207	1 286										
Worked-																				
Roofing and wall tiles	7 577	10 137	7 579	7 593	6 631	5 913	6 261	4 800	4 620	4 570										
Other worked slate (b)	10 502	10 776	5 941	10 970	6 654	2 711	2 430	3 209	3 298	2 736										

(a) Including roughly split or squared.

(b) Including articles of slate or agglomerated slate.

Strontium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Strontium																				
<i>Imports</i>																				
Carbonate	203	163	135	176	196	194	146	124	153	146										
<i>Exports</i>																				
Carbonate	45	45	41	20	0	63	134	42	87	4										

Sulphur

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Sulphur										
<i>Supply</i>										
Produced (a)	145 000	134 000	135 000	133 000	133 000	...	...	...	...	...
Imported (b)	9 859	12 323	7 493	15 203	14 987					
Sulphur, zinc concentrates (imported) (c)	12	2	79	0	6					
<i>Imports</i>										
Sulphur-										
Crude	1 374	4 439	281	4 629	8 584	624	662	191	1 083	1 807
Refined	8 485	7 885	7 212	10 574	6 403	5 461	4 823	4 837	4 709	4 791
Sublimed, colloidal etc	946	6 647	7 547	328	261	1 104	1 430	1 655	423	349
<i>Exports</i>										
Sulphur-										
Crude	27 018	6 154	14 261	5 426	16 695	1 724	402	515	748	1 272
Refined	7 560	24 766	19 629	46 997	30 480	4 046	3 716	3 884	5 004	3 684
Sublimed, colloidal etc	7 359	31 088	108	92	87	700	1 690	208	97	141

(a) Produced from oil refineries.

(b) Including waste and residues.

(c) Sulphur content calculated at 29%.

Talc

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Talc										
<i>Production</i>	2 947	4 907	5 430	2 997	3 671					
<i>Imports</i>	53 099	63 815	48 998	50 671	50 575	18 387	23 540	15 683	16 101	16 223
<i>Exports</i>	4 681	3 570	4 590	5 557	3 264	1 684	1 343	1 469	1 901	1 516

Tantalum and Niobium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Tantalum and Niobium										
<i>Imports</i>										
Ferro-niobium	987	1 029	1 038	682	6 921	16 015	18 258	17 038	11 407	13 123
Tantalum	203	184	164	82	83	20 168	15 345	15 314	10 682	13 845
Niobium (a)	62	60	69	163	199	4 226	3 591	5 547	5 124	9 298
<i>Exports</i>										
Ferro-niobium	162	195	109	34	63	2 944	3 649	1 608	541	1 091
Tantalum	43	61	66	8	21	5 742	4 892	6 013	2 007	3 877
Niobium (a)	142	43	28	37	48	1 584	1 781	2 714	4 618	12 526

(a) Including rhenium.

Tellurium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Tellurium										
<i>Imports</i>	8	11	6	22	1	404	600	218	440	97
<i>Exports</i>	5	17	3	9	2	506	538	335	346	117

Tin

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2017	2017
	Tonnes					£ thousand				
Tin										
<i>Production</i>	—	—	—	160	255					
<i>Consumption</i>										
Refined	1 140	1 080	1 080	1 080	1 080					
<i>Imports</i>										
Concentrates	1	4	0	—	—	67	35	3	—	—
Unwrought	3 484	4 318	4 604	4 049	4 869	50 362	59 495	51 233	50 151	76 307
Unwrought alloys	4 049	5 750	781	669	150	6 331	5 592	1 409	3 856	2 412
Scrap	69	7	1	6	0	255	91	25	35	12
<i>Exports</i>										
Concentrates	86	45	20	158	—	519	370	171	1 215	—
Unwrought	1 726	332	672	429	224	15 855	5 616	8 195	6 183	3 318
Unwrought alloys	319	293	342	331	465	4 690	4 313	3 297	3 423	5 062
Scrap	1 526	636	430	525	129	3 316	2 169	1 717	730	568

Titanium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Titanium																				
<i>Production</i>																				
Titanium dioxide pigment (a)	220 000	240 000	230 000	280 000	290 000															
Apparent consumption (b)	62 600	83 800	90 300	65 100	64 100															
<i>Imports</i>																				
Titanium minerals	104 134	210 722	222 510	257 945	256 411	38 299	101 331	114 699	126 312	130 818										
Scrap	9 892	12 698	9 547	6 606	9 073	25 145	28 739	20 802	10 573	15 513										
Unwrought	10 664	10 738	12 010	10 645	10 889	81 306	71 656	81 936	80 224	95 622										
Wrought	6 543	6 842	7 869	6 587	6 574	308 911	289 548	317 016	322 789	357 477										
Ferro-titanium (c)	687	805	391	452	618	2 057	2 047	848	866	1 118										
Oxides	4 380	7 762	5 099	4 173	6 070	9 979	12 002	8 877	8 269	14 227										
Pigments based on titanium dioxide	70 936	59 381	87 279	48 538	54 569	124 345	104 852	55 191	84 179	116 402										
<i>Exports</i>																				
Titanium minerals	52	24	34	8	16	197	266	172	136	132										
Scrap	3 896	4 233	5 753	6 058	7 575	11 093	12 551	19 864	16 696	21 014										
Unwrought	1 475	1 362	1 556	1 346	1 297	13 148	14 910	15 307	12 605	13 747										
Wrought	6 122	6 316	5 872	7 155	7 006	253 944	267 061	295 111	348 075	362 506										
Ferro-titanium (c)	22 652	22 831	17 347	14 970	15 304	67 224	62 782	45 600	29 774	43 114										
Oxides	2 985	3 556	3 088	3 429	3 483	3 081	4 612	4 815	5 577	6 458										
Pigments based on titanium dioxide	166 563	187 839	282 219	225 545	236 573	323 270	335 956	177 733	367 468	464 829										

(a) BGS estimates

(b) BGS estimates; see explanatory notes.

(c) Including ferro-silico-titanium.

Tungsten

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Tungsten																				
<i>Production</i>																				
—	—	195	923	1 370																
<i>Imports</i>																				
Ores & concentrates	8	4	69	5	12	112	44	345	235	284										
Scrap	1 437	1 399	1 075	1 590	1 425	26 750	24 886	14 366	15 519	22 117										
Unwrought	393	429	236	431	218	10 343	9 531	5 290	5 507	5 956										
Wrought	76	130	171	145	152	4 384	5 738	5 762	5 574	4 933										
Ferro-tungsten (a)	30	47	45	28	65	641	881	648	434	1 233										
Carbide	878	1 740	1 857	1 607	1 848	25 770	55 227	34 453	37 191	54 755										
Tungstates	3	1	1	3	6	135	61	114	111	194										
Oxides and hydroxides	2	2	1	1	1	130	154	43	96	72										
<i>Exports</i>																				
Ores & concentrates	67	279	316	1 926	—	614	1 387	2 223	11 115	—										
Scrap	2 250	2 111	1 266	1 636	1 812	30 249	28 266	15 826	14 646	21 684										
Unwrought	100	85	93	73	94	7 781	5 664	5 481	5 054	5 934										
Wrought	98	94	258	86	76	7 182	7 015	6 112	7 458	6 210										
Ferro-tungsten (a)	9	2	11	247	233	212	47	181	665	519										
Carbide	400	232	340	26	27	6 725	5 808	1 899	1 326	1 928										
Tungstates	45	14	—	1	1	639	175	35	23	17										
Oxides and hydroxides	24	13	2	6	4	209	154	54	122	57										

(a) Including ferro-silico-tungsten.

Vanadium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Vanadium																				
<i>Imports</i>																				
Unwrought	199	168	297	253	284	3 959	2 998	5 135	4 235	6 325										
Oxides	0	1	5	18	0	9	30	26	87	2										
Ferro-vanadium	339	450	2 269	2 155	5 272	5 065	4 761	5 608	2 504	8 768										
<i>Exports</i>																				
Unwrought	36	47	81	45	105	659	850	1 367	778	2 082										
Oxides	0	0	0	0	2	9	5	5	7	18										
Ferro-vanadium	45	13	51	12	15	591	142	289	126	145										

Vermiculite

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Vermiculite																				
<i>Imports (a)</i>																				
Imports (a)	59 424	77 419	31 484	28 945	22 333	7 087	9 937	4 477	5 052	6 134										
<i>Exports (a)</i>																				
Exports (a)	1 459	935	600	672	1 089	772	557	387	513	592										

(a) Figures also include perlite and chlorites.

Zinc

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017										
	Tonnes					£ thousand														
Zinc																				
<i>Consumption</i>																				
Slab	100 314	114 479	107 732	97 133	101 190															
<i>Imports</i>																				
Ores & concentrates	43	6	274	1	19	222	131	608	92	214										
Ash and residues	13 417	70 950	57 850	98 387	120 293	1 180	2 079	1 876	2 540	4 660										
Unwrought	98 448	113 410	106 101	94 731	98 731	129 865	158 077	142 096	154 408	234 852										
Unwrought alloys	8 469	5 177	5 949	6 822	6 036	12 337	8 405	8 942	11 544	15 387										
Scrap	533	1 412	590	470	781	550	1 850	573	554	1 079										
<i>Exports</i>																				
Ores & concentrates	4 720	7 515	7 788	11 473	16 019	2 156	2 829	3 694	5 281	9 443										
Ash and residues	7 008	7 814	6 634	6 068	6 761	6 130	7 065	5 769	6 593	10 865										
Unwrought	2 138	2 930	2 874	2 885	3 411	2 906	4 093	4 000	4 401	7 658										
Unwrought alloys	11 251	17 173	22 064	23 515	26 724	15 853	27 353	35 554	43 430	67 702										
Scrap	4 375	4 736	5 310	2 967	3 294	4 557	5 449	4 775	3 500	6 092										

Zirconium

United Kingdom summary 2013-2017

Commodity	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	Tonnes					£ thousand				
Zirconium										
<i>Apparent consumption (a)</i>	3 000	3 000	3 000	3 000	3 000					
<i>Imports</i>										
Ores and Concentrates (b)	6 879	7 974	6 265	6 087	7 524	10 575	8 875	6 547	6 121	8 078
Scrap	174	164	176	121	130	1 061	1 044	1 169	795	893
Unwrought	260	197	146	130	169	5 049	3 918	2 958	3 830	5 365
Wrought	79	30	29	26	50	2 109	944	1 115	1 351	1 343
<i>Exports</i>										
Ores and concentrates	1 037	1 261	1 200	1 084	1 127	2 659	2 967	2 895	2 504	2 825
Scrap	44	47	48	46	34	433	310	390	536	448
Unwrought	21	9	38	13	4	184	170	331	521	378
Wrought	1	4	5	7	4	177	358	791	350	222

(a) BGS estimates; see explanatory notes.

(b) Mainly zircon.