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# United Kingdom Minerals Yearbook 2019

Decarbonisation and Resource Management Programme  
Open Report OR/20/001





BRITISH GEOLOGICAL SURVEY

DECARBONISATION AND RESOURCE MANAGEMENT PROGRAMME  
OPEN REPORT OR/20/001

# United Kingdom Minerals Yearbook 2019

Statistical data to 2018

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

*Keywords*

United Kingdom, minerals,  
production, imports, exports.

*Front cover:* Dry stone walling  
and meadow restoration at  
Tarmac's Tunstead Quarry and  
Cement Plant, Buxton,  
Derbyshire. Photo by T.J. Brown.  
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*Bibliographical reference*

T. Bide, T.J. Brown, N. Idoine  
and J.M. Mankelov, 2019.  
United Kingdom Minerals  
Yearbook 2018. *British  
Geological Survey Open Report,  
OR/20/001*. 66pp.

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# Acknowledgements

The compilers of this volume are grateful for the help received from the Office for National Statistics, Department for Business, Energy & Industrial Strategy, the Crown Estate Commissioners, The Crown Mineral Agent, the Northern Ireland Department for the Economy and the Isle of Man Department for Enterprise. They would also like to acknowledge the valuable assistance given by the World Bureau of Metal Statistics, the UK Iron and Steel Statistics Bureau, the Mineral Products Association, The Coal Authority, the British Ceramic Confederation and the numerous companies that have generously provided additional information. Data presented would not have been as comprehensive without the particular assistance provided by Aurelie Delannoy (Mineral Products Association) and Lauren Darby (British Ceramic Confederation). This edition of the United Kingdom Minerals Yearbook has been funded via the British Geological Survey's National Capability programme, the CBI Minerals Group and the Mineral Products Association.

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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 Business, Energy and Industrial Strategy (formerly Department of Energy and Climate Change), 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)

1973–2018 *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)

1999–2011 *Annual Mineral Statement*; Department of Enterprise, Trade and Investment (Northern Ireland)

2012–2017 *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](http://www.uktradeinfo.com/Pages/Home.aspx), *Overseas Trade Statistics (monthly, quarterly and annual)*, *Guide to the Classification for Overseas Trade Statistics*

Mineral Products Association (MPA)

Office for National Statistics, UK Statistics Authority, Website: <http://www.statisticsauthority.gov.uk> or [www.statistics.gov.uk](http://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 are absent altogether because an estimate is not feasible, e.g. peat.

As a consequence, the following tables from earlier 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 2012–2018

£ million

SITC section		2012	2013	2014	2015	2016	2017	2018	
<b>Imports (c.i.f.)</b>									
0, 1	Food, beverages, tobacco	36 832.9	39 226.3	38 705.2	38 756.3	41 728.6	45 245.7	46 209.3	
2, 4	Basic materials	11 186.1	11 740.3	11 171.4	10 099.4	10 368.9	11 777.4	12 105.8	
	of which: Minerals	4 784.6	5 003.5	4 298.5	3 369.2	3 296.3	3 779.3	3 788.0	
3	Fuels and related materials	60 498.6	56 009.5	48 890.1	33 325.2	29 392.1	40 085.7	50 415.6	
	of which: Mineral-based	59 824.5	55 072.6	47 867.7	32 375.4	28 609.7	39 211.4	49 105.6	
	Manufactured goods:								
5, 6	Semi-manufactures	101 430.9	96 591.8	95 193.4	93 613.1	99 707.2	111 349.6	113 457.7	
	of which: Mineral-based	45 428.1	38 629.2	33 426.4	30 663.0	32 171.9	38 566.3	40 502.9	
7, 8	Finished manufactures	190 943.8	201 707.6	210 948.2	219 755.1	239 979.2	253 386.7	253 603.3	
	All traded goods	<b>Total</b>	<b>400 892.4</b>	<b>405 275.6</b>	<b>404 908.3</b>	<b>395 549.0</b>	<b>421 175.9</b>	<b>461 845.1</b>	<b>475 791.8</b>
	of which: Mineral-based	110 037.2	98 705.3	85 592.6	66 407.6	64 077.9	81 557.1	93 396.5	
	As % of all traded goods	27.4	24.4	21.1	16.8	15.2	17.7	19.6	
<b>Exports (f.o.b.)</b>									
0, 1	Food, beverages, tobacco	17 917.4	18 860.8	18 899.7	18 316.9	20 284.7	22 041.0	22 582.9	
2, 4	Basic materials	8 390.4	7 414.0	6 830.7	5 894.2	6 255.7	7 602.3	7 841.3	
	of which: Minerals	4 921.1	4 337.0	4 020.2	3 396.9	3 666.0	4 681.3	4 959.4	
3	Fuels and related materials	41 664.1	39 615.7	33 538.4	21 540.9	19 151.5	27 421.1	35 009.8	
	of which: Mineral-based	41 562.3	39 447.7	33 414.9	21 463.0	19 048.3	27 247.8	34 883.7	
	Manufactured goods:								
5, 6	Semi-manufactures	84 916.0	81 764.9	77 135.5	79 167.0	78 973.8	86 412.7	86 532.3	
	of which: Mineral-based	35 332.6	33 300.0	28 669.6	29 007.8	26 558.1	30 721.5	32 849.0	
7, 8	Finished manufactures	139 692.2	146 888.8	146 670.1	149 442.9	162 543.5	177 989.4	180 564.9	
	All traded goods	<b>Total</b>	<b>292 580.1</b>	<b>294 544.2</b>	<b>283 074.4</b>	<b>274 361.8</b>	<b>321 466.4</b>	<b>332 531.3</b>	
	of which: Mineral-based	81 816.0	77 084.7	66 104.7	53 867.7	49 272.4	62 650.7	72 692.1	
	As % of all traded goods	28.0	26.2	23.4	19.6	17.2	19.5	21.9	

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 2012–2018

£ million (a)

SITC (R3) divisions	2014	2015	2016	2017	2018	
27	Crude minerals and fertilisers:					
	imports	505.6	500.1	562.4	719.4	719.0
	exports	452.1	392.4	405.2	460.7	499.8
		-53.5	-107.7	-157.2	-258.7	-219.1
28	Metal ores and scrap:					
	imports	3 793.0	2 869.1	2 733.9	3 059.9	3 069.0
	exports	3 568.1	3 004.5	3 260.8	4 220.6	4 459.6
		-224.9	+135.4	+526.9	+1 160.7	+1 390.6
32	Coal, coke and briquettes:					
	imports	2 358.5	1 317.9	681.8	989.3	1 216.4
	exports	111.7	84.0	86.4	76.4	137.2
		-2 246.8	-1 233.9	-595.4	-912.9	-1 079.2
33	Petroleum, petroleum products and related materials:					
	imports	37 758.4	24 254.8	21 611.2	29 518.6	37 078.7
	exports	30 323.2	18 464.1	16 804.3	24 322.9	31 929.1
		-7 435.2	-5 790.7	-4 807.0	-5 195.8	-5 149.6
34	Gas, natural and manufactured:					
	imports	7 750.9	6 802.8	6 316.7	8 703.5	10 810.5
	exports	2 979.9	2 915.0	2 157.7	2 848.6	2 817.4
		-4 771.0	-3 887.8	-4 159.0	-5 854.9	-7 993.1
51	Organic chemicals:					
	imports	6 985.7	6 220.3	6 452.7	7 401.3	8 159.0
	exports	6 823.8	8 616.3	7 443.5	7 918.8	8 502.2
		-161.9	+2 396.1	+990.8	+517.5	+343.2
52	Inorganic chemicals:					
	imports	2 237.8	2 198.8	1 893.0	2 045.7	2 329.0
	exports	1 746.5	1 616.7	1 512.7	1 515.9	1 611.1
		-491.3	-582.1	-380.2	-529.8	-717.8
56	Manufactured fertilisers:					
	imports	300.8	239.0	230.7	287.1	345.6
	exports	190.0	184.5	193.5	197.3	183.9
		-110.8	-54.4	-37.2	-89.8	-161.7
53–59 (part)	Miscellaneous chemical products:					
	imports	6 478.5	5 638.1	6 030.2	7 094.4	7 627.6
	exports	5 362.0	4 989.0	4 932.4	5 462.8	5 831.5
		-1 116.5	-649.1	-1 097.7	-1 631.6	-1 796.1
66	Non-metallic mineral products:					
	imports	4 576.7	4 914.1	5 309.4	5 841.2	5 957.1
	exports	2 962.1	3 121.3	3 182.6	3 754.7	3 643.7
		-1 614.6	-1 792.8	-2 126.8	-2 086.6	-2 313.4
67	Iron and steel:					
	imports	4 391.8	3 684.9	3 789.4	4 827.0	5 280.2
	exports	4 538.8	3 301.7	2 461.6	3 191.3	3 535.5
		+147.0	-383.1	-1 327.8	-1 635.7	-1 744.7
68	Non-ferrous metals:					
	imports	8 107.9	7 400.4	8 089.7	10 649.1	10 299.8
	exports	6 743.0	6 843.5	6 434.2	8 246.8	9 118.5
		-1 364.9	-556.8	-1 655.5	-2 402.4	-1 181.3
69	Manufactures of metal:					
	imports (b)	347.3	367.5	376.9	420.4	504.6
	exports (b)	303.4	334.7	397.6	434.0	422.5
		-43.9	-32.8	+20.8	+13.6	-82.2
96	Coin other than gold:					
	imports	4.7	4.2	4.5	5.4	4.0
	exports	23.6	29.3	9.8	14.9	9.7
		+18.9	+25.0	+5.2	+9.5	+5.8
	<b>Total (excluding gold)</b>					
	imports	<b>85 597.6</b>	<b>66 411.8</b>	<b>64 082.4</b>	<b>81 562.5</b>	<b>93 400.5</b>
	exports	<b>66 128.2</b>	<b>53 897.0</b>	<b>49 282.2</b>	<b>62 665.6</b>	<b>72 701.8</b>
		<b>-19 469.1</b>	<b>-12 514.9</b>	<b>-14 800.2</b>	<b>-18 896.9</b>	<b>-20 698.6</b>

(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 2012–2018

£ million

Mineral	2012	2013	2014	2015	2016	2017	2018
Coal	1 131	780	660	419	227	225	198
Natural gas	7 855	7 755	6 655	7 035	5 315	6 260	6 900
Natural gas liquids	... (b)	... (b)	... (b)	... (b)	... (b)	... (b)	... (b)
Crude petroleum	22 975	21 330	18 185	12 985	12 385	15 545	21 285
Tin	—	—	—	—	2	4	4
Tungsten	—	—	—	5	23	31	28
Gold	3	1	—	—	0	—	—
Silver	0	0	—	—	0	—	—
Other non-ferrous metals	0	0	0	0	0	0	0
Sand and gravel	555	584	643	781	852	844	902
Limestone and dolomite	565	545	663	1163	1367	1413	1519
Igneous rock	300	320	333				
Sandstone	110	115	122				
Chalk	54	77	57				
Clay and shale	20	41	59	26	26	28	23
China clay	128	129	129	121	121	133	128
Ball clay	49	50	48	47	53	61	63
Salt	326	317	225	212	175	173	166
Silica sand	57	59	55	62	67	82	88
Potash	259	248	226	137	89	45	46
Polyhalite	—	—	—	25	25	63	50
Fluorspar	—	4	4	3	2	1	2
Gypsum and anhydrite	10	8	15	23	19	18	20
Miscellaneous minerals	40	35	70	50	49	43	54
<b>Total</b>	<b>34 438</b>	<b>32 398</b>	<b>28 149</b>	<b>23 094</b>	<b>20 797</b>	<b>24 969</b>	<b>31 476</b>
<b>At 2016 constant prices</b>							
Coal	1 201	813	676	428	227	220	194
Oil and gas	32 728	30 328	25 451	20 429	17 700	21 336	27 578
Metals	4	1	0	5	25	34	31
Construction and industrial minerals	2 626	2 640	2 714	2 704	2 845	2 841	2 995
<b>Total</b>	<b>36 558</b>	<b>33 783</b>	<b>28 841</b>	<b>23 565</b>	<b>20 797</b>	<b>24 432</b>	<b>30 798</b>

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

(b) Included in gas and petroleum figures.

**United Kingdom mining and quarrying: Gross value added (a) 2011–2018**

£ million

	2011	2012	2013	2014	2015	2016	2017	2018
<b>Production</b>								
Mining and quarrying								
Mining and quarrying of energy producing materials								
Mining of coal and lignite	300	441	249	189	167	138	176	164
Extraction of crude petroleum and natural gas	23 937	21 363	20 794	15 743	9 339	8 403	8 809	14 703
Other mining and quarrying	1 139	1 416	1 517	1 514	1 679	1 680	1 572	1 539
Total mining and quarrying	27 358	25 635	24 914	19 493	13 413	11 511	12 028	18 018
<b>All industries</b>	1 481 518	1 530 213	1 590 569	1 660 188	1 709 325	1 778 134	1 846 694	1 923 440
of which: minerals related (%)	1.8	1.7	1.6	1.2	0.8	0.6	0.7	0.9

(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 2012–2018

Thousand tonnes

Mineral	2012	2013	2014	2015	2016	2017	2018
<b>Coal:</b>							
Deep-mined	6 153	4 089	3 685	2 784	22	20	25
Opencast	10 134	8 584	7 962	5 814	4 156	3 021	2 556
Other (a)	680	95	—	—	—	—	—
<b>Natural gas and oil:</b>							
<b>Methane (oil equivalent)</b>							
Colliery	52	52	34	30	38	35	33
Onshore	15	10	38	183	179	184	217
Offshore	38 850	35 268	35 690	38 633	39 659	39 797	38 461
<b>Crude oil</b>							
Onshore	870	1 003	1 014	962	966	836	845
Offshore	41 182	37 453	36 461	41 864	43 339	41 344	46 299
<b>Condensates and other (b)</b>							
Onshore	13	20	19	18	17	14	14
Offshore	2 495	2 170	2 435	2 444	3 122	3 442	3 274
<b>Non-ferrous ores (metal content):</b>							
Tin	—	—	—	—	0.2	0.3	0.2
Tungsten	—	—	—	0.2	0.9	1.4	1.2
Lead (c)	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gold (kg)	102	42	—	—	(d) 6	—	—
Silver (kg)	230	82	—	—	(d) 14	—	—
<b>Clay and shale (e)</b>							
Clay (e)	5 497	6 464	6 806	4 552	4 694	5 544	4 606
Chalk (e)	3 473	3 528	3 312				
Igneous rock (f) (g)	(h) 37 300	(h) 37 700	(h) 41 500				
Limestone (excluding dolomite)	(h) 52 300	(h) 54 400	(h) 64 200	(h) (i) 119 401	(i) 125 301	(h) (i) 125 739	(h) (i) 128 600
Dolomite (excluding limestone)	4 896	3 432	3 730				
Sandstone	(h) 10 700	11 217	13 614				
Slate (j)	701	885	868	(c) 760	(c) 780	(c) 820	(c) 820
<b>Sand and gravel:</b>							
Land	41 516	43 379	46 832	51 053	51 231	50 147	(h) 51 500
Marine (k)	14 840	14 577	14 327	15 390	16 844	17 402	17 817
Ball clay (sales) (c)	748	740	733	740	753	850	867
Barytes	30	30	44	50	56	55	(c) 55
China clay (sales) (c) (l)	1 150	1 110	1 090	1 014	940	970	996
Fireclay (e)	96	105	129	...	...	...	...
Fluorspar (c)	—	16	25	17	12	11	11
Gypsum (natural) (c)	800	700	1 100	1 800	1 600	1 300	1 400
Peat (000 m <sup>3</sup> )	568	1 254	795	...	...	...	...
Potash (m)	(c) 900	(c) 540	576	594	432	216	210
Polyhalite	—	—	—	200	200	500	400
Salt	6 460	6 930	4 690	(c) 4 700	(c) 4 700	(c) 4 700	(c) 4 700
Silica sand	3 888	3 961	3 948	3 822	4 251	4 490	4 863
Talc	4	3	5	5	3	3	2

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

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

(c) BGS estimate.

(d) Production from metallurgical testwork.

(e) Excluding a small production in Northern Ireland.

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

(g) In addition, the following amounts of igneous rock were produced in Guernsey (thousand tonnes): 2012: 169; 2013: 149; 2014: 117; 2015: 116; 2016: 88; 2017: 105; 2018: 122 and Jersey: 2012: 239; 2013: 176; 2014: 243; 2015: 275; 2016: 258; 2017: 247; 2018: 265.

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

(i) Excluding building stone

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

(k) Including marine-dredged landings at foreign ports (exports)

(l) Dry weight.

(m) Marketable product (KCI).

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.

## England production of minerals 2012–2018

Thousand tonnes

Mineral	2012	2013	2014	2015	2016	2017	2018
Coal:							
Deep-mined	6 013	3 998	3 600	2 800	20	20	10
Opencast	2 956	3 412	2 900	2 200	900	1 000	900
Other (a)	...	...	—	—	—	—	—
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	...	...	...	...	...	...	...
Onshore	...	...	...	...	...	...	...
Offshore	...	...	...	...	...	...	...
Crude oil							
Onshore	...	...	...	...	...	...	...
Offshore	...	...	...	...	...	...	...
Condensates and other (b)	...	...	...	...	...	...	...
Non-ferrous ores (metal content):							
Tin	—	—	—	—	0.2	0.3	0.2
Tungsten	—	—	—	0.2	0.9	1.4	1.2
Lead (e)	—	0.1	0.1	0.1	0.1	0.1	0.1
Gold (kg)	—	—	—	—	—	—	—
Silver (kg)	—	—	—	—	—	—	—
Clay and shale (c)	5 298	6 026	6 671	...	...	...	...
Chalk	3 473	3 528	3 312				
Igneous rock	15 646	17 569	19 156	(i) 73044	(i) 77634	(i) 78961	(i) 82296
Limestone and dolomite	46 976	46 423	53 769				
Sandstone	4 451	4 318	4 450				
Sand and gravel:							
Land	33 229	35 846	38 785	54 063	54 773	54 298	55 481
Marine (d)	14 227	9 854	10 685				
Slate (f)	...	...	...	...	...	...	...
Ball clay (sales) (e)	748	740	733	740	753	850	867
Barytes	—	2	...	...	...	...	...
China clay (sales) (g) (e)	1 150	1 110	1 090	1 014	940	970	996
Fireclay	...	98	...	...	...	...	...
Fluorspar (e)	—	16	25	17	12	11	11
Gypsum (natural) (e)	800	700	1 100	1 800	1 600	1 300	1 400
Peat (000 m <sup>3</sup> )	422	661	294	...	...	...	...
Potash (h)	900	540	576	594	432	216	210
Polyhalite	—	—	—	200	200	500	400
Salt	6 152	6 601	4 466	...	...	...	...
Silica sand	3 361	3 620	3 630	...	...	...	4 235

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

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

(c) Including potter's clay.

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

(e) BGS estimate.

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

(g) Dry weight.

(h) Marketable product (KCl).

(i) Excluding building stone

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



## Wales production of minerals 2012–2018

Thousand tonnes

Mineral	2012	2013	2014	2015	2016	2017	2018
Coal:							
Deep-mined	139	91	40	30	10	0	10
Opencast	2 408	2 343	2 500	2 300	2 400	1 200	1 000
Other (a)	...	...	—	—	—	—	—
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	...	...	...	...	...	...	...
Onshore	—	—	—	—	—	—	—
Offshore	...	...	...	...	...	...	...
Crude oil							
Onshore	—	—	—	—	—	—	—
Offshore	...	...	...	...	...	...	...
Condensates and other (b)	...	...	...	...	...	...	...
Non-ferrous ores (metal content):							
Gold	—	—	—	—	—	—	—
Clay and shale	141	...	...	...	...	...	...
Igneous rock	1 769	1 905	2 189	} (d) 12503	} (d) 12376	} (d) 12319	} (d) 12711
Limestone and dolomite	7 938	8 934	11 301				
Sandstone	2 701	2 774	2 521				
Sand and gravel:							
Land	751	673	901	} 2 076	} 1 943	} 1 654	} 1 517
Marine	613	632	647				
Slate (c)	...	...	...	...	...	...	...
Fireclay	—	—	—	—	—	—	—
Silica sand	86	...	...	...	...	...	—

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

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

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

(d) Excluding building stone

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

## Scotland production of minerals 2012–2018

Thousand tonnes

Mineral	2012	2013	2014	2015	2016	2017	2018
Coal:							
Deep-mined	—	—	—	—	—	—	—
Opencast	4 823	2 835	2 500	1 300	800	800	600
Other (a)	...	...	—	—	—	—	—
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	...	...	...	...	...	...	...
Onshore	—	—	—	—	—	—	—
Offshore	...	...	...	...	...	...	...
Crude oil							
Onshore	—	—	—	—	—	—	—
Offshore	...	...	...	...	...	...	...
Condensates and other (b)	...	...	...	...	...	...	...
Non-ferrous ores (metal content):							
Gold (kg)	—	—	—	—	(d) 6	—	—
Silver (kg)	—	—	—	—	(d) 14	—	—
Clay and shale	57	...	...	...	...	...	...
Igneous rock	17 383	15 623	16 939	...	...	...	...
Limestone and dolomite	1 120	1 269	1 302	(e) 22613	(e) 23886	(e) 23190	(e) 22331
Sandstone	1 564	1 591	2 766	...	...	...	...
Sand and gravel (land-won)	5 772	4 911	5 111	5 670	6 238	5 859	5 599
Slate (c)	...	...	...	...	...	...	...
Barytes	30	28	...	...	...	...	...
Fireclay	...	7	...	...	...	...	...
Peat (000 m <sup>3</sup> )	146	594	501	...	...	...	...
Silica sand	440	...	...	...	...	...	655
Talc	4	3	5	5	3	3	2

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

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

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

(d) Production from metallurgical testwork.

(e) Excluding building stone

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

## Minerals produced in the Northern Ireland, Isle of Man, Guernsey and Jersey 2014-2018

Thousand tonnes

	2014	2015	2016	2017	2018
<b>Northern Ireland (d)</b>					
Gold (kg)	0	0	0	0	0
Silver (kg)	0	0	0	0	0
Lead (tonnes)	0	0	0	0	0
Limestone	1 658	1 709	2 146	2 323	...
Sand and gravel	1 535	2 481	2 354	2 606	...
Basalt and igneous rock (a)	2 751	2 587	4 216	3 227	...
Sandstone	3 877	3 946	5 043	3 722	...
Granite	...	...	...	...	...
Clay and shale	...	...	...	...	...
Others (b)	944	1 044	1 264	795	...
<b>Total</b>	<b>10 764</b>	<b>11 766</b>	<b>15 023</b>	<b>12 673</b>	<b>...</b>
<b>Isle of Man</b>					
Limestone	53	58	50	48	41
Sand and gravel	97	101	106	109	108
Igneous rock	98	94	89	86	86
Slate	26	33	28	39	39
<b>Total</b>	<b>274</b>	<b>286</b>	<b>272</b>	<b>281</b>	<b>274</b>
<b>Guernsey</b>					
Igneous rock	117	116	88	105	122
<b>Jersey</b>					
Igneous rock (c)	243	275	258	247	265
Sand and gravel	48	51	46	47	52

(a) Excluding granite.

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

(c) BGS estimates.

(d) Data for Northern Ireland is based on the following numbers of quarry returns: 2014, 80; 2015, 106; 2016, 116 and 2017, 90. No extrapolation for missing returns is included in this table.

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

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

Commodity	Region															Number
	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	Isle of Man	Northern Ireland	Channel Islands	Total
Abandoned mine methane	—	6	—	9	2	—	—	—	—	17	1	—	—	—	—	18
Anhydrite	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	1
Ball clay	—	—	—	—	—	—	—	—	20	20	—	—	—	—	—	20
Barytes	—	—	—	2	—	—	—	—	—	2	—	1	—	—	—	3
Chalk	—	17	—	3	—	13	—	15	1	49	—	—	—	4	—	53
China clay	—	—	—	—	—	—	—	—	18	18	—	—	—	—	—	18
China clay waste	—	—	—	—	—	—	—	—	9	9	—	—	—	—	—	9
Clay & shale	4	29	16	16	22	6	—	21	9	123	11	4	—	13	—	151
Coal, underground	1	—	—	1	—	—	—	—	—	2	—	—	—	—	—	2
Coal, opencast	5	—	—	—	—	—	—	—	—	5	3	1	—	—	—	9
Fireclay	—	4	1	1	1	—	—	—	—	7	—	1	—	—	—	8
Flint	—	1	—	—	—	6	—	2	—	9	—	—	—	—	—	9
Fluorspar	1	—	—	3	—	—	—	—	—	4	—	—	—	—	—	4
Gold	—	—	—	—	—	—	—	—	—	0	—	1	—	1	—	2
Gypsum (c)	—	—	1	4	1	—	—	1	—	7	—	—	—	—	—	7
Igneous & metamorphic rock	8	—	3	7	4	—	—	—	14	36	15	120	2	43	4	220
Iron ore - ironstone	—	—	—	—	—	—	—	3	1	4	—	—	—	—	—	4
Lead	—	—	—	2	—	—	—	—	—	2	—	—	—	1	—	3
Limestone / dolomite	17	31	17	61	8	4	—	13	85	236	35	14	2	20	—	307
Marble	—	—	—	—	—	—	—	—	—	0	—	1	—	—	—	1
Natural gas	—	10	1	3	—	—	—	1	1	16	—	—	—	—	—	16
Oil	—	1	—	82	—	—	—	23	4	110	—	—	—	—	—	110
Peat	—	1	6	—	—	1	—	—	38	46	2	21	—	8	—	77
Polyhalite	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Potash	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Salt	—	2	3	—	—	—	1	—	—	6	—	1	—	1	—	8
Sand	4	8	8	1	3	14	2	31	9	80	2	22	1	3	1	109
Sand & gravel	5	21	21	38	30	90	13	56	25	299	16	103	1	71	—	490
Sandstone	14	53	37	16	17	4	—	4	21	166	22	49	—	35	—	272
Serpentine	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1
Silica sand	—	2	6	1	—	8	—	7	1	25	1	5	—	—	—	31
Silver	—	—	—	—	—	—	—	—	—	0	—	—	—	1	—	1
Slate	—	—	10	—	—	—	—	—	11	21	14	—	2	1	—	38
Slate waste	—	—	3	—	—	—	—	—	—	3	16	1	—	—	—	20
Talc	—	—	—	—	—	—	—	—	—	0	—	1	—	—	—	1
Tin	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1
<b>Total</b>	<b>59</b>	<b>188</b>	<b>133</b>	<b>250</b>	<b>89</b>	<b>146</b>	<b>16</b>	<b>177</b>	<b>269</b>	<b>1 327</b>	<b>138</b>	<b>346</b>	<b>8</b>	<b>202</b>	<b>5</b>	<b>2 026</b>

(a) As at December 2019.

Source: British Geological Survey.

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

(c) Excludes desulphogypsum manufacture.

# Abrasives, natural

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Carats					£ thousand				
<b>Abrasives</b>										
<i>Imports</i>										
Natural abrasives										
Industrial diamonds	4 270 299	2 397 330	2 181 458	2 705 618	5 418 781	20 464	9 455	7 725	11 585	11 982
Tonnes										
Dust and powder of precious and semi-precious stones	33	100	103	31	45	10 330	7 469	7 694	10 898	9 233
Pumice	2 353	4 634	8 034	2 699	2 131	724	1 126	989	863	717
Other	13 280	13 422	13 164	11 609	9 123	3 319	2 757	3 038	3 455	2 822
Carats										
<i>Exports</i>										
Natural abrasives										
Industrial diamonds	2 430 399	943 964	686 369	1 156 793	1 019 188	15 236	8 604	7 862	9 719	6 695
Tonnes										
Dust and powder of precious and semi-precious stones	18	12	68	15	15	13 043	9 830	10 801	13 694	11 049
Pumice	121	100	254	328	500	159	130	244	301	431
Other	3 352	1 183	1 555	1 274	1 414	2 112	1 068	1 008	1 008	839

# Aggregates

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Aggregates</b>										
<i>Production*</i>										
Sand and gravel (a)	61 158 000	66 443 000	68 075 000	67 548 000	(c) 69 300 000					
Crushed rock (b)	108 708 000	119 401 000	125 301 000	125 739 000	(c) 128 600 000					
Total	169 867 000	185 845 000	193 376 000	193 287 000	(c) 197 900 000					
<i>Imports</i>										
Natural aggregates-										
Sand and gravel	549 584	722 068	879 166	631 921	488 876	13 749	14 737	17 793	18 704	19 951
Crushed rock (d)	381 694	281 400	433 084	356 707	270 077	21 191	15 788	19 290	18 168	17 231
Total	931 278	1 003 468	1 312 250	988 628	758 953	34 940	30 525	37 082	36 872	37 182
<i>Exports</i>										
Natural aggregates-										
Sand and gravel (e) (f)	3 518 314	2 223 131	2 445 821	2 409 597	2 841 913	31 179	22 694	26 552	26 473	28 994
Crushed rock	4 966 129	4 251 512	3 815 671	4 353 247	4 419 084	46 097	30 156	29 431	35 901	38 266
Total	8 484 443	6 474 643	6 261 492	6 762 844	7 260 997	77 276	52 851	55 984	62 374	67 260

\* Source: 2014 ONS, 2015-2018 Mineral Products Association

The published production data for Northern Ireland varies according to the number of returns received and in some years this is believed to be too low. Estimates have been added to the figures in this table for 2014, 2015 and 2017 to account for missing returns.

- (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 armoustone 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.  
 (f) However, the Crown Estate Commissioners give the following figures for marine-dredged sand and gravel landed at foreign ports (tonnes): 2014: 2 994 538; 2015: 2 153 146; 2016: 2 767 125; 2017: 3 127 371 and 2018: 4 110 142.

# Aluminium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Aluminium</b>										
<i>Production</i>										
Unwrought-										
Primary	42 000	47 000	46 000	48 000	48 000					
Secondary (a)	148 800	148 800	148 800	148 800	148 800					
<i>Consumption</i>										
Unwrought-										
Primary (a)	270 000	270 000	241 200	241 200	216 000					
Secondary (a)	320 400	320 400	320 400	320 400	320 400					
<i>Imports</i>										
Ash and residues	679	435	1 163	218	850	181	490	263	244	700
Unwrought	154 942	145 297	162 946	162 676	183 402	191 242	173 276	196 694	265 288	316 091
Unwrought alloys	62 549	68 646	71 127	72 035	68 304	96 538	102 809	102 918	128 121	127 711
Scrap	168 299	113 549	113 780	135 710	124 866	132 107	104 570	97 151	123 991	135 632
<i>Exports</i>										
Ash and residues	143	75	465	222	1 000	86	345	328	292	1 449
Unwrought	6 364	3 164	3 326	4 614	8 567	7 779	5 200	4 846	8 609	18 677
Unwrought alloys	219 143	278 215	287 882	270 009	262 847	335 466	405 567	412 070	470 822	481 954
Scrap	452 620	405 504	437 637	370 082	444 339	483 869	404 838	424 272	439 567	499 753

(a) Estimate.

# Aluminium compounds

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Aluminium compounds</b>										
<i>Imports</i>										
Oxide (alumina)	69 337	58 619	153 964	140 836	116 257	41 226	32 620	41 642	112 740	103 102
Hydroxide	81 787	46 081	51 957	51 690	60 463	34 496	20 829	23 023	26 481	25 584
Fused Oxide (a)	40 512	29 713	27 178	30 185	32 971	24 615	16 960	15 668	17 586	22 689
Fluorides	791	389	953	736	854	704	271	734	637	828
<i>Exports</i>										
Oxide (alumina)	4 116	4 953	9 706	3 365	3 824	2 635	2 835	3 796	3 200	3 441
Hydroxide (b)	2 000	5 500	5 100	2 600	2 700	1 863	2 400	1 800	1 300	1 300
Fused Oxide (a)	6 675	6 670	7 567	10 427	13 911	5 607	5 055	6 471	7 489	10 255
Fluorides	499	298	0	0	67	382	245	4	9	72

(a) Artificial corundum.

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

# Antimony

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Antimony</b>										
<i>Imports</i>										
Ores & concentrates	25	—	—	1	—	12	—	—	6	1
Metal	376	128	307	189	259	2 380	979	1 491	1 714	1 967
Oxide	1 916	1 912	1 628	1 690	1 759	9 410	7 496	7 671	9 978	10 104
<i>Exports</i>										
Ores & concentrates	0	52	1	—	—	0	70	4	—	—
Metal	525	431	477	660	537	4 245	3 345	3 792	5 688	5 572
Oxide	127	180	209	78	89	951	843	981	574	583

# Arsenic

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Arsenic</b>										
<i>Imports</i>										
Elemental	7	6	4	3	3	172	207	268	289	445
<i>Exports</i>										
Elemental	7	7	5	3	2	30	139	50	16	21

# Asbestos

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Asbestos</b>										
<i>Imports</i>										
Fabricated asbestos	12	11	17	2	21	247	122	239	75	733
Friction material with a basis of asbestos etc.	6 761	5 778	5 622	5 971	6 908	60 355	50 095	45 239	43 015	42 202
Articles of asbestos cement etc.	170 364	163 162	172 991	189 683	189 178	63 844	62 922	70 850	80 820	78 153
<i>Exports</i>										
Fabricated asbestos	75	12	165	119	57	1 673	1 112	2 055	918	2 161
Friction material with a basis of asbestos etc.	3 068	3 495	2 471	2 384	2 713	51 928	51 218	50 185	72 960	58 410
Articles of asbestos cement etc.	12 372	14 121	21 419	19 260	15 229	5 691	6 564	10 210	11 111	8 674

# Asphalt, natural

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Asphalt, natural</b>										
<i>Imports</i>	7 858	26 765	33 394	27 354	22 628	1 412	4 906	4 335	6 236	4 529
<i>Exports</i>	133 784	70 584	48 224	47 063	47 147	6 589	2 384	1 862	2 054	2 418

# Ball clay

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Ball clay</b>										
<i>Production (sales) (a)</i>	733 000	740 000	753 000	850 000	867 000					
<i>Imports</i>	6 256	7 390	3 580	4 534	4 588	2 418	2 331	1 545	1 990	1 821
<i>Exports</i>	555 049	560 370	570 678	643 779	656 940	35 939	35 701	40 449	46 483	48 050

(a) BGS estimate based on exports.

# Barytes

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Barytes</b>										
<i>Production</i>										
Barium minerals - Barytes (a)	44 000	50 000	56 000	55 000	55 000					
<i>Imports</i>										
Barium minerals (b)	75 984	61 136	44 363	41 245	58 755	10 187	8 414	8 464	9 142	12 965
<i>Exports</i>										
Barium minerals (b)	13 550	12 738	13 089	17 572	14 285	4 970	4 185	3 910	5 305	4 819

(a) BGS estimate

(b) Mainly barytes with some witherite.



# Bauxite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Bauxite</b>										
<i>Imports (a)</i>	34 299	35 850	19 808	14 029	33 816	11 631	10 155	6 156	5 459	10 434
<i>Exports (a)</i>	4 339	3 455	4 879	4 495	5 184	1 976	3 252	1 968	1 824	2 490

(a) Excluding refractory grade bauxite.

# Bentonite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Bentonite</b>										
<i>Imports</i>	151 570	120 841	122 153	128 865	142 665	12 687	10 513	12 366	13 396	14 806
<i>Exports</i>	31 347	28 938	28 856	31 921	30 501	10 724	8 939	9 701	15 119	21 262

# Beryllium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Beryllium</b>										
<i>Imports</i>										
Metal	25	7	33	72	50	872	1 042	1 243	2 180	2 177
Oxides and hydroxides	2	4	3	8	13	234	610	395	1 275	1 152
<i>Exports</i>										
Metal	3	5	3	39	39	180	303	300	959	1 180
Oxides and hydroxides	0	—	0	3	—	7	—	1	55	—

# Bismuth

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Bismuth</b>										
<i>Imports</i>										
Metal	321	259	161	53	82	4 336	2 397	1 128	555	706
<i>Exports</i>										
Metal	348	444	634	210	26	7 851	6 887	6 869	3 872	673

# Boron

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Boron</b>										
<i>Imports</i>										
Boron minerals (a)	4 515	3 975	4 363	4 322	5 314	1 236	952	1 197	1 289	1 608
<i>Exports</i>										
Boron minerals (a)	2	4	111	459	393	4	7	89	425	401

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

# Bricks, blocks and tiles

## Great Britain production of bricks, blocks and tiles 2010–2018

Material	2010	2011	2012	2013	2014	2015	2016	2017	2018
Million bricks									
Bricks (all types):	1 430	1 554	1 459	1 555	1 824	1 915	1 800	1 877	2 025
Million square metres									
Concrete building blocks:									
Dense aggregate	22	23	22	24	25	26	27	27	26
Lightweight aggregate	14	15	14	17	17	19	20	22	21
Aerated concrete	17	16	16	15	15	20	23	25	23
Total	54	55	52	56	58	65	71	74	71
Roofing tiles:									
Concrete	18	18	17	19	24	25	25	26	27

Source: Department for Business Energy and Industrial Strategy

# Bromine

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Bromine</b>										
<i>Imports</i>	5 932	5 271	6 557	6 634	6 321	6 474	6 788	10 970	10 707	9 419
<i>Exports</i>	751	161	1 268	3 202	3 103	1 249	399	2 166	3 841	4 505

# Building and dimension stone

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Building and dimension stone</b>										
<i>Production</i>										
Sandstone	286 000	...	...	...	...					
Igneous rock	159 000	...	...	...	...					
Limestone (a)	585 000	...	...	...	...					
Dolomite (b)	...	...	...	...	...					
Total	1 030 000	...	...	...	...					
<i>Imports</i>										
<i>Unworked-</i>										
Marble & other calcareous stone	10 388	9 006	15 981	30 167	33 351	9 835	6 084	8 190	11 745	15 895
Granite (c)	1 937 720	2 744 898	3 068 883	2 363 599	2 953 475	51 928	54 355	53 843	47 786	57 095
Sandstone	297 327	359 374	442 582	398 535	421 809	58 290	66 376	68 210	88 930	87 896
Other stone	92 460	77 319	60 874	109 927	243 198	15 107	15 303	11 803	13 811	11 817
<i>Worked-</i>										
Marble & other calcareous stone	82 157	67 020	62 073	55 704	46 885	55 139	44 916	46 773	49 320	41 948
Granite	99 354	93 690	95 086	91 188	73 114	66 801	66 545	68 240	67 780	55 251
Other stone	32 294	23 622	24 527	23 991	22 516	20 839	18 221	22 465	24 270	22 471
Paving stones and flagstones	141 694	221 917	227 864	272 669	278 317	28 206	44 025	47 052	64 286	64 648
<i>Exports</i>										
<i>Unworked-</i>										
Marble & other calcareous stone	563	437	578	834	1 219	378	294	413	465	836
Granite	7 167	5 961	7 547	13 915	12 705	1 057	674	1 154	2 172	2 361
Sandstone	4 329	9	299	206	669	396	15	94	73	289
Other stone	178	499	255	208	646	70	617	262	225	405
<i>Worked-</i>										
Marble & other calcareous stone	1 367	1 428	896	809	831	4 226	7 201	3 155	3 417	4 246
Granite	1 025	3 505	660	1 059	849	2 323	5 332	1 214	1 698	1 196
Other stone	2 825	2 081	2 477	6 935	3 089	5 983	4 092	1 738	2 511	1 508
Paving stones and flagstones	8 830	4 532	3 417	3 687	4 992	3 364	1 568	1 460	1 377	1 243

(a) Including dolomite.

(b) Included within Limestone.

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

# Cadmium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Cadmium</b>										
<i>Consumption</i>	10	10	10	10	10					
<i>Imports</i>										
Metal	346	216	224	252	221	600	237	280	417	557
Oxide	241	120	72	96	122	536	122	133	199	316
<i>Exports</i>										
Metal	22	12	7	15	8	138	166	85	172	155

# Cement

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Cement</b>										
<i>Production</i>										
Cement, clinker	(a) 7 197 000	7 804 000	8 056 000	7 824 000	7 734 000					
Cement, finished	(a) 8 958 000	9 235 000	9 370 000	9 359 000	9 197 000					
<i>Cubic metres</i>										
Ready-mixed concrete	24 430 000	25 456 000	26 575 000	26 063 000	25 693 000					
<i>Consumption (home deliveries)</i>										
Finished cement (a)	12 433 000	13 967 000	15 004 000	15 269 000	15 188 000					
<i>Imports</i>										
Portland cement clinkers	981 457	743 671	527 391	532 977	828 093	49 970	43 218	43 707	48 267	51 307
Portland cement	2 314 549	2 181 195	2 338 637	2 422 996	2 464 886	127 928	115 597	128 063	139 185	141 827
Aluminous cement	15 415	14 360	15 105	12 802	14 568	4 969	4 517	4 449	4 174	4 691
Other cement	24 317	23 133	29 470	34 677	37 993	2 998	1 894	3 438	2 697	2 942
<i>Exports</i>										
Portland cement clinkers	21 059	6 899	47 928	23 649	12 106	3 557	1 308	3 029	1 540	915
Portland cement	68 225	67 218	93 513	138 181	178 307	9 262	10 276	11 278	15 680	17 427
Aluminous cement	64 748	59 833	58 218	62 746	72 604	29 641	24 931	26 821	30 628	34 471
Other cement	6 421	3 522	2 680	5 591	3 291	1 894	1 532	1 183	2 475	1 942

(a) Great Britain only.

# Chalk (see Limestone)

# China clay

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>China clay</b>										
<i>Production (sales) (a)</i>	1 090 000	1 014 000	940 000	970 000	996 000					
<i>Imports (b)</i>	92 426	76 443	74 357	68 664	86 805	14 998	12 498	14 148	15 752	17 465
<i>Exports (b)</i>	984 272	913 371	846 617	873 633	897 498	116 105	108 488	109 226	119 421	124 057

(a) BGS estimate.

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

# China stone (see Feldspar)

# Chromium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Chromium</b>										
<i>Apparent consumption (a)</i>	39 900	30 700	27 000	36 500	38 800					
<i>Imports</i>										
Ores & concentrates	8 111	5 100	5 092	5 460	7 149	2 057	1 378	1 285	1 740	2 903
Ferro-chrome										
Under 4% carbon	8 871	7 005	5 232	7 005	5 744	14 335	13 135	10 468	13 135	14 204
4%-6% carbon	...	100	37	100	23	...	192	52	192	4
Over 6% carbon	54 404	34 504	31 674	34 504	48 375	38 969	23 450	21 351	23 450	51 251
Ferro-silico-chrome	307	402	47	12	1	451	612	82	55	12
Oxides and hydroxides	(b) 8 600	15 267	13 833	14 915	15 570	(b) 13 700	30 782	30 237	39 143	48 462
Metal	1 829	1 608	1 422	1 227	1 688	9 381	8 617	9 254	9 311	14 759
<i>Exports</i>										
Ores & concentrates	57	83	106	71	86	26	16	54	124	107
Ferro-chrome										
Under 4% carbon	372	272	220	272	506	1 569	1 341	1 163	1 341	2 668
4%-6% carbon	804	681	281	681	191	531	416	107	416	192
Over 6% carbon	2 361	2 169	1 653	2 169	2 428	3 055	2 623	2 262	2 623	4 464
Ferro-silico-chrome	362	474	114	545	89	741	1 154	278	1 269	242
Oxides and hydroxides	(c) 890	1 161	526	467	276	(c) 2 600	2 855	1 458	1 582	884
Metal	7 216	6 416	6 933	7 153	7 384	51 510	48 005	50 756	63 391	81 265

(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 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Clays</b>										
<i>Production (a)</i>										
Clay and shale	6 806 000	4 551 900	4 693 900	5 543 900	4 606 000					
<i>Imports</i>										
Unspecified clays	149 468	158 222	139 925	147 165	144 947	23 442	21 590	21 587	24 266	24 504
<i>Exports</i>										
Unspecified clays	161 079	131 067	114 027	98 227	84 939	15 009	8 717	8 913	9 534	10 378

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

Source: 2014 ONS, 2015-2018 British Ceramic Confederation

## Great Britain production of clay and shale by end-use 2003–2018

Thousand tonnes

Year	Bricks, pipes and tiles	Cement	Lightweight aggregate	Constructional use	Other uses	Total
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
2018 (a)	4 341	149	—	116	...	4 606

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

Source: 2015-2018 British Ceramic Confederation, 2003-2014 Office for National Statistics.



# Coal

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Coal</b>										
<i>Production</i>										
Bituminous (a)	11 648 000	8 598 000	4 178 000	3 041 000	2 581 000					
<i>Consumption</i>										
	48 295 000	37 451 000	18 037 000	14 439 000	11 929 000					
<i>Imports</i>										
Anthracite	111 197	22 069	32 108	32 416	153 587	14 729	4 538	4 140	6 042	18 620
Bituminous & Other	38 420 305	21 507 833	7 437 409	7 300 751	9 158 720	2 182 585	1 121 749	467 974	708 280	918 883
Total	38 531 502	21 529 902	7 469 517	7 333 167	9 312 307	2 197 314	1 126 287	472 114	714 322	937 503
Briquettes of Coal	14 382	9 666	24 130	56 251	32 513	1 973	1 000	3 188	7 706	4 714
Lignite (including agglomerated)	1 510	1 710	3 367	1 705	1 640	545	752	1 122	355	410
<i>Exports</i>										
Anthracite	81 353	77 292	82 512	88 637	105 285	10 624	9 616	9 004	10 207	15 975
Bituminous & Other	343 800	275 364	327 687	374 174	495 995	46 813	33 517	37 119	44 465	65 915
Total	425 153	352 656	410 199	462 811	601 280	57 437	43 133	46 123	54 672	81 890
Briquettes of Coal	108 328	73 768	56 053	34 185	35 282	20 074	12 943	8 897	6 012	6 378
Lignite (including agglomerated)	1 245	816	636	414	366	655	416	358	149	72

(a) Including anthracite.

# Cobalt

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Cobalt</b>										
<i>Apparent consumption (a)(b)</i>	2 100	1 200	2 200	1 500	200					
<i>Imports</i>										
Ore	151	127	83	34	24	269	307	145	106	105
Unwrought	3 920	3 118	4 691	5 114	4 293	50 547	36 519	39 074	89 464	145 115
Wrought	336	2 222	671	505	627	11 706	13 829	14 842	15 586	24 423
Oxides	160	129	264	166	117	2 073	1 660	2 261	4 043	5 199
Scrap	304	391	527	1 115	1 262	2 300	3 301	4 096	13 216	21 651
<i>Exports</i>										
Ore	9	9	8	16	9	124	170	180	690	307
Unwrought	615	851	991	787	1 451	17 476	18 852	19 577	30 007	39 502
Wrought	494	584	923	1 011	984	19 107	20 622	27 484	38 045	46 103
Oxides	1 434	1 153	1 257	1 241	878	19 498	16 608	17 940	35 586	38 190
Scrap	887	558	589	1 135	1 535	12 164	6 419	6 040	14 314	29 743

(a) Metal content.

(b) BGS estimates; see explanatory notes.

# Coke and breeze

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Coke and breeze</b>										
<i>Production</i>										
Coke oven - coke	3 601 000	2 716 000	1 332 000	1 361 000	1 263 000					
Coke oven - breeze	31 000	18 000	16 000	18 000	17 000					
<i>Consumption</i>										
Coke oven coke	3 199 000	2 853 000	1 872 000	1 764 000	1 554 000					
Breeze	1 070 000	962 000	584 000	549 000	592 000					
<i>Imports</i>										
Coke from coal	71 638	52 391	44 584	41 871	115 562	11 822	8 780	7 995	10 099	31 264
Coke from lignite	942	10 956	73 713	2 269	174	463	1 615	7 751	1 335	119
<i>Exports</i>										
Coke from coal	190 855	129 207	227 117	24 892	96 321	26 501	15 752	20 855	5 407	31 543
Coke from lignite	20	133	46	15	0	17	77	34	19	1

# Copper

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Copper</b>										
<i>Consumption</i>										
<i>Unwrought-</i>										
Refined	22 800	23 026	21 895	19 032	18 000					
Copper in scrap for direct use (a)	120 000	120 000	120 000	120 000	120 000					
<i>Imports</i>										
Ores & concentrates	248	76	0	37	392	187	93	57	161	953
Matte & cement	78	41	59	28	48	358	109	307	155	234
Scrap	28 243	27 083	34 681	32 075	28 199	68 275	62 952	85 786	92 942	85 525
Ash and residues	431	209	134	16	51	610	221	159	27	53
<i>Unwrought-</i>										
Unrefined	754	435	36	35	52	1 240	671	206	240	406
Refined	19 339	22 747	62 043	21 613	25 091	82 053	84 650	195 284	100 234	122 222
Alloys	4 475	5 218	4 468	5 218	2 591	17 500	16 002	20 030	16 002	15 117
Master Alloys	340	362	290	362	502	1 824	1 600	1 286	1 600	3 103
<i>Exports</i>										
Ores & concentrates	8	778	146	331	2 442	11	2 366	495	1 432	10 386
Matte & cement	17	141	116	1 069	350	338	551	428	4 627	2 177
Scrap	295 741	263 655	309 613	284 990	261 560	732 130	592 150	677 228	782 594	756 078
Ash and residues	1 228	206	453	2 219	4 924	3 352	366	1 005	8 444	13 977
<i>Unwrought-</i>										
Unrefined	201	212	209	221	215	3 352	3 416	3 592	4 323	3 890
Refined	997	601	28 474	20 779	13 043	4 698	2 713	115 782	103 507	69 582
Alloys	6 154	4 615	4 026	7 476	5 303	29 207	18 217	12 316	17 720	15 009
Master Alloys	6 918	6 578	5 150	5 314	5 742	29 394	24 396	17 117	23 159	26 140

(a) Estimate.

# Crushed rock (see also Aggregates)

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes				£ thousand					
<b>Crushed rock</b>										
<i>Production*</i> (a)	(b) 108 708 000	119 401 000	125 301 000	125 739 000	(b) 128 600 000					
<i>Imports</i> (c)	381 694	281 400	433 084	356 707	270 077	21 191	15 788	19 290	18 168	17 231
<i>Exports</i>	4 966 129	4 251 512	3 815 671	4 353 247	4 419 084	46 097	30 156	29 431	35 901	38 266

\* Source: 2014 ONS, 2015-2018 Mineral Products Association

The published production data for Northern Ireland varies according to the number of returns received and in some years this is believed to be too low. Estimates have been added to the figures in this table for 2014, 2015 and 2017 to account for missing returns.

(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 1984–2018

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
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
2018	5 772	6 203	11 571	4 693	27 083	—	—	26 975	82 296	12 711	22 331	117 338

(a) From 2000, excludes Cumbria.

(b) From 2000, includes Cumbria.

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

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

(e) BGS estimate.

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

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

# Diamond

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Carats					£ thousand				
<b>Diamond</b>										
<i>Imports</i>										
Unsorted	14 833 453	17 328 419	18 126 079	21 689 101	20 338 927	497 713	441 507	480 845	589 370	551 666
<i>Gem-</i>										
Rough	823 336	229 247	1 603 129	8 848 292	10 125 262	29 271	31 747	346 358	577 414	599 550
Cut	5 254 159	342 389	298 987	305 845	663 678	934 982	1 061 796	773 858	680 413	867 945
Industrial	4 270 299	2 397 330	2 181 458	2 705 618	5 418 781	20 464	9 455	7 725	11 585	11 982
Dust	25 481 253	19 117 231	21 960 382	28 874 346	25 771 437	9 595	7 196	7 539	10 559	8 806
<i>Exports</i>										
Unsorted	14 606 086	17 027 561	18 105 603	29 614 238	27 062 547	492 070	433 772	476 592	1 115 508	948 380
<i>Gem-</i>										
Rough	581 879	127 790	241 586	445 121	272 713	30 818	21 555	243 698	50 147	40 109
Cut	470 026	178 953	148 331	423 553	170 873	681 894	913 861	614 440	548 485	547 734
Industrial	2 430 399	943 964	686 369	1 156 793	1 019 188	15 236	8 604	7 862	9 719	6 695
Dust	19 103 486	16 835 755	24 983 180	29 947 667	28 474 520	12 195	9 290	10 237	13 265	10 905

# Diatomite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Diatomite</b>										
<i>Imports (a)</i>										
	25 542	12 011	16 155	15 022	19 288	6 686	2 817	4 049	4 369	4 853
<i>Exports (a)</i>										
	367	456	655	542	619	334	458	602	421	476

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

# Dolomite (see Limestone)

# Feldspar

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Feldspar</b>										
<i>Imports</i>										
Feldspar	19 154	5 602	3 722	8 443	7 679	3 002	972	957	1 314	1 512
Nepheline-syenite	33 646	35 009	34 477	38 645	36 122	3 233	3 032	3 117	3 491	3 474
<i>Exports</i>										
Feldspar	118	77	85	85	160	71	34	32	25	70
Nepheline-syenite	288	313	513	537	567	54	128	130	113	150

# Fireclay

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Fireclay</b>										
<i>Production</i>	(a) 129 000	...	...	...	...					
<i>Imports</i>										
Fireclay	3 076	2 394	2 603	6 275	4 970	899	802	815	1 998	1 664
Fireclay bricks etc	2 882	3 972	1 548	3 517	2 192	2 487	1 945	1 064	3 345	1 853
Refractory hollow-ware	1 977	1 653	1 499	1 200	1 140	5 630	5 068	4 575	3 861	3 489
<i>Exports</i>										
Fireclay	1 303	990	1 140	1 203	1 415	704	623	723	806	967
Fireclay bricks etc	2 519	2 459	3 818	3 836	2 711	2 538	2 458	5 641	5 376	3 014
Refractory hollow-ware	662	727	575	564	525	14 081	13 889	13 117	14 185	15 629

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

# Fluorspar

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Fluorspar</b>										
<i>Production (a)</i>	25 000	12 000	12 000	11 000	11 000					
<i>Imports</i>										
(b) 12 100	(b) 2 900	(b) 18 400	3 363	3 705	(b) 2 300	(b) 500	(b) 2 400	441	574	
<i>Exports</i>										
24 539	17 088	11 604	10 809	10 535	6 513	5 215	2 481	2 241	3 876	

(a) Estimates

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

# Gas, natural (see Petroleum)

# Germanium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Germanium</b>										
<i>Imports</i>										
Metal	2	0	0	1	0	515	168	89	141	100
<i>Exports</i>										
Metal	92	11	31	14	12	757	368	166	156	203

# Gold

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Gold</b>										
<i>Production</i>	-----	-----	(a) 0	-----	-----					
<i>Imports</i>										
Waste & scrap	72	172	190	214	308	101 386	18 385	22 584	28 532	21 833
Unwrought (b)	70	3	3	3	4	1 723 487	63 869	76 704	102 801	130 115
Semi-manufactured	427	490	1 450	835	625	10 601 342	12 169 683	42 797 688	26 650 976	19 020 357
<i>Exports</i>										
Waste & scrap	363	250	407	528	532	445 203	98 208	342 237	337 404	348 607
Unwrought (b)	216	1	2	2	1	5 309 000	10 514	2 738	61 021	14 903
Semi-manufactured	730	1 066	404	423	788	17 511 501	25 190 007	11 502 820	13 140 230	23 768 398

(a) Small quantities have been produced as follows: 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 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Graphite</b>										
<i>Imports</i>										
Natural graphite	5 277	3 451	2 667	3 815	5 357	4 905	2 778	2 436	3 432	4 161
Artificial graphite	14 656	24 088	8 819	10 019	10 583	20 056	17 274	12 349	17 703	24 737
Graphite crucibles etc	272	152	148	158	214	1 781	1 016	1 009	1 145	1 593
<i>Exports</i>										
Natural graphite	1 608	1 762	1 592	1 851	1 687	2 644	2 784	3 210	3 055	2 909
Artificial graphite	(a) 7 800	5 864	100 515	30 200	6 569	(a) 11 800	13 279	17 258	15 344	11 751
Graphite crucibles etc	779	5 563	4 547	5 552	6 390	4 514	12 880	9 972	12 238	15 825

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

# Gypsum

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Gypsum</b>										
<i>Production</i>										
Gypsum, natural (a)	1 100 000	1 800 000	1 600 000	1 300 000	1 400 000					
<i>Imports</i>										
Gypsum	516 377	730 856	1 591 274	1 523 565	1 506 933	7 379	9 143	19 715	20 659	20 644
Gypsum (plasters)	41 106	26 660	96 760	820 059	814 303	11 797	7 405	11 015	21 973	24 371
<i>Exports</i>										
Gypsum	4 296	5 609	4 619	9 202	13 692	1 505	1 609	1 399	2 042	2 560
Gypsum (plasters)	19 957	20 146	20 575	26 365	32 011	8 035	7 607	8 849	11 998	14 547

(a) BGS Estimates.

# Hafnium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Hafnium</b>										
<i>Imports</i>										
	11	6	18	22	13	1 924	1 817	5 414	8 194	4 275
<i>Exports</i>										
	12	12	28	93	6	540	957	1 309	1 362	2 510

# Igneous rock

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Igneous rock – see also Building and dimension stone</b>										
<i>Production (a)(b)</i>										
	41 500 000	...	...	...	...					
<i>Imports</i>										
Granite-										
Worked	99 354	93 690	95 086	91 188	73 114	66 801	66 545	68 240	67 780	55 251
Unworked	1 937 720	2 744 898	3 068 883	2 363 599	2 953 475	51 928	54 355	53 843	47 786	57 095
<i>Exports</i>										
Granite-										
Worked	1 025	3 505	660	1 059	849	2 323	5 332	1 214	1 698	1 196
Unworked	7 167	5 961	7 547	13 915	12 705	1 057	674	1 154	2 172	2 361

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

(b) Includes an estimate for Northern Ireland.



# Insulating materials

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Insulating materials</b>										
<i>Imports</i>										
Mineral wools (a)	16 714	14 368	19 107	28 160	32 361	33 832	29 675	31 506	34 665	39 333
Expanded minerals (b)	14 799	17 039	20 425	35 349	60 215	7 413	8 138	8 188	8 530	10 740
Other (c)	46 884	44 921	43 086	48 851	46 511	66 044	54 432	56 685	73 990	76 539
<i>Exports</i>										
Mineral wools (a)	75 644	38 347	32 853	47 246	58 046	76 677	72 959	81 831	75 722	83 037
Expanded minerals (b)	13 953	13 265	13 801	12 608	13 666	24 759	22 562	22 129	21 602	24 146
Other (c)	66 887	40 311	28 571	30 491	31 984	84 766	53 000	54 712	88 304	86 113

(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 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Iodine</b>										
<i>Imports</i>										
	1 129	743	600	938	1 005	19 288	13 564	9 870	14 623	17 910
<i>Exports</i>										
	305	114	205	241	206	4 802	1 718	3 300	3 544	3 271

# Iron compounds and earth colours

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Iron compounds and earth colours</b>										
<i>Imports</i>										
Earth colours containing 70% or more ferric oxide	374	488	596	72	27	498	354	374	26	23
Other iron compounds-Oxides and hydroxides	35 355	32 481	29 590	30 056	30 334	26 492	28 108	26 528	27 190	27 437
<i>Exports</i>										
Earth colours containing 70% or more ferric oxide	183	170	50	80	60	219	167	113	136	84
Other iron compounds-Oxides and hydroxides	8 834	4 974	4 758	5 693	5 919	7 677	7 436	8 253	10 768	10 793

# Iron ore

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Iron ore</b>										
<i>Consumption</i>	14 352 900	12 975 100	9 116 600	9 020 500	8 497 100					
<i>Imports</i>										
Iron ore	14 469 169	12 044 762	9 281 505	9 128 731	8 898 295	904 485	495 481	422 027	611 301	587 059
Fe content (a)	8 700 000	7 200 000	5 600 000	5 500 000	5 300 000					
<i>Exports</i>										
Iron ore	3 860	91 853	3 722	2 205	2 923	3 301	3 134	989	594	819

(a) BGS estimates.

# Iron and steel

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Iron and steel</b>										
<i>Production</i>										
Pig iron	9 704 600	8 773 500	6 142 400	5 997 000	5 587 900					
<i>Crude steel-</i>										
Alloy qualities	616 400	502 300	404 500	466 100	454 200					
Other	11 417 100	10 404 400	7 230 400	7 025 200	6 813 500					
Total	12 033 500	10 906 700	7 634 900	7 491 300	7 267 700					
<i>Consumption</i>										
Pig iron (a)	9 678 000	8 737 000	6 082 000	5 920 000	5 613 000					
Finished steel (b)	9 994 000	9 587 000	9 880 000	10 119 000	9 916 000					
Scrap	4 145 300	3 699 800	2 550 800	2 691 800	2 788 500					
<i>Imports</i>										
Pig iron	52 780	40 920	32 063	42 350	37 901	18 225	16 147	7 814	14 469	12 353
Shot, powder, sponge etc	28 660	36 452	30 459	21 310	22 664	34 841	33 130	25 797	32 352	40 618
Ferro-alloys	235 941	180 427	147 268	163 971	181 157	261 001	169 833	128 084	202 586	246 329
Ingots and other primary forms	340 628	353 841	417 001	422 137	725 999	240 495	189 724	203 481	254 965	410 305
Scrap	351 436	238 363	226 250	321 663	366 533	113 335	67 137	68 287	112 448	144 746
<i>Exports</i>										
Pig iron	1 758	2 525	346	4 470	8 058	1 619	1 911	196	787	1 692
Shot, powder, sponge etc	50 745	36 638	59 228	44 528	36 124	57 809	47 689	48 605	57 180	65 374
Ferro-alloys	47 413	35 071	34 285	38 592	36 765	240 999	142 485	121 163	197 018	251 672
Ingots and other primary forms	3 197 397	2 412 446	470 280	476 459	663 715	1 424 193	916 498	427 734	549 308	707 814
Scrap	6 934 918	7 155 388	7 928 339	8 567 251	8 546 485	1 711 018	1 408 537	1 460 245	2 168 719	2 332 820

(a) Consumption in steel making only.

(b) Net home disposals

## Consumption in the United Kingdom iron and steel industry 2009–2018

Thousand tonnes

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Iron ore –										
Home produced (a)	—	—	—	—	—	—	—	—	—	—
Imported (b)	11 192	10 572	9 735	10 511	14 037	14 353	12 975	9 126	9 023	8 497
Manganese ore	21	—	—	—	3	—	—	10	2	—
Iron and steel scrap (f)	3 459	3 713	3 890	3 675	4 085	4 145	3 700	2 551	2 692	2 789
Pig iron (f)	7 540	7 088	6 610	7 325	9 909	9 678	8 737	6 082	5 920	5 613
Alloy metals (c) –										
Nickel	8	10	12	10	...	...	...	...	...	...
Molybdenum	1	1	2	2	...	...	...	...	...	...
Tungsten	0	0	0	0	...	...	...	...	...	...
Vanadium	0	0	0	0	...	...	...	...	...	...
Cobalt	0	0	0	0	...	...	...	...	...	...
Chromium	24	34	44	42	...	...	...	...	...	...
Niobium	0	0	0	0	...	...	...	...	...	...
Ferro-alloys –										
Ferro-manganese	70	67	66	66	...	...	...	...	...	...
Ferro-silico- manganese	17	16	16	16	...	...	...	...	...	...
Ferro-aluminium	2	2	2	2	...	...	...	...	...	...
Ferro-chromium	(d)	(d)	(d)	(d)	...	...	...	...	...	...
Ferro-silico- chromium	(d)	(d)	(d)	(d)	...	...	...	...	...	...
Ferro-silicon	27	26	26	26	...	...	...	...	...	...
Ferro-silico- zirconium	0	0	0	0	...	...	...	...	...	...
Calcium silicide	0	0	0	0	...	...	...	...	...	...
Ferro-phosphorus	1	1	1	1	...	...	...	...	...	...
Ferro-niobium	(d)	(d)	(d)	(d)	...	...	...	...	...	...
Ferro-titanium	1	1	1	1	...	...	...	...	...	...
Dolomite (raw and burnt) (e)	369	399	344	556	759	793	790	494	451	427
Limestone (e)	1 095	948	932	912	1 147	1 255	1 041	680	653	638
Lime (e)	378	371	395	379	387	461	415	294	233	335
Zinc for galvanising	41	49	48	42	...	...	...	...	...	...
Tin for tinplating	2	3	2	2	...	...	...	...	...	...

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

(c) Metal content.

(d) Included under alloying metals.

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

(f) Consumption in steel making only.

Source: Iron and Steel Statistics Bureau.

# Lead

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Lead</b>										
<i>Production</i>										
Concentrate-										
Pb content (a) (b)	100	100	100	100	100					
Unwrought-										
Bullion	36 000	36 000	36 000	36 000	36 000					
Refined										
Primary (c)	110 000	149 000	170 000	165 000	153 000					
Secondary	157 000	158 000	158 000	160 000	168 000					
<i>Consumption</i>										
Refined	207 548	217 198	284 564	294 627	271 651					
<i>Imports</i>										
Ores & concentrates	2 048	2 779	996	1 242	1 330	2 342	2 790	1 781	2 867	2 905
Ash and residues	18	1	236	37	1	15	11	290	36	9
Unwrought										
Unrefined-										
Base bullion (d)	94 990	181 923	133 917	149 358	115 539	168 773	294 539	258 379	353 902	259 315
Other	0	0	1 552	1 128	12 487	8	1	1 344	2 451	24 351
Refined	35 146	17 889	19 069	30 717	26 020	47 424	22 572	27 324	57 305	43 322
Alloys	62	9	—	10	21	258	24	—	33	33
Scrap	7 236	6 419	4 904	2 998	2 250	8 312	5 959	5 600	3 890	3 081
<i>Exports</i>										
Ores & concentrates	666	4 172	1 824	1 914	1 838	455	3 782	2 634	2 843	3 259
Ash and residues	1 489	2 293	1 953	3 674	8 316	1 988	262	402	742	642
Unwrought										
Unrefined-										
Base bullion	...	0	—	258	—	...	6	—	1 388	7
Other	55 611	29 543	81 750	74 746	63 162	84 620	41 570	134 363	156 728	128 821
Refined	91 654	152 109	100 035	87 047	80 120	133 247	206 002	148 443	168 709	152 919
Alloys	3 006	5 790	9 057	10 649	22 677	4 226	8 016	13 934	21 135	41 617
Scrap	56 432	42 405	62 815	62 057	58 094	59 158	40 307	53 948	82 703	78 254

(a) BGS estimate.

(b) By-product of Pennine fluorspar operations.

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

(d) Containing substantial quantities of silver.

# Limestone, dolomite and chalk

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Limestone</b>										
<i>Production</i>										
Limestone (a)	64 200 000	...	...	...	...					
Dolomite	3 730 000	...	...	...	...					
<i>Imports</i>										
Limestone flux (b)	18 893	174 781	190 632	462 833	315 851	1 325	11 243	13 124	25 251	19 652
Lime	12 872	10 406	6 680	8 101	7 007	2 351	1 679	1 115	1 821	1 846
Dolomite	198 084	206 463	161 213	242 606	247 144	5 727	5 271	4 658	8 227	9 609
<i>Exports</i>										
Limestone flux (b)	276 336	225 348	187 926	209 183	193 333	2 930	2 763	2 688	3 406	2 974
Lime	133 357	141 971	129 803	131 872	126 455	18 773	23 549	24 306	26 831	22 495
Dolomite (c)	210 700	172 600	159 700	190 800	172 400	15 600	13 500	14 500	20 200	19 500
<b>Chalk</b>										
<i>Production (d)</i>										
	3 312 000	...	...	...	...					
<i>Imports</i>										
	22 055	12 363	12 597	13 217	9 483	1 763	1 094	1 219	1 532	3 135
<i>Exports</i>										
	46 153	52 182	35 291	25 151	25 787	2 412	2 371	2 800	2 711	2 856

(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, 1981–2018

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
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	269	182	653	—	—	233	—
2018	282	145	638	—	—	335	—

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 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Lithium</b>										
<i>Imports</i>										
Oxide and hydroxide	384	93	263	324	358	3 503	863	5 375	5 118	5 030
Carbonate	434	405	1 095	1 919	1 680	2 030	1 870	6 953	13 859	18 708
<i>Exports</i>										
Oxide and hydroxide	65	47	113	228	195	462	317	1 417	2 994	3 521
Carbonate	138	294	447	768	842	600	1 280	3 217	8 287	10 990

# Magnesia

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Magnesia</b>										
<i>Imports</i>										
Magnesite	5 258	4 955	5 438	5 696	2 201	1 110	1 088	1 289	1 262	775
<i>Magnesia-</i>										
Dead burned	8 367	1 491	1 802	5 163	8 475	3 710	964	878	2 409	4 384
Caustic-calcined	46 005	25 816	25 961	26 358	22 953	10 235	6 535	7 719	8 464	8 503
Other	11 358	20 220	11 732	8 629	7 046	5 945	6 097	4 045	4 255	4 995
Kieserite	15 011	12 658	11 859	13 990	14 723	2 990	2 500	2 214	2 888	3 081
Magnesite or chrome-magnesite										
refractory bricks and shapes (a)(b)	369 255	19 513	14 413	12 758	18 089	29 055	14 050	11 069	10 702	16 697
<i>Exports</i>										
Magnesite	1 266	408	682	627	315	1 317	462	737	929	518
<i>Magnesia-</i>										
Dead burned	893	795	844	1 185	1 463	677	610	798	1 252	1 461
Caustic-calcined	2 498	2 016	2 899	2 466	3 214	959	771	585	658	801
Other	8 140	7 328	6 159	5 730	7 585	10 536	9 336	7 493	8 025	11 097
Kieserite	98	14	112	133	40	65	8	47	51	15
Magnesite or chrome-magnesite										
refractory bricks and shapes (a)(b)	4 332	1 385	470	2 329	5 686	1 199	694	437	1 826	2 811

(a) Including dolomite bricks.

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

# Magnesium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Magnesium</b>										
<i>Imports</i>										
Ferro-silico-magnesium	948	844	209	309	457	963	557	187	296	326
Scrap	961	197	295	359	129	995	114	275	252	102
Unwrought	4 116	3 172	2 485	3 212	3 404	6 919	4 935	4 000	5 839	6 490
Unwrought alloys	5 565	8 034	8 804	3 661	1 397	9 548	13 772	16 253	7 918	3 116
Wrought	8 710	6 431	3 531	5 127	4 989	27 766	23 212	23 317	29 272	21 827
<i>Exports</i>										
Ferro-silico-magnesium	119	37	68	64	72	169	108	84	85	106
Scrap	3 654	7 147	6 173	2 926	1 151	5 995	10 969	12 198	6 370	2 280
Unwrought	219	50	63	6	75	219	63	185	120	438
Unwrought alloys	2 114	1 870	1 422	1 636	1 868	17 141	14 852	15 178	16 182	22 162
Wrought	847	507	512	541	552	6 073	5 419	7 697	12 483	23 706

# Manganese

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Manganese</b>										
<i>Consumption in Iron and Steel Industry</i>										
Ore	—	—	9 700	2 400	—					
<i>Apparent consumption (a)</i>	78 000	66 000	50 000	44 000	56 000					
<i>Imports</i>										
Ores & Concentrates (b)	3 232	3 045	2 634	3 689	3 212	1 696	1 365	959	1 683	1 474
Ferro-manganese	54 814	39 129	29 248	21 903	31 607	37 687	25 205	18 004	25 909	33 661
Ferro-silico-manganese	47 122	45 039	35 044	31 735	35 815	30 955	25 847	18 092	30 286	30 865
Scrap	25	71	51	15	3 574	36	106	69	25	5 812
Unwrought	3 459	3 012	3 038	3 393	51	5 853	4 285	4 751	5 078	95
Wrought	145	0	19	82	2	256	10	41	159	14
Oxides	8 373	7 767	5 218	6 317	5 984	3 689	3 596	2 717	4 075	4 283
<i>Exports</i>										
Ores & Concentrates	3 983	517	419	375	497	980	576	394	374	548
Ferro-manganese	2 721	1 695	1 561	2 132	416	6 505	3 017	1 693	4 802	804
Ferro-silico-manganese	791	402	789	156	122	232	117	178	188	67
Oxides	2 917	2 298	1 648	1 349	655	1 625	1 553	947	1 089	529
Metal (c)	700	900	1 300	800	500	1 400	1 700	1 800	2 200	1 000

(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 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Marble</b>										
<i>Imports</i>										
Dimension stone-										
Unworked	10 388	9 006	15 981	30 167	33 351	9 835	6 084	8 190	11 745	15 895
Worked	82 157	67 020	62 073	55 704	46 885	55 139	44 916	46 773	49 320	41 948
Crushed and powdered	162 521	128 552	129 724	126 492	132 421	12 356	9 870	10 094	8 893	9 212
<i>Exports</i>										
Dimension stone-										
Unworked	563	437	578	834	1 219	378	294	413	465	836
Worked	1 367	1 428	896	809	831	4 226	7 201	3 155	3 417	4 246
Crushed and powdered	206	400	261	387	657	51	142	73	46	102

# Mercury

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Mercury</b>										
<i>Imports</i>										
Elemental	4	2	9	0	0	28	29	58	27	55
<i>Exports</i>										
Elemental	10	0	37	0	0	14	23	89	13	7

# Mica

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Mica</b>										
<i>Imports</i>										
Crude (a)	160	164	100	514	271	187	41	34	151	87
Ground	7 891	6 960	7 059	8 072	7 789	2 497	1 864	2 495	3 042	3 731
Waste	0	0	0	—	...	2	9	9	—	...
Worked	994	1 102	1 329	1 099	1 212	4 276	3 984	4 446	4 781	4 509
<i>Exports</i>										
Crude (a)	4	0	0	10	8	4	1	8	107	20
Ground	4 706	4 035	4 259	4 590	4 863	4 393	3 307	3 786	4 716	5 063
Waste	0	0	—	2	—	6	4	—	15	—
Worked	625	564	902	919	904	7 788	7 527	10 453	11 306	11 708

(a) Including sheets or splittings.

# Molybdenum

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Molybdenum</b>										
<i>Apparent consumption (a)(b)</i>	5 000	3 600	1 600	3 300	1 200					
<i>Imports</i>										
Roasted molybdenite concentrates	16 326	11 709	10 117	15 701	14 040	156 129	82 918	62 197	127 191	160 297
Other ores and concentrates	303	223	204	33	11	2 932	1 650	1 298	321	176
Ferro-molybdenum	303	307	72	220	267	3 347	2 993	674	1 796	3 373
Scrap	1 169	1 410	1 207	1 519	1 719	13 675	10 957	14 000	22 374	33 480
Powders	178	136	165	144	55	3 721	2 095	3 250	3 208	1 407
Unwrought	42	64	137	231	182	932	1 147	1 665	4 573	4 078
Wrought	260	119	66	75	58	2 912	2 401	1 753	2 717	3 210
Oxides and hydroxides	2 723	1 624	730	1 573	1 301	26 256	11 173	4 165	12 641	15 485
<i>Exports</i>										
Roasted molybdenite concentrates	—	44	—	0	15	—	18	—	1	173
Other ores and concentrates	0	1	0	0	12	16	18	23	3	16
Ferro-molybdenum	12 491	9 712	9 620	12 833	13 301	145 844	77 322	75 010	125 981	187 460
Scrap	514	313	599	1 186	1 744	8 100	4 661	7 497	16 860	25 967
Powders	253	37	40	54	153	1 329	870	950	980	2 137
Unwrought	9	10	3	34	52	179	118	84	586	1 285
Wrought	21	15	46	3	14	1 420	1 432	1 545	787	815
Oxides and hydroxides	2	120	0	0	—	23	933	37	14	9

(a) Metal content.

(b) BGS estimates; see explanatory notes.

# Nepheline syenite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Nepheline syenite</b>										
<i>Imports</i>	33 646	35 009	34 477	38 645	36 122	3 233	3 032	3 117	3 491	3 474
<i>Exports</i>	288	313	513	537	567	54	128	130	113	150

# Nickel

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Nickel</b>										
<i>Production (a)</i>	39 100	38 804	45 194	38 052	41 220					
<i>Consumption (b)(c)</i>	21 788	18 070	24 384	24 938	26 106					
<i>Imports</i>										
Ores & concentrates	1	1	24	28	—	20	143	148	231	—
Mattes, sinters etc.	59 194	59 668	68 651	52 114	50 887	374 755	357 155	331 699	327 204	381 688
Scrap	11 000	9 125	11 960	8 337	10 562	58 717	50 651	44 563	50 473	66 737
Ferro-nickel	22 480	7 782	7 618	7 272	11 279	59 157	15 674	14 129	15 149	26 287
Unwrought	9 031	8 740	8 653	10 330	9 857	88 129	76 105	59 795	83 126	103 051
Unwrought alloys	3 771	3 180	3 044	4 530	4 591	55 197	38 651	31 364	69 764	97 352
Oxides	4	7	9	32	51	68	104	89	174	148
<i>Exports</i>										
Ores & concentrates	3	0	0	5	—	49	16	9	75	—
Mattes, sinters etc.	584	555	237	226	65	3 403	4 570	1 959	2 620	1 032
Ash and residues	11 124	10 532	11 547	9 986	9 487	88 669	100 907	111 851	100 252	95 139
Scrap	15 772	11 932	14 443	11 442	20 460	94 413	73 695	70 633	87 575	114 417
Ferro-nickel	68	14	427	291	154	32	74	136	290	252
Unwrought	27 358	28 518	30 034	26 493	23 520	282 759	233 126	215 878	234 309	240 021
Unwrought alloys	7 629	7 085	7 833	7 437	7 752	104 504	99 329	101 658	99 385	122 048
Oxides	2	2	0	1	—	78	91	14	37	21

(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 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Thousand cubic metres					£ thousand				
<b>Peat</b>										
<i>Production</i>	795	...	...	...	...					
<i>Imports</i>										
Peat and agglomerated peat	476 301	428 362	509 911	503 240	470 074	33 722	23 946	30 115	33 058	35 338
<i>Exports</i>										
Peat and agglomerated peat	56 338	46 715	47 014	41 817	41 206	5 659	4 775	5 190	5 653	5 941

# Perlite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Perlite</b>										
<i>Imports (a)</i>	77 419	31 484	28 945	22 333	40 402	9 937	4 477	5 052	6 134	6 343
<i>Exports (a)</i>	935	600	672	1 089	831	557	387	513	592	456

(a) Figures also include vermiculite and chlorites.

# Petroleum (also see Primary fuels)

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Petroleum</b>										
<i>Production</i>										
Crude petroleum	37 474 000	42 826 000	44 306 000	42 180 000	47 145 000					
Condensates and other (a)	2 454 000	2 462 000	3 139 000	3 456 000	3 288 000					
Refined petroleum products	60 392 000	60 929 000	59 969 000	59 804 000	58 205 000					
<i>Consumption (inland deliveries)</i>										
<i>of refined products</i>										
<i>Used as fuels-</i>										
Refineries	3 198 000	3 352 000	3 377 000	3 389 000	3 352 000					
Elsewhere	56 980 000	58 310 000	58 996 000	60 075 000	59 311 000					
Not used as fuels	5 873 000	6 525 000	7 035 000	7 238 000	7 177 000					
Total	66 051 000	68 187 000	69 408 000	70 702 000	69 840 000					
<i>Imports</i>										
Crude petroleum	46 831 399	44 138 446	43 320 697	50 351 691	48 064 186	21 600 909	12 050 230	10 585 049	16 074 046	19 739 796
Partly refined petroleum and refined products	29 709 394	34 823 771	35 803 762	33 839 960	36 049 170	15 948 891	12 072 223	10 705 765	12 792 546	16 458 324
<i>Exports</i>										
Crude petroleum	37 109 307	37 530 691	39 927 139	45 743 284	49 786 125	17 457 656	10 556 745	9 710 798	14 683 669	20 360 353
Partly refined petroleum and refined products	25 286 521	23 817 716	23 190 368	23 732 942	22 448 030	12 755 964	7 728 866	6 907 997	9 223 996	10 580 955

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

# Natural gas

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Natural gas</b>										
<i>Production</i>										
Methane										
Colliery (a)	34 000	30 000	38 000	35 000	33 000					
Offshore and onshore (a)	35 728 000	38 817 000	39 838 000	39 981 000	38 678 000					
<i>Consumption (b)</i>	66 463 000	68 378 000	76 635 000	74 655 000	75 308 000					
<i>Imports</i>										
Liquefied natural gas (c)	10 654 401	13 104 630	10 060 675	6 312 073	6 716 374					
Natural gas in gaseous state (c)	30 357 864	29 750 122	35 242 070	38 143 892	37 744 835					
Total (c)	41 012 265	42 854 752	45 302 745	44 455 965	44 461 210	7 635 000	6 990 000	6 085 000	7 520 000	10 825 000
Other natural gas (d)	478 690	736 763	1 198 131	1 065 836	801 671	253 833	203 986	295 282	387 896	322 814
<i>Exports</i>										
Liquefied natural gas and natural gas in gaseous state (c)	9 968 929	13 444 013	9 843 219	10 699 200	7 127 211	2 000 000	2 310 000	1 355 000	1 830 000	1 815 000
Other natural gas (d)	2 467 647	2 447 025	3 390 326	2 976 609	2 838 830	1 119 308	650 148	851 269	1 053 820	1 171 313

(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 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Phosphorus</b>										
<i>Imports</i>										
Phosphate rock	3 515	2 445	801	558	168	1 215	605	364	284	124
Fertiliser	164 387	131 665	138 256	165 383	144 232	52 510	46 137	41 649	49 060	47 843
Superphosphates	156 066	128 374	154 397	136 506	171 739	35 454	33 198	35 711	31 155	47 606
Other phosphatic fertilisers	8 023	6 239	5 893	10 149	2 520	1 121	943	920	1 565	704
Elemental phosphorus	1 888	824	1 360	1 658	1 817	4 407	1 901	2 984	5 283	4 281
Phosphoric acids	85 096	91 195	75 949	82 254	73 845	40 783	49 322	41 901	44 489	48 082
Calcium phosphates	90 439	70 210	81 672	85 221	96 918	35 288	30 491	40 389	38 386	42 418
Sodium phosphates and orthophosphates	10 196	8 930	10 015	8 751	8 288	9 587	9 128	9 293	8 878	9 369
Polyphosphates including ammonium and sodium	33 274	17 426	34 052	26 642	37 600	25 318	20 315	25 051	25 450	30 857
<i>Exports</i>										
Phosphate rock	23	119	71	234	281	112	114	490	215	1 193
Fertiliser	1 970	503	487	786	1 002	1 141	529	553	507	810
Superphosphates	12	39	75	23	1 877	3	26	243	153	546
Other phosphatic fertilisers	5 908	10 130	9 477	5 769	6 604	1 064	949	1 893	1 202	956
Elemental phosphorus	0	0	0	0	0	23	31	27	19	18
Phosphoric acids	8 355	1 260	1 967	1 916	1 715	5 705	1 534	1 960	1 784	1 945
Calcium phosphates	3 137	1 455	4 169	4 515	1 422	2 694	4 064	6 494	3 967	1 623
Sodium phosphates and orthophosphates	1 418	1 012	830	870	643	1 906	1 385	1 338	1 472	1 308
Polyphosphates including ammonium and sodium	1 476	1 276	1 497	1 439	1 213	2 748	2 792	3 398	3 720	4 096

# Platinum group metals

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Platinum group metals</b>										
<i>Imports</i>										
Unwrought or partly worked-										
Platinum	52	155	204	339	84	1 282 639	839 657	1 108 904	1 399 896	1 470 589
Palladium	34	62	216	422	48	523 443	515 339	495 410	1 054 226	1 126 245
Other platinum metals	5	27	79	23	14	54 528	70 172	64 784	145 127	235 522
Waste & scrap	838	777	340	1 281	1 194	458 926	218 270	222 215	201 653	48 637
<i>Exports</i>										
Unwrought or partly worked-										
Platinum	74	78	120	91	95	1 572 799	1 478 439	1 618 559	2 099 626	1 972 488
Palladium	61	84	91	89	83	950 467	1 224 311	1 276 426	1 906 302	2 049 827
Other platinum metals	20	55	60	23	51	232 617	215 877	195 277	319 628	522 053
Waste & scrap	3 815	2 607	2 811	2 265	3 149	33 725	25 809	27 191	39 697	71 402

There is no mine production of platinum group metals in the UK. However, refined platinum group metals are produced from imported materials and recycling but information is insufficient to enable an estimate to be made.

# Potassium compounds

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Potassium compounds</b>										
<i>Production</i>										
Chloride (K <sub>2</sub> O Content)	576 000	594 000	432 000	216 000	210 000					
Polyhalite	—	200 000	200 000	500 000	400 000					
<i>Imports</i>										
Sulphate	16 513	15 795	11 743	12 270	10 151	5 894	5 728	4 843	4 688	3 845
Chloride	201 039	154 689	156 456	362 278	333 293	45 445	35 544	32 290	75 128	73 172
Other potassic fertilisers	8 875	3 948	6 598	6 713	2 866	1 271	597	1 103	1 638	1 357
<i>Exports</i>										
Sulphate	469	567	1 497	1 269	2 221	160	193	520	370	607
Chloride (a)	557 000	652 000	433 000	212 000	56 000	93 000	118 000	80 000	41 000	15 000
Other potassic fertilisers	53 838	86 428	160 420	224 884	283 256	5 631	7 014	9 301	21 337	23 122

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

# Precious and semi-precious stones

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Precious and semi-precious stones (excluding diamond) (a)</b>										
<i>Imports</i>										
Natural stones	281	382	330	498	387	192 402	230 277	152 908	158 284	94 105
Synthetic stones	41	25	40	29	18	3 609	3 242	3 721	10 559	7 478
Dust and powder	3	2	1	2	1	735	273	154	339	427
<i>Exports</i>										
Natural stones	21	64	(b) 28	56	22	200 998	247 854 (b) 117 000	163 444	116 802	
Synthetic stones	18	7	8	6	6	8 635	12 603	10 605	18 837	24 754
Dust and powder	4	1	(b) 8	1	1	861	540	(b) 580	429	144

(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 1988–2018 (energy supplied basis)

Million tonnes of oil equivalent (a)

Year	Coal	Petroleum	Natural gas (b)	Bioenergy & waste (c)	Nuclear electricity	Wind, solar & hydro-electricity (d)	Total
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	126
2016	3	52	40	12	15	5	127
2017	2	51	40	12	15	6	126
2018	2	56	39	13	14	7	130

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

(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 solar PV and natural flow hydro. Excludes generation from pumped storage stations.

Source: Department for Business, Energy and Industrial Strategy.



## United Kingdom consumption of energy (primary fuel input) 1988–2018 (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
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	13	68	76	15	15	5	2	194
2017	10	69	74	15	15	6	1	192
2018	9	69	75	17	14	7	2	191

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

Source: Department 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 and natural flow hydro. Excludes generation from pumped storage stations

# Pumice

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Pumice</b>										
<i>Imports</i>	2 353	4 634	8 034	2 699	2 131	724	1 126	989	863	717
<i>Exports</i>	121	100	254	328	500	159	130	244	301	431

# Pyrite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Pyrite</b>										
<i>Imports</i>										
Iron pyrites (incl.cupreous)-										
Unroasted	962	467	648	798	2 079	272	118	156	180	468
Roasted	237	155	311	77	426	83	81	103	68	165
<i>Exports</i>										
Iron pyrites (incl.cupreous)-										
Unroasted	31	14	2 979	3 014	6 876	22	15	800	939	1 600
Roasted	18	—	0	0	1	5	—	2	3	6

# Quartz and quartzite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Quartz and quartzite</b>										
<i>Imports</i>										
Quartzite	700	553	524	410	3 921	365	320	251	280	209
Quartz	14 032	14 040	15 815	25 431	20 011	9 120	8 225	11 405	19 860	16 384
<i>Exports</i>										
Quartzite	0	0	—	14	20	14	2	—	31	414
Quartz	715	489	346	419	928	358	231	319	544	895

# Radioactive and associated materials

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Radioactive and associated materials</b>										
<i>Imports</i>										
Natural and enriched uranium, plutonium, artificial radioactive isotopes, and their compounds	...	...	...	...	...	701 096	832 713	563 863	246 120	307 981
<i>Exports</i>										
Natural and enriched uranium, isotopes, and their compounds	...	...	...	...	...	900 144	915 982	713 043	216 866	239 944

# Rare earths

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Rare earths</b>										
<i>Imports</i>										
Metals (a)	127	42	10	6	0	3 399	1 261	245	154	14
Cerium compounds	603	693	502	1 302	437	4 735	6 232	8 600	12 143	3 367
Other rare earth compounds (b)	591	565	341	628	499	10 528	14 478	6 582	16 235	13 596
Ferro-cerium & other pyrophoric alloys	28	29	67	41	1	186	153	170	101	35
<i>Exports</i>										
Metals (a)	18	17	9	13	12	836	1 248	412	512	374
Cerium compounds	24	280	38	775	151	854	1 027	1 073	12 899	2 292
Other rare earth compounds (b)	275	259	165	278	356	3 980	4 212	4 121	6 733	9 308
Ferro-cerium & other pyrophoric alloys	152	47	1	25	50	372	226	170	330	302

(a) Including yttrium and scandium.

(b) Including yttrium and scandium compounds.

# Salt

## United Kingdom summary 2013-2017

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Salt</b>										
<i>Production</i>	4 690 000	(a) 4 700 000	(a) 4 700 000	(a) 4 700 000	(a) 4 700 000					
<i>Imports</i>	356 289	536 067	445 477	703 377	1 129 652	39 714	43 267	52 363	72 200	76 796
<i>Exports</i>	386 486	350 744	243 433	352 195	366 935	40 881	37 940	37 974	47 594	60 078

(a) BGS estimate based on last reported figure in 2014.

# Sand and gravel (see also Aggregates)

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Sand and gravel</b>										
<i>Production*</i>										
Sand & gravel (a)	61 158 000	66 443 000	68 075 000	67 548 000	(b) 69 300 000					
<i>Consumption</i>										
Building sand (c)	6 960 000	...	...	...	...					
Concreting sand (c)	22 335 000	...	...	...	...					
Gravel and hoggin (c)	26 834 000	...	...	...	...					
Total (c)	56 129 000	...	...	...	...					
<i>Imports</i>	549 584	722 068	879 166	631 921	488 876	13 749	14 737	17 793	18 704	19 951
<i>Exports (d)</i>	3 518 314	2 223 131	2 445 821	2 409 597	2 841 913	31 179	22 694	26 552	26 473	28 994

\* Source: 2014 Office for National Statistics, 2015-2018 Mineral Products Association

The published production data for Northern Ireland varies according to the number of returns received and in some years this is believed to be too low. Estimates have been added to the figures in this table for 2014 and 2015 to account for missing returns.

(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): 2014: 2 994 538; 2015: 2 153 146; 2016: 2 767 125, 2017: 3 127 371 and 2018: 4 110 142.

## United Kingdom production of sand and gravel 1993–2018

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)	Total		
1993	79.4	4.3	83.7	10.1	6.2	16.3	100.0	0.8
1994	86.3	5.1	91.5	11.3	6.6	18.0	109.4	1.3
1995	78.0	5.3	83.3	11.6	6.8	18.4	101.7	5.2
1996	70.5	5.3	75.7	11.5	6.7	18.2	93.9	7.2
1997	74.4	5.1	79.5	12.0	6.9	18.9	98.4	4.9
1998	73.0	5.3	78.3	13.0	7.0	20.0	98.3	2.4
1999	74.8	5.5	80.3	13.4	7.2	20.7	101.0	2.8
2000	74.9	5.1	80.0	14.4	7.3	21.7	101.6	2.4
2001	74.6	6.2	80.8	13.6	7.0	20.6	101.4	1.6
2002	69.9	5.5	75.4	12.8	6.2	19.0	94.4	1.5
2003	68.1	4.9	73.0	12.1	6.1	18.2	91.2	2.1
2004	73.1	5.1	78.1	13.0	6.1	19.2	97.3	1.8
2005	69.4	5.8	75.2	13.0	6.5	19.5	94.7	1.5
2006	66.3	5.2	71.5	14.0	6.7	20.7	92.1	4.1
2007	64.7	8.1	72.8	13.8	6.6	20.4	93.2	2.1
2008	59.5	7.1	66.6	12.6	6.2	18.8	85.5	2.2
2009	46.1	4.9	51.0	9.6	5.7	15.3	66.2	4.5
2010	45.0	2.2	47.2	9.3	5.2	14.5	61.7	1.0
2011	43.8	2.6	46.4	11.2	6.1	17.3	63.7	1.5
2012	39.8	(d) 1.8	41.5	10.3	4.5	14.8	56.4	1.7
2013	41.4	(d) 1.9	43.4	10.5	4.1	14.6	58.0	1.3
2014	44.8	(d) 2.0	46.8	11.3	3.0	14.3	61.2	2.4
2015	(e) 48.6	2.5	51.1	(c) 13.2	2.2	15.4	66.4	4.1
2016	(e) 48.9	2.4	51.2	(c) 14.1	2.8	16.8	68.1	2.0
2017	(e) 47.5	2.6	50.1	(c) 14.3	3.1	17.4	67.5	1.6
2018	(e) 48.9	(d) 2.6	51.5	(c) 13.7	4.1	17.8	69.3	2.0

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) Trade 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 1983–2018

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
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
2018	1 935	3 132	2 803	6 160	6 153	14 027	18 041	3 231	55 481	1 517	5 599	62 597

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

(b) From 2000, excludes Cumbria.

(c) From 2000, includes Cumbria.

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

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

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

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

## Sandstone

### United Kingdom summary 2014–2018

Commodity	2014	2015	2016	2017	2018
Tonnes					
<b>Sandstone</b> – see Building and dimension stone					
<i>Production</i>	13 614 000	...	...	...	...

# Selenium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Selenium</b>										
<i>Imports</i>										
Elemental	493	457	325	238	244	9 364	6 864	2 575	1 464	2 284
<i>Exports</i>										
Elemental	276	221	214	46	23	10 621	5 562	3 029	1 065	655

# Silica sand

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Silica sand</b>										
Production (a)(b)	3 948 000	3 822 107	4 251 219	4 490 367	4 863 240					
<i>Imports</i>	139 874	140 865	111 060	154 051	139 980	15 682	9 002	9 900	11 974	10 545
<i>Exports</i>	93 849	61 234	63 227	91 001	83 315	5 039	5 638	4 222	4 012	3 948

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

(b) Source: 2013-2017 Office for National Statistics, 2018 comprehensive survey by the Silica and Moulding Sands Association and BGS

# Silicon

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Silicon</b>										
<i>Imports</i>										
Elemental silicon-										
Containing not less than										
99.99% silicon	37 518	32 614	1 372	889	321	120 249	102 477	22 681	18 812	17 812
Other	73 607	73 405	88 450	97 083	100 076	113 794	121 952	141 137	161 849	192 025
Ferro-silicon	43 209	38 385	32 652	34 399	39 958	41 350	30 672	25 316	33 554	43 505
Ferro-silico-manganese	47 122	45 039	35 044	31 735	35 815	30 955	25 847	18 092	30 286	30 865
Ferro-silico-magnesium	948	844	209	309	457	963	557	187	296	326
Ferro-silico-chrome	307	402	47	12	1	451	612	82	55	12
Doped silicon	553	366	1 112	279	217	57 452	60 564	59 871	55 454	43 301
<i>Exports</i>										
Elemental silicon-										
Containing not less than										
99.99% silicon	2 695	2 914	2 168	1 012	7	34 911	35 655	27 619	13 227	179
Other	2 727	1 618	2 044	2 408	1 855	4 754	2 628	2 964	3 984	3 367
Ferro-silicon	3 400	1 409	3 676	2 964	2 525	6 307	3 427	5 832	5 499	4 717
Ferro-silico-manganese	791	402	789	156	122	232	117	178	188	67
Ferro-silico-magnesium	119	37	68	64	72	169	108	84	85	106
Ferro-silico-chrome	362	474	114	545	89	741	1 154	278	1 269	242
Doped silicon	721	263	181	204	239	84 972	81 329	87 703	104 774	107 180
Doped silicon	616	721	263	181	204	84 870	84 972	81 329	87 703	104 774

# Sillimanite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Sillimanite</b>										
<i>Imports</i>										
Sillimanite minerals (a)	6 814	5 983	6 130	8 526	9 805	2 111	1 767	1 890	2 689	3 054
Chamotte earth (b)	19 936	14 816	12 891	10 865	9 319	3 575	2 756	2 587	2 375	2 008
Mullite	7 306	6 269	5 531	4 656	3 405	2 636	2 305	2 603	2 473	2 264
<i>Exports</i>										
Sillimanite minerals (a)	107	198	238	346	648	46	61	80	111	196
Chamotte earth (b)	3 276	848	871	1 059	973	871	274	303	415	383
Mullite	958	1 010	1 419	2 099	1 994	1 142	1 377	2 057	2 507	2 570

(a) Andalusite, kyanite and sillimanite.

(b) Calcined refractory clay including flint clay.

# Silver

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Silver</b>										
Production	—	—	(a) 14	—	—					
<i>Imports</i>										
Ores & concentrates	395	328	962	7	79	169	260	5 024	2 321	1 511
Waste & scrap	5 108	6 014	7 366	8 525	10 438	568 268	449 793	538 484	691 254	831 182
Unwrought	4 163	3 853	3 890	4 559	3 314	1 588 002	1 291 673	1 618 543	1 967 094	1 251 044
Partly worked	577	915	924	830	1 119	118 845	92 300	132 603	152 233	253 134
Silver in unrefined lead bullion (b)	190	360	270	360	230					
<i>Exports</i>										
Ores & concentrates	2	0	18	32	42	668	14	1 672	1 386	2 070
Waste & scrap	11 221	8 537	10 614	10 742	11 640	278 025	254 402	321 037	358 966	311 851
Unwrought	3 347	3 968	1 359	1 340	2 697	1 156 822	1 228 992	498 122	581 668	1 015 074
Partly worked	170	262	335	121	231	41 352	22 669	40 131	41 688	70 451

(a) Produced from metallurgical test work in Scotland: 14 kilograms

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



# Slate

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Slate</b>										
<i>Production</i>										
Architectural & cladding uses,	48 000	...	...	...	...					
Powder and granules	33 000	...	...	...	...					
Crude blocks	39 000	...	...	...	...					
Fill and other uses	748 000	...	...	...	...					
Total	868 000	(a) 760 000	(a) 780 000	(a) 820 000	(a) 820 000					
<i>Imports</i>										
Unworked (b)	28 984	36 682	48 468	77 562	53 167	7 090	8 577	11 050	18 666	16 544
<i>Worked-</i>										
Roofing and wall tiles	170 864	145 770	150 190	135 458	127 934	65 819	53 177	59 568	59 058	60 586
Other worked slate (c)	25 637	27 735	27 666	28 340	30 327	10 375	11 346	12 230	13 153	14 104
<i>Exports</i>										
Unworked (b)	48 856	45 598	27 753	68 360	101 972	1 796	1 818	1 207	1 286	2 460
<i>Worked-</i>										
Roofing and wall tiles	10 137	7 579	7 593	6 631	5 656	6 261	4 800	4 620	4 570	4 187
Other worked slate (c)	10 776	5 941	10 970	6 654	7 664	2 430	3 209	3 298	2 736	2 681

(a) BGS estimate.

(b) Including roughly split or squared.

(c) Including articles of slate or agglomerated slate

# Strontium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Strontium</b>										
<i>Imports</i>										
Carbonate	163	135	176	196	219	146	124	153	146	166
<i>Exports</i>										
Carbonate	45	41	20	0	0	134	42	87	4	28

# Sulphur

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Sulphur</b>										
<i>Production</i> (a)	134 000	135 000	133 000	133 000	129 000					
<i>Imports</i>										
Sulphur-										
Crude	4 439	281	4 629	8 584	175	662	191	1 083	1 807	276
Refined	7 885	7 212	10 574	6 403	7 067	4 823	4 837	4 709	4 791	4 250
Sublimed, colloidal etc	6 647	7 547	328	261	267	1 430	1 655	423	349	304
<i>Exports</i>										
Sulphur-										
Crude	6 154	14 261	5 426	16 695	14 895	402	515	748	1 272	609
Refined	24 766	19 629	46 997	30 480	11 136	3 716	3 884	5 004	3 684	1 753
Sublimed, colloidal etc	31 088	108	92	87	57	1 690	208	97	141	73

(a) Produced from oil refineries.

# Talc

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Talc</b>										
<i>Production</i>	4 907	5 430	2 997	3 218	1 640					
<i>Imports</i>	63 815	48 998	50 671	50 575	47 384	23 540	15 683	16 101	16 223	15 575
<i>Exports</i>	3 570	4 590	5 557	3 264	2 759	1 343	1 469	1 901	1 516	1 839

# Tantalum and Niobium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Tantalum and Niobium</b>										
<i>Imports</i>										
Ferro-niobium	1 029	1 038	682	6 921	870	18 258	17 038	11 407	13 123	13 189
Tantalum	184	164	82	83	129	15 345	15 314	10 682	13 845	22 977
Niobium (a)	60	69	163	199	214	3 591	5 547	5 124	9 298	10 891
<i>Exports</i>										
Ferro-niobium	195	109	34	63	42	3 649	1 608	541	1 091	1 039
Tantalum	61	66	8	21	56	4 892	6 013	2 007	3 877	9 544
Niobium (a)	43	28	37	48	66	1 781	2 714	4 618	12 526	8 063

(a) Including rhenium.

# Tellurium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Tellurium</b>										
<i>Imports</i>	11	6	22	1	0	600	218	440	97	31
<i>Exports</i>	17	3	9	2	1	538	335	346	117	22

# Tin

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2017	2017	2018
	Tonnes					£ thousand				
<b>Tin</b>										
<i>Production</i>	—	—	160	255	(a) 230					
<i>Consumption</i>										
Refined	1 080	1 080	1 080	1 080	1 080					
<i>Imports</i>										
Concentrates	4	0	—	—	—	35	3	—	—	—
Unwrought	4 318	4 604	4 049	4 869	5 533	59 495	51 233	50 151	76 307	84 191
Unwrought alloys	5 750	781	669	150	110	5 592	1 409	3 856	2 412	1 150
Scrap	7	1	6	0	18	91	25	35	12	112
<i>Exports</i>										
Concentrates	45	20	158	—	—	370	171	1 215	—	—
Unwrought	332	672	429	224	270	5 616	8 195	6 183	3 318	4 469
Unwrought alloys	293	342	331	465	375	4 313	3 297	3 423	5 062	4 416
Scrap	636	430	525	129	10	2 169	1 717	730	568	105

(a) BGS estimate.

# Titanium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Titanium</b>										
<i>Production</i>										
Titanium dioxide pigment (a)	240 000	230 000	280 000	290 000	280 000					
<i>Apparent consumption</i> (b)	88 000	88 000	28 000	54 000	53 000					
<i>Imports</i>										
Titanium minerals	210 722	222 510	257 945	256 411	301 584	101 331	114 699	126 312	130 818	159 118
Scrap	12 698	9 547	6 606	9 073	10 251	28 739	20 802	10 573	15 513	18 585
Unwrought	10 738	12 010	10 645	10 889	11 260	71 656	81 936	80 224	95 622	103 222
Wrought	6 842	7 869	6 587	6 574	16 825	289 548	317 016	322 789	357 477	435 014
Ferro-titanium (c)	805	391	452	618	463	2 047	848	866	1 118	1 140
Oxides	7 762	5 099	4 173	6 070	5 183	12 002	8 877	8 269	14 227	12 819
Pigments based on titanium dioxide	59 381	87 279	48 538	54 569	56 354	104 852	55 191	84 179	116 402	136 956
<i>Exports</i>										
Titanium minerals	24	34	8	16	79	266	172	136	132	213
Scrap	4 233	5 753	6 058	7 575	7 020	12 551	19 864	16 696	21 014	19 071
Unwrought	1 362	1 556	1 346	1 297	2 064	14 910	15 307	12 605	13 747	22 947
Wrought	6 316	5 872	7 155	7 006	7 143	267 061	295 111	348 075	362 506	334 808
Ferro-titanium (c)	22 831	17 347	14 970	15 304	16 181	62 782	45 600	29 774	43 114	43 019
Oxides	3 556	3 088	3 429	3 483	628	4 612	4 815	5 577	6 458	2 529
Pigments based on titanium dioxide	187 839	282 219	225 545	236 573	225 507	335 956	177 733	367 468	464 829	489 145

(a) BGS estimates

(b) BGS estimates; see explanatory notes.

(c) Including ferro-silico-titanium.

# Tungsten

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Tungsten</b>										
<i>Production</i>										
	—	195	923	1 370	(a) 1 240					
<i>Imports</i>										
Ores & concentrates	4	69	5	12	9	44	345	235	284	331
Scrap	1 399	1 075	1 590	1 425	1 659	24 886	14 366	15 519	22 117	26 222
Unwrought	429	236	431	218	275	9 531	5 290	5 507	5 956	9 171
Wrought	130	171	145	152	59	5 738	5 762	5 574	4 933	5 744
Ferro-tungsten (b)	47	45	28	65	82	881	648	434	1 233	1 835
Carbide	1 740	1 857	1 607	1 848	1 475	55 227	34 453	37 191	54 755	53 191
Tungstates	1	1	3	6	9	61	114	111	194	155
Oxides and hydroxides	2	1	1	1	2	154	43	96	72	225
<i>Exports</i>										
Ores & concentrates	279	316	1 926	—	—	1 387	2 223	11 115	—	—
Scrap	2 111	1 266	1 636	1 812	1 674	28 266	15 826	14 646	21 684	23 526
Unwrought	85	93	73	94	103	5 664	5 481	5 054	5 934	8 236
Wrought	94	258	86	76	77	7 015	6 112	7 458	6 210	6 418
Ferro-tungsten (b)	2	11	247	233	118	47	181	665	519	768
Carbide	232	340	26	27	592	5 808	1 899	1 326	1 928	3 571
Tungstates	14	0	1	1	0	175	35	23	17	14
Oxides and hydroxides	13	2	6	4	2	154	54	122	57	26

(a) BGS estimate

(b) Including ferro-silico-tungsten.

# Vanadium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Vanadium</b>										
<i>Imports</i>										
Unwrought	168	297	253	284	189	2 998	5 135	4 235	6 325	7 877
Oxides	1	5	18	0	3	30	26	87	2	180
Ferro-vanadium	450	2 269	2 155	5 272	2 236	4 761	5 608	2 504	8 768	14 901
<i>Exports</i>										
Unwrought	47	81	45	105	276	850	1 367	778	2 082	3 853
Oxides	0	0	0	2	0	5	5	7	18	12
Ferro-vanadium	13	51	12	15	15	142	289	126	145	512

# Vermiculite

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Vermiculite</b>										
<i>Imports (a)</i>										
	77 419	31 484	28 945	22 333	40 402	9 937	4 477	5 052	6 134	6 343
<i>Exports (a)</i>										
	935	600	672	1 089	831	557	387	513	592	456

(a) Figures also include perlite and chlorites.

# Zinc

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Zinc</b>										
<i>Consumption</i>										
Slab	114 479	107 732	97 133	101 190	104 759					
<i>Imports</i>										
Ores & concentrates	6	274	1	19	1	131	608	92	214	34
Ash and residues	70 950	57 850	98 387	120 293	116 235	2 079	1 876	2 540	4 660	7 021
Unwrought	113 410	106 101	94 731	98 731	102 510	158 077	142 096	154 408	234 852	246 358
Unwrought alloys	5 177	5 949	6 822	6 036	6 423	8 405	8 942	11 544	15 387	16 155
Scrap	1 412	590	470	781	676	1 850	573	554	1 079	1 109
<i>Exports</i>										
Ores & concentrates	7 515	7 788	11 473	16 019	23 192	2 829	3 694	5 281	9 443	12 154
Ash and residues	7 814	6 634	6 068	6 761	5 687	7 065	5 769	6 593	10 865	9 021
Unwrought	2 930	2 874	2 885	3 411	6 016	4 093	4 000	4 401	7 658	14 360
Unwrought alloys	17 173	22 064	23 515	26 724	24 687	27 353	35 554	43 430	67 702	63 093
Scrap	4 736	5 310	2 967	3 294	3 257	5 449	4 775	3 500	6 092	5 766

# Zirconium

## United Kingdom summary 2014-2018

Commodity	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	Tonnes					£ thousand				
<b>Zirconium</b>										
<i>Apparent consumption</i> (a)	3 000	3 000	3 000	3 000	3 000					
<i>Imports</i>										
Ores and Concentrates (b)	7 974	6 265	6 087	7 524	8 060	8 875	6 547	6 121	8 078	11 427
Scrap	164	176	121	130	206	1 044	1 169	795	893	2 048
Unwrought	197	146	130	169	88	3 918	2 958	3 830	5 365	2 821
Wrought	30	29	26	50	29	944	1 115	1 351	1 343	2 612
<i>Exports</i>										
Ores and concentrates	1 261	1 200	1 084	1 127	1 461	2 967	2 895	2 504	2 825	3 974
Scrap	47	48	46	34	109	310	390	536	448	1 273
Unwrought	9	38	13	4	14	170	331	521	378	465
Wrought	4	5	7	4	13	358	791	350	222	559

(a) BGS estimates; see explanatory notes.

(b) Mainly zircon.