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Geological
Survey



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United Kingdom Minerals Yearbook 2021

Decarbonisation and Resource Management Programme

Open Report OR/22/020



BRITISH GEOLOGICAL SURVEY

DECARBONISATION AND RESOURCE MANAGEMENT PROGRAMME

OPEN REPORT OR/22/020

United Kingdom Minerals Yearbook 2021

T. Bide, E. Evans, N.E. Idoine and J. Mankelow

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Front cover

Construction of the
Woodsmith Polyhalite mine,
operated by Anglo American,
North York Moors National
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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>	<i>Square yard</i>	<i>Square metre</i>
1	= 0.0311035	1	= 0.836127
32.1507	= 1	1.19599	= 1
<i>Pound</i>	<i>Kilogram</i>	<i>Cubic yard</i>	<i>Cubic metre</i>
1	= 0.453592	1	= 0.764555
2.20462	= 1	1.30795	= 1
<i>Hundredweight</i>	<i>Kilogram</i>	<i>UK gallon</i>	<i>Litre</i>
1	= 50.8023	1	= 4.54596
0.019684	= 1	0.2199755	= 1
<i>Long ton</i>	<i>Tonne</i>		
1	= 1.01605		
0.984206	= 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)

1973–2020 *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)

2012–2019 *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)*, *Energy Trends*, *Monthly Statistics of Building Materials and Components*, *BEIS website for construction information*

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

Department for Enterprise (Isle of Man)

The Coal Authority

The Crown Estate

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

Mineral Products Association (MPA)

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

UK Iron and Steel Statistics Bureau, *Annual Statistics*

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

CHANGES TO PREVIOUS EDITIONS

Many of the tables in previous editions of the UK minerals yearbook were reliant on the Annual Mineral Raised Inquiry (AMRI), an annual survey conducted by the Office for National Statistics, completed by minerals operators, that measured sales of minerals extracted in Great Britain (assumed to be equivalent to mineral production). The AMRI survey ceased in early 2016 (the last year of data is 2014) resulting in the interruption of several data series. The results of this survey were the only source of data for sales by end-use and sales of individual rock types (e.g. sandstone, limestone or igneous rock). The end-use data included sales for industrial uses, building stone, agricultural uses, different types of aggregate uses such as concrete or asphalt, etc. Furthermore, production data for some mineral commodities now relies on estimates as opposed to reported data, e.g. salt, or 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 2014–2020

£ million

SITC section		2014	2015	2016	2017	2018	2019	2020	
Imports (c.i.f.)									
0, 1	Food, beverages, tobacco	38 705.2	38 756.3	41 728.6	45 245.7	46 209.3	47 541.9	47 714.5	
2, 4	Basic materials	11 171.4	10 099.4	10 368.9	11 777.4	12 105.8	12 354.1	13 221.3	
	of which: Minerals	4 298.5	3 369.2	3 296.3	3 779.3	3 788.0	3 997.4	4 716.2	
3	Fuels and related materials	48 890.1	33 325.2	29 392.1	40 085.7	50 415.6	43 971.9	26 183.7	
	of which: Mineral-based	47 867.7	32 375.4	28 609.7	39 211.4	49 105.6	42 912.2	25 450.4	
	Manufactured goods:								
5, 6	Semi-manufactures	95 193.4	93 613.1	99 707.2	111 349.6	113 457.7	114 301.1	108 078.5	
	of which: Mineral-based	33 426.4	30 663.0	32 171.9	38 566.3	40 502.9	41 463.3	37 710.2	
7, 8	Finished manufactures	210 948.2	219 755.1	239 979.2	253 386.7	253 603.3	262 977.1	223 801.2	
	All traded goods	Total	404 908.3	395 549.0	421 175.9	461 845.1	475 791.8	481 146.2	418 999.2
	of which: Mineral-based	85 592.6	66 407.6	64 077.9	81 557.1	93 396.5	88 373.0	67 876.8	
	As % of all traded goods	21.1	16.8	15.2	17.7	19.6	18.4	16.2	
Exports (f.o.b.)									
0, 1	Food, beverages, tobacco	18 899.7	18 316.9	20 284.7	22 041.0	22 582.9	23 820.6	21 652.0	
2, 4	Basic materials	6 830.7	5 894.2	6 255.7	7 602.3	7 841.3	7 404.7	6 991.4	
	of which: Minerals	4 020.2	3 396.9	3 666.0	4 681.3	4 959.4	4 721.0	4 598.9	
3	Fuels and related materials	33 538.4	21 540.9	19 151.5	27 421.1	35 009.8	31 671.6	20 725.5	
	of which: Mineral-based	33 414.9	21 463.0	19 048.3	27 247.8	34 883.7	31 530.8	20 577.1	
	Manufactured goods:								
5, 6	Semi-manufactures	77 135.5	79 167.0	78 973.8	86 412.7	86 532.3	86 205.6	86 209.0	
	of which: Mineral-based	28 669.6	29 007.8	26 558.1	30 721.5	32 849.0	32 996.1	36 548.0	
7, 8	Finished manufactures	146 670.1	149 442.9	162 543.5	177 989.4	180 564.9	190 918.1	149 012.4	
	All traded goods	Total	283 074.4	274 361.8	287 209.3	332 531.3	340 020.6	284 590.3	
	of which: Mineral-based	66 104.7	53 867.7	49 272.4	62 650.7	72 692.1	69 247.9	61 724.0	
	As % of all traded goods	23.4	19.6	17.2	19.5	21.9	20.4	21.7	

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 2016–2020

£ million (a)

SITC (R3) divisions	2016	2017	2018	2019	2020
27 Crude minerals and fertilisers:					
imports	562.4	719.4	719.0	746.2	642.8
exports	405.2	460.7	499.8	481.6	421.4
	-157.2	-258.7	-219.1	-264.6	-221.4
28 Metal ores and scrap:					
imports	2 733.9	3 059.9	3 069.0	3 251.2	4 073.3
exports	3 260.8	4 220.6	4 459.6	4 239.3	4 177.9
	+526.9	+1 160.7	+1 390.6	+988.1	+104.2
32 Coal, coke and briquettes:					
imports	681.8	989.3	1 216.4	904.5	586.4
exports	86.4	76.4	137.2	141.9	157.1
	-595.4	-912.9	-1 079.2	-762.7	-429.4
33 Petroleum, petroleum products and related materials:					
imports	21 611.2	29 518.6	37 078.7	35 431.5	20 177.8
exports	16 804.3	24 322.9	31 929.1	29 223.8	19 138.0
	-4 807.0	-5 195.8	-5 149.6	-6 207.7	-1 040.0
34 Gas, natural and manufactured:					
imports	6 316.7	8 703.5	10 810.5	6 576.2	4 686.1
exports	2 157.7	2 848.6	2 817.4	2 165.2	1 281.9
	-4 159.0	-5 854.9	-7 993.1	-4 411.0	-3 404.2
51 Organic chemicals:					
imports	6 452.7	7 401.3	8 159.0	8 014.8	7 507.3
exports	7 443.5	7 918.8	8 502.2	8 687.3	9 251.9
	+990.8	+517.5	+343.2	+672.5	+1 744.6
52 Inorganic chemicals:					
imports	1 893.0	2 045.7	2 329.0	2 177.7	1 589.9
exports	1 512.7	1 515.9	1 611.1	1 673.0	1 988.0
	-380.2	-529.8	-717.8	-504.6	+398.1
56 Manufactured fertilisers:					
imports	230.7	287.1	345.6	372.8	325.5
exports	193.5	197.3	183.9	193.5	206.5
	-37.2	-89.8	-161.7	-179.3	-119.0
53–59 (part) Miscellaneous chemical products:					
imports	6 030.2	7 094.4	7 627.6	7 914.9	6 897.5
exports	4 932.4	5 462.8	5 831.5	5 542.9	5 247.8
	-1 097.7	-1 631.6	-1 796.1	-2 371.9	-1 649.6
66 Non-metallic mineral products:					
imports	5 309.4	5 841.2	5 957.1	5 629.9	2 231.5
exports	3 182.6	3 754.7	3 643.7	3 789.7	3 927.0
	-2 126.8	-2 086.6	-2 313.4	-1 840.2	-1 695.4
67 Iron and steel:					
imports	3 789.4	4 827.0	5 280.2	4 692.1	3 269.1
exports	2 461.6	3 191.3	3 535.5	3 157.0	2 625.0
	-1 327.8	-1 635.7	-1 744.7	-1 535.0	-644.1
68 Non-ferrous metals:					
imports	8 089.7	10 649.1	10 299.8	12 172.7	13 821.1
exports	6 434.2	8 246.8	9 118.5	9 463.2	14 656.1
	-1 655.5	-2 402.4	-1 181.3	-2 709.4	+835.0
69 Manufactures of metal:					
imports (b)	376.9	420.4	504.6	488.5	372.7
exports (b)	397.6	434.0	422.5	489.3	341.1
	+20.8	+13.6	-82.2	-0.8	-31.67
96 Coin other than gold:					
imports	4.5	5.4	4.0	5.5	7.1
exports	9.8	14.9	9.7	9.4	15.9
	+5.2	+9.5	+5.8	+3.9	+8.7
Total (excluding gold)					
imports	64 082.4	81 562.5	93 400.5	88 378.5	67 883.8
exports	49 282.2	62 665.6	72 701.8	69 257.2	61 739.9
	-14 800.2	-18 896.9	-20 698.6	-19 121.2	-6 144.0

(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 2014–2020

£ million

Mineral	2014	2015	2016	2017	2018	2019	2020
Coal	660	419	227	225	198	132	104
Natural gas	6 655	7 035	5 315	6 260	6 900	5 530	4 875
Natural gas liquids	... (b)	... (b)	... (b)	... (b)	... (b)	... (b)	... (b)
Crude petroleum	18 185	12 985	12 385	15 545	21 285	21 085	14 140
Tin	—	—	2	4	4	—	—
Tungsten	—	5	23	31	28	—	—
Gold	—	—	0	—	—	2	1
Silver	—	—	0	—	—	0	0
Other non-ferrous metals	0	0	0	0	0	0	0
Sand and gravel	643	783	859	859	907	937	754
Limestone and dolomite	663	(c) 1 192	(c) 1 421	(c) 1 476	(c) 1 587	(c) 1 592	(c) 1443
Igneous rock	333						
Sandstone	122						
Chalk	57						
Clay and shale	59	26	26	28	23	23	15
China clay	129	121	121	133	128	142	97
Ball clay	48	47	53	61	63	52	48
Salt	225	177	166	95	109	92	90
Silica sand	55	62	67	82	88	90	96
Potash	226	137	89	45	46	0	0
Polyhalite	—	25	25	63	50	127	142
Fluorspar	4	3	2	1	2	4	4
Gypsum and anhydrite	15	23	19	18	20	22	22
Miscellaneous minerals	70	50	49	43	41	29	28
Total	28 149	23 090	20 849	24 969	31 479	29 859	21 858
At 2019 constant prices							
Coal	716	452	240	234	202	132	98
Oil and gas	26 941	21 620	18 750	22 690	28 760	26 615	18 058
Metals	0	5	26	36	33	2	1
Construction and industrial minerals	2 873	2 857	3 069	3 022	3 127	3 110	2 600
Total	30 530	24 935	22 086	25 982	32 121	29 859	20 758

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

(b) Included in gas and petroleum figures.

(c) Including a BGS estimate for the value of building stone

United Kingdom mining and quarrying: Gross value added (a) 2013–2020

£ million

	2013	2014	2015	2016	2017	2018	2019	2020
Production								
Mining and quarrying								
Mining and quarrying of energy producing materials								
Mining of coal and lignite	165	89	126	218	266	174	216	165
Extraction of crude petroleum and natural gas	20 207	16 046	8 981	9 274	13 563	19 431	18 184	9 857
Other mining and quarrying	1 467	1 464	1 629	1 640	1 612	1 898	1 916	1 948
Total mining and quarrying (b)	24 210	19 704	13 033	12 384	16 625	22 768	21 656	12 804
All industries	1 601 614	1 674 387	1 727 643	1 799 292	1 872 421	1 942 619	2 017 344	1 914 338
of which: minerals related (%)	1.5	1.2	0.8	0.7	0.9	1.2	1.1	0.7

(a) At current basic prices.

Source: Office for National Statistics.

(b) 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 2014–2020

Thousand tonnes

Mineral	2014	2015	2016	2017	2018	2019	2020
Coal:							
Deep-mined	3 685	2 784	22	20	24	99	107
Opencast	7 962	5 814	4 156	3 021	2 758	2 492	1 567
Other (a)	—	—	—	—	—	—	—
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	34	30	38	35	33	24	16
Onshore	38	183	223	191	219	325	220
Offshore	35 728	38 817	39 838	39 981	38 792	37 385	37 469
Crude oil							
Onshore	1 014	962	966	836	1530	1472	1417
Offshore	36 461	41 864	43 340	42 349	46 318	47 872	44 241
Condensates and other (b)							
Onshore	19	18	17	14	67	63	55
Offshore	2 435	2 444	3 122	3 432	3 272	3 081	3 272
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	0.2	0.1
Gold (kg)	—	—	(d) 6	—	—	50	28
Silver (kg)	—	—	(d) 14	—	—	130	100
Clay and shale (c)							
Clay (c)	6 806	4 552	4 694	5 544	4 606	4 529	2 952
Chalk (c)	3 312						
Igneous rock (f) (g)	(l) 41 500						
Limestone (excluding dolomite)	(l) 64 200	(l) 119 401	125 301	(l) 125 739	129 998	(l) 129 600	(l) 117 100
Dolomite (excluding limestone)	3 730						
Sandstone	13 614						
Slate (h)	868	(e) 760	(e) 780	(e) 820	(e) 820	(e) 160	(e) 160
Sand and gravel:							
Land	46 831	51 053	51 231	50 143	52 065	(l) 47 600	(l) 41 200
Marine (i)	14 327	15 390	16 844	17 402	17 817	18 088	18 047
Ball clay (sales) (e)	733	740	753	850	867	738	696
Barytes	44	50	56	55	(e) 55	(e) 50	(e) 50
China clay (sales) (j) (e)	1 090	1 014	940	970	996	715	635
Fireclay (c)	129	...	...	...	...	...	...
Fluorspar (e)	25	17	12	11	11	14	15
Gypsum (natural) (e)	1 100	1 800	1 600	1 300	1 400	1 600	1 300
Peat (000 m ³)	795	...	...	...	...	...	...
Potash (k)	576	594	432	216	210	—	—
Polyhalite	—	200	200	500	400	635	709
Salt	4 690	(e) 4 000	3 899	2 362	3 430	2 378	2 312
Silica sand	3 948	3 822	4 251	5 051	4 890	5 136	5 301
Talc	5	5	3	3	2	3	1

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

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

(c) Excluding a small production in Northern Ireland.

(d) Production from metallurgical testwork.

(e) BGS estimate.

(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): 2014: 117; 2015: 116; 2016: 88; 2017: 105; 2018: 122; 2019: 111; 2020: 92 and Jersey: 2014: 243; 2015: 275; 2016: 258; 2017: 247; 2018: 265; 2019: 275; 2020: 265.

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

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

(j) Dry weight.

(k) Marketable product (KCl).

(l) Including an estimate or partial estimate for Northern Ireland.

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 2014–2020

Thousand tonnes

Mineral	2014	2015	2016	2017	2018	2019	2020
Coal:							
Deep-mined	3 600	2 800	20	20	10	1	1
Opencast	2 900	2 200	900	1 000	900	600	433
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	0.2	0.1
Gold (kg)	—	—	—	—	—	—	—
Silver (kg)	—	—	—	—	—	—	—
Clay and shale (c)	6 671	...	...	...	...	...	...
Chalk	3 312						
Igneous rock	19 156						
Limestone (d)	...	(k) 73 044	(k) 77 634	(k) 78 961	(k) 82 296	(k) 83 014	(k) 76 277
Dolomite (f)	...						
Limestone and dolomite	53 769						
Sandstone	4 450						
Sand and gravel:							
Land	38 785						
Marine (g)	10 685	54 063	54 773	54 299	55 481	50 480	44 137
Slate (h)	...	...	...	...	...	...	...
Ball clay (sales) (e)	733	740	753	850	867	738	696
Barytes	...	...	...	...	...	...	...
China clay (sales) (i) (e)	1 090	1 014	940	970	996	715	635
Fireclay	...	...	...	...	...	...	...
Fluorspar (e)	25	17	12	11	11	14	15
Gypsum (natural) (e)	1 100	1 800	1 600	1 300	1 400	1 600	1 300
Peat (000 m ³)	294	...	...	...	...	...	...
Potash (j)	576	594	432	216	210	—	—
Polyhalite	—	200	200	500	400	635	709
Salt	4 466	...	...	...	...	...	...
Silica sand	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 dolomite for constructional uses.

(e) BGS estimate.

(f) Dolomite and magnesian limestone used for constructional and agricultural purposes as well as for refractory, chemical and other purposes specifically dependent on the high magnesium content.

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

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

(i) Dry weight.

(j) Marketable product (KCI).

(k) 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 2014–2020

Thousand tonnes

Mineral	2014	2015	2016	2017	2018	2019	2020
Coal:							
Deep-mined	40	30	10	0	10	100	106
Opencast	2 500	2 300	2 400	1 200	1 000	1 100	1 073
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	...	...	...	...	...	...	...
Igneous rock	2 189						
Limestone (c)	...						
Dolomite (d)	...	(f) 12 503	(f) 12 376	(f) 12 319	(f) 12 711	(f) 12 832	(f) 12 448
Limestone and dolomite	11 301						
Sandstone	2 521						
Sand and gravel:							
Land	901						
Marine	647	2 076	1 943	1 654	1 517	1 810	1 830
Slate (e)	...	...	...	...	...	...	...
Fireclay	—	—	—	—	—	—	—
Silica sand	...	...	...	...	—	—	—

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

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

(c) Including dolomite for constructional uses.

(d) Dolomite and magnesian limestone used for constructional and agricultural purposes as well as for refractory, chemical and other purposes specifically dependent on the high magnesium content.

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

(f) 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 2014–2020

Thousand tonnes

Mineral	2014	2015	2016	2017	2018	2019	2020
Coal:							
Deep-mined	—	—	—	—	—	—	—
Opencast	2 500	1 300	800	800	600	400	167
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)	—	—	(f) 6	—	—	—	0
Silver (kg)	—	—	(f) 14	—	—	—	—
Clay and shale	...	...	...	...	...	...	...
Igneous rock	16 939						
Limestone (c)	...	(g) 22 613	(g) 23 886	(g) 23 190	(g) 22 331	(g) 23 409	(g) 19 105
Dolomite (d)	...						
Limestone and dolomite	1 302						
Sandstone	2 766						
Sand and gravel (land-won)	5 111	5 670	6 238	5 859	5 599	5 630	4 758
Slate (e)	...	...	...	...	...	...	...
Barytes	...	...	...	...	...	...	...
Fireclay	...	...	...	...	...	...	...
Peat (000 m ³)	501	...	...	...	...	...	...
Silica sand	...	...	...	...	655	...	...
Talc	5	5	3	3	2	3	1

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

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

(c) Including dolomite for constructional uses.

(d) Dolomite and magnesian limestone used for constructional and agricultural purposes as well as for refractory, chemical and other purposes specifically dependent on the high magnesium content.

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

(f) Production from metallurgical testwork.

(g) 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 2016-2020

Thousand tonnes

	2016	2017	2018	2019	2020
Northern Ireland (d)					
Gold (kg)	6	0	0	(c) 50	28
Silver (kg)	0	0	0	(c) 130	(c) 100
Lead (tonnes)	0	0	0	(c) 50	(c) 50
Limestone	2 146	2 323	3 158	2664	...
Sand and gravel	2 354	2 606	3 175	2290	...
Basalt and igneous rock (a)	4 216	3 227	4 164	3162	...
Sandstone	5 043	3 722	5 339	4515	...
Granite	...	...	...	...	...
Clay and shale	...	...	...	...	...
Others (b)	1 264	795	1 565	752	...
Total	15 023	12 673	17 401	13 384	...
Isle of Man					
Limestone	50	48	41	54	46
Sand and gravel	106	109	108	92	111
Igneous rock	89	86	86	85	88
Slate	28	39	39	38	64
Total	272	281	274	269	309
Guernsey					
Igneous rock	88	105	122	111	92
Jersey					
Igneous rock (c)	258	247	265	275	265
Sand and gravel	46	47	52	59	54

(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 mine/quarry returns: 2016, 116; 2017, 90; 2018, 114 and 2019, 77.

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	—	—	—	—	—	—	—	—	19	19	—	—	—	—	—	19
Barytes	—	—	—	1	—	—	—	—	—	1	—	2	—	—	—	3
Chalk	—	13	—	3	—	11	—	18	1	46	—	—	—	4	—	50
China clay	—	—	—	—	—	—	—	—	15	15	—	—	—	—	—	15
China clay waste	—	—	—	—	—	—	—	—	8	8	—	—	—	—	—	8
Clay & shale	5	21	16	16	22	4	—	21	9	114	9	4	—	6	—	133
Coal, underground	—	—	1	—	—	—	—	—	—	1	2	—	—	—	—	3
Coal, opencast	—	—	—	1	—	—	—	—	—	1	1	—	—	—	—	2
Coalbed methane	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	1
Fireclay	—	4	1	1	1	—	—	—	—	7	—	—	—	—	—	7
Flint	—	1	—	—	—	5	—	2	—	8	—	—	—	—	—	8
Fluorspar	1	—	—	2	—	—	—	—	—	3	—	—	—	—	—	3
Gold	—	—	—	—	—	—	—	—	—	0	—	1	—	1	—	2
Gypsum (c)	—	—	1	4	1	—	—	1	—	7	—	—	—	—	—	7
Igneous & metamorphic rock	8	—	3	7	3	—	—	—	13	34	17	122	2	50	4	229
Iron ore - ironstone	—	—	—	—	—	—	—	3	—	3	—	—	—	—	—	3
Lead	—	—	—	1	—	—	—	—	—	1	—	—	—	1	—	2
Limestone / dolomite	15	33	14	58	7	3	—	11	88	229	35	14	2	20	—	300
Marble	—	—	—	—	—	—	—	—	—	0	—	1	—	—	—	1
Natural gas	—	12	1	3	—	—	—	1	1	18	—	—	—	—	—	18
Oil	—	1	—	82	—	—	—	23	4	110	—	—	—	—	—	110
Peat	—	1	4	—	—	—	—	—	38	43	1	19	—	8	—	71
Polyhalite	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Salt	—	1	3	—	—	—	—	—	—	4	—	—	—	1	—	5
Sand	3	8	6	—	4	15	1	31	12	80	1	21	1	3	1	107
Sand & gravel	6	21	19	36	32	82	9	41	21	267	15	111	1	66	—	460
Sandstone	14	44	35	16	18	3	—	5	21	156	19	50	—	35	—	260
Serpentine	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1
Silica sand	—	2	6	1	—	8	—	7	1	25	—	5	—	—	—	30
Silver	—	—	—	—	—	—	—	—	—	0	—	—	—	1	—	1
Slate	—	—	10	—	—	—	—	—	11	21	13	—	2	1	—	37
Slate waste	—	—	1	—	—	—	—	—	—	1	8	—	—	—	—	9
Talc	—	—	—	—	—	—	—	—	—	0	—	1	—	—	—	1
Tin	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1
Tungsten	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1
Total	52	169	122	241	91	131	10	164	265	1 245	122	351	8	197	5	1 928

(a) As at January 2022.

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 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Carats					£ thousand				
Abrasives										
<i>Imports</i>										
Natural abrasives										
Industrial diamonds	2 181 458	2 705 618	5 418 781	3 040 649	1 646 227	7 725	11 585	11 982	41 067	7 634
Tonnes										
Dust and powder of precious and semi-precious stones	103	31	45	34	30	7 694	10 898	9 233	10 169	7 163
Pumice	8 034	2 699	2 131	1 550	1 280	989	863	717	654	648
Other	13 164	11 609	9 123	11 851	6 532	3 038	3 455	2 822	3 533	1 845
Carats										
<i>Exports</i>										
Natural abrasives										
Industrial diamonds	686 369	1 156 793	1 019 188	1 160 545	503 444	7 862	9 719	6 695	8 079	6 619
Tonnes										
Dust and powder of precious and semi-precious stones	68	15	15	16	17	10 801	13 694	11 049	9 983	7 996
Pumice	254	328	500	304	403	244	301	431	323	553
Other	1 555	1 274	1 414	852	809	1 008	1 008	839	1 020	913

Aggregates

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Aggregates										
<i>Production*</i>										
Sand and gravel (a)	68 075 000	67 548 000	69 882 000	66 170 000	(c) 57 702 000					
Crushed rock (b)	125 301 000	125 739 000	129 998 000	(c) 129 600 000	(c) 107 900 000					
Total	193 376 000	193 287 000	199 881 000	(c) 195 773 000	(c) 174 813 000					
<i>Imports</i>										
Natural aggregates-										
Sand and gravel	879 166	631 921	488 876	465 526	348 107	17 793	18 704	19 951	25 586	22 491
Crushed rock (d)	433 084	356 707	270 077	209 381	216 573	19 290	18 168	17 231	14 270	12 547
Total	1 312 250	988 628	758 953	674 907	564 680	37 082	36 872	37 182	39 856	35 038
<i>Exports</i>										
Natural aggregates-										
Sand and gravel (e) (f)	2 445 821	2 409 597	2 841 913	3 257 033	3 331 874	26 552	26 473	28 994	40 017	31 407
Crushed rock	3 815 671	4 353 247	4 419 084	3 464 967	3 808 212	29 431	35 901	38 266	36 256	34 050
Total	6 261 492	6 762 844	7 260 997	6 722 000	7 140 000	55 984	62 374	67 260	76 273	65 457

* 2016-2020 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 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 armourstone imports were believed to be wrongly classified as 'granite, crude'. Care should be taken when comparing long time trends.

(e) Principally marine-dredged sand and gravel. Source: HM Revenue and Customs.

(f) However, the Crown Estate Commissioners give the following figures for marine-dredged sand and gravel landed at foreign ports (tonnes): 2016: 2 767 125; 2017: 3 127 371; 2018: 4 110 142; 2019: 4 672 369 and 2020: 4 344 873.

Aluminium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Aluminium										
<i>Production</i>										
Unwrought-										
Primary	46 000	48 000	44 400	39 400	35 700					
Secondary (a)	148 800	148 800	148 800	148 800	127 200					
<i>Consumption</i>										
Unwrought-										
Primary (a)	241 200	241 200	180 000	180 000	171 000					
Secondary (a)	320 400	320 400	148 800	148 800	139 200					
<i>Imports</i>										
Ash and residues	1 163	218	850	995	2 602	263	244	700	783	1 631
Unwrought	162 946	162 676	183 402	161 909	120 039	196 694	265 288	316 091	255 085	172 585
Unwrought alloys	71 127	72 035	68 304	(a) 94 900	(a) 84 000	102 918	128 121	127 711	123 495	102 631
Scrap	113 780	135 710	124 866	100 274	98 190	97 151	123 991	135 632	97 739	81 369
<i>Exports</i>										
Ash and residues	465	222	1 000	2 462	14 814	328	292	1 449	763	1 343
Unwrought	3 326	4 614	8 567	2 658	4 841	4 846	8 609	18 677	4 651	7 378
Unwrought alloys	287 882	270 009	262 847	(a) 249 500	(a) 202 200	412 070	470 822	481 954	400 900	314 918
Scrap	437 637	370 082	444 339	477 842	436 146	424 272	439 567	499 753	462 025	378 103

(a) Estimate.

Aluminium compounds

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Aluminium compounds										
<i>Imports</i>										
Oxide (alumina)	153 964	140 836	116 257	126 979	93 915	41 642	112 740	103 102	64 364	37 316
Hydroxide	51 957	51 690	60 463	95 714	74 557	23 023	26 481	25 584	31 542	28 039
Fused Oxide (a)	27 178	30 185	32 971	28 625	21 055	15 668	17 586	22 689	20 131	15 311
Fluorides	953	736	854	823	587	734	637	828	1 169	794
<i>Exports</i>										
Oxide (alumina)	9 706	3 365	3 824	4 156	3 411	3 796	3 200	3 441	3 741	2 881
Hydroxide (b)	3 100	800	2 500	3 500	1 387	1 500	900	1 200	1 204	865
Fused Oxide (a)	7 567	10 427	13 911	13 469	10 044	6 471	7 489	10 255	10 236	7 874
Fluorides	0	0	67	225	458	4	9	72	136	240

(a) Artificial corundum.

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

Antimony

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Antimony										
<i>Imports</i>										
Ores & concentrates	—	1	—	—	0	—	6	1	—	1
Metal	307	189	259	290	191	1 491	1 714	1 967	2 275	1 444
Oxide	1 628	1 690	1 759	2 468	1 375	7 671	9 978	10 104	7 555	5 572
<i>Exports</i>										
Ores & concentrates	1	—	—	—	0	4	—	—	—	0
Metal	477	660	537	521	422	3 792	5 688	5 572	5 169	3 980
Oxide	209	78	89	151	95	981	574	583	1 078	525

Arsenic

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Arsenic										
<i>Imports</i>										
Elemental	4	3	3	5	3	268	289	445	282	247
<i>Exports</i>										
Elemental	3	2	1	4	2	16	21	20	28	10

Asbestos

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Asbestos										
<i>Imports</i>										
Fabricated asbestos	17	2	21	2	5	239	75	733	76	77
Friction material with a basis of asbestos etc.	5 622	5 971	6 908	6 910	5 010	45 239	43 015	42 202	35 833	31 198
Articles of asbestos cement etc.	172 991	189 683	189 178	204 437	44 214	70 850	80 820	78 153	86 157	20 301
<i>Exports</i>										
Fabricated asbestos	165	119	57	157	109	2 055	918	2 161	1 758	988
Friction material with a basis of asbestos etc.	2 471	2 384	2 713	1 837	1 456	50 185	72 960	58 410	27 199	25 019
Articles of asbestos cement etc.	21 419	19 260	15 229	18 260	7 182	10 210	11 111	8 674	11 415	3 858

Asphalt, natural

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Asphalt, natural										
<i>Imports</i>	33 394	27 354	22 628	72 253	79 384	4 335	6 236	4 529	4 040	1 315
<i>Exports</i>	48 224	47 063	47 147	41 974	39 264	1 862	2 054	2 418	3 371	2 126

Ball clay

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Ball clay										
<i>Production (sales) (a)</i>	753 000	850 000	867 000	738 000	696 000					
<i>Imports</i>	3 580	4 534	4 588	3 247	4 591	1 545	1 990	1 821	1 437	2 402
<i>Exports</i>	570 678	643 779	656 940	558 961	527 551	40 449	46 483	48 050	44 850	39 451

(a) BGS estimates

Barytes

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Barytes										
<i>Production</i>										
Barium minerals - Barytes (a)	56 000	55 000	55 000	50 000	50 000					
<i>Imports</i>										
Barium minerals (b)	44 363	41 245	58 753	63 552	38 595	8 464	9 142	12 957	12 120	7 983
<i>Exports</i>										
Barium minerals (b)	13 089	17 572	14 284	13 205	13 221	3 910	5 305	4 781	4 448	4 522

(a) BGS estimate

(b) Mainly barytes with some witherite.

Bauxite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Bauxite										
<i>Imports (a)</i>	19 808	14 029	33 816	44 135	47 948	6 156	5 459	10 434	12 802	9 351
<i>Exports (a)</i>	4 879	4 495	5 184	5 122	4 100	1 968	1 824	2 490	2 621	2 175

(a) Excluding refractory grade bauxite.

Bentonite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Bentonite										
<i>Imports</i>	122 153	128 865	142 665	121 451	138 782	12 366	13 396	14 806	16 443	21 909
<i>Exports</i>	28 856	31 921	30 501	27 527	24 869	9 701	15 119	21 262	21 216	19 043

Beryllium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Beryllium										
<i>Imports</i>										
Metal	33	72	50	9	1	1 243	2 180	2 177	2 386	3 644
Oxides and hydroxides	3	8	13	4	5	395	1 275	1 152	1 092	1 062
<i>Exports</i>										
Metal	3	39	39	9	0	300	959	1 180	272	191
Oxides and hydroxides	0	3	—	2	0	1	55	—	46	2

Bismuth

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Bismuth										
<i>Imports</i>										
Metal	161	53	82	139	210	1 128	555	706	679	1 041
<i>Exports</i>										
Metal	634	210	26	22	20	6 869	3 872	673	610	509

Boron

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Boron										
<i>Imports</i>										
Boron minerals (a)	4 363	4 322	5 314	4 234	4 321	1 197	1 289	1 608	1 310	1 334
<i>Exports</i>										
Boron minerals (a)	111	459	393	504	504	89	425	401	540	493

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

Bricks, blocks and tiles

Great Britain production of bricks, blocks and tiles 2012–2020

Material	2012	2013	2014	2015	2016	2017	2018	2019	2020
Million bricks									
Bricks (all types):	1 459	1 555	1 824	1 915	1 800	1 877	2 025	2 002	1 427
Million square metres									
Concrete building blocks:									
Dense aggregate	22	24	25	26	27	27	26	25	21
Lightweight aggregate	14	17	17	19	20	22	21	21	17
Aerated concrete	16	15	15	20	23	25	23	28	22
Total	52	56	58	65	71	74	71	74	60
Roofing tiles:									
Concrete	17	19	24	25	25	26	27	26	16

Source: Department for Business Energy and Industrial Strategy

Bromine

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Bromine										
<i>Imports</i>	6 557	6 634	6 321	5 095	4 375	10 970	10 707	9 419	8 027	6 026
<i>Exports</i>	1 268	3 202	3 103	1 095	821	2 166	3 841	4 505	2 435	3 094

Building and dimension stone

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Building and dimension stone										
<i>Production</i>										
Sandstone	...	...	...	...	...
Igneous rock	...	...	...	...	...
Limestone	...	...	...	...	...
Dolomite	...	...	...	...	...
Total (a)	900 000	1 100 000	900 000	1 100 000	900 000					
<i>Imports</i>										
<i>Unworked-</i>										
Marble & other calcareous stone	15 981	30 167	33 351	35 478	50 326	8 190	11 745	15 895	11 865	13 467
Granite (b)	3 068 883	2 363 599	2 953 475	3 197 438	3 426 506	53 843	47 786	57 095	63 284	71 258
Sandstone	442 582	398 535	421 809	421 279	427 343	68 210	88 930	87 896	87 513	93 786
Other stone	60 874	109 927	243 198	151 549	90 570	11 803	13 811	11 817	10 833	11 284
<i>Worked-</i>										
Marble & other calcareous stone	62 073	55 704	46 885	55 830	(a) 42 766	46 773	49 320	41 948	59 458	(a) 40 933
Granite	95 086	91 188	73 114	69 443	51 295	68 240	67 780	55 251	54 037	40 345
Other stone	24 527	23 991	22 516	25 961	44 764	22 465	24 270	22 471	29 027	25 000
Paving stones and flagstones	227 864	272 669	278 317	313 922	346 515	47 052	64 286	64 648	74 254	68 472
<i>Exports</i>										
<i>Unworked-</i>										
Marble & other calcareous stone	578	834	1 219	1 265	723	413	465	836	1 225	816
Granite	7 547	13 915	12 705	11 536	1 747	1 154	2 172	2 361	1 913	573
Sandstone	299	206	669	1 014	111	94	73	289	638	105
Other stone	255	208	646	731	445	262	225	405	366	266
<i>Worked-</i>										
Marble & other calcareous stone	896	809	831	1 150	303	3 155	3 417	4 246	4 666	925
Granite	660	1 059	849	689	1 604	1 214	1 698	1 196	1 330	1 508
Other stone	2 477	6 935	3 089	2 071	1 721	1 738	2 511	1 508	4 968	2 924
Paving stones and flagstones	3 417	3 687	4 992	4 231	7 486	1 460	1 377	1 243	1 223	2 343

(a) BGS estimates.

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

Cadmium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Cadmium										
<i>Consumption</i>	10	10	10	10	10					
<i>Imports</i>										
Metal	224	252	221	247	170	280	417	557	611	369
Oxide	72	96	122	0	41	133	199	316	4	144
<i>Exports</i>										
Metal	7	15	8	66	15	85	172	155	240	100

Cement

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Cement										
<i>Production</i>										
Cement, clinker	8 056 000	7 824 000	7 734 000	7 830 000	6 941 000					
Cement, finished	9 370 000	9 359 000	9 197 000	9 079 000	8 046 000					
	Cubic metres									
Ready-mixed concrete	26 575 000	26 063 000	25 693 000	24 701 000	19 419 909					
	Tonnes									
Consumption (home deliveries)										
Finished cement (a)	13 967 000	15 004 000	15 269 000	15 188 000	15 218 000					
<i>Imports</i>										
Portland cement clinkers	527 391	532 977	828 093	543 316	223 547	43 707	48 267	51 307	37 736	18 617
Portland cement	2 338 637	2 422 996	2 464 886	2 879 196	2 615 340	128 063	139 185	141 827	172 577	155 385
Aluminous cement	15 105	12 802	14 568	18 652	38 008	4 449	4 174	4 691	7 162	9 688
Other cement	29 470	34 677	37 993	33 569	44 293	3 438	2 697	2 942	2 830	3 134
<i>Exports</i>										
Portland cement clinkers	47 928	23 649	12 106	8 746	14 073	3 029	1 540	915	733	920
Portland cement	93 513	138 181	178 307	150 056	157 854	11 278	15 680	17 427	14 879	14 702
Aluminous cement	58 218	62 746	72 604	62 589	50 621	26 821	30 628	34 471	31 639	24 322
Other cement	2 680	5 591	3 291	2 136	1 934	1 183	2 475	1 942	1 652	1 509

(a) Great Britain only.

Chalk (see Limestone)

China clay

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
China clay										
<i>Production (sales) (a)</i>	940 000	970 000	996 000	715 000	635 000					
<i>Imports (b)</i>	74 357	68 664	86 805	62 837	60 174	14 148	15 752	17 465	15 718	13 580
<i>Exports (b)</i>	846 617	873 633	897 498	643 940	571 714	109 226	119 421	124 057	110 406	100 015

(a) BGS estimate.

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

China stone (see Feldspar)

Chromium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Chromium										
<i>Apparent consumption (a)</i>	27 000	36 500	38 800	31 700	24 700					
<i>Imports</i>										
Ores & concentrates	5 092	5 460	7 149	7 529	6 096	1 285	1 740	2 903	2 721	1 645
Ferro-chrome										
Under 4% carbon	5 232	7 005	5 744	8 643	4 823	10 468	13 135	14 204	19 915	9 053
4%-6% carbon	37	100	23	118	251	52	192	4	157	255
Over 6% carbon	31 674	34 504	48 375	35 633	30 252	21 351	23 450	51 251	33 417	22 692
Ferro-silico-chrome	47	12	1	18	6	82	55	12	34	16
Oxides and hydroxides	13 833	14 915	15 570	15 458	12 010	30 237	39 143	48 462	40 210	24 012
Metal	1 422	1 227	1 688	1 399	913	9 254	9 311	14 759	10 851	6 300
<i>Exports</i>										
Ores & concentrates	106	71	86	864	189	54	124	107	403	94
Ferro-chrome										
Under 4% carbon	220	272	506	487	603	1 163	1 341	2 668	2 886	2 541
4%-6% carbon	281	681	191	271	269	107	416	192	374	215
Over 6% carbon	1 653	2 169	2 428	1 860	2 310	2 262	2 623	4 464	2 984	3 231
Ferro-silico-chrome	114	545	89	43	60	278	1 269	242	162	188
Oxides and hydroxides	526	467	276	193	334	1 458	1 582	884	843	832
Metal	6 933	7 153	7 384	8 439	5 820	50 756	63 391	81 265	77 481	44 715

(a) BGS estimates; see explanatory notes.

Clays

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Clays										
<i>Production</i>										
Clay and shale	4 693 900	5 543 900	4 606 000	4 529 000	2 952 000					
<i>Imports</i>										
Unspecified clays	139 925	147 165	144 947	116 176	97 857	21 587	24 266	24 504	18 995	11 956
<i>Exports</i>										
Unspecified clays	114 027	98 227	84 939	75 148	63 703	8 913	9 534	10 378	9 641	9 450

Source: British Ceramic Confederation

Great Britain production of clay and shale by end-use 2005–2020

Thousand tonnes

Year	Bricks, pipes and tiles	Cement	Lightweight aggregate	Constructional use	Other uses	Total
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
2019 (a)	4 529	—	—	—	...	4 529
2020	2 952	—	—	—	...	2 952

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

Source: British Ceramic Confederation and Office for National Statistics.

Coal

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Coal										
<i>Production</i>										
Bituminous (a)	4 178 000	3 041 000	2 782 000	2 591 000	1 673 000					
<i>Consumption</i>										
	18 035 000	14 439 000	12 059 000	7 981 000	7 072 000					
<i>Imports</i>										
Anthracite	32 108	32 416	153 587	73 287	52 152	4 140	6 042	18 620	11 612	7 124
Bituminous & Other	7 437 409	7 300 751	9 158 720	5 366 022	3 635 890	467 974	708 280	918 883	566 732	311 230
Total	7 469 517	7 333 167	9 312 307	5 439 309	3 688 042	472 114	714 322	937 503	578 344	318 354
Briquettes of Coal	24 130	56 251	32 513	16 716	11 302	3 188	7 706	4 714	2 352	1 494
Lignite (including agglomerated)	3 367	1 705	1 640	1 028	352	1 122	355	410	385	209
<i>Exports</i>										
Anthracite	82 512	88 637	105 285	(b) 114 300	131 609	9 004	10 207	15 975	(b) 17 910	18 362
Bituminous & Other	327 687	374 174	495 995	771 846	1 593 851	37 119	44 465	65 915	85 728	109 523
Total	410 199	462 811	601 280	886 146	1 725 460	46 123	54 672	81 890	103 638	127 885
Briquettes of Coal	56 053	34 185	35 282	30 140	135 490	8 897	6 012	6 378	5 503	9 802
Lignite (including agglomerated)	636	414	366	595	467	358	149	72	151	230

(a) Including anthracite.

(b) BGS estimate.

Cobalt

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Cobalt										
<i>Apparent consumption (a)(b)</i>	2 200	1 500	200	1 600	3 000					
<i>Imports</i>										
Ore	83	34	24	42	10	145	106	105	176	24
Unwrought	4 691	5 114	4 293	3 881	4 903	39 074	89 464	145 115	89 037	91 629
Wrought	671	505	627	588	684	14 842	15 586	24 423	27 929	24 537
Oxides	264	166	117	128	85	2 261	4 043	5 199	2 978	1 109
Scrap	527	1 115	1 262	931	478	4 096	13 216	21 651	10 663	5 089
<i>Exports</i>										
Ore	8	16	9	68	70	180	690	307	310	207
Unwrought	991	787	1 451	1 243	1 440	19 577	30 007	39 502	38 117	39 972
Wrought	923	1 011	984	1 045	742	27 484	38 045	46 103	65 077	45 942
Oxides	1 257	1 241	878	888	821	17 940	35 586	38 190	22 650	19 238
Scrap	589	1 135	1 535	983	536	6 040	14 314	29 743	15 137	7 838

(a) Metal content.

(b) BGS estimates; see explanatory notes.

Coke and breeze

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Coke and breeze										
<i>Production</i>										
Coke oven - coke	1 332 000	1 361 000	1 263 000	1 295 000	1 203 000					
Coke oven - breeze	16 000	18 000	17 000	19 000	16 000					
<i>Consumption</i>										
Coke oven coke	1 872 000	1 764 000	1 554 000	1 705 000	1 741 000					
Breeze	584 000	549 000	592 000	613 000	588 000					
<i>Imports</i>										
Coke from coal	44 584	41 871	115 562	162 016	217 304	7 995	10 099	31 264	43 145	37 840
Coke from lignite	73 713	2 269	174	151	174	7 751	1 335	119	97	117
<i>Exports</i>										
Coke from coal	227 117	24 892	96 321	81 865	30 043	20 855	5 407	31 543	21 593	6 209
Coke from lignite	46	15	0	—	—	34	19	1	—	—

Copper

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Copper										
<i>Consumption</i>										
Unwrought-										
Refined	21 895	19 032	18 000	18 000	14 400					
Copper in scrap for direct use (a)	120 000	120 000	120 000	120 000	...					
<i>Imports</i>										
Ores & concentrates	0	37	392	112	0	57	161	953	246	13
Matte & cement	59	28	48	47	67	307	155	234	236	265
Scrap	34 681	32 075	28 199	24 011	23 178	85 786	92 942	85 525	63 858	64 195
Ash and residues	134	16	51	133	20	159	27	53	48	25
Unwrought-										
Unrefined	36	35	52	33	18	206	240	406	237	141
Refined	62 043	21 613	25 091	21 685	20 114	195 284	100 234	122 222	102 540	94 799
Alloys	4 468	5 218	2 591	1 935	1 315	20 030	16 002	15 117	11 934	9 011
Master Alloys	290	362	502	439	387	1 286	1 600	3 103	2 414	1 927
<i>Exports</i>										
Ores & concentrates	146	331	2 442	291	44	495	1 432	10 386	1 394	196
Matte & cement	116	1 069	350	4 329	500	428	4 627	2 177	17 509	2 208
Scrap	309 613	284 990	261 560	341 124	222 899	677 228	782 594	756 078	787 325	691 589
Ash and residues	453	2 219	4 924	3 196	4 030	1 005	8 444	13 977	10 185	12 828
Unwrought-										
Unrefined	209	221	215	302	186	3 592	4 323	3 890	4 354	3 694
Refined	28 474	20 779	13 043	2 373	1 275	115 782	103 507	69 582	9 950	5 276
Alloys	4 026	7 476	5 303	2 550	3 052	12 316	17 720	15 009	7 765	8 149
Master Alloys	5 150	5 314	5 742	5 289	5 965	17 117	23 159	26 140	23 516	24 459

(a) Estimate.

Crushed rock (see also Aggregates)

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Crushed rock										
<i>Production</i> ^(a)	125 301 000	125 739 000	129 998 000	(b) 129 636 000	(b) 117 111 000					
<i>Imports</i> (c)	433 084	356 707	270 077	209 381	216 573	19 290	18 168	17 231	14 270	12 547
<i>Exports</i>	3 815 671	4 353 247	4 419 084	3 464 967	3 808 212	29 431	35 901	38 266	36 256	34 050

* Source: 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 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 1986–2020

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
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	4 165	5 849	9 040	3 775	23 806	632	1 795	21 439	70 501	11 994	19 759	102 254
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
2019	5 468	6 466	9 546	4 919	29 164	104	2 026	25 321	83 014	12 832	23 409	119 255
2020	4 987	7 236	8 856	4 489	26 559	—	—	24 151	76 277	12 448	19 105	107 830

(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 trade association.

For 2014 and 2019 the Aggregate Minerals Survey

Diamond

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Carats					£ thousand				
Diamond										
<i>Imports</i>										
Unsorted Gem-	18 126 079	21 689 101	20 338 927	16 432 540	58 749	480 845	589 370	551 666	442 201	7 458
Rough	1 603 129	8 848 292	10 125 262	4 050 858	220 464	346 358	577 414	599 550	101 433	16 382
Cut	298 987	305 845	663 678	632 568	296 460	773 858	680 413	867 945	845 889	431 548
Industrial Dust	2 181 458	2 705 618	5 418 781	3 040 649	1 646 227	7 725	11 585	11 982	41 067	7 634
	21 960 382	28 874 346	25 771 437	29 619 970	30 185 214	7 539	10 559	8 806	10 103	7 037
<i>Exports</i>										
Unsorted Gem-	18 105 603	29 614 238	27 062 547	16 369 776	638	476 592	1 115 508	948 380	442 800	172
Rough	241 586	445 121	272 713	309 700	148 020	243 698	50 147	40 109	47 278	14 618
Cut	148 331	423 553	170 873	267 847	94 037	614 440	548 485	547 734	1 012 823	416 277
Industrial Dust	686 369	1 156 793	1 019 188	1 160 545	503 444	7 862	9 719	6 695	8 079	6 619
	24 983 180	29 947 667	28 474 520	20 891 380	18 689 126	10 237	13 265	10 905	9 740	7 958

Diatomite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Diatomite										
<i>Imports (a)</i>										
	16 155	15 022	19 288	11 649	11 201	4 049	4 369	4 853	3 877	3 659
<i>Exports (a)</i>										
	655	542	619	315	254	602	421	476	370	222

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

Dolomite (see Limestone)

Feldspar

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Feldspar										
<i>Imports</i>										
Feldspar	3 722	8 443	7 679	9 461	1 708	957	1 314	1 512	1 447	483
Nepheline-syenite	34 477	38 645	36 122	28 872	19 149	3 117	3 491	3 474	3 018	2 129
<i>Exports</i>										
Feldspar	85	85	160	71	26	32	25	70	36	21
Nepheline-syenite	513	537	567	446	435	130	113	150	99	102

Fireclay

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Fireclay										
<i>Production</i>	...	...	...	...	...
<i>Imports</i>										
Fireclay	2 603	6 275	4 970	6 718	6 736	815	1 998	1 664	2 465	2 435
Fireclay bricks etc	1 548	3 517	2 192	1 621	2 755	1 064	3 345	1 853	2 133	1 696
Refractory hollow-ware	1 499	1 200	1 140	1 045	1 009	4 575	3 861	3 489	3 555	3 581
<i>Exports</i>										
Fireclay	1 140	1 203	1 415	1 516	1 061	723	806	967	1 008	730
Fireclay bricks etc	3 818	3 836	2 711	2 177	3 634	5 641	5 376	3 014	2 937	3 802
Refractory hollow-ware	575	564	525	521	467	13 117	14 185	15 629	15 480	10 052

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

Fluorspar

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Fluorspar										
<i>Production (a)</i>	12 000	11 000	11 000	14 000	15 000					
<i>Imports</i>	(b) 18 400	3 363	3 705	2 718	1 080	(b) 2 400	441	574	977	306
<i>Exports</i>	11 604	10 809	10 535	14 434	15 053	2 481	2 241	3 876	5 514	5 025

(a) Estimates

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

Gas, natural (see Petroleum)

Germanium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Germanium										
<i>Imports</i>										
Metal	0	1	0	4	1	89	141	100	407	320
<i>Exports</i>										
Metal	31	14	12	9	5	166	156	203	157	45

Gold

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Gold										
<i>Production</i>	(n) 0	—	—	* 0	* 0					
<i>Imports</i>										
Waste & scrap	190	214	308	428	88	22 584	28 532	21 833	49 992	27 093
Unwrought (s)	3	3	4	1	5	76 704	102 801	130 115	42 001	227 976
Semi-manufactured	1 450	835	625	1 526	1 504	42 797 688	26 650 976	19 020 357	55 351 947	68 420 777
<i>Exports</i>										
Waste & scrap	407	528	532	658	319	342 237	337 404	348 607	450 731	391 637
Unwrought (s)	2	2	1	1	1	2 738	61 021	14 903	22 562	21 601
Semi-manufactured	404	423	788	531	376	11 502 820	13 140 230	23 768 398	18 236 861	16 636 174

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

(b) BGS estimates

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

Granite (see Igneous rock)

Graphite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Graphite										
<i>Imports</i>										
Natural graphite	2 667	3 815	5 357	4 494	7 244	2 436	3 432	4 161	4 058	5 464
Artificial graphite	8 819	10 019	10 583	9 584	9 320	12 349	17 703	24 737	15 997	13 810
Graphite crucibles etc	148	158	214	290	213	1 009	1 145	1 593	2 025	1 355
<i>Exports</i>										
Natural graphite	1 592	1 851	1 687	1 536	2 125	3 210	3 055	2 909	2 669	3 049
Artificial graphite	100 515	30 200	6 569	7 796	6 962	17 258	15 344	11 751	12 705	11 355
Graphite crucibles etc	4 547	5 552	6 390	5 159	4 031	9 972	12 238	15 825	13 252	10 666

Gypsum

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Gypsum										
<i>Production</i>										
Gypsum, natural (a)	1 600 000	1 300 000	1 400 000	1 600 000	1 300 000					
<i>Imports</i>										
Gypsum	1 591 274	1 523 565	1 506 933	2 116 960	1 564 541	19 715	20 659	20 644	30 036	26 126
Gypsum (plasters)	96 760	820 059	814 303	342 758	453 293	11 015	21 973	24 371	19 848	27 676
<i>Exports</i>										
Gypsum	4 619	9 202	13 692	5 401	21 126	1 399	2 042	2 560	2 174	2 293
Gypsum (plasters)	20 575	26 365	32 011	31 711	26 692	8 849	11 998	14 547	14 642	11 739

(a) BGS Estimates.

Hafnium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Hafnium										
<i>Imports</i>										
	18	22	13	17	7	5 414	8 194	4 275	7 985	2 939
<i>Exports</i>										
	28	93	6	10	3	1 309	1 362	2 510	2 424	1 330

Igneous rock

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Igneous rock – see also Building and dimension stone										
<i>Production</i>										
					
<i>Imports</i>										
Granite-										
Worked	95 086	91 188	73 114	69 443	51 295	68 240	67 780	55 251	54 037	40 345
Unworked	3 068 883	2 363 599	2 953 475	3 197 438	3 426 506	53 843	47 786	57 095	63 284	71 258
<i>Exports</i>										
Granite-										
Worked	660	1 059	849	689	1 604	1 214	1 698	1 196	1 330	1 508
Unworked	7 547	13 915	12 705	11 536	1 747	1 154	2 172	2 361	1 913	573

Insulating materials

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Insulating materials										
<i>Imports</i>										
Mineral wools (a)	19 107	28 160	32 361	31 615	21 548	31 506	34 665	39 333	37 497	34 053
Expanded minerals (b)	20 425	35 349	60 215	65 908	50 355	8 188	8 530	10 740	13 880	10 564
Other (c)	43 086	48 851	46 511	37 172	28 247	56 685	73 990	76 539	72 975	51 592
<i>Exports</i>										
Mineral wools (a)	32 853	47 246	58 046	66 518	61 447	81 831	75 722	83 037	101 804	90 454
Expanded minerals (b)	13 801	12 608	13 666	12 468	10 400	22 129	21 602	24 146	26 434	22 451
Other (c)	28 571	30 491	31 984	30 888	19 597	54 712	88 304	86 113	79 682	62 708

(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 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Iodine										
<i>Imports</i>										
	600	938	1 005	847	820	9 870	14 623	17 910	18 864	22 009
<i>Exports</i>										
	205	241	206	226	173	3 300	3 544	3 271	4 455	4 733

Iron compounds and earth colours

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Iron compounds and earth colours										
<i>Imports</i>										
Earth colours containing 70% or more ferric oxide	596	72	27	1	0	374	26	23	7	2
Other iron compounds-Oxides and hydroxides	29 590	30 056	30 334	33 133	26 851	26 528	27 190	27 437	27 778	23 250
<i>Exports</i>										
Earth colours containing 70% or more ferric oxide	50	80	60	38	80	113	136	84	77	164
Other iron compounds-Oxides and hydroxides	4 758	5 693	5 919	5 580	3 878	8 253	10 768	10 793	9 356	6 955

Iron ore

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Iron ore										
<i>Consumption</i>	9 116 600	9 020 500	8 497 100	8 464 500	8 172 900					
<i>Imports</i>										
Iron ore	9 281 505	9 128 808	8 898 721	7 658 408	7 061 081	422 027	611 301	587 059	592 978	561 136
Fe content (a)	5 600 000	5 500 000	5 300 000	4 600 000	4 200 000					
<i>Exports</i>										
Iron ore	3 722	2 205	2 923	1 623	1 683	989	594	819	572	452

(a) BGS estimates.

Iron and steel

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Iron and steel										
<i>Production</i>										
Pig iron	6 142 400	5 996 500	5 587 900	5 621 700	5 235 500					
<i>Crude steel-</i>										
Alloy qualities	404 500	466 100	454 200	345 100	245 500					
Other	7 230 400	7 025 200	6 813 500	6 873 000	6 840 200					
Total	7 634 900	7 491 300	7 267 700	7 218 100	7 085 700					
<i>Consumption</i>										
Pig iron (a)	6 082 000	5 920 000	5 613 000	5 618 000	5 508 000					
Finished steel (b)	9 880 000	10 118 000	9 913 000	9 343 000	7 410 000					
Scrap	2 550 800	2 691 800	2 788 500	2 685 700	2 665 100					
<i>Imports</i>										
Pig iron	32 063	42 350	37 901	43 079	21 592	7 814	14 469	12 353	14 214	6 242
Shot, powder, sponge etc	30 459	21 310	22 664	24 092	19 677	25 797	32 352	40 618	45 928	32 768
Ferro-alloys	147 268	163 971	181 157	159 385	134 647	128 084	202 586	246 329	196 933	147 950
Ingots and other primary forms	417 001	422 137	725 999	574 167	348 038	203 481	254 965	410 305	329 885	187 365
Scrap	226 250	321 663	366 533	268 277	363 325	68 287	112 448	144 746	80 363	64 544
<i>Exports</i>										
Pig iron	346	4 470	8 058	6 322	11 148	196	787	1 692	1 597	2 092
Shot, powder, sponge etc	59 228	44 528	36 124	42 604	30 514	48 605	57 180	65 374	69 262	58 643
Ferro-alloys	34 285	38 592	36 765	31 465	25 649	121 163	197 018	251 672	230 847	122 966
Ingots and other primary forms	470 280	476 459	663 715	466 558	585 264	427 734	549 308	707 814	533 873	457 790
Scrap	7 928 339	8 567 251	8 546 485	7 914 657	6 704 643	1 460 245	2 168 719	2 332 820	1 989 400	1 602 992

(a) Consumption in steel making only.

(b) Net home disposals

Consumption in the United Kingdom iron and steel industry 2011–2020

Thousand tonnes

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Iron ore –										
Home produced (a)	—	—	—	—	—	—	—	—	—	—
Imported (b)	9 735	10 511	14 037	14 353	12 975	9 126	9 023	8 497	8 465	8 173
Manganese ore	—	—	3	—	—	10	2	—	—	—
Iron and steel scrap (f)	3 890	3 675	4 085	4 145	3 700	2 551	2 692	2 789	2 686	2 665
Pig iron (f)	6 610	7 325	9 909	9 678	8 737	6 082	5 920	5 613	5 618	5 508
Alloy metals (c) –										
Nickel	12	10	...	...	...	...	...	...	...	...
Molybdenum	2	2	...	...	...	...	...	...	...	...
Tungsten	0	0	...	...	...	...	...	...	...	...
Vanadium	0	0	...	...	...	...	...	...	...	...
Cobalt	0	0	...	...	...	...	...	...	...	...
Chromium	44	42	...	...	...	...	...	...	...	...
Niobium	0	0	...	...	...	...	...	...	...	...
Ferro-alloys –										
Ferro-manganese	66	66	...	...	...	...	...	...	...	...
Ferro-silico-manganese	16	16	...	...	...	...	...	...	...	...
Ferro-aluminium	2	2	...	...	...	...	...	...	...	...
Ferro-chromium	(d)	(d)	...	...	...	...	...	...	...	...
Ferro-silico-chromium	(d)	(d)	...	...	...	...	...	...	...	...
Ferro-silicon	26	26	...	...	...	...	...	...	...	...
Ferro-silico-zirconium	0	0	...	...	...	...	...	...	...	...
Calcium silicide	0	0	...	...	...	...	...	...	...	...
Ferro-phosphorus	1	1	...	...	...	...	...	...	...	...
Ferro-niobium	(d)	(d)	...	...	...	...	...	...	...	...
Ferro-titanium	1	1	...	...	...	...	...	...	...	...
Dolomite (raw and burnt) (e)	344	556	759	793	790	494	451	427	492	351
Limestone (e)	932	912	1 147	1 255	1 041	680	653	638	591	510
Lime (e)	395	379	387	461	415	294	324	335	400	316
Zinc for galvanising	48	42	...	...	...	...	...	...	...	...
Tin for tinplating	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 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Lead										
<i>Production</i>										
Concentrate-										
Pb content (a) (b)	100	100	100	150	100					
Unwrought-										
Bullion	36 000	36 000	36 000	36 000	36 000					
Refined										
Primary (c)	217 000	227 000	226 000	229 000	197 000					
Refined-Secondary	160 000	160 800	160 000	162 000	158 200					
<i>Consumption</i>										
Refined	220 000	249 800	226 200	230 300	226 470					
<i>Imports</i>										
Ores & concentrates	996	1 242	1 330	1 949	748	1 781	2 867	2 905	3 435	1 170
Ash and residues	236	37	1	105	235	290	36	9	228	603
Unwrought										
Unrefined-										
Base bullion (d)	133 917	149 358	115 539	116 553	139 539	258 379	353 902	259 315	232 526	264 058
Other	1 552	1 128	1 249	1 669	* 1 700	1 344	2 451	30 751	39 958	* 40 000
Refined	19 069	30 717	26 020	38 570	10 707	27 324	57 305	43 322	63 173	16 017
Alloys	—	10	21	106	108	—	33	33	166	162
Scrap	4 904	2 998	2 250	6 218	2 000	5 600	3 890	3 081	9 000	2 373
<i>Exports</i>										
Ores & concentrates	1 824	1 914	1 838	2 231	1 886	2 634	2 843	3 259	2 526	2 963
Ash and residues	1 953	3 674	8 316	7 998	6 820	402	742	642	1 581	826
Unwrought										
Unrefined-										
Base bullion	—	258	—	349	0	—	1 388	7	649	14
Other	81 750	74 746	63 162	61 893	* 60 000	134 363	156 728	128 821	154 434	* 150 000
Refined	100 035	87 047	80 120	74 760	108 055	148 443	168 709	152 919	132 072	169 454
Alloys	9 057	10 649	22 677	33 520	31 282	13 934	21 135	41 617	58 070	46 147
Scrap	62 815	62 057	58 094	46 328	41 202	53 948	82 703	78 254	54 767	48 016

(a) BGS estimate.

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

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

(d) Containing substantial quantities of silver.

Limestone, dolomite and chalk

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Limestone										
<i>Production</i>										
Limestone	...	...	...	...	...
Dolomite	...	...	...	...	...
<i>Imports</i>										
Limestone flux (a)	190 632	462 833	315 851	16 954	25 589	13 124	25 251	19 652	2 100	2 693
Lime	6 680	8 101	7 007	8 210	8 888	1 115	1 821	1 846	1 937	1 721
Dolomite	161 213	242 606	247 144	215 127	318 955	4 658	8 227	9 609	9 529	8 994
<i>Exports</i>										
Limestone flux (a)	187 926	209 183	193 333	162 027	154 091	2 688	3 406	2 974	2 190	2 286
Lime	129 803	131 872	126 455	141 954	121 022	24 306	26 831	22 495	23 549	19 477
Dolomite (b)	159 700	190 800	195 700	239 500	151 000	14 500	20 200	25 800	22 900	19 600
Chalk										
<i>Production</i>										
					
<i>Imports</i>										
	12 597	13 217	9 483	12 451	14 814	1 219	1 532	3 135	2 397	1 216
<i>Exports</i>										
	35 291	25 151	25 787	30 155	42 919	2 800	2 711	2 856	3 176	2 756

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

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

Great Britain consumption of dolomite, limestone and lime in iron and steel production, 1983–2020

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
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	—	—	324	—
2018	282	145	638	—	—	335	—
2019	351	142	591	—	—	400	—
2020	227	124	510	—	—	316	—

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 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Lithium										
<i>Imports</i>										
Oxide and hydroxide	263	324	358	552	467	5 375	5 118	5 030	5 266	2 984
Carbonate	1 095	1 919	1 680	1 648	1 508	6 953	13 859	18 708	9 709	6 193
<i>Exports</i>										
Oxide and hydroxide	113	228	195	396	282	1 417	2 994	3 521	3 961	1 958
Carbonate	447	768	842	645	690	3 217	8 287	10 990	5 845	3 350

Magnesia

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Magnesia										
<i>Imports</i>										
Magnesite	5 438	5 696	2 201	6 065	5 948	1 289	1 262	775	1 566	1 351
<i>Magnesia-</i>										
Dead burned	1 802	5 163	8 475	7 760	5 974	878	2 409	4 384	4 604	3 209
Caustic-calcined	25 961	26 358	22 953	26 717	20 260	7 719	8 464	8 503	8 899	6 673
Other	11 732	8 629	7 046	7 556	9 314	4 045	4 255	4 995	6 571	4 313
Kieserite	11 859	13 990	14 723	8 674	8 217	2 214	2 888	3 081	1 841	1 559
<i>Magnesite or chrome-magnesite</i>										
refractory bricks and shapes (a)(b)	14 413	12 758	18 089	29 893	17 392	11 069	10 702	16 697	17 772	15 139
<i>Exports</i>										
Magnesite	682	627	315	281	90	737	929	518	716	563
<i>Magnesia-</i>										
Dead burned	844	1 185	1 463	2 117	835	798	1 252	1 461	1 879	719
Caustic-calcined	2 899	2 466	3 214	3 376	4 575	585	658	801	1 003	1 174
Other	6 159	5 730	7 585	7 311	6 085	7 493	8 025	11 097	12 252	9 932
Kieserite	112	133	40	50	43	47	51	15	20	29
<i>magnesite or chrome-magnesite</i>										
refractory bricks and shapes (a)(b)	470	2 329	5 686	5 448	3 260	437	1 826	2 811	3 781	1 769

(a) Including dolomite bricks.

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

Magnesium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Magnesium										
<i>Imports</i>										
Ferro-silico-magnesium	209	309	457	376	638	187	296	326	407	836
Scrap	295	359	129	25	43	275	252	102	54	60
Unwrought	2 485	3 212	3 404	2 571	2 118	4 000	5 839	6 490	5 306	3 644
Unwrought alloys	8 804	3 661	1 397	291	404	16 253	7 918	3 116	786	653
Wrought	3 531	5 127	4 989	3 704	2 846	23 317	29 272	21 827	19 484	14 619
<i>Exports</i>										
Ferro-silico-magnesium	68	64	72	83	78	84	85	106	112	96
Scrap	6 173	2 926	1 151	153	65	12 198	6 370	2 280	137	50
Unwrought	63	6	75	9	51	185	120	438	109	239
Unwrought alloys	1 422	1 636	1 868	1 436	892	15 178	16 182	22 162	17 939	11 490
Wrought	512	541	552	369	432	7 697	12 483	23 706	12 864	10 900

Manganese

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Manganese										
<i>Consumption in Iron and Steel Industry</i>										
Ore	9 700	2 400	—	—	—					
<i>Apparent consumption (a)</i>	50 000	44 000	56 000	57 000	52 000					
<i>Imports</i>										
Ores & Concentrates (b)	2 634	3 689	3 212	3 337	3 904	959	1 683	1 474	1 305	1 453
Ferro-manganese	29 248	21 903	31 607	34 438	35 824	18 004	25 909	33 661	33 570	32 919
Ferro-silico-manganese	35 044	31 735	35 815	35 215	28 469	18 092	30 286	30 865	29 138	22 255
Scrap	51	15	51	12	7	69	25	95	20	15
Unwrought	3 038	3 393	3 574	2 630	2 044	4 751	5 078	5 812	4 251	3 135
Wrought	19	82	2	279	22	41	159	14	624	54
Oxides	5 218	6 317	5 984	5 862	5 340	2 717	4 075	4 283	4 811	3 863
<i>Exports</i>										
Ores & Concentrates	419	375	497	136	425	394	374	548	164	136
Ferro-manganese	1 561	2 132	416	464	560	1 693	4 802	804	675	617
Ferro-silico-manganese	789	156	122	178	116	178	188	67	87	40
Scrap	7	2	24	2	9	24	6	43	5	12
Unwrought	234	118	134	140	91	326	199	237	275	158
Wrought	3	20	1	3	0	156	121	70	138	39
Oxides	1 648	1 349	655	989	932	947	1 089	529	936	815
Metal (c)	1 300	800	500	700	200	1 800	2 200	1 000	1 500	900

(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 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Marble										
<i>Imports</i>										
Dimension stone-										
Unworked	15 981	30 167	33 351	35 478	50 326	8 190	11 745	15 895	11 865	13 467
Worked	62 073	55 704	46 885	55 830	42 766	46 773	49 320	41 948	59 458	40 933
Crushed and powdered	129 724	126 492	132 421	89 451	70 568	10 094	8 893	9 212	7 104	5 557
<i>Exports</i>										
Dimension stone-										
Unworked	578	834	1 219	1 265	723	413	465	836	1 225	816
Worked	896	809	831	1 150	1 213	3 155	3 417	4 246	4 666	3 589
Crushed and powdered	261	387	657	280	255	73	46	102	62	38

Mercury

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Mercury										
<i>Imports</i>										
Elemental	9	0	0	10	0	58	27	55	85	17
<i>Exports</i>										
Elemental	37	0	0	0	0	89	13	7	2	2

Mica

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Mica										
<i>Imports</i>										
Crude (a)	100	514	271	1 065	748	34	151	87	319	257
Ground	7 059	8 072	7 789	5 465	4 377	2 495	3 042	3 731	2 280	2 233
Waste	0	—	...	—	0	9	—	...	—	4
Worked	1 329	1 099	1 212	972	843	4 446	4 781	4 509	3 809	3 815
<i>Exports</i>										
Crude (a)	0	10	8	17	5	8	107	20	46	20
Ground	4 259	4 590	4 863	4 650	3 666	3 786	4 716	5 063	4 817	4 352
Waste	—	2	—	7	—	—	15	—	5	—
Worked	902	919	904	997	808	10 453	11 306	11 708	11 193	9 541

(a) Including sheets or splittings.

Molybdenum

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Molybdenum										
<i>Apparent consumption (a)(b)</i>	1 600	3 300	1 200	2 100	1 300					
<i>Imports</i>										
Roasted molybdenite concentrates	10 117	15 701	14 040	12 896	7 457	62 197	127 191	160 297	164 155	68 451
Other ores and concentrates	204	33	11	94	5	1 298	321	176	827	121
Ferro-molybdenum	72	220	267	419	271	674	1 796	3 373	5 919	3 258
Scrap	1 207	1 519	1 719	2 010	1 607	14 000	22 374	33 480	43 012	30 238
Powders	165	144	55	133	91	3 250	3 208	1 407	3 832	2 599
Unwrought	137	231	182	331	146	1 665	4 573	4 078	7 588	3 452
Wrought	66	75	58	34	114	1 753	2 717	3 210	2 921	1 775
Oxides and hydroxides	730	1 573	1 301	1 556	1 232	4 165	12 641	15 485	16 375	11 866
<i>Exports</i>										
Roasted molybdenite concentrates	-----	0	15	120	530	—	1	173	1 466	5 183
Other ores and concentrates	9 620	12 833	13 301	12 236	7 317	75 010	125 981	187 460	179 493	80 876
Scrap	599	1 186	1 744	1 399	890	7 497	16 860	25 967	35 567	18 914
Powders	40	54	153	160	18	950	980	2 137	3 003	493
Unwrought	3	34	52	197	254	84	586	1 285	5 948	5 078
Wrought	46	3	14	9	3	1 545	787	815	841	489
Oxides and hydroxides	0	0	—	2	0	37	14	9	45	8

(a) Metal content.

(b) BGS estimates; see explanatory notes.

Nepheline syenite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Nepheline syenite										
<i>Imports</i>	34 477	38 645	36 122	28 872	19 149	3 117	3 491	3 474	3 018	2 129
<i>Exports</i>	513	537	567	446	435	130	113	150	99	102

Nickel

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Nickel										
<i>Production (a)</i>	43 104	37 090	38 211	34 976	35 177					
<i>Consumption (b)(c)</i>	22 294	23 976	23 097	19 217	16 386					
<i>Imports</i>										
Ores & concentrates	24	28	0	0	0	148	231	3	9	6
Mattes, sinters etc.	68 651	52 114	50 887	51 744	41 755	331 699	327 204	381 688	397 062	334 613
Scrap	11 960	8 337	10 562	13 294	7 166	44 563	50 473	66 737	87 207	41 119
Ferro-nickel	7 618	7 272	11 279	10 713	5 941	14 129	15 149	26 287	12 665	14 329
Unwrought	8 653	10 330	9 857	9 033	5 642	59 795	83 126	103 051	96 526	62 235
Unwrought alloys	3 044	4 530	4 591	4 796	2 970	31 364	69 764	97 352	85 906	49 102
Oxides	9	32	51	154	3	89	174	148	244	113
<i>Exports</i>										
Ores & concentrates	0	5	12	0	23	9	75	20	6	107
Ash and residues	11 547	9 986	9 487	9 136	8 142	111 851	100 252	95 139	89 740	79 461
Mattes, sinters etc.	237	226	65	94	134	1 959	2 620	1 032	1 244	1 335
Scrap	14 443	11 442	20 460	13 863	8 872	70 633	87 575	114 417	118 612	60 905
Ferro-nickel	427	291	154	478	516	136	290	252	680	832
Unwrought	30 034	26 493	23 520	17 301	30 802	215 878	234 309	240 021	194 798	354 555
Unwrought alloys	7 833	7 437	7 752	8 257	5 205	101 658	99 385	122 048	132 713	90 851
Oxides	0	1	0	0	2	14	37	30	20	122

(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 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Peat										
<i>Production</i>	...	...	...	...	...
<i>Imports</i>										
Peat and agglomerated peat	509 911	503 240	470 074	522 520	574 663	30 115	33 058	35 338	40 103	45 870
<i>Exports</i>										
Peat and agglomerated peat	47 014	41 817	41 206	37 292	51 927	5 190	5 653	5 941	5 776	8 463

Perlite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Perlite										
<i>Imports (a)</i>	28 945	22 333	40 402	34 763	19 561	5 052	6 134	6 343	6 397	3 887
<i>Exports (a)</i>	672	1 089	831	682	672	513	592	456	497	522

(a) Figures also include vermiculite and chlorites.

Petroleum (also see Primary fuels)

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Petroleum										
<i>Production</i>										
Crude petroleum	44 306 000	43 185 000	47 848 000	49 344 000	45 658 000					
Condensates and other (s)	3 139 000	3 446 000	3 339 000	3 144 000	3 327 000					
Refined petroleum products	60 003 000	59 796 000	58 205 000	58 726 000	47 876 000					
<i>Consumption (inland deliveries)</i>										
<i>of refined products</i>										
Used as fuels-										
Refineries	3 377 000	3 389 000	3 352 000	3 224 000	2 601 000	...	...	...	...	...
Elsewhere	59 159 000	60 056 000	59 455 000	58 321 000	43 682 000	...	...	...	...	...
Not used as fuels	7 035 000	7 262 000	6 921 000	6 482 000	5 512 000					
Total	69 571 000	70 707 000	69 728 000	68 027 000	51 795 000					
<i>Imports</i>										
Crude petroleum	43 320 697	50 351 691	48 064 186	49 925 112	45 724 018	10 585 049	16 074 046	19 739 796	19 203 974	12 141 988
Partly refined petroleum and refined products	35 803 762	33 839 960	36 049 170	13 282 335	9 546 298	10 705 765	12 792 546	16 458 324	5 868 175	2 755 493
<i>Exports</i>										
Crude petroleum	39 927 139	45 743 284	49 786 125	45 479 841	46 152 558	9 710 798	14 683 669	20 360 353	18 191 562	12 519 045
Partly refined petroleum and refined products	23 190 368	23 732 942	22 448 030	4 121 764	3 630 087	6 907 997	9 223 996	10 580 955	1 887 489	1 126 855

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

Natural gas

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Natural gas										
<i>Production</i>										
Methane										
Colliery (a)	38 000	35 000	33 000	24 000	16 000					
Offshore and onshore (a)	39 838 000	39 981 000	38 792 000	37 385 000	37 690 000					
<i>Consumption (b)</i>	76 635 000	74 618 000	74 647 000	73 819 000	69 383 000					
<i>Imports</i>										
Liquefied natural gas (c)	10 060 648	6 312 040	6 716 340	16 719 525	17 202 675					
Natural gas in gaseous state (c)	35 242 070	38 143 892	37 744 835	27 233 685	23 914 320					
Total (c)	45 302 719	44 455 932	44 461 176	43 953 210	41 116 995	6 085 000	7 465 000	10 845 000	6 875 000	4 655 000
Other natural gas (d)	1 198 131	1 065 836	801 671	548 543	429 640	295 282	387 896	322 814	216 678	142 598
<i>Exports</i>										
Liquefied natural gas and natural gas in gaseous state (c)	9 843 177	10 699 176	7 127 236	7 772 528	9 106 069	1 355 000	1 830 000	1 820 000	1 125 000	810 000
Other natural gas (d)	3 390 326	2 976 609	2 838 830	2 883 818	2 563 479	851 269	1 053 820	1 171 313	1 025 506	703 473

(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 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Phosphorus										
<i>Imports</i>										
Phosphate rock	801	558	168	263	380	364	284	124	231	2171
Fertiliser	138 256	165 383	144 232	147 062	149 117	41 649	49 060	47 843	48 970	40 351
Superphosphates	154 397	136 506	171 743	160 914	141 084	35 711	31 155	47 552	40 917	26 636
Other phosphatic fertilisers	5 893	10 149	2 520	4 772	270	920	1 565	704	1 073	318
Elemental phosphorus	1 360	1 658	1 817	698	576	2 984	5 283	4 281	1 767	1 567
Phosphoric acids	75 949	82 254	73 845	71 881	79 463	41 901	44 489	48 082	49 355	52 190
Calcium phosphates	81 672	85 221	96 918	99 703	79 511	40 389	38 386	42 418	43 682	35 182
Sodium phosphates and orthophosphates	10 015	8 751	8 288	9 507	8 730	9 293	8 878	9 369	9 691	8 961
Polyphosphates including ammonium and sodium	34 052	26 642	37 600	32 162	27 487	25 051	25 450	30 857	31 124	28 754
<i>Exports</i>										
Phosphate rock	71	234	281	63	473	490	215	1 193	790	230
Fertiliser	487	786	1 002	712	826	553	507	810	652	635
Superphosphates	75	23	1 877	(b)* 2 510	(b)* 270	243	153	546	(b)* 710	(b)* 50
Other phosphatic fertilisers	9 477	5 769	6 604	5 138	1 677	1 893	1 202	956	657	718
Elemental phosphorus	0	0	0	8	23	27	19	18	20	13
Phosphoric acids	1 967	1 916	1 715	7 502	9 063	1 960	1 784	1 945	6 455	7 493
Calcium phosphates	4 169	4 515	1 422	1 829	3 224	6 494	3 967	1 623	2 547	2 663
Sodium phosphates and orthophosphates	830	870	643	826	520	1 338	1 472	1 308	1 238	972
Polyphosphates including ammonium and sodium	1 497	1 439	1 213	1 555	1 251	3 398	3 720	4 096	3 641	4 845

Platinum group metals

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Platinum group metals										
<i>Imports</i>										
Unwrought or partly worked-										
Platinum	204	339	84	96	100	1 108 904	1 399 896	1 470 589	2 031 032	1 858 409
Palladium	216	422	48	67	86	495 410	1 054 226	1 126 245	2 500 250	3 819 931
Other platinum metals	79	23	14	10	10	64 784	145 127	235 522	456 004	1 622 744
Waste & scrap	340	1 281	1 194	663	628	222 215	201 653	48 637	42 652	61 265
<i>Exports</i>										
Unwrought or partly worked-										
Platinum	120	91	95	62	97	1 618 559	2 099 626	1 972 488	1 347 677	2 156 932
Palladium	91	89	83	83	77	1 276 426	1 906 302	2 049 827	3 113 649	4 218 756
Other platinum metals	60	23	51	20	18	195 277	319 628	522 053	900 193	2 651 225
Waste & scrap	2 811	2 265	3 149	2 957	2 674	27 191	39 697	71 402	100 318	166 326

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 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Potassium compounds										
<i>Production</i>										
Chloride (K ₂ O Content)	432 000	216 000	210 000	—	—					
Polyhalite	200 000	500 000	400 000	635 000	709 000					
<i>Imports</i>										
Sulphate	11 743	12 270	10 151	9 057	12 087	4 843	4 688	3 845	4 272	6 708
Chloride	156 456	362 278	333 293	448 937	426 057	32 290	75 128	73 172	105 644	93 381
Other potassic fertilisers	6 598	6 713	2 866	3 563	622	1 103	1 638	1 357	1 731	1 560
<i>Exports</i>										
Sulphate	1 497	1 269	2 221	2 546	3 221	520	370	607	710	810
Chloride	101 609	17 840	36 633	77 842	113 492	22 850	7 588	12 573	18 801	21 428
Other potassic fertilisers	160 420	224 884	283 256	451 513	519 081	9 301	21 337	23 122	38 599	41 336

Precious and semi-precious stones

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Precious and semi-precious stones (excluding diamond) (a)										
<i>Imports</i>										
Natural stones	330	498	387	474	436	152 908	158 284	94 105	135 750	70 577
Synthetic stones	40	29	18	41	1	3 721	10 559	7 478	17 121	280
Dust and powder	1	2	1	1	1	154	339	427	66	126
<i>Exports</i>										
Natural stones	28	56	22	154	14	117 000	163 444	116 802	209 652	55 393
Synthetic stones	8	6	6	4	1	10 605	18 837	24 754	17 813	462
Dust and powder	8	1	1	132	2	580	429	144	243	38

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

United Kingdom production of primary fuels 1990–2020 (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)	Total
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	7	15	3	114
2014	7	44	36	8	14	4	113
2015	5	50	39	9	16	5	124
2016	3	52	40	10	15	5	126
2017	2	51	40	11	15	6	127
2018	2	56	39	12	14	7	130
2019	2	58	37	12	12	7	128
2020	1	54	38	13	11	8	124

(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 generation by solar PV. Excludes generation from pumped storage stations

Source: Department for Business, Energy and Industrial Strategy.

United Kingdom consumption of energy (primary fuel input) 1990–2020 (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
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	9	15	3	1	207
2014	32	66	66	11	14	4	2	194
2015	25	67	68	12	16	5	2	195
2016	13	68	76	14	15	5	2	192
2017	10	70	74	14	15	6	1	191
2018	9	69	74	16	14	7	2	190
2019	6	68	73	17	12	7	2	184
2020	6	51	68	18	11	8	2	163

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

Source: Department of Energy and Climate Change.

(b) Including colliery methane.

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

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

Pumice

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Pumice										
<i>Imports</i>	8 034	2 699	2 131	1 550	1 280	989	863	717	654	648
<i>Exports</i>	254	328	500	304	403	244	301	431	323	553

Pyrite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Pyrite										
<i>Imports</i>										
Iron pyrites (incl.cupreous)-										
Unroasted	648	798	2 079	2 848	4 466	156	180	468	1 003	1 202
Roasted	311	77	426	335	0	103	68	165	82	3
<i>Exports</i>										
Iron pyrites (incl.cupreous)-										
Unroasted	2 979	3 014	6 876	226	556	800	939	1 600	100	190
Roasted	0	0	1	0	—	2	3	6	1	—

Quartz and quartzite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Quartz and quartzite										
<i>Imports</i>										
Quartzite	524	410	3 921	4 471	4 527	251	280	209	296	568
Quartz	15 815	25 431	20 011	22 002	21 077	11 405	19 860	16 384	22 300	20 704
<i>Exports</i>										
Quartzite	—	14	20	11	5	—	31	414	128	25
Quartz	346	419	928	696	3 499	319	544	895	1 119	860

Radioactive and associated materials

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Radioactive and associated materials										
<i>Imports</i>										
Natural and enriched uranium, plutonium, artificial radioactive isotopes, and their compounds	...	...	...	...	...	563 863	246 120	307 981	294 606	210 895
<i>Exports</i>										
Natural and enriched uranium, isotopes, and their compounds plutonium, artificial radioactive	...	...	...	...	...	713 043	216 866	239 944	277 540	172 128

Rare earths

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Rare earths										
<i>Imports</i>										
Metals (a)	10	6	0	0	0	245	154	14	28	7
Cerium compounds	502	1 302	437	563	108	8 600	12 143	3 367	9 427	1 164
Other rare earth compounds (b)	341	628	499	563	334	6 582	16 235	13 596	9 427	7 356
Ferro-cerium & other pyrophoric alloys	67	41	1	4	27	170	101	35	102	181
<i>Exports</i>										
Metals (a)	9	13	12	10	8	412	512	374	231	253
Cerium compounds	38	775	151	36	38	1 073	12 899	2 292	1 736	1 263
Other rare earth compounds (b)	165	278	356	218	104	4 121	6 733	9 308	4 484	1 494
Ferro-cerium & other pyrophoric alloys	1	25	50	45	10	170	330	302	282	178

(a) Including yttrium and scandium.

(b) Including yttrium and scandium compounds.

Salt

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Salt										
<i>Production</i>	3 898 987	2 361 707	3 430 266	2 377 765	2 312 100					
<i>Imports</i>	445 477	703 377	1 129 652	856 464	612 494	52 363	72 200	76 796	73 409	72 424
<i>Exports</i>	243 433	352 195	366 935	273 285	374 671	37 974	47 594	60 078	52 001	54 811

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

Sand and gravel (see also Aggregates)

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Sand and gravel										
<i>Production*</i>										
Sand & gravel (a)	68 075 000	67 548 000	69 882 000	(u) 66 170 000	(u) 57 702 000					
<i>Consumption</i>										
Building sand	...	...	...	...	...
Concreting sand	...	...	...	...	...
Gravel and hoggin	...	...	...	...	...
Total	...	...	...	...	...
<i>Imports</i>	879 166	631 921	488 876	465 526	348 107	17 793	18 704	19 951	25 586	22 491
<i>Exports (c)</i>	2 445 821	2 409 597	2 841 913	3 257 033	3 331 874	26 552	26 473	28 994	40 017	31 407

* Source: Sources: Mineral Product Association, Department for the Economy (Northern Ireland)

(a) Including production from marine dredging.
 (b) Includes an estimate for Northern Ireland.

(c) 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): 2016: 2 767 125, 2017: 3 127 371; 2018: 4 110 142; 2019: 4 672 369 and 2020: 4 344 873.

United Kingdom production of sand and gravel 1995–2020

Million tonnes

Year	Land-based production			Marine-dredged			Total production United Kingdom	For beach replenishment (c) (f)
	Great Britain (a)	Northern Ireland (b)	Total	For home market (a)	For export (c)	Total		
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	3.2	52.1	(c) 13.7	4.1	17.8	69.9	2.0
2019	(e) 44.5	(d) 3.1	47.4	(c) 13.4	4.7	18.1	65.5	3.9
2020	(e) 38.6	(d) 2.6	41.2	(c) 12.1	4.3	16.4	57.6	1.6

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 1985–2020

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
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	1 410	2 571	2 509	5 877	6 600	11 936	17 538	3 923	52 364	2 145	5 111	59 620
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
2019	1 820	2 335	2 312	6 476	7 063	11 125	15 916	3 433	50 480	1 810	5 630	57 920
2020	1 257	1 753	2 093	6 252	5 373	10 257	13 954	3 198	44 137	1 830	4 758	50 725

(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 trade association.

For 2014 and 2019 the Aggregate Minerals Survey

Sandstone

United Kingdom summary 2015–2019

Commodity	2016	2017	2018	2019	2020
Tonnes					
Sandstone – see Building and dimension stone					
<i>Production</i>

(a) Includes an estimate for Northern Ireland.

Selenium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Selenium										
<i>Imports</i>										
Elemental	325	238	244	261	127	2 575	1 464	2 284	2 297	1 154
<i>Exports</i>										
Elemental	214	46	23	57	21	3 029	1 065	655	1 063	759

Silica sand

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Silica sand										
<i>Production (a) (b)</i>										
	4 251 219	5 051 461	4 890 490	5 136 383	5 301 296					
<i>Imports</i>										
	111 060	154 051	139 980	203 569	111 684	9 900	11 974	10 545	12 355	11 791
<i>Exports</i>										
	63 227	91 001	83 315	270 849	189 890	4 222	4 012	3 948	4 006	4 773

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

(b) Source: Office for National Statistics, except 2018 which was a comprehensive survey by the Silica and Moulding Sands Association and BGS

Silicon

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Silicon										
<i>Imports</i>										
Elemental silicon-										
Containing not less than										
99.99% silicon	1 372	889	321	235	397	22 681	18 812	17 812	26 406	19 991
Other	88 450	97 083	100 076	79 786	76 167	141 137	161 849	192 025	154 752	134 466
Ferro-silicon	32 652	34 399	39 958	29 766	24 610	25 316	33 554	43 505	31 154	23 151
Ferro-silico-manganese	35 044	31 735	35 815	35 215	28 469	18 092	30 286	30 865	29 138	22 255
Ferro-silico-magnesium	209	309	457	376	638	187	296	326	407	836
Ferro-silico-chrome	47	12	1	18	6	82	55	12	34	16
Doped silicon	1 112	279	217	140	214	59 871	55 454	43 301	40 628	37 030
<i>Exports</i>										
Elemental silicon-										
Containing not less than										
99.99% silicon	2 168	1 012	7	19	96	27 619	13 227	179	316	293
Other	2 044	2 408	1 855	1 578	2 639	2 964	3 984	3 367	3 962	5 142
Ferro-silicon	3 676	2 964	2 525	1 526	1 263	5 832	5 499	4 717	3 284	3 170
Ferro-silico-manganese	789	156	122	178	116	178	188	67	87	40
Ferro-silico-magnesium	68	64	72	83	78	84	85	106	112	96
Ferro-silico-chrome	114	545	89	43	60	278	1 269	242	162	188
Doped silicon	181	204	239	262	230	87 703	104 774	107 180	114 495	98 758
Doped silicon	263	181	204	239	262	81 329	87 703	104 774	107 180	114 495

Sillimanite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Sillimanite										
<i>Imports</i>										
Sillimanite minerals (a)	6 130	8 526	9 805	8 634	6 856	1 890	2 689	3 054	2 906	2 367
Chamotte earth (b)	12 891	10 865	9 319	9 773	6 511	2 587	2 375	2 008	2 031	1 237
Mullite	5 531	4 656	3 405	3 308	2 170	2 603	2 473	2 264	1 611	1 052
<i>Exports</i>										
Sillimanite minerals (a)	238	346	648	946	678	80	111	196	378	199
Chamotte earth (b)	871	1 059	973	792	430	303	415	383	330	210
Mullite	1 419	2 099	1 994	923	548	2 057	2 507	2 570	1 382	747

(a) Andalusite, kyanite and sillimanite.

(b) Calcined refractory clay including flint clay.

Silver

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Kilograms					£ thousand				
Silver										
<i>Production</i>										
	(a) 14	—	—	(b) 130	(b) 100					
<i>Imports</i>										
Ores & concentrates	962	7	79	34	114	5 024	2 321	1 511	1 250	126
Waste & scrap	7 366	8 525	10 438	9 743	9 798	538 484	691 254	831 182	1 041 741	1 924 733
Unwrought	3 890	4 559	3 314	2 931	3 546	1 618 543	1 967 094	1 251 044	1 230 635	1 887 047
Partly worked	924	830	1 119	321	212	132 603	152 233	253 134	46 338	46 422
Silver in unrefined lead bullion (c)	270	360	230	230	280					
<i>Exports</i>										
Ores & concentrates	18	32	42	2	1	1 672	1 386	2 070	175	134
Waste & scrap	10 614	10 742	11 640	11 609	10 117	321 037	358 966	311 851	477 268	988 430
Unwrought	1 359	1 340	2 697	(d) 1 600	4 891	498 122	581 668	1 015 074	(d) 811 726	2 601 521
Partly worked	335	121	231	(b) 190	725	40 131	41 688	70 451	(b) 45 800	329 100

(a) Sales

(b) BGS estimate

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

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

Slate

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Slate										
<i>Production</i> (a)	780 000	820 000	820 000	160 000	160 000					
<i>Imports</i>										
Unworked (b)	48 468	77 562	53 167	36 766	29 374	11 050	18 666	16 544	13 914	12 452
Roofing and wall tiles	150 190	135 458	127 934	142 175	141 755	59 568	59 058	60 586	65 597	64 581
Other worked slate (c)	27 666	28 340	30 327	22 262	23 504	12 230	13 153	14 104	11 093	9 920
<i>Exports</i>										
Unworked (b)	27 753	68 360	101 972	92 960	435	1 207	1 286	2 460	2 136	505
Roofing and wall tiles	7 593	6 631	5 656	6 311	6 556	4 620	4 570	4 187	4 248	4 536
Other worked slate (c)	10 970	6 654	7 664	2 549	2 285	3 298	2 736	2 681	1 721	971

(a) BGS estimate.

(b) Including roughly split or squared.

(c) Including articles of slate or agglomerated slate

Strontium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Strontium										
<i>Imports</i>										
Carbonate	176	196	219	225	97	153	146	166	164	100
<i>Exports</i>										
Carbonate	20	0	0	1	0	87	4	28	107	3

Sulphur

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Sulphur										
<i>Production</i> (a)	133 000	133 000	129 000	130 000	106 000					
<i>Imports</i>										
Sulphur-										
Crude	4 629	8 584	175	14 098	18 151	1 083	1 807	276	754	1 304
Refined	10 574	6 403	7 067	4 746	4 483	4 709	4 791	4 250	2 422	2 586
Sublimed, colloidal etc	328	261	267	248	185	423	349	304	305	261
<i>Exports</i>										
Sulphur-										
Crude	5 426	16 695	14 895	1 526	990	748	1 272	609	124	103
Refined	46 997	30 480	11 136	23 664	5 764	5 004	3 684	1 753	2 648	1 122
Sublimed, colloidal etc	92	87	57	55	1 478	97	141	73	112	292

(a) Produced from oil refineries.

Talc

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Talc										
<i>Production</i>	2 997	3 218	1 640	3 131	1 386					
<i>Imports</i>	50 671	50 575	47 384	51 818	40 660	16 101	16 223	15 575	15 851	13 638
<i>Exports</i>	5 557	3 264	2 759	2 027	1 883	1 901	1 516	1 839	1 715	1 850

Tantalum and Niobium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Tantalum and Niobium										
<i>Imports</i>										
Ferro-niobium	682	6 921	870	741	445	11 407	13 123	13 189	14 016	9 130
Tantalum	82	83	129	195	93	10 682	13 845	22 977	14 464	8 393
Niobium (a)	163	199	214	136	114	5 124	9 298	10 891	6 502	6 791
<i>Exports</i>										
Ferro-niobium	34	63	42	37	19	541	1 091	1 039	583	351
Tantalum	8	21	56	86	24	2 007	3 877	9 544	13 957	3 396
Niobium (a)	37	48	66	91	23	4 618	12 526	8 063	2 299	2 182

(a) Including rhenium.

Tellurium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Tellurium										
<i>Imports</i>	22	1	0	1	2	440	97	31	102	188
<i>Exports</i>	9	2	1	0	0	346	117	22	28	18

Tin

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2017	2017	2018	2019	2020
	Tonnes					£ thousand				
Tin										
<i>Production</i>	160	255	(a) 230	—	—					
<i>Consumption</i>										
Refined	1 080	1 080	1 080	1 080	240					
<i>Imports</i>										
Concentrates	—	—	—	25	25	—	—	—	414	355
Unwrought	4 049	4 869	5 533	3 440	3 641	50 151	76 307	84 191	52 932	50 471
Unwrought alloys	669	150	110	120	49	3 856	2 412	1 150	1 869	818
Scrap	6	0	18	6	5	35	12	112	42	41
<i>Exports</i>										
Concentrates	158	—	—	—	—	1 215	—	—	—	—
Unwrought	429	224	270	159	139	6 183	3 318	4 469	1 940	1 667
Unwrought alloys	331	465	375	280	315	3 423	5 062	4 416	3 504	3 483
Scrap	525	129	10	99	18	730	568	105	402	188

(a) BGS estimate.

Titanium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Titanium										
<i>Production</i>										
Titanium dioxide pigment (a)	280 000	290 000	280 000	270 000	270 000					
<i>Apparent consumption (b)</i>										
	28 000	54 000	53 000	10 000	29 000					
<i>Imports</i>										
Titanium minerals	257 945	256 411	301 584	201 493	201 432	126 312	130 818	159 118	123 008	128 060
Scrap	6 606	9 073	10 251	8 986	7 302	10 573	15 513	18 585	17 391	10 659
Unwrought	10 645	10 889	11 260	10 740	6 164	80 224	95 622	103 222	94 023	48 227
Wrought	6 587	6 574	16 825	8 520	6 226	322 789	357 477	435 014	417 620	312 708
Ferro-titanium (c)	452	618	463	214	198	866	1 118	1 140	577	579
Oxides	4 173	6 070	5 183	4 154	3 601	8 269	14 227	12 819	11 225	9 577
Pigments based on titanium dioxide	48 538	54 569	56 354	60 819	62 455	84 179	116 402	136 956	140 920	130 936
<i>Exports</i>										
Titanium minerals	8	16	79	4 020	17	136	132	213	3 191	45
Scrap	6 058	7 575	7 020	7 632	2 981	16 696	21 014	19 071	23 413	7 336
Unwrought	1 346	1 297	2 064	1 856	935	12 605	13 747	22 947	19 879	10 483
Wrought	7 155	7 006	7 143	7 755	5 313	348 075	362 506	334 808	395 658	273 551
Ferro-titanium (c)	14 970	15 304	16 181	13 143	12 014	29 774	43 114	43 019	33 972	26 805
Oxides	3 429	3 483	628	1 258	3 421	5 577	6 458	2 529	3 306	8 546
Pigments based on titanium dioxide	225 545	236 573	225 507	218 722	217 235	367 468	464 829	489 145	473 943	456 446

(a) BGS estimates

(b) BGS estimates; see explanatory notes.

(c) Including ferro-silico-titanium.

Tungsten

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Tungsten										
<i>Production</i>										
	923	1 370	(a) 1 240	—	—					
<i>Imports</i>										
Ores & concentrates	5	12	9	18	48	235	284	331	873	1 047
Scrap	1 590	1 425	1 659	1 191	942	15 519	22 117	26 222	17 414	12 533
Unwrought	431	218	275	214	236	5 507	5 956	9 171	6 407	6 643
Wrought	145	152	59	99	41	5 574	4 933	5 744	5 149	4 457
Ferro-tungsten (b)	28	65	82	47	51	434	1 233	1 835	895	810
Carbide	1 607	1 848	1 475	540	126	37 191	54 755	53 191	17 738	4 499
Tungstates	3	6	9	10	5	111	194	155	313	153
Oxides and hydroxides	1	1	2	1	1	96	72	225	135	116
<i>Exports</i>										
Ores & concentrates	1 926	—	—	—	—	11 115	—	—	—	—
Scrap	1 636	1 812	1 674	1 806	1 370	14 646	21 684	23 526	18 281	12 373
Unwrought	73	94	103	118	56	5 054	5 934	8 236	7 758	3 488
Wrought	86	76	77	73	58	7 458	6 210	6 418	5 994	4 987
Ferro-tungsten (b)	247	233	118	5	0	665	519	768	180	9
Carbide	26	27	592	147	22	1 326	1 928	3 571	5 993	1 974
Tungstates	1	1	0	0	0	23	17	14	4	19
Oxides and hydroxides	6	4	2	2	1	122	57	26	69	73

(a) BGS estimate

(b) Including ferro-silico-tungsten.

Vanadium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Vanadium										
<i>Imports</i>										
Unwrought	253	284	189	241	81	4 235	6 325	7 877	10 640	2 160
Oxides	18	0	3	0	33	87	2	180	12	292
Ferro-vanadium	2 155	5 272	2 236	187	160	2 504	8 768	14 901	5 925	2 561
<i>Exports</i>										
Unwrought	45	105	276	120	14	778	2 082	3 853	3 512	489
Oxides	0	2	0	0	0	7	18	12	14	7
Ferro-vanadium	12	15	15	11	32	126	145	512	280	513

Vermiculite

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Vermiculite										
<i>Imports (a)</i>										
	28 945	22 333	40 402	34 763	19 561	5 052	6 134	6 343	6 397	3 887
<i>Exports (a)</i>										
	672	1 089	831	682	672	513	592	456	497	522

(a) Figures also include perlite and chlorites.

Zinc

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Zinc										
<i>Consumption</i>										
Slab	97 133	101 190	104 759	91 394	77 204					
<i>Imports</i>										
Ores & concentrates	1	19	1	0	2 336	92	214	34	1	4 666
Ash and residues	98 387	120 293	116 235	134 320	70 557	2 540	4 660	7 021	10 418	6 308
Unwrought	94 731	98 731	102 510	93 052	78 205	154 408	234 852	246 358	203 607	152 694
Unwrought alloys	6 822	6 036	6 423	5 916	5 362	11 544	15 387	16 155	14 212	10 893
Scrap	470	781	676	781	984	554	1 079	1 109	1 204	1 088
<i>Exports</i>										
Ores & concentrates	11 473	16 019	23 192	18 669	20 848	5 281	9 443	12 154	9 494	9 202
Ash and residues	6 068	6 761	5 687	6 605	4 005	6 593	10 865	9 021	8 326	5 310
Unwrought	2 885	3 411	6 016	4 012	3 621	4 401	7 658	14 360	8 664	7 118
Unwrought alloys	23 515	26 724	24 687	20 069	14 853	43 430	67 702	63 093	44 403	28 896
Scrap	2 967	3 294	3 257	5 477	4 443	3 500	6 092	5 766	8 169	6 470

Zirconium

United Kingdom summary 2016-2020

Commodity	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Tonnes					£ thousand				
Zirconium										
<i>Apparent consumption</i> (a)	3 000	3 000	3 000	2 000	2 000					
<i>Imports</i>										
Ores and Concentrates (b)	6 087	7 524	8 060	6 589	6 836	6 121	8 078	11 427	10 681	10 508
Scrap	121	130	206	184	61	795	893	2 048	1 606	495
Unwrought	130	169	88	151	129	3 830	5 365	2 821	5 186	4 081
Wrought	26	50	29	53	39	1 351	1 343	2 612	3 642	2 659
<i>Exports</i>										
Ores and concentrates	1 084	1 127	1 461	1 165	1 112	2 504	2 825	3 974	3 349	2 710
Scrap	46	34	109	152	65	536	448	1 273	1 609	832
Unwrought	13	4	14	2	3	521	378	465	234	275
Wrought	7	4	13	14	19	350	222	559	405	811

(a) BGS estimates; see explanatory notes.

(b) Mainly zircon.