



**British
Geological Survey**
NATURAL ENVIRONMENT RESEARCH COUNCIL

United Kingdom Minerals Yearbook 2012

Minerals and Waste Programme
Open Report OR/13/024



BRITISH GEOLOGICAL SURVEY

MINERALS AND WASTE PROGRAMME

OPEN REPORT OR/13/024

United Kingdom Minerals Yearbook 2012

Statistical data to 2011

T. Bide, T. J. Brown and S. F. Hobbs.

Keywords

United Kingdom, minerals,
production, imports, exports.

Front cover

Roan Edge Quarry, New Hutton,
Kendal, Cumbria operated by
Cemex UK Materials Ltd.
BGS © NERC.
Photographer: Tom Bide

Bibliographical reference

T. Bide, T. J. Brown and S. F.
Hobbs. 2013. United Kingdom
Minerals Yearbook 2012. *British
Geological Survey Open Report*,
OR/13/024. 88pp.

BRITISH GEOLOGICAL SURVEY

The full range of our publications is available from BGS shops at Nottingham, Edinburgh, London and Cardiff (Welsh publications only) see contact details below or shop online at www.geologyshop.com

The London Information Office also maintains a reference collection of BGS publications, including maps for consultation.

We publish an annual catalogue of our maps and other publications; this catalogue is available online or from any of the BGS shops.

The British Geological Survey carries out the geological survey of Great Britain and Northern Ireland (the latter as an agency service for the government of Northern Ireland), and of the surrounding continental shelf, as well as basic research projects. It also undertakes programmes of technical aid in geology in developing countries.

The British Geological Survey is a component body of the Natural Environment Research Council.

© NERC 2013 All rights reserved

Copyright in materials derived from the British Geological Survey's work is owned by the Natural Environment Research Council (NERC) and/or the authority that commissioned the work. You may not copy or adapt this publication without first obtaining permission. Contact the BGS Intellectual Property Rights Section, British Geological Survey, Keyworth, e-mail ipr@bgs.ac.uk.

You may quote extracts of a reasonable length without prior permission, provided a full acknowledgement is given of the source of the extract.

All communications regarding the content of this publication should be addressed to the Head of Science, Minerals and Waste, British Geological Survey, Keyworth, Nottingham NG12 5GG

Tel 0115 936 3495 Fax 0115 936 3446

e-mail: minerals@bgs.ac.uk

British Geological Survey offices

BGS Central Enquiries Desk

Tel 0115 936 3143 Fax 0115 936 3276
email enquiries@bgs.ac.uk

Keyworth, Nottingham NG12 5GG

Tel 0115 936 3100 Fax 0115 936 3200
email sales@bgs.ac.uk

Murchison House, West Mains Road, Edinburgh EH9 3LA

Tel 0131 667 1000 Fax 0131 668 2683
email scotsales@bgs.ac.uk

Natural History Museum, Cromwell Road, London SW7 5BD

Tel 020 7589 4090 Fax 020 7584 8270
Tel 020 7942 5344/45 email bgs_london@bgs.ac.uk

Columbus House, Greenmeadow Springs, Tongwynlais, Cardiff CF15 7NE

Tel 029 2052 1962 Fax 029 2052 1963

Maclean Building, Crowmarsh Gifford, Wallingford OX10 8BB

Tel 01491 838800 Fax 01491 692345

Geological Survey of Northern Ireland, Colby House, Stranmillis Court, Belfast BT9 5BF

Tel 028 9038 8462 Fax 028 9038 8461

www.bgs.ac.uk/gsni/

Parent Body

Natural Environment Research Council, Polaris House, North Star Avenue, Swindon SN2 1EU

Tel 01793 411500 Fax 01793 411501
www.nerc.ac.uk

Website www.bgs.ac.uk

Shop online at www.geologyshop.com

Acknowledgements

The compilers of this volume are grateful for the help received from the Office for National Statistics, the Department for Business, Innovation and Skills, the Department for Communities and Local Government, the Department of Energy and Climate Change, the Crown Estate Commissioners, The Crown Mineral Agent, the Northern Ireland Department of Enterprise, Trade and Investment and the Isle of Man Department of Trade and Industry. They would also like to acknowledge the valuable assistance given by the World Bureau of Metal Statistics, the UK Iron and Steel Statistics Bureau, the Mineral Products Association, the Kaolin and Ball Clay Association, The Coal Authority and the numerous companies that have generously provided additional information.

Contents

Acknowledgements	1
Contents	2
Explanatory notes	4
Tables	7
Trade in minerals and mineral-based products compared with total trade 2007–2011	7
Balance of trade in minerals and mineral-based products 2007–2011.....	8
Approximate value of minerals produced in the UK 2005–2011	10
UK approximate value of minerals produced onshore and offshore 2004–2011	10
UK mining and quarrying: gross value added 2005–20012	11
UK employment in the minerals industry, 2011	11
UK production of minerals 2006–2012.....	12
England production of mineral 2005–2011	13
Wales production of minerals 2005–2011	14
Scotland production of minerals 2005–2011	15
Minerals produced in Northern Ireland, Isle of Man, Guernsey and Jersey 2007–2011.....	16
Number of mineral workings in the UK by commodity.....	17
Abrasives, natural	18
Aggregates	18
Aluminium	22
Aluminium compounds.....	22
Antimony	23
Arsenic.....	23
Asbestos	23
Ashphalt, natural	24
Ball clay	24
Barytes.....	24
Bauxite	25
Bentonite.....	25
Beryllium	25
Bismuth	25
Boron	26
Bricks	26
Bromine	26
Building and dimension stone	27
Cadmium	27
Cement	28
Chalk (see Limestone)	51
China clay	28
China stone (see Feldspar).....	42
Chromium	29
Clays.....	29
Coal	31
Cobalt	34
Coke and breeze.....	34
Copper	35
Crushed rock (also see Aggregates).....	35
Diamond	41
Diatomite.....	41
Dolomite (see Limestone)	51
Feldspar	42
Fireclay	42
Fluorspar.....	42
Gas, natural (see Petroleum).....	64
Germanium	43
Gold	43
Granite (see Igneous rock)	45
Graphite	44
Gypsum	44
Hafnium	45
Igneous rock	45
Insulating materials	47
Iodine	47

Iron compounds and earth colours.....	47
Iron ore	48
Iron and steel.....	48
Lead.....	50
Limestone, dolomite and chalk.....	51
Lithium	58
Magnesia	58
Magnesium	59
Manganese.....	59
Marble.....	60
Mercury.....	60
Mica	60
Molybdenum	61
Natural Gas.....	64
Nepheline syenite	61
Nickel.....	62
Niobium (see Tantalum and Niobium).....	84
Peat	62
Perlite.....	63
Petroleum (also see Primary fuels).....	63
Phosphorus.....	65
Platinum group metals	65
Potassium compounds.....	66
Precious and semi-precious stones (excluding diamonds)	66
Primary fuels	67
Pumice.....	69
Pyrite.....	69
Quartz and quartzite	69
Radioactive and associated materials.....	70
Rare earths	70
Salt.....	70
Sand and gravel (also see Aggregates).....	71
Sandstone.....	77
Selenium.....	79
Sepiolite	79
Silica sand	79
Silicon	81
Sillmanite	81
Silver.....	82
Slate.....	82
Strontium	83
Sulphur	83
Talc	83
Tantalum.....	84
Tellurium.....	84
Tin.....	84
Titanium	85
Tungsten.....	86
Vanadium.....	86
Vermiculite.....	87
Zinc.....	87
Zirconium	88

Diagrams

Value of UK minerals production 2011.....	9
Value of UK construction and industrial minerals production 2011	9
GB production of crushed rock by end-use 2011	36
GB production of sand and gravel by end-use 2011	71

Explanatory notes

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

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

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

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

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

<i>Troy ounce</i>	<i>Kilogram</i>
1	= 0.0311035
32.1507	= 1

<i>Pound</i>	<i>Kilogram</i>
1	= 0.453592
2.20462	= 1

<i>Hundredweight</i>	<i>Kilogram</i>
1	= 50.8023
0.019684	= 1

<i>Long ton</i>	<i>Tonne</i>
1	= 1.01605
0.984206	= 1

<i>Square yard</i>	<i>Square metre</i>
1	= 0.836127
1.19599	= 1

<i>Cubic yard</i>	<i>Cubic metre</i>
1	= 0.764555
1.30795	= 1

<i>UK gallon</i>	<i>Litre</i>
1	= 4.54596
0.2199755	= 1

Symbols: The following symbols are used throughout:

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

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

Trade: Trade figures from INTRASTAT, the system for measuring intra-EC trade became available from 1993. This was introduced following the abolition of customs controls as a result of the Single Market and trade figures are now compiled

from data provided directly from companies instead of Customs documents. Extra-EC trade continues to be collected from Customs declarations as before. The transition from one system to another has produced some anomalous figures in terms of the size of the trade in and unit value of certain commodities. These factors should be taken into consideration when evaluating trends. Figures given in this edition are the combined intra and extra-EC trade data.

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

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

Exclusion of warranty

Use by recipients of information provided by the BGS, is at the recipients' own risk. BGS has taken care to ensure that information provided is as free from error as is reasonably practical. In view of the disparate sources of information at BGS's disposal, including such material donated to BGS, that BGS accepts in good faith as being accurate, the Natural Environment Research Council (NERC) gives no warranty, expressed or implied, as to the quality, accuracy, performance, and merchantability of the information supplied, or to the information's suitability for any use whether made known to BGS or otherwise. NERC/BGS accepts no liability whatever in respect of loss, damage, injury or other occurrence however caused.

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 Department of Energy and Climate Change, collects statistics relating to hydrocarbons (natural gas and crude petroleum). Statistics on coal production are now collected by The Coal Authority. Returns of sand and gravel were collected by the Department of the Environment up to 1974. 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)
1973–2009 *Digest of United Kingdom Energy Statistics*; Department of Energy and climate change (formerly published by Department for Business Enterprise and Regulatory Reform, Department of Trade and Industry or Department of Energy)
1973–1993 *Minerals (PA1007)*; Central Statistical Office
1994–2009 *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)
1999–2009 *Annual Mineral Statement*; Department of Enterprise, Trade and Investment (Northern Ireland)

Department of Energy and Climate Change: *Digest of United Kingdom Energy Statistics (annual)*

Department for Business, Innovation and Skills: *Monthly Statistics of Building Materials and Components, BIS website for construction information*

Office for National Statistics, UK Statistics Authority, Website: www.statisticsauthority.gov.uk or www.statistics.gov.uk, *Monthly Digest of Statistics, Mineral Extraction in Great Britain (annual), United Kingdom National Accounts*

HM Customs and Excise: *Overseas Trade Statistics (monthly, quarterly and annual), Guide to the Classification for Overseas Trade Statistics*

Crown Estate Commissioners, The Crown Mineral Agent

Department of Enterprise, Trade & Investment (Northern Ireland), *Annual Mineral Statement*

Department of Trade and Industry (Isle of Man)

Advisory and Finance Committee (Guernsey)

UK Iron and Steel Statistics Bureau, *Annual Statistics*

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

International Fertilizer Industry Association

The Kaolin and Ball Clay Association

Mineral Products Association (MPA), formerly the Quarry Products Association (QPA)

The Coal Authority

Trade in minerals and mineral-based products compared with total trade 2007–2011

£ million

SITC section	2005	2006	2007	2008	2009	2010	2011	
Imports (c.i.f.)								
0, 1	Food, beverages, tobacco	23,291.4	24,685.3	26,351.5	30,570.8	31,840.9	33,415.9	36,068.8
2, 4	Basic materials	7,366.7	8,497.5	10,115.7	11,411.2	8,096.0	10,731.6	12,418.4
	of which: Minerals	2,619.9	3,420.9	4,559.3	5,498.4	2,932.5	4,719.3	5,674.3
3	Fuels and related materials	23,535.0	29,531.8	29,470.4	44,289.5	31,721.3	40,857.5	56,753.1
	of which: Mineral-based	23,092.9	29,098.4	29,231.9	43,906.3	31,461.9	40,531.9	56,285.8
	Manufactured goods:							
5, 6	Semi-manufactures	64,754.7	71,723.1	76,718.3	81,638.4	76,663.1	90,246.6	99,988.3
	of which: Mineral-based	27,017.6	31,348.9	39,877.0	35,062.3	31,135.8	38,973.1	45,038.1
7, 8	Finished manufactures	151,715.1	166,367.3	166,661.7	171,678.0	157,080.1	183,328.1	186,824.7
	Total	270,662.9	300,805.0	309,317.6	339,588.1	305,401.4	358,579.6	392,053.5
	All traded goods							
	of which: Mineral-based	52,730.4	63,868.3	73,668.1	84,467.0	65,530.3	84,224.3	106,998.2
	As % of all traded goods	19.5	21.2	23.8	24.9	21.5	23.5	27.3
Exports (f.o.b.)								
0, 1	Food, beverages, tobacco	10,690.2	11,080.1	11,752.6	13,670.8	14,398.2	16,027.4	18,125.2
2, 4	Basic materials	3,982.7	4,906.1	5,473.8	6,558.5	5,160.0	7,288.5	8,941.0
	of which: Minerals	2,186.1	2,893.7	3,372.5	4,141.9	2,998.0	4,556.1	5,574.8
3	Fuels and related materials	20,131.0	23,976.1	23,147.4	33,595.7	25,399.7	33,416.3	40,674.5
	of which: Mineral-based	20,030.0	23,872.3	23,035.7	33,485.2	25,239.0	33,212.1	40,536.4
	Manufactured goods:							
5, 6	Semi-manufactures	60,079.2	65,327.6	68,344.9	76,148.4	71,385.9	79,884.7	87,742.3
	of which: Mineral-based	25,962.2	28,775.7	30,464.8	33,924.9	27,555.7	33,361.0	38,755.8
7, 8	Finished manufactures	115,724.9	137,485.6	110,304.8	117,063.9	106,773.0	123,510.2	136,474.3
	Total	210,608.0	242,775.5	219,023.5	247,037.2	223,116.7	260,127.1	291,957.3
	All traded goods							
	of which: Mineral-based	48,178.3	55,541.6	56,873.0	71,552.0	55,792.7	71,129.3	84,867.0
	As % of all traded goods	22.9	22.9	26.0	29.0	25.0	27.3	29.1

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.

Balance of trade in minerals and mineral-based products 2007–2011

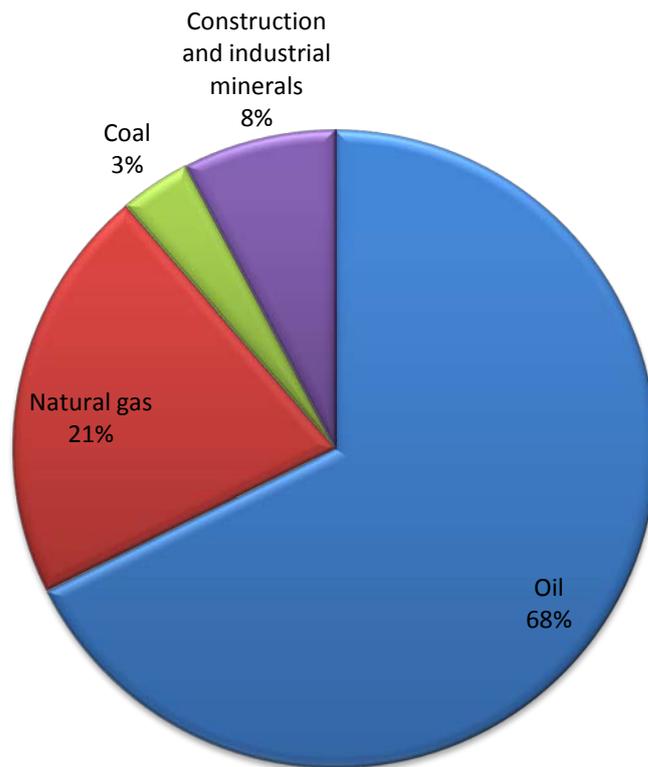
£ million (a)

SITC (R3) divisions	2007	2008	2009	2010	2011	
27	Crude minerals and fertilisers:					
	imports	479.1	554.7	448.6	551.3	635.6
	exports	488.5	497.1	492.8	478.6	520.0
		+9.4	-57.6	+44.1	-72.7	-115.6
28	Metal ores and scrap:					
	imports	4,080.2	4,943.7	2,483.9	4,168.0	5,038.7
	exports	2,884.0	3,644.8	2,505.3	4,077.5	5,054.7
		-1,196.2	-1,298.9	+21.4	-90.5	+16
32	Coal, coke and briquettes:					
	imports	2,105.3	3,688.4	2,702.4	1,908.2	3,026.6
	exports	77.4	147.1	115.5	227.7	185.1
		-2,027.9	-3,541.2	-2,586.8	-1,680.5	-2,841.6
33	Petroleum, petroleum products and related materials:					
	imports	23,863.9	33,325.9	23,820.8	31,519.6	43,899.5
	exports	21,203.8	30,074.4	23,038.7	29,610.8	35,956.2
		-2,660.1	-3,251.5	-782.1	-1,908.8	-7,943.3
34	Gas, natural and manufactured:					
	imports	3,262.7	6,892.1	4,938.8	7,104.1	9,359.6
	exports	1,754.5	3,263.7	2,084.7	3,373.6	4,395.1
		-1,508.2	-3,628.4	-2,854.1	-3,730.5	-4,964.5
51	Organic chemicals:					
	imports	8,858.9	8,660.3	8,420.4	9,545.8	10,260.6
	exports	7,562.2	8,322.0	8,996.7	8,761.5	9,075.7
		-1,296.7	-338.3	+576.3	-784.3	-1,184.9
52	Inorganic chemicals:					
	imports	2,734.8	2,749.3	2,749.1	2,950.6	3,528.1
	exports	2,766.5	2,885.2	2,775.4	3,399.7	2,939.4
		+31.8	+136.0	+26.3	+449.1	-588.7
56	Manufactured fertilisers:					
	imports	201.5	379.3	188.0	329.1	324.7
	exports	99.3	197.0	169.7	133.0	158.3
		-102.2	-182.3	-18.3	-196.1	-166.3
53–59 (part)	Miscellaneous chemical products:					
	imports	3,823.6	4,196.2	4,586.8	5,822.9	6,595.7
	exports	3,522.3	3,750.9	3,423.3	4,830.6	5,617.8
		-301.3	-445.3	-1,163.5	-992.4	-977.9
66	Non-metallic mineral products:					
	imports	6,840.3	7,136.4	5,823.3	7,377.5	8,466.1
	exports	5,828.7	6,303.0	4,955.4	6,482.4	7,406.2
		-1,011.6	-833.4	-868.0	-895.1	-1,059.9
67	Iron and steel:					
	imports	4,638.2	5,136.0	2,708.4	3,884.5	4,962.6
	exports	4,676.1	5,314.1	3,067.6	3,740.1	4,528.0
		+37.9	+178.1	+359.2	-144.4	-434.7
68	Non-ferrous metals:					
	imports	6,395.1	6,567.3	6,448.7	8,850.4	10,321.6
	exports	5,792.2	6,910.2	3,973.6	5,822.0	8,572.6
		-602.9	+342.9	-2,475.1	-3028.4	-749.1
69	Manufactures of metal:					
	imports (b)	224.5	237.5	211.0	212.2	289.3
	exports (b)	217.4	242.5	194.1	191.7	228.9
		-7.1	+5.0	-17.0	-20.5	-60.4
96	Coin other than gold:					
	imports	3.7	4.7	2.9	3.7	6.1
	exports	38.0	48.2	76.9	40.3	42.2
		+34.3	+43.5	+74.0	+36.6	+36.0
	Total (excluding gold)					
	imports	67,511.8	84,471.8	65,533.2	84,228.0	106,714.8
	exports	56,910.9	71,600.2	55,869.6	71,169.5	84,680.2
		-9,092.6	-11,572.5	-8,500.1	-9,469.24	-21,066.9
97	Gold (non-monetary):					
	imports	344.5	486.0	386.8	976.0	...
	exports	885.9	815.5	1,478.9	2,137.4	...
		+541.4	+329.4	+1,092.1	+1,161.4	...
	Total					
	imports	67,856.3	84,957.9	65,920.0	85,204.0	...
	exports	57,796.8	72,415.7	57,348.5	73,306.9	...
		-10,059.5	-12,542.2	-8,571.5	-11,897.1	...
	Gold (monetary):					
	imports	6,925.5	13,010.0	23,336.9	19,202.5	...
	exports	1,413.4	7,725.2	1,082.7	6,213.8	...
		-5,512.1	-5,284.9	-22,254.2	-12,988.7	...
	Grand total					
	imports	74,781.8	97,967.9	89,256.8	104,406.5	...
	exports	59,210.2	80,140.8	58,431.1	79,520.7	...
		-15,571.6	-17,827.0	-30,825.7	-24,885.8	...

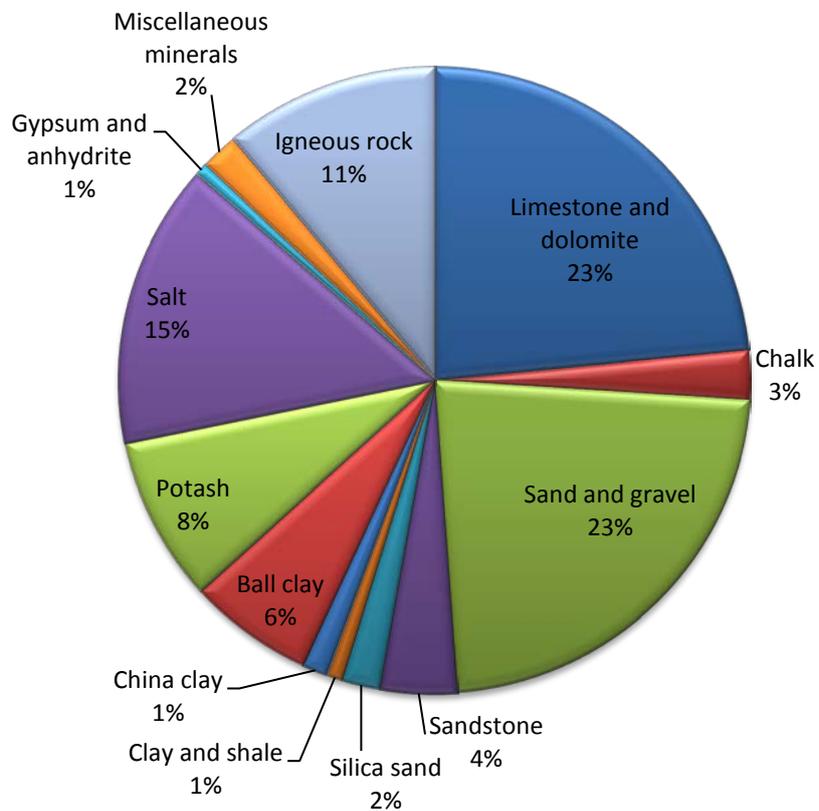
(a) Imports are valued c. i. f. and exports are valued f. o. b.

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

Value of United Kingdom minerals production 2011
 (total value £37 704 million)



Value of United Kingdom construction and industrial minerals production 2011
 (total value £2894 million)



Approximate value (a) of minerals produced in the United Kingdom 2005–2011

£ million

Mineral	2004	2005	2006	2007	2008	2009	2010	2011
Coal	800	722	705	708	1,154	973	1,002	1,345
Natural gas	7,115	8,902	11,741	9,377	10,612	7,570	7,590	7,960
Natural gas liquids	1,037	1,684	1,910	1,749	2,204	... (b)	... (b)	... (b)
Crude petroleum	13,424	16,656	17,935	18,979	25,102	19,075	23,110	25,505
Iron ore	0	0	0	0	0	0	0	0
Tin	—	—	—	—	—	—	—	—
Gold	—	—	—	1	3	4	4	6
Silver	—	—	—	0	0	1	2	4
Other non-ferrous metals	0	0	0	0	0	0	0	0
Sand and gravel	722	746	818	811	814	640	630	661
Limestone and dolomite	756	687	756	686	777	518	709	679
Igneous rock	396	335	374	392	426	336	320	319
Sandstone	157	146	143	135	120	106	116	113
Chalk	112	112	101	117	93	43	56	74
Clay and shale	25	27	27	26	19	13	17	23
China clay	195	107	64	58	45	33	25	38
Ball clay	46	51	81	82	82	80	100	186
Fuller's earth	3	1	—	—	—	—	—	—
Salt	217	222	195	285	186	405	530	424
Silica sand	67	58	72	69	67	53	57	57
Potash	68	72	64	60	61	240	279	246
Fluorspar	5	5	7	7	5	3	4	—
Gypsum and anhydrite	19	17	19	19	19	19	19	19
Miscellaneous minerals	39	44	49	49	46	48	42	45
Total	25,203	30,594	35,061	33,610	41,835	30,160	34,612	37,704
At 2009 constant prices								
Coal	841	793	752	739	1,169	973	975	1,276
Oil and gas	22,688	29,903	33,710	31,425	38,417	26,645	29,864	31,750
Metals	0	0	0	1	3	4	4	6
Construction and industrial minerals	2,973	2,887	2,956	2,919	2,796	2,537	2,825	2,736
Total	26,502	33,583	37,418	35,084	42,386	30,159	33,667	35,769

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

(b) Included in gas and petroleum figures.

Source: British Geological Survey.

United Kingdom approximate value of minerals produced onshore and offshore 2004–2011

£ million

	2004	2005	2006	2007	2008	2009	2010	2011
Onshore	3,787	3,574	3,673	3,687	3,751	3,361	4,301	3,914
Offshore	21,416	27,019	31,387	29,923	38,084	26,798	30,312	33,791
Total	25,203	30,594	35,060	33,610	41,835	30,159	34,613	37,705

Source: British Geological Survey.

United Kingdom mining and quarrying: Gross value added (a) 2005–2012

£ million

	2005	2006	2007	2008	2009	2010	2011	2012
Production								
Mining and quarrying								
Mining and quarrying of energy producing materials								
Mining of coal and lignite	272	296	347	329	351	338	423	301
Extraction of crude petroleum and natural gas	21,638	25,304	26,230	31,272	24,878	29,777	33,558	27,643
Other mining and quarrying	3,989	4,396	4,375	5,187	5,203	5,528	5,950	6,229
Total mining and quarrying	25,899	29,996	30,952	36,788	30,432	35,643	39,931	34,173
All industries	1,125,302	1,188,498	1,258,922	1,290,935	1,265,016	1,309,333	1,368,490	1,384,284
of which: minerals related (%)	2	3	2	3	2	3	3	2

(a) At current basic prices.

Source: Office for National Statistics.

United Kingdom employment in the minerals industry, 2011

Mineral	2011			Northern Ireland
	Great Britain (a)			
	Mines (d)	Quarries	Total	
Ball clay	—	...	...	—
Chalk	—	330	330	...
Chert and flint	—	...	...	—
China clay	—	...	...	—
Clay and shale	—	321	321	...
Coal	4,012	2,518	6,419	—
Dolomite	—	335	335	—
Fireclay	...	210	210	...
Gypsum and anhydrite	...	...	...	—
Honestone	—	...	...	—
Igneous rock	—	1,504	1,504	...
Limestone	—	2,200	2,200	...
Oil and gas	—	—	(c)	—
Peat	—	228	228	—
Potash	...	...	...	—
Salt	...	...	...	...
Sand and gravel	—	2,373	2,373	...
Sandstone	—	1,105	1,105	...
Silica sand	—	198	198	—
Silica stone	...	...	...	—
Slate	...	...	...	—
Soapstone and talc	...	...	...	—
Others (including ore minerals)	...	...	1,914	...

(a) Where more than one mineral is extracted at a mine or quarry all employment is attributed to the chief mineral.

(b) Included with 'Others'.

(c) Oil and Gas UK estimates the workforce employed on the UK Continental Shelf at 440 000, of which 32 000 are directly employed by exploration and production companies.

(d) Including surface and underground workers at mines.

These figures should not be used for time series analysis due to changes in question format over recent years.

Sources: Office for National Statistics, Department of Enterprise Trade and Investment (Northern Ireland), The Coal Authority, Department for Business Innovation and Skills.

United Kingdom production of minerals 2006–2012

Thousand tonnes

Mineral	2006	2007	2008	2009	2010	2011	2012 (Estimated)
Coal:							
Deep-mined	9 444	7 674	8 096	7 520	7 390	7 312	6153
Opencast	8 635	8 866	9 509	9 854	10 426	10 580	10 185
Other (a)	438	467	449	500	600	600	450
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	65	62	63	67	63	58	60
Onshore	91	105	92	89	88	27	39 000
Offshore	79 856	71 957	69 525	59 581	57 036	45 204	
Crude oil							
Onshore	1 379	1 271	1 248	1 181	941	678	43 039
Offshore	68 287	69 086	64 249	61 639	57 106	47 893	
Condensates and other (c)							
Onshore	41	38	33	32	17	0	3 345
Offshore	6 872	6 180	6 135	5 346	4 898	3 401	
Iron ore	0.4	0.3	0.1	—	—	—	—
Non-ferrous ores (metal content):							
Tin	—	—	—	—	—	—	—
Lead (h)	0.4	0.3	0.3	0.2	0.3	0.3	0.1
Gold (kg)	...	88	163	187	177	202	102
Silver (kg)	—	212	398	514	506	531	230
Chalk (e)	7 376	7 566	5 874	4 047	3 626	3 996	3 600
Clay and shale (e)	10 432	10 104	8 459	5 310	5 934	6 154	5 800
Igneous rock (j) (k)	53 954	58 909	53 489	44 618	44 876	44 490	40 000
Limestone (excluding dolomite)	80 228	83 491	74 143	60 110	60 207	57 930	58 000
Dolomite (excluding limestone)	12 101	7 622	5 509	3 164	4 540	4 490	
Sand and gravel:							
Land	71 418	72 810	66 638	50 973	47 167	46 826	61 000
Marine (i)	20 689	20 426	18 833	15 253	14 533	17 287	
Sandstone	18 038	16 806	12 255	12 335	11 556	12 477	
Slate (g)	865	1 428	1 058	683	695	763	750
Ball clay (sales)	1 015	1 022	1 020	727	900 (h)	930 (h)	750 (h)
Barytes	48	53	43	36	34	31	30
Chert and flint	2	1	1	1	1	1	1
China clay (sales) (d)	1 762	1 671	1 355	1 060	(h) 1 140	(h) 1 290	1 150
China stone	1	1	0.5	0.0	0.0	0.0	0.0
Fireclay (e)	228	338	180	129	110	162	150
Fluorspar (h)	50	45	37	19	26	—	—
Gypsum (natural)	(h) 1 700	(h) 1 700	(h) 1 700	(h) 1 700	(h) 1 700	(h) 1 700	1 700
Lignite	...	...	...	...	...	...	...
Peat (000 m ³)	1 593	885	760	887	1 004	825	800
Potash (b)	716	712	673	700	700	770	770
Salt	5 499	5 600	5 565	6 166	6 666	6 060	6 000
Silica sand	5 174	4 909	4 777	3 755	4 070	3 969	4 000
Talc	4	3	2	3	3	4	4

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

(b) Marketable product (KCl).

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

(d) Dry weight.

(e) Excluding a small production in Northern Ireland.

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

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

(h) BGS estimate.

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

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

(k) In addition, the following amounts of igneous rock were produced in

Guernsey (thousand tonnes): 2006: 136; 2007: 160; 2008: 139; 2009: 120;

2010: 116; 2011: 156

and Jersey: 2006: 286; 2007: 295; 2008: 325; 2009: 249; 2010: 238; 2011: 220

Sources: Office for National Statistics, Department of Business, Innovation and Skills, Dept. of Enterprise, Trade & Investment (Northern Ireland), Crown Estate Commissioners (marine sand and gravel produced for export), and company data.

England production of minerals 2005–2011

Thousand tonnes

Mineral	2005	2006	2007	2008	2009	2010	2011
Coal:							
Deep-mined	9 011	8 954	7 452	7 817	7 397	7 344	7 231
Opencast	1 456	966	1 619	2 139	2 137	2 689	2 949
Other (a)	...	...	...	...	...	...	...
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	...	...	...	...	...	...	...
Onshore	...	...	...	...	...	...	...
Offshore	...	...	...	...	...	...	...
Crude oil							
Onshore	...	...	...	...	...	...	...
Offshore	...	...	...	...	...	...	...
Condensates and other (c)	...	...	...	...	...	...	...
Iron ore	(e) 0.5	—	—	—	—	—	—
Non-ferrous ores (metal content):							
Tin	—	—	—	—	—	—	—
Lead (e)	0.4	0.4	0.2	0.1	0.1	0.1	—
Zinc	—	—	—	—	—	—	—
Chalk	7 105	7 376	7 565	5 874	4 047	3 626	3 996
Clay and shale (b)	10 074	9 437	9 269	7 682	4 666	5 424	5 852
Igneous rock	20 576	22 076	21 865	21 056	17 846	17 460	17 428
Limestone (i)	67 325	67 356	67 378	60 738	48 751	47 569	49 771
Dolomite (j)	...	10 238	...	...	...	...	...
Sand and gravel:							
Land	58 926	56 148	54 512	61 669	37 810	36 723	36 589
Marine (f)	18 383	19 602	19 274	17 746	14 380	13 801	16 548
Sandstone	6 910	7 041	6 918	5 854	3 980	4 176	4 454
Slate (h)	...	...	...	...	...	...	...
Anhydrite	...	...	...	...	...	...	...
Ball clay (sales)	1 011	1 015	1 022	1 020	727	(e) 900	(e) 930
Barytes	...	11	10	7	3	—	—
Calcspars	—	—	—	—	—	—	—
Chert and flint	2	2	1	1	1	...	...
China clay (sales) (k)	1 911	1 762	1 671	1 355	1 060	(e) 1 140	(e) 1 290
China stone	2	1	1	0	0	(e) 0	(e) 0
Fireclay	346	213	305	168	128	108	154
Fluorspar (e)	56	50	43	37	19	26	—
Fuller's earth (sales) (g) (k)	6	—	—	—	—	—	—
Gypsum (natural)	(e) 1 700	(e) 1 700	(e) 1 700	(e) 1 700	(e) 1 700	(e) 1 700	(e) 1 700
Lignite	...	...	...	...	...	...	...
Peat (000 m ³)	928	857	654	496	476	456	429
Potash (d)	732	716	712	673	700	700	770
Potter's clay	...	...	...	...	...	...	...
Rock salt	...	...	...	...	...	...	...
Salt	5 770	5 224	5 320	5 287	5 858	6 333	5 771
Silica sand	3 572	4 540	4 335	4 208	3 293	3 633	3 533
Silica stone and ganister	...	...	...	...	...	...	...

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

(b) Including potter's clay.

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

(d) Marketable product (KCl).

(e) BGS estimate.

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

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

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

(i) Including dolomite for constructional uses.

(j) 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.

(k) Dry weight.

Sources: Office for National Statistics, Department of Business, Innovation and Skills, Crown Estate Commissioners (marine sand and gravel produced for export) and company data.

Wales production of minerals 2005–2011

Thousand tonnes

Mineral	2005	2006	2007	2008	2009	2010	2011
Coal:							
Deep-mined	552	485	253	110	99	47	82
Opencast	1,235	1,257	1,060	1,632	1,598	1,699	2,103
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	354	604	405	104	151	...	165
Igneous rock	2,364	2,596	2,474	3,028	1,932	2,294	2,450
Limestone (d)	12,759	13,707	14,549	12,114	8,131	7,878	7,897
Dolomite (f)	...	...	...	...	...	...	...
Sand and gravel:							
Land	1,634	1,528	1,187	1,275	795	901	870
Marine	1,112	1,087	1,152	1,086	873	732	740
Sandstone	3,233	3,415	3,558	2,323	2,667	2,807	3,114
Slate (c)	...	...	...	...	...	...	...
Fireclay	—	—	—	—	—	—	—
Silica sand	51	92	71	62	59	...	...

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

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

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

(d) 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.

Sources: Office for National Statistics, Department of Business, Innovation and Skills and company data.

Scotland production of minerals 2005–2011

Thousand tonnes

Mineral	2005	2006	2007	2008	2009	2010	2011
Coal:							
Deep-mined	—	—	—	—	—	—	—
Opencast	7 753	6 487	6 188	5 678	6 037	6 038	5 528
Other (a)	...	...	...	...	...	...	...
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	...	...	...	...	...	...	...
Onshore	—	—	—	—	—	—	—
Offshore	...	...	...	...	...	...	...
Crude oil							
Onshore	—	—	—	—	—	—	—
Offshore	...	...	...	...	...	...	...
Condensates and other (b)	...	...	...	...	...	...	...
Clay and shale	469	390	429	674	494	...	137
Igneous rock	23 052	23 194	26 345	22 925	19 082	19 684	19 113
Limestone (d)	1 746	1 534	1 555	1 473	1 210	1 072	1 251
Dolomite (f)	...	...	...	...	...	...	...
Sand and gravel (land-won)	8 808	8 592	9 025	8 097	7 512	7 365	6 366
Sandstone	1 466	1 372	1 502	1 381	1 895	1 806	1 910
Slate (c)	...	...	...	...	...	...	...
Barytes	...	37	42	36	34	31	31
Fireclay	49	15	32	12	1	3	8
Honestone	...	...	...	...	...	...	...
Peat (000 m ³)	577	736	231	265	412	548	395
Silica sand	522	542	503	508	403	...	...
Talc	6	4	3	2	3	3	4

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

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

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

(d) 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.

Sources: Office for National Statistics, Department of Business, Innovation and Skills and company data.

Minerals produced in Northern Ireland, the Isle of Man, Guernsey and Jersey 2007–2011

Thousand tonnes

	2007	2008	2009	2010	2011
Northern Ireland					
Gold (kg)	88	163	187	177	202
Silver (kg)	212	398	514	506	531
Lead	(c) 200	(c) 200	243	251	280
Limestone	5,904	3,739	3,972	3,689	...
Sand and gravel	8,086	7,134	4,856	2,178	...
Basalt and igneous rock (a)	8,225	6,481	5,758	5,438	...
Sandstone	4,828	2,697	3,793	2,768	...
Granite	...	...	...	...	...
Clay and shale	...	...	...	...	...
Others (b)	2,468	2,931	1,998	2,087	...
Total	29,511	22,982	20,377	16,160	...
Isle of Man					
Limestone	112	113	352	71	82
Sand and gravel	206	197	171	145	141
Igneous rock	104	158	132	109	96
Slate	58	64	45	28	29
Total	480	532	701	353	347
Guernsey					
Igneous rock	160	139	120	116	156
Jersey					
Igneous rock (c)	295	325	249	238	220
Sand and gravel	65	67	67	57	74

(a) Excluding granite.

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

(c) BGS estimates.

Sources: Department of Enterprise, Trade & Investment (Northern Ireland),
Department of Economic Development (Isle of Man),
Company data (Guernsey and Jersey).

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

Number

Commodity	Region										England Total	Wales	Scotland	Isle of Man	Northern Ireland	Channel Islands	Total
	North East England	Yorkshire & the Humber	North West England	East Midlands	West Midlands	East of England	Greater London	South East England	South West England								
Abandoned mine methane	—	5	—	6	1	—	—	—	—	12	1	—	—	—	—	13	
Anhydrite	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	1	
Ball clay	—	—	—	—	—	—	—	—	18	18	—	—	—	—	—	18	
Barytes	—	—	—	4	—	—	—	—	—	4	—	1	—	—	—	5	
Calcite	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	1	
Chalk	—	17	—	3	—	14	—	19	1	54	—	—	—	4	—	58	
Chert	—	—	—	—	—	—	—	—	—	0	1	—	—	—	—	1	
China clay	—	—	—	—	—	—	—	—	16	16	—	—	—	—	—	16	
China clay waste	—	—	—	—	—	—	—	—	13	13	—	—	—	—	—	13	
Clay & shale	6	25	16	19	24	6	—	27	13	136	9	3	—	7	—	155	
Coal, underground	1	3	1	1	—	—	—	—	1	7	1	—	—	—	—	8	
Coal, opencast	6	1	—	2	2	—	—	—	—	11	10	10	—	—	—	31	
Coalbed methane	—	—	1	1	—	—	—	—	—	2	—	—	—	—	—	2	
Fireclay	—	3	1	1	2	—	—	—	—	7	—	1	—	—	—	8	
Flint	—	2	—	—	—	4	—	2	—	8	—	—	—	—	—	8	
Fluorspar	1	1	—	7	—	—	—	—	—	9	—	—	—	—	—	9	
Gold	—	—	—	—	—	—	—	—	—	0	—	—	—	1	—	1	
Gypsum	—	—	1	3	1	—	—	1	—	6	—	—	—	—	—	6	
Igneous & metamorphic rock	7	—	2	7	4	—	—	—	13	33	14	98	2	54	3	204	
Iron ore - ironstone	—	2	—	—	1	—	—	3	—	6	—	—	—	—	—	6	
Lead	—	—	—	3	—	—	—	—	—	3	—	—	—	1	—	4	
Limestone / dolomite	19	35	18	57	7	4	—	14	89	243	38	14	2	20	—	317	
Marble	—	—	—	—	—	—	—	—	—	0	—	1	—	—	—	1	
Mine drainage gas	—	2	—	1	—	—	—	—	—	3	—	—	—	—	—	3	
Natural gas	—	10	1	3	—	—	—	1	1	16	—	—	—	—	—	16	
Oil	—	—	—	33	—	—	—	22	3	58	—	—	—	—	—	58	
Peat	1	3	9	—	—	2	—	—	39	54	2	23	—	8	—	87	
Potash	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	1	
Salt	—	1	1	—	—	1	—	—	—	3	—	—	—	1	—	4	
Sand	5	6	4	1	3	11	1	31	11	73	2	15	—	3	1	94	
Sand & gravel	6	26	25	42	34	88	6	54	29	310	13	106	3	77	—	509	
Sandstone	20	54	39	19	22	7	—	6	24	191	27	46	—	35	—	299	
Silica sand	1	2	5	1	1	15	—	5	1	31	1	5	—	—	—	37	
Slate	—	—	10	—	—	—	—	—	8	18	11	—	3	1	—	33	
Slate waste	—	—	1	—	—	—	—	—	—	1	13	—	—	—	—	14	
Talc	—	—	—	—	—	—	—	—	—	0	—	1	—	—	—	1	
Tin	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1	
Total	73	199	135	215	103	152	7	185	281	1,350	143	324	10	212	4	2,043	

(a) As at May 2013.

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

Source: British Geological Survey.

Abrasives, natural

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Carats					£ thousand				
Abrasives										
<i>Imports</i>										
Natural abrasives										
Industrial diamonds	7 524 168	5 127 610	3 321 670	7 299 364	10 236 376	11 164	12 307	7 623	30 724	20 976
	Tonnes									
Dust and powder of precious and semi-precious stones	49	39	24	27	473	10 749	9 352	6 756	11 006	11 853
Pumice	206 353	2 259	1 668	2 062	2 067	2 546	2 013	1 130	1 183	810
Other	11 827	13 424	11 748	11 876	13 876	2 532	3 517	2 634	3 012	3 788
	Carats									
<i>Exports</i>										
Natural abrasives										
Industrial diamonds	4 754 029	6 121 081	4 440 922	2 478 568	3 864 054	17 485	17 700	13 977	21 248	25 685
	Tonnes									
Dust and powder of precious and semi-precious stones	31	151	27	30	409	13 310	12 052	8 315	14 892	14 216
Pumice	40	76	307	704	136	93	293	534	997	448
Other	1 180	1 339	1 203	1 562	1 250	612	1 056	1 283	1 890	513

Aggregates

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Aggregates										
<i>Production</i>										
Sand and gravel (a)	93 236 000	85 473 000	66 226 000	61 700 000	(d)63 113 000					
Crushed rock (b)	148 534 000	127 996 000	104 626 000	94 203 000	(d)102 828 000					
Total	241 770 000	213 469 000	170 852 000	155 903 000	(d)165 941 000					
<i>Imports</i>										
Natural aggregates-										
Sand and gravel	896 715	647 603	444 725	343 749	357 607	18 260	16 043	12 212	10 874	12 454
Crushed rock (c)	1 909 733	1 984 383	1 609 546	1 896 201	1 705 153	27 501	34 449	26 157	30 740	36 384
Total	2 806 448	2 631 986	2 054 271	2 239 950	2 062 760	45 761	50 492	38 369	41 614	48 838
<i>Exports</i>										
Natural aggregates-										
Sand and gravel (e)	8 089 175	7 747 635	6 236 662	6 081 730	5 413 300	46 624	50 027	48 688	44 819	45 162
Crushed rock	5 959 212	5 260 973	4 916 514	4 910 701	5 387 038	33 637	36 693	36 965	36 490	40 856
Total	14 048 387	13 008 608	11 153 176	10 992 431	10 800 337	80 261	86 720	85 653	81 309	86 019

- (a) Including production from marine dredging.
 (b) Includes small quantities for other purposes in Northern Ireland.
 (c) For a number of years, a significant amount of armoustone imports were believed to be wrongly classified as 'granite, crude'. Care should be taken when comparing long time trends.
 (d) Includes an estimate for Northern Ireland.

- (e) Principally marine-dredged sand and gravel.
 Source: HM Revenue and Customs.
 However, the Crown Estate Commissioners give the following figures for marine-dredged sand and gravel landed at foreign ports (tonnes):
 2007: 6 649 041; 2008: 6 211 703; 2009: 5 660 522; 2010: 5 192 348
 2011: 6 098 020.

England and Wales summary of consumption of primary aggregates, by region 2009 (a) (b)

Thousand tonnes

Region	Land-won sand and gravel	Marine sand and gravel	Total sand and gravel	Crushed rock	Total primary aggregate
South West	2,960	511	3,471	12,238	15,710
South East	5,679	4,700	10,380	5,383	15,762
London	1,459	3,824	5,283	4,086	9,369
East of England	8,412	336	8,748	4,276	13,024
East Midlands	5,569	0	5,569	10,613	16,183
West Midlands	5,427	17	5,444	5,040	10,484
North West	1,891	76	1,967	10,299	12,266
Yorkshire and the Humber	2,980	234	3,214	7,779	10,993
North East	1,444	515	1,959	3,522	5,481
England	35,821	10,214	45,035	63,236	109,271
South Wales	209	516	724	5,886	6,611
North Wales	491	53	544	2,694	3,238
Wales	700	568	1,268	8,580	9,848
England and Wales	36,521	10,782	47,303	71,816	119,120

(a) For aggregate use only.

Source: Collation of the Results of the 2009 Aggregate Minerals Survey for England and Wales. British Geological Survey.

(b) The figure for total consumption slightly under estimates true consumption because for some regions unallocated sales have an unknown destination. Total unallocated sales were (thousand tonnes): sand and gravel: 518; crushed rock: 1785.

Permitted reserves of primary aggregate minerals in England and Wales for active and inactive sites at 31st December 2009 (a)

Thousand tonnes

Region	Sand and gravel					Crushed rock					Grand total (excluding dormant)
	Active	Inactive: worked in past	Inactive: yet to be worked	Total	Dormant (b)	Active	Inactive: worked in past	Inactive: yet to be worked	Total	Dormant (b)	
South West	32,168	3,558	4,781	40,508	(c)	711,883	156,475	0	868,359	305,285	908,866
South East	63,607	4,602	10,837	79,046	2,020	44,903	9,002	4,899	58,804	685	137,850
London	1,702	(c)	(c)	1,952	(c)	0	0	0	0	0	1,952
East of England	120,692	14,213	12,467	147,372	2,082	2,243	1,100	0	3,343	2,900	150,715
East Midlands	54,764	9,391	16,439	80,594	7,270	1,018,426	285,032	0	1,303,457	33,379	1,384,052
West Midlands	77,791	25,693	210	103,694	3,500	217,306	67,775	26,700	311,781	4,600	415,476
North West	30,042	7,623	4,100	41,765	(c)	307,309	17,771	2,300	327,380	0	369,146
Yorkshire and the Humber	28,493	5,507	0	34,000	(c)	284,660	16,437	0	301,097	0	335,096
North East	8,713	6,624	0	15,337	1,200	167,335	49,226	0	216,561	23,313	231,898
England	417,972	77,461	48,834	544,267	17,437	2,754,065	602,818	33,899	3,390,782	370,162	3,935,049
South Wales	1,672	0	0	1,672	350	286,742	132,220	0	418,962	21,006	420,634
North Wales	17,272	2,002	0	19,274	840	167,786	4,641	0	172,428	1,405	191,701
Wales	18,943	2,002	0	20,945	1,190	454,529	136,861	0	591,390	22,411	612,335
England & Wales	436,915	79,463	48,834	565,212	18,627	3,208,594	739,680	33,899	3,982,172	392,573	4,547,384

(a) For aggregate use only.

Source: Collation of the Results of the 2009 Aggregate Minerals Survey for England and Wales. British Geological Survey.

(b) Reserves in 'dormant' sites are not included in 'inactive sites worked in the past' nor in the totals.

(c) Confidential, but totals remain correct.

Great Britain estimated consumption of natural aggregates 1960–2011

Million tonnes

Year	Crushed rock aggregate (c)				Sand and gravel (b)			Total crushed rock and sand and gravel
	Limestone (a)	Igneous rock	Sandstone	Total	Sand	Gravel	Total	
1960	18	15	4	37	38	38	76	113
1961	20	16	4	40	42	43	85	125
1962	21	16	4	41	42	43	85	126
1963	23	17	4	44	44	45	89	133
1964	29	20	5	54	52	54	106	160
1965	34	20	5	59	50	52	102	161
1966	40	22	6	68	50	56	106	174
1967	48	25	7	80	52	60	112	192
1968	53	27	11	91	54	58	112	203
1969	55	28	14	97	52	57	109	206
1970	59	28	11	98	53	57	110	208
1971	62	29	9	100	53	59	112	212
1972	61	32	10	103	55	63	118	221
1973	74	38	14	126	62	68	130	256
1974	72	34	12	118	53	60	113	231
1975	67	32	10	110	54	63	117	227
1976	60	28	10	98	51	59	110	208
1977	59	26	9	94	46	53	99	193
1978	61	28	10	99	48	55	102	201
1979	65	29	10	104	49	54	103	207
1980	65	28	10	103	45	52	96	199
1981	57	25	10	92	41	48	89	182
1982	62	30	11	103	42	49	91	194
1983	70	31	11	112	46	55	101	213
1984	69	30	12	111	46	54	100	211
1985	72	32	11	115	47	55	102	217
1986	78	34	11	123	51	55	106	229
1987	89	39	14	142	53	58	111	253
1988	102	44	16	162	63	67	130	292
1989	106	46	16	169	64	67	131	300
1990	98	49	14	162	58	58	116	278
1991	90	46	13	148	49	49	98	246
1992	85	48	11	144	45	44	89	233
1993	89	49	12	150	45	44	89	239
1994	99	50	13	162	50	48	98	259
1995	87	49	15	151	47	43	90	240
1996	77	43	12	133	43	39	82	215
1997	80	42	12	134	45	42	86	220
1998	79	40	13	132	44	42	86	218
1999	76	45	11	133	45	43	88	221
2000	75	44	12	131	45	44	89	220
2001	(d) 78	45	(d) 11	134	45	43	88	222
2002	71	44	11	127	44	39	83	210
2003	67	45	11	123	45	35	80	203
2004	70	46	11	127	45	41	86	213
2005	66	46	11	123	43	39	82	205
2006	70	(d) 46	(d) 11	127	42	38	80	207
2007	(d) 67	51	12	130	42	36	79	208
2008	59	47	9	115	37	35	72	187
2009	(d) 45	38	8	91	30	26	56	147
2010	(d) 39	(d) 35	8	82	29	26	54	137
2011	(d) 39	43	9	91	30	25	55	146

(a) Including dolomite.

(d) BGS estimate.

(b) Total production, excluding marine-dredged material for export; see table on p.93.

Source: Office for National Statistics.

(c) The following amounts of crushed rock aggregate, believed to be mainly igneous rock, were exported (million tonnes): 2006: 5; 2007: 6; 2008: 5; 2009: 5; 2010: 5. Crushed rock aggregate is also imported in comparable amounts. These figures have not been taken into account when calculating consumption.

**Great Britain consumption of natural aggregates related to construction work
(intensity of use of aggregates) 1960–2011**

Year	Value of new construction work (a)	Estimated consumption of aggregate			Total value of all construction work (a)	Estimated consumption of aggregate		
		Crushed rock	Sand and gravel (b)	Total		Crushed rock	Sand and gravel (b)	Total
		£ million	Tonnes per £1000			£ million	Tonnes per £1000	
1960	35 604	1.0	2.1	3.2	55 981	0.7	1.4	2.0
1961	38 964	1.0	2.2	3.2	59 952	0.7	1.4	2.1
1962	40 203	1.0	2.1	3.1	61 634	0.7	1.4	2.0
1963	40 962	1.1	2.2	3.2	63 129	0.7	1.4	2.1
1964	48 270	1.1	2.2	3.3	70 917	0.8	1.5	2.3
1965	51 193	1.2	2.0	3.1	74 417	0.8	1.4	2.2
1966	51 568	1.3	2.1	3.4	75 332	0.9	1.4	2.3
1967	56 143	1.4	2.0	3.4	80 632	1.0	1.4	2.4
1968	58 001	1.6	1.9	3.5	82 544	1.1	1.4	2.5
1969	56 851	1.7	1.9	3.6	80 788	1.2	1.3	2.5
1970	54 698	1.8	2.0	3.8	78 454	1.2	1.4	2.7
1971	56 454	1.8	2.0	3.8	80 396	1.2	1.4	2.6
1972	56 622	1.8	2.1	3.9	82 865	1.2	1.4	2.7
1973	56 705	2.2	2.3	4.5	84 099	1.5	1.5	3.0
1974	47 276	2.5	2.4	4.9	73 928	1.6	1.5	3.1
1975	44 961	2.4	2.6	5.0	69 384	1.6	1.7	3.3
1976	45 861	2.1	2.4	4.5	68 858	1.4	1.6	3.0
1977	44 240	2.1	2.2	4.4	67 991	1.4	1.5	2.8
1978	46 223	2.1	2.2	4.4	73 604	1.3	1.4	2.7
1979	42 793	2.4	2.4	4.8	74 156	1.4	1.4	2.8
1980	36 617	2.8	2.6	5.4	69 601	1.5	1.4	2.9
1981	32 762	2.8	2.7	5.5	62 872	1.5	1.4	2.9
1982	34 987	2.9	2.6	5.5	65 293	1.6	1.4	3.0
1983	37 939	3.0	2.7	5.6	71 141	1.6	1.4	3.0
1984	38 663	2.9	2.6	5.4	73 485	1.5	1.4	2.9
1985	38 027	3.0	2.7	5.7	73 881	1.6	1.4	2.9
1986	40 075	3.1	2.6	5.7	76 715	1.6	1.4	3.0
1987	45 610	3.1	2.4	5.6	85 486	1.7	1.3	3.0
1988	50 809	3.2	2.6	5.7	93 639	1.7	1.4	3.1
1989	51 497	3.3	2.5	5.8	96 901	1.7	1.4	3.1
1990	51 027	3.2	2.3	5.4	96 338	1.7	1.2	2.9
1991	48 552	3.0	2.0	5.1	89 076	1.7	1.1	2.8
1992	47 649	3.0	1.9	4.9	85 503	1.7	1.0	2.7
1993	47 195	3.2	1.9	5.1	84 024	1.8	1.1	2.8
1994	45 421	3.6	2.2	5.7	83 621	1.9	1.2	3.1
1995	45 444	3.3	2.0	5.3	84 463	1.8	1.1	2.8
1996	47 218	2.8	1.7	4.6	87 168	1.5	0.9	2.5
1997	48 766	2.7	1.8	4.5	88 989	1.5	1.0	2.5
1998	50 272	2.6	1.7	4.3	90 547	1.5	0.9	2.4
1999	51 929	2.6	1.7	4.3	91 746	1.4	1.0	2.4
2000	52 073	2.5	1.7	4.2	92 683	1.4	1.0	2.4
2001	51 717	2.6	1.7	4.3	94 269	1.4	0.9	2.4
2002	53 861	2.3	1.5	3.9	98 520	1.3	0.8	2.1
2003	56 340	2.2	1.4	3.6	104 013	1.2	0.8	2.0
2004	60 163	2.1	1.4	3.6	105 289	1.2	0.8	2.0
2005	59 412	2.1	1.4	3.4	104 425	1.2	0.8	2.0
2006	73 381	1.7	1.1	2.8	112 400	1.1	0.7	1.8
2007	75 924	1.7	1.0	2.7	114 766	1.1	0.7	1.8
2008	71 713	1.6	1.0	2.6	111 658	1.0	0.6	1.7
2009	60 493	1.5	0.9	2.4	96 639	0.9	0.6	1.5
2010	69 413	1.2	0.8	2.0	104 288	0.8	0.5	1.3
2011	71 181	1.3	0.8	2.1	106 846	0.9	0.5	1.4

(a) Valued at constant 2005 prices.

Source: Department for Business, Innovation & Skills and Office for National Statistics

Source: British Geological Survey.

(b) Land-won and marine-dredged material.

Aluminium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Aluminium										
<i>Production</i>										
<i>Unwrought-</i>										
Primary	364 595	326 900	252 000	186 000	213 000					
Secondary	193 900	145 800	129 800	142 000	149 000					
<i>Consumption</i>										
<i>Unwrought-</i>										
Primary	363 480	339 440	(b) 270 000	(b) 270 000	(b) 270 000					
Secondary	174 073	369 083	344 400	322 400	320 400					
Ferro-aluminium (a)	3 140	2 950	2 190	2 120	2 070					
<i>Imports</i>										
Ash and residues	2 273	1 136	526	1 001	1 776	1 516	1 744	418	1 142	1 091
Unwrought	201 262	160 797	304 621	138 975	201 428	284 302	234 827	326 050	204 559	309 357
Unwrought alloys	93 145	93 210	43 601	62 686	62 784	150 316	152 037	60 882	104 767	113 462
Scrap	158 827	145 819	117 651	126 584	109 122	145 358	155 175	94 893	134 400	123 162
<i>Exports</i>										
Ash and residues	5	631	132	24	503	374	1 990	407	85	326
Unwrought	30 631	20 690	17 688	43 665	49 959	44 194	31 790	19 211	60 938	81 932
Unwrought alloys	269 523	265 018	305 849	364 612	356 170	420 852	426 355	369 575	626 968	617 355
Scrap	906 831	872 988	422 574	443 466	440 399	491 914	574 214	333 723	549 108	606 047

(a) Consumption in the iron and steel industry; ferro-alloy weight.
 (b) Estimate.

Aluminium compounds

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Aluminium compounds										
<i>Imports</i>										
Oxide (alumina)	787 218	705 033	352 250	229 158	110 265	166 674	169 891	86 601	84 105	58 634
Hydroxide	112 287	110 503	98 516	87 278	90 065	22 834	27 336	25 911	28 869	33 996
Fused Oxide (a)	30 960	50 448	20 646	42 447	36 375	11 779	23 988	11 911	25 305	23 417
Fluorides	4 897	4 553	3 024	2 118	1 248	2 790	3 668	3 405	1 230	1 842
<i>Exports</i>										
Oxide (alumina)	9 016	9 517	16 810	5 879	5 114	3 699	3 367	5 458	5 189	4 185
Hydroxide (b)	5 200	5 300	4 400	2 100	2 600	1 000	2 000	1 600	1 300	2 000
Fused Oxide (a)	8 801	9 329	5 819	11 489	10 270	5 600	7 138	5 581	8 617	8 703
Fluorides	213	210	156	10	5	92	119	229	67	60

(a) Artificial corundum.

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

Antimony

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Antimony										
<i>Imports</i>										
Ores & concentrates	14	19	4	24	33	31	105	14	77	208
Metal	110	98	88	45	121	428	972	566	472	1 216
Oxide	1 917	2 454	1 548	2 598	1 785	5 399	6 272	5 249	12 821	14 209
<i>Exports</i>										
Metal	21	35	75	77	57	169	297	640	903	781
Oxide	379	558	407	490	290	936	1 655	1 203	2 347	1 804

Arsenic

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Arsenic										
<i>Imports</i>										
Elemental	70	52	60	7	5	212	240	380	107	182
<i>Exports</i>										
Elemental	0	0	0	0	0	3	98	9	9	67

Asbestos

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Asbestos										
<i>Imports</i>										
Fibre	187	...	11	...	...	1	...	1	...	...
Fabricated asbestos	50	53	11	28	32	1 486	1 799	507	1 106	847
Friction material with a basis of asbestos etc.	6 794	7 464	7 392	6 787	6 856	37 129	44 863	32 224	45 011	45 883
Articles of asbestos cement etc.	86 963	65 502	66 397	76 447	87 240	30 496	28 467	28 750	30 790	35 084
<i>Exports</i>										
Fibre	...	...	...	...	...	...	...	...	...	...
Fabricated asbestos	132	200	223	79	106	1 429	1 886	1 529	964	1 312
Friction material with a basis of asbestos etc.	3 152	3 453	2 772	3 497	3 151	33 282	45 785	36 490	43 223	40 774
Articles of asbestos cement etc.	18 285	15 994	8 452	11 312	18 250	6 618	7 586	4 952	5 724	9 199

Asphalt, natural

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Asphalt, natural										
<i>Imports</i>	183 969	152 309	48 668	56 781	75 610	30 046	32 946	10 837	17 905	29 516
<i>Exports</i>	287 977	141 900	190 764	198 446	145 463	36 092	22 126	41 322	41 898	44 104

Ball clay

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Ball clay										
<i>Production (sales)</i>	(a)1 022 472	(a)1 020 496	(a) 727 076	(b) 900 000	(b) 930 000					
<i>Imports</i>	18 126	12 197	16 340	12 938	8 039	1 754	1 880	1 578	2 146	2 105
<i>Exports</i>	775 850	768 115	513 010	697 037	704 337	45 608	48 838	33 342	41 403	43 437

(a) Source: The Kaolin and Ball Clay Association.
 (b) BGS estimate based on exports.

Barytes

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Barytes										
<i>Production</i>										
Barium minerals - Barytes	53 000	43 000	36 000	34 099	31 000					
<i>Imports</i>										
Barium minerals (a)	84 617	56 794	61 308	89 474	99 872	4 286	4 251	4 558	10 241	11 911
<i>Exports</i>										
Barium minerals (a)	9 242	9 976	13 095	17 851	15 648	2 024	2 320	3 407	4 315	4 285

(a) Mainly barites with some witherite.

Bauxite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Bauxite										
<i>Imports (a)</i>	48 741	57 971	37 461	41 650	41 497	5 421	13 042	13 455	14 147	14 689
<i>Exports (a)</i>	4 276	6 121	3 873	3 140	5 936	1 683	2 137	1 816	1 510	3 648

(a) Excluding refractory grade bauxite.

Bentonite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Bentonite										
<i>Imports</i>	157 388	205 853	140 301	141 849	200 332	11 693	16 658	12 534	13 755	16 924
<i>Exports</i>	47 122	43 261	34 622	41 323	38 478	14 773	15 234	13 828	13 058	12 865

Beryllium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Beryllium										
<i>Imports</i>										
Metal	13	28	3	24	45	3 803	1 702	1 308	3 644	1 175
Oxides and hydroxides	6	11	2	1	1 465	410	891	207	1	929
<i>Exports</i>										
Metal	10	10	0	5	7	2 989	263	113	279	379
Oxides and hydroxides	0	...	2	0	9	0	...	14	9	160

Bismuth

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Bismuth										
<i>Imports</i>										
Metal	1 908	1 582	310	366	411	23 190	16 140	2 622	3 704	5 426
<i>Exports</i>										
Metal	2 588	905	941	427	1 038	28 291	12 763	9 142	7 236	8 642

Boron

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Boron										
<i>Imports</i>										
Boron minerals (a)	4 360	2 322	879	2 383	2 425	1 324	627	345	671	674
<i>Exports</i>										
Boron minerals (a)	545	254	5	63	10	135	77	10	166	41

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

Bricks

Due to a change in the way the Department for Business, Innovation and Skills report information relating to construction materials it is no longer possible to give details of Great Britain's production of bricks, blocks and tiles (for more information see <https://www.gov.uk/government/organisations/department-for-business-innovation-skills/series/building-materials-and-components-monthly-statistics-2012>).

Bromine

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Bromine										
<i>Imports</i>										
	5 266	5 903	6 534	5 788	9 486	4 625	4 476	6 661	5 737	9 096
<i>Exports</i>										
	1 470	1 015	497	781	1 473	2 236	1 716	1 463	1 888	2 344

Building and dimension stone

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Building and dimension stone										
<i>Production</i>										
Sandstone	419 000	499 000	722 000	741 000	333 000					
Igneous rock	(a) 50 000	279 000	408 000	(a) 600 000	(a) 200 000					
Limestone	(a) 320 000	307 000	(a) 300 000	(a) 700 000	(b) 204 000					
Dolomite	(a) 1 000	2 000	(a) 1 000	(a) 1 000	(c) ...					
Total	(a) 790 000	1 087 000	(a) 1 431 000	(a) 2 100 000	(a) 737 000					
<i>Imports</i>										
Unworked-										
Marble & other calcareous stone	37 404	37 444	26 787	21 339	20 655	20 144	21 150	16 466	15 556	14 965
Granite (d)	442 911	1 058 054	361 043	270 991	282 548	43 987	54 092	40 792	39 615	41 275
Sandstone	322 530	264 202	202 831	201 490	223 664	41 949	38 988	27 176	33 590	39 424
Other stone	68 726	54 415	48 823	63 655	62 604	10 393	10 983	10 208	12 299	11 689
Worked-										
Marble & other calcareous stone	111 039	114 870	100 648	92 078	88 210	63 620	74 273	70 696	59 417	53 335
Granite	114 967	115 495	94 003	95 792	93 900	74 519	80 043	66 539	69 242	66 748
Other stone	64 610	61 324	98 462	87 152	49 219	26 035	27 885	30 246	30 638	21 335
Paving stones and flagstones	297 099	176 448	136 981	181 584	167 497	43 258	30 602	22 748	34 691	31 735
<i>Exports</i>										
Unworked-										
Marble & other calcareous stone	2 227	1 019	728	822	698	553	264	493	1 221	805
Granite	7 634	8 629	5 722	36 657	91 172	2 125	1 741	1 215	3 211	2 667
Sandstone	1 081	354	243	259	221	269	109	149	226	156
Other stone	8 928	888	276	540	251	419	161	107	134	88
Worked-										
Marble & other calcareous stone	4 740	2 934	1 603	1 332	965	7 319	5 292	3 294	3 310	1 967
Granite	429	786	1 904	1 449	709	627	1 391	2 069	2 031	1 330
Other stone	7 022	7 372	2 797	2 591	3 534	5 860	5 386	5 406	4 983	4 887
Paving stones and flagstones	3 716	2 483	3 321	4 640	12 467	1 125	1 314	1 229	1 379	2 238

- (a) BGS estimate.
 (b) Including dolomite.
 (c) Included within Limestone.
 (d) Figures in some years believed to be too high. May include aggregates.

Cadmium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Cadmium										
<i>Consumption</i>										
	87	96	71	72	83					
<i>Imports</i>										
Metal	276	212	246	470	542	1 218	957	827	1 424	963
Pigments	102	104	63	22	98	386	506	255	136	351
Oxide	438	386	181	309	281	1 495	1 586	512	988	575
<i>Exports</i>										
Metal	76	54	25	2 545	1 441	334	739	440	7 383	3 378
Pigments	962	537	620	774	640	6 546	6 272	7 533	10 217	9 989

Cement

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Cement										
<i>Production</i>										
Cement, clinker (a)	10 227 000	9 478 000	6 420 000	6 598 000	7 096 000					
Cement, finished (a)	11 887 000	10 071 000	7 623 000	7 882 000	8 529 000					
<i>Cubic metres</i>										
Ready-mixed concrete	23 548 000	20 051 000	14 069 000	14 038 000	15 121 000					
<i>Tonnes</i>										
<i>Consumption (home deliveries)</i>										
Finished cement (a)(b)	11 638 000	9 937 000	7 474 000	7 767 000	8 318 000					
<i>Imports</i>										
Portland cement clinkers	836 788	366 791	206 857	201 308	208 595	59 190	34 947	19 471	20 789	19 940
Portland cement	1 534 683	1 731 228	1 718 146	1 759 841	1 746 862	81 685	93 946	98 170	101 408	100 775
Aluminous cement	14 770	8 946	8 248	14 779	18 157	3 876	2 698	2 644	4 889	5 598
Other cement	11 445	19 378	22 567	77 252	82 296	2 862	4 148	5 345	5 488	3 895
<i>Exports</i>										
Portland cement clinkers	28 432	15 071	4 708	5 500	15 531	1 856	1 248	950	1 313	2 763
Portland cement	459 629	230 920	92 628	134 223	121 537	30 877	18 540	10 884	13 357	13 921
Aluminous cement	63 756	57 963	42 725	50 689	55 727	22 386	20 022	16 500	23 800	27 368
Other cement	24 695	35 160	8 635	6 092	6 606	4 354	4 630	2 155	1 870	2 153

(a) Great Britain only.
 (b) Excluding imports.

Chalk (see Limestone)

China clay

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
China clay										
<i>Production (sales)(a)</i>	(b)1 671 426	(b)1 355 365	(b)1 059 848	(c)1 140 000	(c)1 290 000					
<i>Imports (d)</i>	54 888	67 349	61 164	82 927	102 396	8 064	12 116	14 028	17 361	18 818
<i>Exports (d)</i>	1 723 161	1 186 905	880 929	1 025 298	1 157 780	146 289	119 536	101 218	115 113	123 274

(a) Dry weight.
 (b) Source: The Kaolin and Ball Clay Association.
 (c) Estimate.

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

China stone (see Feldspar)

Chromium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Chromium										
<i>Apparent consumption (a)</i>	59 100	82 000	17 500	39 100	49 300					
<i>Consumption in Iron and Steel Industry (b)</i>	60 980	68 770	24 100	33 970	38 210					
<i>Imports</i>										
Ores & concentrates	103 551	117 715	33 867	7 084	10 572	6 698	21 106	6 789	1 901	3 305
Ferro-chrome										
Under 4% carbon	11 396	13 250	5 730	7 836	15 198	11 820	31 747	10 517	15 559	28 388
4%-6% carbon	1 383	1 081	683	50	1 705	1 094	878	423	37	1 197
Over 6% carbon	34 197	65 360	28 471	50 512	53 288	17 514	75 033	20 200	49 286	49 568
Ferro-silico-chrome	1 242	128	13	9	362	635	136	30	10	409
Oxides and hydroxides (c)	13 000	10 300	2 300	10 600	12 900	9 200	12 400	2 900	15 000	23 600
Metal	2 134	3 099	2 904	3 007	2 346	9 820	15 062	12 132	17 349	16 671
<i>Exports</i>										
Ores & concentrates	178	–	32 507	297	168	37	...	3 168	103	69
Ferro-chrome										
Under 4% carbon	376	461	294	187	326	564	2 018	954	765	1 978
4%-6% carbon	622	160	39	964	261	371	324	75	411	397
Over 6% carbon	1 940	755	1 141	1 252	1 266	2 686	1 379	1 653	1 851	1 877
Ferro-silico-chrome	35	9	50	22	364	80	24	244	43	268
Oxides and hydroxides (d)	12 700	14 500	4 900	1 200	1 100	18 400	33 600	12 200	3 500	4 300
Metal	6 777	6 501	5 058	7 441	8 017	27 595	38 623	33 207	54 158	64 662

(a) BGS estimates; see explanatory notes.

(b) Chromium content of ferro-alloys.

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

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

Clays

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Clays										
<i>Production</i>										
Clay and shale	10 104 000	8 459 000	5 310 000	5 934 000	6 154 000					
<i>Imports</i>										
Unspecified clays	79 697	55 659	87 620	102 136	132 321	15 407	17 332	12 520	16 420	22 093
<i>Exports</i>										
Unspecified clays	19 184	15 120	8 702	14 138	71 216	4 608	5 927	2 533	3 591	4 384

Great Britain production of clay and shale by end-use 1998–2011

Thousand tonnes

Year	Bricks, pipes and tiles	Cement	Lightweight aggregate	Construc- tional use	Other uses	Total
1998	8 214	2 384	—	1 089	(a) 543	12 230
1999	8 270	2 148	—	540	...	11 355
2000	7 880	1 939	1	...	...	10 838
2001	7 574	1 884	33	625	(a) 310	10 426
2002	6 985	2 194	...	956	...	10 306
2003	7 090	2 215	...	1 181	...	10 680
2004	7 629	...	—	...	234	11 164
2005	7 741	1 937	—	798	422	10 898
2006	6 772	...	—	...	...	10 432
2007	6 869	2 348	—	785	102	10 104
2008	4 969	2 013	—	1 318	159	8 459
2009	2 797	1 397	—	998	118	5 310
2010	...	1 353	—	769	...	5 934
2011	3 983	1 474	—	561	136	6 154

(a) BGS estimate.

Source: Office for National Statistics.

Coal

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Coal										
<i>Production</i>										
Bituminous (a)	17 070 000	18 053 000	17 874 000	18 417 000	18 492 000					
<i>Consumption</i>										
	62 886 000	58 212 000	48 786 000	51 455 000	51 541 000					
<i>Imports</i>										
Anthracite	135 941	213 318	207 327	187 246	193 474	7 769	27 725	25 757	22 711	21 111
Bituminous & Other	43 024 560	43 038 043	36 553 574	23 227 529	31 627 894	1 951 342	3 480 141	2 632 676	1 828 525	2 933 563
Total	43 160 501	43 251 361	36 760 900	23 414 775	31 821 368	1 959 111	3 507 866	2 658 434	1 851 236	2 954 674
Briquettes of Coal	6 127	13 164	6 484	10 489	21 030	1 068	1 348	1 480	1 740	3 007
Lignite (including agglomerated)	384	986	2 537	777	888	329	507	660	231	150
<i>Exports</i>										
Anthracite	123 549	165 473	119 472	89 701	97 014	10 474	15 647	15 587	11 701	13 335
Bituminous & Other	419 193	742 582	391 414	615 067	502 581	30 528	80 084	56 545	73 176	64 111
Total	542 742	908 055	510 886	704 768	599 595	41 002	95 730	72 132	84 877	77 446
Briquettes of Coal	26 590	51 782	67 618	88 351	116 416	2 976	7 869	12 142	15 783	18 713
Lignite (including agglomerated)	2 966	3 157	2 795	3 182	1 943	410	591	600	621	375

(a) Including anthracite.

UK supply of coal 2011

Thousand tonnes

	Bituminous		Anthracite	Total
	Steam coal	Coking coal		
Production				
Mine production	16,335	383	1,174	17,892
Other sources	660	...	75	735
Stock change	874	-17	-20	836
Total production	17,869	366	1,229	19,463
Imports				
European Union	1,056	3	96	1,155
Australia	—	3,380	0	3,380
Canada	—	363	—	363
Colombia	8,010	0	0	8,010
Indonesia	0	—	—	0
China P.R.	—	—	51	51
South Africa	647	—	—	647
Russia	12,093	239	0	12,332
USA	4,461	1,873	—	6,334
Other countries	205	50	—	255
Total imports	26,472	5,908	147	32,527
Total exports	-496	-3	-97	-97
Total supply	43,845	6,271	1,279	51,893

Source: Department of Energy and Climate Change.

Great Britain production of deep-mined and opencast coal 1982–2011

Thousand tonnes

Year	Deep-mined			Opencast			Deep-mined and opencast		
	Anthracite	Bituminous	Total	Anthracite	Bituminous	Total	Anthracite	Bituminous	Total
1982	1,406	104,755	106,161	1,478	13,788	15,266	2,884	118,543	121,427
1983	1,249	100,493	101,742	767	13,939	14,706	2,016	114,432	116,448
1984	256	34,987	35,243	961	13,345	14,306	1,217	48,332	49,549
1985	838	74,451	75,289	1,304	14,265	15,569	2,142	88,716	90,858
1986	984	89,382	90,366	1,001	13,274	14,275	1,985	102,656	104,641
1987	917	85,040	85,957	1,174	14,612	15,786	2,091	99,652	101,743
1988	770	82,992	83,762	1,028	16,871	17,899	1,798	99,863	101,661
1989	453	79,175	79,628	1,607	17,050	18,657	2,060	96,225	98,285
1990	573	72,326	72,899	1,372	16,762	18,134	1,945	89,088	91,033
1991	189	73,168	73,357	1,675	16,961	18,636	1,864	90,129	91,993
1992	177	65,623	65,800	1,863	16,324	18,187	2,040	81,947	83,987
1993	115	50,342	50,457	1,289	15,717	17,006	1,404	66,059	67,463
1994	...	...	31,854	...	...	16,804	...	...	48,658
1995	...	...	35,150	...	...	16,369	...	...	51,519
1996	...	...	32,223	...	...	16,315	...	...	48,538
1997	...	...	30,281	...	...	16,700	(a) 2 500	(a) 44 500	46,981
1998	...	...	25,731	...	...	14,315	(a) 2 000	(a) 38 000	40,046
1999	...	...	20,888	...	...	15,275	(a) 2 000	(a) 34 200	36,163
2000	...	...	17,187	...	...	13,412	(a) 2 000	(a) 28 600	30,599
2001	...	...	17,347	...	...	14,166	(a) 2 000	(a) 29 500	31,513
2002	...	...	16,391	...	...	13,148	(a) 2 000	(a) 27 500	29,539
2003	...	...	15,633	...	...	12,126	...	...	27,759
2004	...	...	12,542	...	...	11,993	...	...	24,536
2005	...	...	9,563	...	...	10,445	...	...	20,008
2006	...	...	9,444	...	...	8,635	...	...	18,079
2007	...	...	7,674	...	...	8,866	...	...	16,540
2008	...	...	8,096	...	...	9,509	...	...	17,605
2009	...	...	7,520	...	...	9,854	...	...	17,374
2010	...	...	7,390	...	...	10,426	...	...	17,817
2011	...	...	7,312	...	...	10,580	...	...	17,892

(a) BGS estimate.

Source: Department of Energy and Climate Change.

United Kingdom regional deep-mined coal production 2006–2011

Thousand tonnes

County/Unitary authority	2006	2007	2008	2009	2010	2011
Doncaster	57	118	468	708	700	705
Kirklees	19	14	17	19	11	4
Rotherham	811	917	1,184	987	844	856
Warwickshire	2,247	2,560	3,160	2,888	2,588	2,078
Derbyshire	26	24	23	20	20	28
Nottinghamshire	2,642	2,125	1,810	1,789	1,719	1,283
North Yorkshire	1,908	1,569	1,155	985	1,461	2,276
Gloucestershire	0	0	0	0	0	0
England	7,711	7,327	7,817	7,397	7,344	7,231
Rhondda, Cynon Taff	423	145	1	—	—	—
Neath Port Talbot	11	19	105	97	46	81
Torfaen	5	5	4	2	1	0
Wales	440	168	110	99	47	82
Scotland	—	—	—	—	—	—
United Kingdom	8,150	7,495	7,927	7,496	7,390	7,312

In previous editions this table has displayed figures relating to the financial years.

Source: The Coal Authority.

United Kingdom regional opencast coal production 2006–2011

Thousand tonnes

County/Unitary authority	2006	2007	2008	2009	2010	2011
Bolton	—	144	251	262	369	111
Calderdale	—	1	—	1	—	—
Kirklees	—	12	4	4	—	—
Leeds	—	—	—	4	89	—
Rotherham	29	—	—	—	40	—
Wakefield	—	35	146	100	—	—
Lancashire	—	—	1	—	—	—
St Helens	11	—	—	—	—	—
Leicestershire	34	—	437	339	98	—
Derbyshire	—	13	76	427	600	436
Durham	83	143	—	0	106	369
Newcastle upon Tyne	119	25	—	0	19	326
Northumberland	666	1,246	1,223	1,000	1,363	1,394
Shropshire	24	0	—	—	—	—
Telford & Wrekin	—	—	—	—	4	313
England	966	1,619	2,139	2,137	2,689	2,949
Blaenau Gwent	—	—	—	—	—	12
Merthyr Tydfil	—	—	379	632	787	987
Carmarthenshire	32	24	9	—	—	—
Neath Port Talbot	822	666	842	552	3,262	616
Powys	403	370	402	414	374	488
Wales	1,257	1,060	1,633	1,598	4,423	2,103
Dumfries & Galloway	—	829	582	585	736	330
Falkirk	53	—	—	—	—	—
Midlothian	267	84	226	206	223	64
West Lothian	513	344	23	—	—	—
East Ayrshire	3,573	3,350	3,218	2,893	2,624	2,964
Fife	1,200	816	712	794	756	832
North Lanarkshire	—	—	—	—	29	22
South Lanarkshire	881	766	916	1,560	1,671	1,316
Scotland	6,487	6,188	5,678	6,037	6,038	5,528
United Kingdom	8,710	8,867	9,449	9,772	13,150	10,580

In previous editions this table has displayed figures relating to the financial years.

Source: The Coal Authority.

Cobalt

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Cobalt										
<i>Consumption in Iron and Steel Industry (a)</i>										
	20	20	10	10	10					
<i>Apparent consumption (a)(b)</i>	3 000	2 500	1 000	3 700	4 300					
<i>Imports</i>										
Ore	0	72	200	143	124	11	1 526	3 750	669	378
Unwrought	3 670	3 748	3 131	5 023	5 137	73 809	114 725	48 235	72 415	62 556
Wrought	885	767	439	505	644	11 182	14 241	18 134	15 588	17 100
Oxides	180	138	168	198	256	3 394	4 021	2 309	2 825	2 890
Scrap	866	880	358	435	312	10 316	12 130	4 195	4 851	3 708
<i>Exports</i>										
Ore	0	12	0	2	5	11	56	7	49	57
Unwrought	679	804	1 187	730	843	17 036	28 019	27 420	21 691	25 144
Wrought	855	633	552	555	533	20 921	26 806	24 439	24 103	22 676
Oxides	689	798	891	1 267	820	13 909	22 944	13 809	23 040	14 261
Scrap	766	1 178	834	494	363	6 984	10 915	2 924	5 193	5 446

(a) Metal content.

(b) BGS estimates; see explanatory notes.

Coke and breeze

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Coke and breeze										
<i>Production</i>										
Coke oven - coke	4 451 000	4 324 000	3 663 000	3 990 000	4 021 000					
Coke oven - breeze	25 000	35 000	29 000	32 000	31 000					
<i>Consumption</i>										
Coke oven coke	4 010 000	3 899 000	2 843 000	2 620 000	2 335 000					
Breeze	1 233 000	1 205 000	892 000	805 000	749 000					
<i>Imports</i>										
Coke from coal	691 402	509 265	89 717	171 791	133 511	98 135	107 977	14 962	25 551	28 967
Coke from lignite	7 315	363	125	469	474	1 077	105	61	260	248
<i>Exports</i>										
Coke from coal	97 608	172 201	91 678	442 944	252 612	10 459	28 927	16 972	109 965	48 456
Coke from lignite	20 813	...	0	...	13	1 365	...	0	...	10

Copper

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Copper										
<i>Consumption</i>										
<i>Unwrought-</i>										
Refined	41 454	42 920	22 800	43 000	22 800					
Copper in scrap for direct use (a)	120 000	120 000	120 000	120 000	120 000					
<i>Imports</i>										
Ores & concentrates	1 676	699	581	189	125	1 218	1 500	928	968	884
Matte & cement	2	14	1	22	20	51	...	23	28	40
Scrap	21 852	21 132	18 549	27 495	29 010	53 297	53 211	39 973	81 565	91 261
Ash and residues	1 089	635	217	40	24	1 395	782	156	63	42
<i>Unwrought-</i>										
unrefined	7 401	5 529	3 034	2 039	1 267	23 350	18 981	14 557	7 898	4 588
refined	46 820	47 716	45 249	40 708	34 627	170 610	187 844	145 913	202 000	194 158
alloys	5 488	5 173	3 766	5 379	5 095	18 339	15 991	11 931	19 914	24 681
Master Alloys	714	548	300	309	403	2 827	2 778	1 447	1 859	2 482
<i>Exports</i>										
Ores & concentrates	2	118	68	39	51	36	137	107	152	136
Matte & cement	16	28	14	33	36	181	215	118	218	370
Scrap	346 361	358 981	429 467	421 868	513 394	646 751	775 054	693 154	1 077 272	1 315 943
Ash and residues	465	723	832	541	660	196	591	1 407	451	418
<i>Unwrought-</i>										
unrefined	786	3 066	205	185	194	4 844	16 062	2 508	2 896	3 571
refined	8 489	4 850	14 059	8 863	17 951	29 618	20 571	41 963	43 952	97 471
alloys	12 533	11 603	7 906	6 899	9 611	46 032	45 706	26 335	33 354	54 264
Master Alloys	5 609	6 219	3 933	5 883	7 261	21 354	25 047	12 728	26 087	38 143

(a) Estimate.

Crushed rock (see also Aggregates)

United Kingdom summary 2007–2011

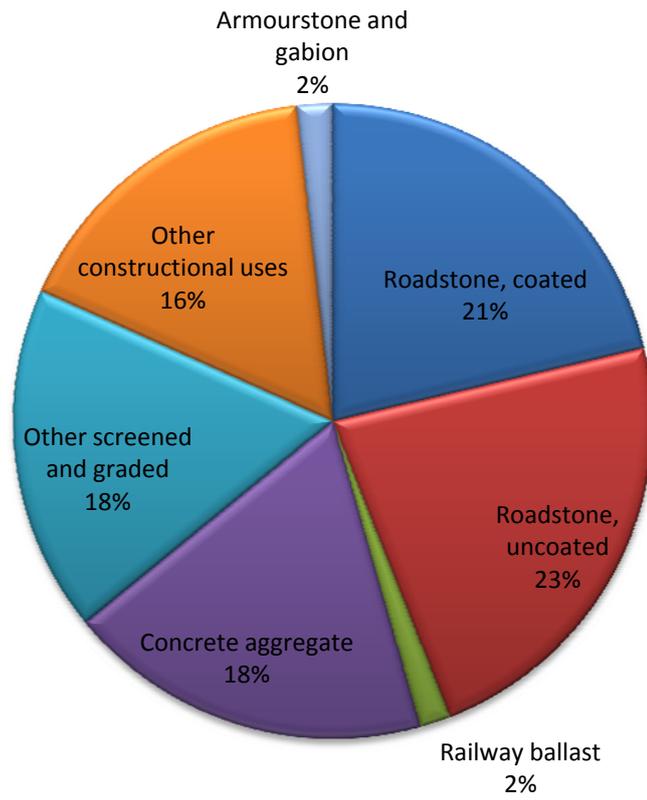
Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Crushed rock										
<i>Production (a)</i>										
	148 534 000	127 996 000	104 626 000	94 203 000	(b)102 828 000					
<i>Imports (c)</i>										
	1 909 733	1 984 383	1 609 546	1 896 201	1 705 153	27 501	34 449	26 157	30 740	36 384
<i>Exports</i>										
	5 959 212	5 260 973	4 916 514	4 910 701	5 387 038	33 637	36 693	36 965	36 490	40 856

(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 end-use 2011
(total production 90.9 million tonnes)



Great Britain production of crushed rock by region 1980–2011

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
1980	9 948	4 951	10 714	7 364	15 996	658	1 114	21 934	72 679	15 998	13 586	102 533
1981	8 677	4 504	9 442	6 713	15 854	534	961	18 763	65 450	14 249	11 681	91 381
1982	9 362	4 779	10 108	8 181	17 237	537	1 112	21 175	72 492	16 754	13 602	102 848
1983	8 978	5 311	11 481	9 192	19 206	...	...	23 178	79 541	18 835	13 706	112 082
1984	9 668	5 116	9 557	8 861	19 142	...	...	25 107	79 650	16 965	14 063	110 678
1985	9 823	5 330	9 444	8 589	21 429	674	1 404	26 510	83 203	17 423	14 370	114 995
1986	9 861	5 469	11 201	8 780	23 038	500	1 597	29 194	89 640	17 881	14 844	122 365
1987	10 375	5 328	15 407	10 015	26 355	772	1 601	34 443	104 296	20 950	16 990	142 237
1988	11 453	6 849	14 885	12 519	32 026	853	2 589	39 108	120 283	23 102	17 629	161 014
1989	13 497	7 078	16 895	12 519	32 646	611	3 254	37 589	124 088	23 581	21 125	168 794
1990	14 602	7 533	15 449	11 047	34 143	709	1 320	33 073	117 875	22 646	21 094	161 615
1991	13 378	6 320	14 269	10 009	29 862	676	1 625	28 037	104 177	22 123	21 707	148 007
1992	12 669	5 899	12 812	8 783	29 879	...	...	28 564	100 553	21 482	21 932	143 967
1993	12 724	6 748	12 734	8 225	31 522	625	1 168	29 848	103 595	23 237	22 743	149 576
1994	13 365	7 892	15 576	8 839	33 713	1 705	1 433	32 141	114 665	24 346	22 746	161 757
1995	10 930	8 077	15 664	...	31 881	629	...	27 419	103 475	23 139	24 224	150 838
1996	10 385	6 448	12 350	6 514	29 001	595	1 210	22 940	89 444	21 273	22 177	132 894
1997	10 619	7 086	12 484	6 416	29 925	536	1 352	23 117	91 535	20 585	21 667	133 787
1998	10 246	6 348	13 745	6 028	26 933	607	1 358	23 411	88 675	19 903	23 138	131 716
1999	9 298	5 829	11 689	5 996	30 724	575	1 343	23 183	88 637	20 429	23 531	132 598
2000	5 441	10 381	11 748	5 533	28 679	475	1 624	24 146	88 027	19 044	23 236	130 307
2001	6 338	9 601	11 718	5 688	30 780	452	1 984	28 067	94 630	17 765	21 364	133 759
2002	5 390	9 426	11 620	5 835	29 604	372	1 068	24 332	87 647	16 724	22 198	126 568
2003	6 081	8 887	10 652	5 538	28 443	(e) 350	(e) 1 008	22 998	83 957	16 837	22 092	122 885
2004	6 455	9 182	11 457	4 861	28 445	423	1 351	23 479	85 653	16 528	25 494	127 674
2005	5 333	7 993	10 875	4 416	27 468	238	1 090	23 180	80 593	16 535	24 732	121 860
2006	5 352	8 996	10 811	4 824	29 658	496	1 059	22 526	83 722	18 429	24 744	126 895
2007	5 482	9 351	10 834	4 750	28 530	591	1 011	22 374	82 922	18 487	28 168	129 577
2008	4 928	7 962	10 045	3 850	24 328	683	1 029	22 355	75 179	15 685	24 215	115 079
2009	3 194	5 629	6 868	2 808	21 575	(e) 289	1 085	18 218	59 666	10 542	20 895	91 103
2010	3 354	4 329	6 681	2 927	17 036	274	800	14 715	50 115	11 001	21 193	82 309
2011	3 400	...	...	...	20 670	...	...	...	57 744	12 034	21 151	90 928

(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.

Source: Office for National Statistics.

Great Britain production of crushed rock for aggregate 2011

Thousand tonnes

Mineral	Roadstone									Total
	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	
Limestone (inc. dolomite)	2 100	4 379	7 782	338	3	10 618	9 742	7 903	167	43 032
Igneous rock	3 704	5 409	9 003	1 688	1 417	5 523	5 410	5 274	1 329	38 757
Sandstone	999	2 769	1 413	452	1	658	911	1 812	124	9 139
Total	6 803	12 557	18 199	2 480	1 421	16 799	16 063	14 988	1 620	90 928

Source: Office for National Statistics.

Great Britain production of crushed rock by end-use 1998–2011

Thousand tonnes

Year	Roadstone			Railway ballast	Fill	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Total
	Coated	Uncoated	Surface dressing chippings							
1998	23 131	36 816	...	(a) 2 481	49 142	20 146	...	...	...	131 716
1999	22 260	38 114	...	(a) 2 196	49 948	20 080	...	...	...	132 598
2000	21 785	36 509	...	(a) 2 189	51 228	18 595	...	...	...	130 307
2001	23 340	34 638	...	(a) 2 682	44 543	28 553	...	...	...	133 759
2002	23 281	27 323	...	3 514	46 109	26 342	...	...	...	126 568
2003	23 139	28 950	...	(a) 2 895	39 313	28 522	...	...	...	122 885
2004	18 721	25 260	3 787	3 832	...	21 231	21 016	33 492	333	127 674
2005	20 136	25 902	2 693	3 403	...	16 876	20 949	31 360	540	121 860
2006	21 367	27 234	2 331	3 543	...	19 863	21 140	30 721	696	126 895
2007	20 503	27 983	2 136	3 904	...	24 658	19 367	30 244	781	129 577
2008	19 517	25 649	1 204	3 408	...	22 995	15 036	26 555	713	115 079
2009	16 709	21 722	1 252	2 556	...	19 593	12 356	16 234	681	91 103
2010	17 104	20 674	1 343	2 158	...	17 039	11 056	12 320	614	82 309
2011	19 360	18 199	2 480	1 421	...	16 799	16 063	14 988	1 620	90 928

(a) BGS estimate.

Source: Office for National Statistics.

Great Britain production of crushed rock, gravel and sand for use in concrete, 1999–2011

Thousand tonnes

Year	Sandstone	Igneous rock	Limestone and dolomite	Gravel (a)	Concreting sand (a)	Total
1999	773	3,998	15,309	30,349	31,730	82,159
2000	738	3,811	14,046	30,753	31,167	80,515
2001	1,425	6,351	20,780	29,969	31,656	90,181
2002	1,483	4,747	20,112	27,699	31,224	85,265
2003	1,778	6,613	20,197	26,566	31,521	86,675
2004	1,214	5,086	14,931	27,533	32,529	81,293
2005	551	3,755	12,571	26,014	29,848	72,739
2006	496	5,548	13,819	25,354	29,815	75,032
2007	1,529	7,147	15,981	23,621	30,202	78,480
2008	914	6,597	15,484	18,787	26,885	68,667
2009	1,116	5,741	12,737	14,452	21,570	55,616
2010	859	5,264	10,915	13,494	20,947	51,479
2011	658	5,523	10,618	14,103	22,591	53,493

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

Source: Office for National Statistics.

Great Britain production of crushed rock for use as roadstone, 1999–2011

Thousand tonnes

Year	Sandstone		Igneous rock		Limestone and dolomite		Total	
	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated
1999	3,140	2,326	9,945	13,307	9,175	22,481	22,260	38,114
2000	3,315	2,201	9,890	13,394	8,580	20,915	21,785	36,509
2001	3,216	1,731	9,523	10,547	10,602	22,360	23,340	34,638
2002	3,402	1,689	11,023	10,326	8,858	15,308	23,281	27,323
2003	3,586	1,741	11,019	10,764	8,533	16,455	23,138	28,950
2004	3,689	(a) 1 698	10,392	(a) 11 318	4,640	(b) 14 558	18,721	(a) 29 047
2005	3,526	(b) 1 452	7,832	(a) 11 168	8,777	(b) 14 195	20,136	(a) 28 595
2006	2,858	(a) 1 850	9,571	(a) 11 478	8,937	(a) 16 237	21,367	(a) 29 565
2007	3,185	(a) 1 751	9,349	(a) 11 838	7,968	(a) 16 530	20,503	(a) 30 119
2008	2,835	(b) 1 109	8,794	(a) 13 155	7,888	(b) 11 960	19,517	(a) 26 853
2009	3,272	(a) 1 482	7,192	(b) 10 021	6,245	(b) 10 572	16,709	(a) 22 974
2010	3,243	(b) 1 265	8,281	(a) 10 815	5,580	(b) 9 234	17,104	(a) 22 017
2011	3,768	(a) 1 865	9,113	(a) 10 691	6,479	(a) 8 123	19,360	(a) 20 679

(a) Including surface dressing chippings.

Source: Office for National Statistics.

(b) Excluding surface dressing chippings.

Great Britain production of crushed rock for railway ballast, 1999–2011

Thousand tonnes

Year	Sandstone	Igneous rock	Limestone and dolomite	Total
1999	(a) 138	1,959	(a) 99	(a) 2 196
2000	(a) 100	1,965	(a) 100	(a) 2 189
2001	(a) 150	2,341	(a) 150	(a) 2 682
2002	190	3,324	—	3,514
2003	...	2,669	...	(a) 2 895
2004	...	3,074	...	3,832
2005	...	3,072	...	3,403
2006	...	3,102	...	3,543
2007	...	3,372	...	3,904
2008	157	...	...	3,408
2009	—	...	...	2,556
2010	...	2,154	...	2,158
2011	...	1,417	...	1,421

(a) BGS estimate.

Source: Office for National Statistics.

England production of crushed rock by end-use 1999–2011

Thousand tonnes

Year	Roadstone									Total
	Coated	Uncoated	Surface dressing chippings	Railway ballast	Fill and ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & Gabion	
1999	15 663	24 338	...	...	34 754	13 882	...	...	...	88 637
2000	15 618	23 568	...	...	35 500	13 340	...	...	...	88 027
2001	17 202	24 333	...	...	31 518	21 578	...	...	...	94 630
2002	17 002	18 179	...	...	33 611	18 855	...	...	...	87 647
2003	16 511	18 625	...	...	28 545	20 275	...	...	...	83 957
2004	11 995	17 564	2 156	2 243	...	15 300	12 388	23 867	179	85 692
2005	13 194	17 208	1 426	1 871	...	12 494	11 676	22 474	248	80 593
2006	14 504	18 551	1 104	1 933	...	14 818	11 268	21 133	411	83 722
2007	12 865	19 370	889	2 322	...	16 211	12 103	18 717	443	82 922
2008	13 201	16 582	845	2 248	...	16 928	7 756	17 167	450	75 179
2009	11 087	13 376	752	...	...	14 735	7 077	10 384	...	59 666
2010	10 599	11 833	909	...	...	11 687	5 900	7 170	...	50 115
2011	12 626	9 572	2 045	1 033	...	12 259	10 067	8 872	1 269	57 744

Source: Office for National Statistics.

Wales production of crushed rock by end-use 1999–2011

Thousand tonnes

Year	Roadstone									Total
	Coated	Uncoated	Surface dressing chippings	Railway ballast	Fill and ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & Gabion	
1999	3 342	4 868	...	...	8 268	3 951	...	...	...	20 429
2000	2 748	3 269	...	...	9 532	3 495	...	...	...	19 044
2001	3 269	2 436	...	...	7 212	4 848	...	...	...	17 765
2002	3 340	1 938	...	...	6 508	4 937	...	...	...	16 724
2003	3 039	2 514	...	...	5 640	5 644	...	...	...	16 837
2004	2 856	1 871	...	...	...	3 733	2 469	4 351	...	16 528
2005	3 737	2 007	...	...	...	2 117	2 927	4 478	83	16 535
2006	3 853	1 972	...	...	...	2 514	2 954	5 813	85	18 429
2007	3 351	2 121	...	...	...	3 335	2 678	5 662	74	18 487
2008	...	1 757	250	...	...	3 087	1 642	5 057	45	15 685
2009	3 267	1 830	192	...	...	2 317	773	2 044	...	10 542
2010	3 224	1 695	218	...	...	2 112	1 198	2 446	...	11 001
2011	3 665	1 339	275	...	...	2 237	2 141	2 202	...	12 034

Source: Office for National Statistics.

Scotland production of crushed rock by end-use 1999–2011

Thousand tonnes

Year	Roadstone									Total
	Coated	Uncoated	Surface dressing chippings	Railway ballast	Fill and ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & Gabion	
1999	3 255	8 907	...	...	9 122	2 247	...	...	...	23 531
2000	3 420	9 672	...	...	8 385	1 760	...	...	...	23 236
2001	2 870	7 869	...	...	8 495	2 130	...	...	...	21 364
2002	2 939	7 206	...	...	9 503	2 550	...	...	...	22 198
2003	3 589	7 812	...	...	8 023	2 669	...	...	...	22 092
2004	3 910	5 825	...	...	...	2 198	6 159	5 274	...	25 494
2005	3 204	6 687	...	...	...	2 266	6 346	4 408	208	24 732
2006	3 008	6 711	...	...	...	2 531	6 918	3 776	200	24 744
2007	4 286	6 492	...	...	...	5 111	4 586	5 865	264	28 168
2008	...	7 310	109	...	...	2 981	5 639	4 331	218	24 215
2009	2 355	6 516	308	...	...	2 541	4 506	3 805	...	20 895
2010	3 282	7 146	217	...	...	3 239	3 959	2 704	...	21 193
2011	3 069	7 288	159	...	...	2 303	3 855	3 914	...	21 151

Source: Office for National Statistics.

Diamond

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Diamond										
<i>Imports</i>										
Unsorted Gem-	13 661 786	10 283 610	8 348 854	8 703 907	8 484 526	573 786	876 344	834 518	1 228 713	1 248 369
Rough	81 195 314	59 534 653	44 064 081	40 559 260	38 472 604	2 999 781	2 761 345	2 013 574	2 747 423	3 539 213
Cut	973 433	1 343 330	868 406	761 455	18 292 931	752 728	911 691	689 890	826 271	971 820
Industrial Dust	7 524 168	5 127 610	3 321 670	7 299 364	10 236 376	11 164	12 307	7 623	30 724	20 976
	198 484 150	187 268 975	88 148 090	111 136 020	32 411 894	10 046	8 665	6 404	10 624	11 281
<i>Exports</i>										
Unsorted Gem-	5 307 857	3 388 395	4 090 534	3 689 202	2 735 369	363 578	477 338	488 658	710 750	620 529
Rough	84 573 134	66 479 817	43 775 775	51 769 860	41 541 219	3 337 596	3 448 031	2 381 592	3 417 622	4 336 731
Cut	477 463	795 612	257 202	283 435	1 292 162	538 638	699 752	657 011	772 743	702 987
Industrial Dust	4 754 029	6 121 081	4 440 922	2 478 568	3 864 054	17 485	17 700	13 977	21 248	25 685
	104 552 775	122 681 695	105 427 105	113 451 535	42 269 921	13 014	11 492	7 796	14 191	13 864

Diatomite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Diatomite										
<i>Imports (a)</i>										
	24 224	23 084	22 014	18 649	20 042	4 437	4 548	5 001	5 348	5 340
<i>Exports (a)</i>										
	1 238	903	533	1 650	797	1 025	502	288	424	814

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

Dolomite (see Limestone)

Feldspar

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Feldspar										
<i>Production</i>										
China stone (a)	1 112	430	–	–	–					
<i>Imports</i>										
Feldspar	26 751	18 899	9 299	17 584	16 750	1 687	1 406	661	1 813	1 964
Nepheline-syenite	40 484	44 275	32 462	39 092	35 573	3 617	4 355	3 516	4 038	4 475
<i>Exports</i>										
Feldspar	40	82	369	38	34	20	28	30	20	19
Nepheline-syenite	2 430	902	204	291	337	635	520	62	83	101

(a) Including weathered granite feldspar.

Fireclay

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Fireclay										
<i>Production (a)</i>										
	338 000	180 000	129 000	110 000	162 000					
<i>Imports</i>										
Fireclay	1 467	2 556	2 273	2 644	1 739	244	402	514	661	346
Fireclay bricks etc	8 166	7 070	3 229	2 103	2 148	3 478	4 960	1 509	1 552	1 972
Refractory hollow-ware	1 357	2 272	2 090	1 622	2 009	2 670	3 557	4 306	3 614	4 761
<i>Exports</i>										
Fireclay	94	54	92	9	26	79	33	62	24	29
Fireclay bricks etc	3 283	4 347	3 455	2 587	2 198	3 957	5 319	4 441	3 093	3 344
Refractory hollow-ware	2 386	1 274	1 297	890	1 354	16 218	17 071	14 687	13 212	16 802

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

Fluorspar

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Fluorspar										
<i>Production</i>										
	44 936	36 801	18 536	26 420	–					
<i>Imports</i>										
	3 875	8 429	6 436	1 294	45 327	1 040	2 389	2 574	599	7 568
<i>Exports</i>										
	589	187	303	412	590	304	156	184	1 345	165

Gas, natural (see Petroleum)

Germanium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Germanium										
<i>Imports</i>										
Metal	3	1	3	2	1	872	400	802	539	1 161
<i>Exports</i>										
Metal	0	0	53	1	2	135	277	308	523	1 351

Gold

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Gold										
<i>Production (a)</i>	0	0	0	0	0					
<i>Imports</i>										
Waste & scrap	17	43	213	66	71	13 157	35 655	24 161	90 993	112 737
Unwrought (b)	725	878	1 158	791	1 000	7 017 522	13 136 670	23 560 892	19 875 910	25 100 889
Semi-manufactured	287	36	9	10	13	226 489	307 054	148 367	193 170	357 787
<i>Exports</i>										
Waste & scrap	282	272	533	497	273	37 334	293 085	1 041 439	1 534 257	1 460 031
Unwrought (b)	211	579	78	260	752	2 169 760	8 068 006	1 326 269	6 309 575	23 027 896
Semi-manufactured	44	24	19	33	23	76 554	162 089	147 766	428 307	636 654

(a) Small quantities have been produced in Northern Ireland as follows:
2007: 88 kilograms; 2008: 163 kilograms; 2009: 187 kilograms;
2010: 177 kilograms; 2011: 202 kilograms.

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

Granite (see Igneous rock)

Graphite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Graphite										
<i>Imports</i>										
Natural graphite	17 225	14 309	7 850	6 989	6 869	8 642	7 766	5 516	5 468	6 377
Artificial graphite	16 112	20 728	10 813	16 290	20 236	15 136	21 815	18 104	21 622	26 240
Graphite crucibles etc	1 333	991	788	782	689	3 531	3 401	2 880	2 878	2 535
<i>Exports</i>										
Natural graphite	3 065	3 156	2 271	2 981	3 660	3 760	3 906	3 015	3 032	4 182
Artificial graphite	8 765	6 792	5 450	6 894	8 151	11 275	17 974	13 008	14 909	15 167
Graphite crucibles etc	10 900	11 342	6 412	6 548	7 784	22 612	25 447	17 751	17 750	17 750

Gypsum

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Gypsum										
<i>Production</i>										
Gypsum, natural (a)	1 700 000	1 700 000	1 700 000	1 700 000	1 700 000					
<i>Imports</i>										
<i>Gypsum-</i>										
Gypsum	196 613	140 783	396 138	216 605	539 327	8 511	8 522	8 104	6 957	7 284
Calcined gypsum (plasters)	52 678	88 766	60 337	54 209	46 526	10 674	12 433	13 540	12 728	11 655
<i>Exports</i>										
<i>Gypsum-</i>										
Gypsum	1 248	1 493	1 978	3 330	3 428	584	955	777	1 128	1 035
Calcined gypsum (plasters)	57 988	48 340	32 551	24 552	25 504	13 668	13 647	12 067	7 953	9 169

(a) BGS Estimates.

UK production of desulphogypsum 2002–2012

	Thousand Tonnes										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Drax	485	699	653	565	610	645	744	...	...	...	...
Ratcliffe-on-Soar	358	384	350	235	204	254	338	263	266	248	383
West Burton	–	–	274	335	289	255	217	164	144	164	276
Eggborough	–	–	–	31	46	36	66	...	40	44	112
Cottam	–	–	–	19	196	257	225	164	210	208	234
Total	843	1 083	1 228	1185	1303	1447	1590	...	...	...	...

Hafnium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Hafnium										
<i>Imports</i>	16	41	7	12	16	708	1 832	1 426	3 000	2 294
<i>Exports</i>	1	1	18	15	11	56	254	1 342	1 036	251

Igneous rock

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Igneous rock – see also Building and dimension stone										
<i>Production</i> (a)	58 909 000	53 490 000	44 618 000	44 876 000	(b)44 390 000					
<i>Imports</i>										
Granite-										
Worked	114 967	115 495	94 003	95 792	93 900	74 519	80 043	66 539	69 242	66 748
Unworked	442 911	1 058 054	361 043	270 991	282 548	43 987	54 092	40 792	39 615	41 275
<i>Exports</i>										
Granite-										
Worked	429	786	1 904	1 449	709	627	1 391	2 069	2 031	1 330
Unworked	7 634	8 629	5 722	36 657	91 172	2 125	1 741	1 215	3 211	2 667

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

(b) Includes an estimate for Northern Ireland.

England production of igneous rock by end-use 1999–2011

Thousand tonnes

Year	Roadstone											Total	
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses		Other uses
1999	37	2 568	3 919	...	...	...	1 724	...	7 538	...	...	...	20 803
2000	27	2 726	3 916	3 587	...	...	2 106	...	6 799	...	...	...	20 435
2001	...	2 792	3 523	2 844	...	...	4 059	...	8 051	...	...	6	22 647
2002	12	2 778	4 872	3 477	...	1 612	2 110	...	7 028	...	...	—	21 889
2003	28	2 974	4 066	3 185	...	1 701	3 458	...	6 460	...	...	5	21 878
2004	12	2 868	1 473	3 722	938	1 779	2 623	3 493	3 203	60	3	...	20 174
2005	18	2 571	1 699	3 619	449	...	1 457	4 105	3 727	86	...	...	20 576
2006	20	...	3 418	4 071	...	...	2 961	3 277	3 492	...	...	...	22 076
2007	28	2 539	...	4 692	323	...	...	4 621	...	...	...	...	21 865
2008	22	...	2 313	5 410	342	...	3 605	1 717	2 747	79	...	...	21 056
2009	...	2 925	1 334	4 167	318	...	3 198	1 949	1 653	...	...	...	17 846
2010	...	2 364	2 037	3 455	364	...	2 041	1 499	1 632	192	...	...	17 460
2011	...	1 840	3 393	2 130	1 433	...	3 165	1 670	1 541	1 110	...	...	17 428

Source: Office for National Statistics.

Wales production of igneous rock by end-use 1999–2011

Thousand tonnes

Year	Roadstone											Total	
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses		Other uses
1999	6	...	355	...	...	...	164	...	556	...	...	—	2 730
2000	...	314	227	659	...	...	...	...	...	...	...	—	2 743
2001	...	393	197	266	...	...	369	...	...	...	...	—	2 372
2002	9	375	366	241	...	219	396	...	506	...	...	—	2 111
2003	5	375	257	327	...	—	...	...	...	...	...	—	2 507
2004	3	477	179	209	...	...	357	...	391	10	—	...	2 295
2005	2	427	...	314	...	...	117	492	347	...	—	...	2 364
2006	...	...	...	243	...	...	156	452	412	...	—	...	2 596
2007	15	377	...	256	...	...	...	483	...	...	—	...	2 474
2008	13	...	...	246	...	...	...	603	405	...	...	...	3 028
2009	7	325	...	227	...	...	167	151	426	...	—	...	1 932
2010	...	330	540	236	90	...	216	112	677	...	...	...	2 294
2011	...	412	616	247	...	...	232	140	490	82	...	...	2 450

Source: Office for National Statistics.

Scotland production of igneous rock by end-use 1999–2011

Thousand tonnes

Year	Roadstone											Total	
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses		Other uses
1999	141	...	804	8 367	...	740	2 110	...	7 702	...	...	...	21 761
2000	179	1 762	945	9 148	...	...	...	...	...	...	...	39	21 455
2001	423	1 608	1 010	7 437	...	...	1 922	...	...	...	...	26	20 034
2002	196	1 595	1 037	6 608	...	1 494	2 241	...	7 332	...	...	40	20 543
2003	179	2 101	1 246	7 251	...	967	...	...	...	...	...	308	20 920
2004	171	2 485	1 090	5 568	...	...	2 107	...	4 552	92	—	...	23 724
2005	130	1 993	...	6 322	...	1 036	2 181	6 147	3 866	175	—	...	23 052
2006	...	1 685	...	6 332	230	1 107	2 431	6 754	3 291	173	—	...	23 194
2007	...	1 847	2 153	6 163	...	1 077	4 982	4 399	5 214	251	...	...	26 345
2008	244	1 580	...	6 924	...	...	...	5 298	3 999	198	...	...	22 925
2009	...	1 636	...	5 627	272	...	2 376	4 292	3 435	207	...	...	19 082
2010	552	2 512	499	6 483	186	...	3 007	3 693	2 187	...	...	...	19 684
2011	94	1 452	1 399	6 626	...	...	2 126	3 599	3 242	136	...	...	19 113

Source: Office for National Statistics.

Insulating materials

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Insulating materials										
<i>Imports</i>										
Mineral wools (a)	36 100	24 135	25 128	24 427	20 908	34 748	32 142	34 156	33 505	32 446
Expanded minerals (b)	170 284	111 091	30 732	47 121	59 198	9 663	8 663	5 523	7 137	9 330
Other (c)	45 972	43 244	32 068	37 361	38 030	38 309	38 139	32 841	40 172	41 701
<i>Exports</i>										
Mineral wools (a)	33 825	24 700	29 984	35 500	44 328	58 525	39 471	35 600	52 257	60 566
Expanded minerals (b)	20 009	19 581	10 973	14 174	16 777	18 668	22 236	14 126	17 959	19 333
Other (c)	57 570	58 762	42 351	56 989	64 551	61 163	70 153	57 472	74 706	84 958

(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 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Iodine										
<i>Imports</i>										
	1 225	1 107	1 075	1 254	1 426	11 828	10 923	13 753	16 854	18 464
<i>Exports</i>										
	369	175	121	393	234	4 557	1 826	2 153	2 922	5 760

Iron compounds and earth colours

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Iron compounds and earth colours										
<i>Imports</i>										
Earth colours containing 70% or more ferric oxide	136	74	213	210	247	48	25	217	147	324
Other iron compounds- Oxides and hydroxides	37 993	36 145	21 412	21 516	19 187	22 333	25 271	18 624	21 396	19 697
<i>Exports</i>										
Earth colours containing 70% or more ferric oxide	79	450	543	68	159	150	646	598	100	190
Other iron compounds- Oxides and hydroxides	7 265	7 784	4 313	5 070	4 825	8 593	11 318	7 723	7 582	6 474

Iron ore

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Iron ore										
<i>Production</i>										
Iron ore (a)	(b) 300	145	–	–	–					
Fe content (b)	170	80	–	–	–					
<i>Consumption</i>										
Home-produced (b)	300	140	–	–	–					
Imported	16 607 000	15 338 400	11 171 300	10 572 200	9 734 800					
<i>Imports</i>										
Iron ore	17 435 472	15 282 786	9 185 919	10 597 085	9 175 254	644 177	938 415	468 519	912 896	990 550
Fe content (b)	10 600 000	9 300 000	5 600 000	6 400 000	5 500 000					
<i>Exports</i>										
Iron ore	5 396	7 731	32 579	5 228	179 699	1 734	953	3 014	634	14 379

(a) The Florence mine near Egremont, Cumbria closed in 2008. The mine produced high-grade hematite for foundry uses, mineral specimens and jewellery. The mine was also a tourist attraction.

(b) BGS estimates.

Iron and steel

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Iron and steel										
<i>Production</i>										
Pig iron	10 959 800	10 136 800	7 671 100	7 233 000	6 625 000					
<i>Crude steel-</i>										
Alloy qualities	778 600	824 900	393 500	506 600	599 000					
Other	13 613 700	12 695 600	9 681 000	9 201 400	8 879 000					
Total	14 392 300	13 520 500	10 074 500	9 708 000	9 478 000					
<i>Consumption</i>										
Pig iron (a)	10 729 000	9 931 000	7 540 000	7 088 000	6 610 000					
Finished steel (b)	12 841 000	11 785 000	70 070 000	8 790 000	9 115 000					
Scrap	5 144 000	4 888 000	3 459 400	3 713 100	3 890 300					
<i>Imports</i>										
Pig iron	89 863	61 657	19 703	41 959	69 095	17 957	21 724	5 758	13 167	27 613
Shot, powder, sponge etc	25 772	27 003	17 483	97 745	160 969	27 009	26 470	15 722	31 682	46 342
Ferro-alloys	298 803	314 921	160 285	208 817	225 819	271 513	430 007	154 472	246 459	285 036
<i>Iron and steel-</i>										
Ingots and other primary forms	849 803	679 019	212 829	714 541	1 185 242	352 643	409 887	176 318	393 571	636 490
Scrap	204 100	228 294	213 818	270 986	423 744	159 432	133 546	80 685	160 388	192 405
<i>Exports</i>										
Pig iron	15 892	2 523	27 765	4 339	2 074	4 353	2 308	5 254	3 351	2 685
Shot, powder, sponge etc	45 051	43 775	37 314	41 899	46 893	39 693	43 529	31 752	43 965	56 120
Ferro-alloys	41 841	40 986	28 899	45 314	43 918	361 635	365 568	125 266	240 287	273 119
<i>Iron and steel-</i>										
Ingots and other primary forms	3 514 850	3 348 794	2 118 701	1 137 160	668 885	1 450 504	1 619 056	936 583	818 397	885 788
Scrap	6 013 907	6 616 708	6 007 656	7 507 853	7 744 411	1 335 853	1 868 340	1 184 693	1 944 946	2 408 014

(a) Consumption in steel making only.

(b) Net home disposals.

Consumption in the United Kingdom iron and steel industry 2002–2011

Thousand tonnes

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Iron ore –										
Home produced (a)	0	1	1	0	0	0	0	0	0	0
Imported (b)	13 181	15 766	16 011	15 990	16 539	16 607	15 338	11 171	10 572	9 735
Manganese ore	4	0	6	3	6	3	4	21	0	0
Iron and steel scrap (f)	4 138	4 390	5 123	4 531	4 811	5 144	4 888	3 459	3 713	3 890
Pig iron (f)	8 312	9 955	10 010	9 983	10 444	10 729	9 931	7 540	7 088	6 610
Alloy metals (c) –										
Nickel	15	16	17	14	13	12	12	8	10	12
Molybdenum	2	2	2	2	2	2	3	1	1	2
Tungsten	0	0	0	0	0	0	0	0	0	0
Vanadium	1	0	0	0	0	0	0	0	0	0
Cobalt	0	0	0	0	0	0	0	0	0	0
Chromium	46	53	54	52	55	61	69	24	34	38
Niobium	0	0	0	0	0	0	1	0	0	0
Ferro-alloys –										
Ferro-manganese	77	94	95	92	97	100	94	70	67	66
Ferro-silico-manganese	21	23	23	22	24	24	23	17	16	16
Ferro-aluminium	3	3	3	3	3	3	3	2	2	2
Ferro-chromium	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Ferro-silico-chromium	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Ferro-silicon	35	37	37	36	38	39	37	27	26	26
Ferro-silico-zirconium	0	0	0	0	0	0	0	0	0	0
Calcium silicide	0	0	0	0	0	0	0	0	0	0
Ferro-phosphorus	1	1	1	1	1	1	1	1	1	1
Ferro-niobium	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Ferro-titanium	1	1	1	1	1	1	1	1	1	1
Dolomite (raw and burnt) (e)	223	254	262	243	445	474	420	369	399	344
Limestone (e)	1 684	2 019	2 068	1 951	2 028	1 822	1 664	1 095	948	932
Lime (e)	501	530	584	593	631	585	496	378	371	395
Zinc for galvanising	66	62	53	57	60	58	52	41	49	48
Tin for tinplating	3	2	3	3	2	3	3	2	3	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 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Lead										
<i>Production</i>										
Concentrate-										
Pb content	(a)(b) 300	(a)(b) 300	(c) 243	(c) 251	(c) 280					
Unwrought-										
Bullion	36 000	36 000	36 000	36 000	36 000					
Refined										
Primary (d)	119 000	139 000	157 865	153 453	130 055					
Secondary	144 000	144 000	144 000	144 000	144 000					
<i>Consumption</i>										
Refined	244 800	222 123	188 726	207 618	209 982					
<i>Imports</i>										
Ores & concentrates	72	116	24	23	47	91	169	30	42	51
Ash and residues	443	423	133	186	345	670	200	90	153	302
Unwrought										
Unrefined-										
Base bullion (e)	119 726	194 113	130 312	151 653	127 691	191 196	252 593	194 998	297 843	323 923
Other	3 160	1 190	1 300	0	133	3 446	1 698	1 180	41	256
Refined	28 020	18 379	14 179	14 359	18 468	33 596	22 523	14 569	18 682	28 354
Alloys	7	19 924	1 798	787	1 287	35	24 743	2 741	1 681	2 678
Scrap	17 685	4 621	4 962	8 858	4 792	15 842	5 287	4 695	9 957	5 430
<i>Exports</i>										
Ores & concentrates	19	177	67	11	84	91	277	98	37	146
Ash and residues	704	535	515	982	852	300	536	327	560	547
Unwrought										
Unrefined										
Base bullion	...	...	0	21	822	...	...	3	40	1 398
Other	1 257	1 725	45	1 226	65 046	825	1 854	38	1 635	113 204
Refined	66 895	77 795	126 697	103 988	79 009	92 463	96 383	144 935	152 672	124 734
Alloys	39 246	57 466	54 505	62 406	4 820	56 008	79 823	70 000	97 889	7 606
Scrap	31 942	47 660	56 055	69 404	74 789	31 087	44 505	48 579	74 457	90 421

- (a) By-product of Pennine fluorspar operations and of gold mining in Northern Ireland.
 (b) BGS estimate.
 (c) By-product of gold mining in Northern Ireland.
 (d) Refined from imported bullion including lead content of alloys.
 (e) Containing substantial quantities of silver.

Limestone, dolomite and chalk

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Limestone										
<i>Production</i>										
Limestone	83 491 000	74 145 000	60 111 000	56 985 000	(a)58 130 000					
Dolomite	7 622 000	5 509 000	3 164 000	4 540 000	4 490 000					
<i>Imports</i>										
Limestone flux (b)	32 446	38 404	24 368	14 954	5 187	1 679	1 699	1 764	1 758	1 729
Lime	23 946	11 452	9 091	9 883	16 305	2 747	1 887	1 235	1 627	2 356
Dolomite	146 587	146 620	149 802	149 695	144 281	3 721	4 954	4 612	4 961	5 675
<i>Exports</i>										
Limestone flux (b)	348 347	261 462	226 165	225 551	250 651	4 894	3 168	2 763	3 161	3 442
Lime	103 928	115 728	95 357	106 075	157 690	12 831	13 946	13 382	13 442	17 946
Dolomite (c)	4 642	4 786	3 438	2 675	1 077	252	249	245	227	112
Chalk										
<i>Production (d)</i>										
	7 566 000	5 874 000	4 047 000	3 626 000	3 996 000					
<i>Imports</i>										
	5 689	5 447	3 878	9 341	8 002	450	716	627	1 074	852
<i>Exports</i>										
	34 594	126 594	30 890	22 504	21 221	2 082	4 510	1 870	1 542	1 680

(a) Includes an estimate for Northern Ireland.

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

(c) Crude.

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

Great Britain production of limestone and chalk for cement, 1999–2011

Thousand tonnes

Year	Limestone	Chalk	Total
1999	(a) 9 831	(a) 6 345	16 176
2000	(a) 9 821	(a) 6 288	16 109
2001	10 123	5 111	15 234
2002	9 642	5 550	15 192
2003	9 573	5 360	14 933
2004	9 474	5 177	14 651
2005	...	...	13 235
2006	...	...	12 408
2007	...	...	13 837
2008	...	...	11 539
2009	...	...	8 208
2010	...	...	8 703
2011	...	...	9 936

(a) BGS estimate.

Source: Office for National Statistics.

Great Britain production of limestone, dolomite and chalk for agricultural uses, 1999–2011

Thousand tonnes

Year	Limestone	Dolomite	Chalk	Total	Calcination (a)
1999	...	...	...	1 961	8
2000	...	...	...	1 749	2
2001	810	...	...	1 610	11
2002	789	...	...	1 639	...
2003	1 007	...	...	2 036	...
2004	921	...	...	1 811	...
2005	757	...	...	1 595	...
2006	...	...	...	1 709	...
2007	...	...	...	1 826	...
2008	...	...	...	1 629	...
2009	...	...	...	1 927	...
2010	...	...	...	1 795	...
2011	...	...	...	1 990	...

(a) Comprises material included in the total which, after calcination, was used as lime and dolomitic lime.

Source: Office for National Statistics.

(b) BGS estimate.

Great Britain production of limestone, dolomite and chalk for industrial uses, 1999–2011

Thousand tonnes

Year	Limestone	Dolomite	Chalk	Total	Calcination
1999	...	...	...	10 282	(a) 5 258
2000	...	...	...	9 867	(a) 4 797
2001	6 357	...	...	9 625	(a) 4 925
2002	6 536	...	...	8 915	(b) 3 766
2003	6 799	...	...	9 684	(b) 3 906
2004	6 003	...	...	8 614	(b) 2 897
2005	...	...	...	8 456	(b) 2 721
2006	5 911	...	...	8 776	2 459
2007	5 945	...	...	8 713	2 885
2008	5 862	...	...	8 437	2 256
2009	2 577	...	...	4 408	831
2010	4 842	...	...	6 764	1 401
2011	5 401	...	...	7 478	2 262

(a) Comprises material included in the total which, after calcination, was used for industrial purposes as lime or dolomitic lime. Excludes small amounts for agricultural purposes.

(c) BGS estimate.

Source: Office for National Statistics.

(b) Including small amounts used for agricultural purposes but excluded from the total.

Great Britain production of limestone, dolomite and chalk for industrial uses by end-use, 1999–2011

Thousand tonnes

Year	Iron and steel making (a)	Chemicals (a)	Glass making	Special fillers	Asphalt fillers	Building materials	Water and effluent treatment and pollution control (a)	Total (a)
1999	...	1 689	203	...	...	460	...	10 282
2000	...	1 864	...	...	192	474	1 144	9 867
2001	...	2 630	278	...	211	957	1 384	9 625
2002	...	...	233	1 759	164	...	1 154	8 915
2003	...	...	...	...	325	...	...	9 686
2004	...	...	...	...	149	...	...	8 615
2005	...	...	...	1 131	126	577	...	8 457
2006	4 390	...	280	983	...	624	...	8 776
2007	4 319	...	...	991	116	698	...	8 714
2008	4 089	...	...	928	105	529	1 362	8 439
2009	2 822	102	200	834	95	122	233	4 408
2010	3 035	...	...	912	85	332	...	6 766
2011	3 583	1 079	212	...	...	381	1 216	7 477

(a) Including material for calcination.

Source: Office for National Statistics.

Great Britain production of limestone, dolomite and chalk for calcination by end-use, 1999–2011

Thousand tonnes

Year	Agriculture	Iron and Steel	Chemicals	Building materials	Others	Total
1999	8	2 970	1 689	460	139	5 266
2000	2	2 301	1 864	474	158	4 799
2001	11	1 248	2 630	957	90	4 936
2002	...	1 228	1 922	537	...	3 766
2003	...	1 353	1 858	...	...	3 906
2004	...	1 463	...	...	...	2 897
2005	...	1 460	...	...	...	2 721
2006	...	1 230	...	...	...	2 459
2007	...	1 220	...	...	...	2 885
2008	...	1 113	...	...	...	2 256
2009	...	...	...	...	...	831
2010	...	...	...	...	...	1 401
2011	...	903	...	...	...	2 262

Source: Office for National Statistics.

Great Britain production of limestone, dolomite and chalk for iron and steel making, 1999–2011

Thousand tonnes

Year	Limestone	Dolomite and chalk	Total	Calcination (a)
1999	3 239	...	...	2 970
2000	2 500	...	...	2 301
2001	1 844	...	...	1 248
2002	1 866	...	...	1 228
2003	1 948	...	...	1 353
2004	1 592	...	...	1 463
2005	1 745	...	...	1 460
2006	...	...	4 390	1 230
2007	...	...	4 319	1 220
2008	...	...	4 089	1 113
2009	...	...	2 822	...
2010	...	...	3 035	...
2011	...	...	3 583	903

(a) Comprises material included in the total which, after calcination, was used as lime or dolomitic lime.

Source: Office for National Statistics.

England production of limestone by end-use 1999–2011

I thousand tonnes

Year	For constructional uses (a)					For other uses														Total	
	Roadstone					Railway ballast	Concrete aggregate	Other screened and graded	Other constructional uses	Armour-stone & Gabion	Agricultural use	Iron and steel	Cement	Chemical uses	Building materials	Environmental uses (d)	Glass making	Asphalt filler (b)	Other fillers (c)		Other uses
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings																
1999	245	4 226	3 528	19 265	...	...	11 610	...	22 616	...	685	...	...	...	...	...	...	...	...	...	75 820
2000	278	4 079	3 363	18 648	...	...	10 654	...	23 897	...	537	1 620	...	...	...	...	115	...	...	2 983	74 954
2001	168	...	4 956	20 502	...	...	16 457	...	19 545	...	561	...	...	...	...	...	...	109	...	...	79 902
2002	145	3 726	3 755	13 931	...	—	15 985	...	21 697	...	524	...	7 595	...	...	...	...	107	...	3 045	73 528
2003	160	3 597	3 720	14 586	...	2	15 925	...	17 627	...	700	1 382	7 087	...	...	...	96	209	1 313	3 103	69 507
2004	...	3 829	1 918	13 029	1 015	394	11 949	7 863	18 760	94	686	948	7 122	1 156	...	...	114	113	1 013	...	72 173
2005	...	4,486	2,536	12,618	794	...	10,732	6,604	16,720	126	544	1,180	6,485	1,428	...	...	115	88	848	...	67,325
2006	369	4,758	2,406	13,681	...	...	11,605	6,681	15,142	279	623	1,751	5,981	...	...	...	...	...	...	...	67,356
2007	...	4,033	2,765	13,855	...	...	13,043	6,605	13,633	256	748	1,884	6,334	...	...	...	98	...	717	...	67,378
2008	298	3,342	3,499	10,525	...	...	12,716	5,033	12,967	322	654	1,898	5,684	...	...	...	112	...	667	...	60,738
2009	...	2,714	...	8,983	...	...	10,700	4,908	8,056	189	908	1,293	...	...	...	...	...	...	615	...	48,751
2010	...	...	...	7,778	...	...	9,114	4,152	4,843	171	846	1,249	5,326	...	...	...	...	...	633	...	47,569
2011 (t)	...	1,755	...	6,668	...	...	8,759	7,952	6,524	154	1,279	2,530	6,125	...	...	...	206	...	...	...	49,772

(a) Including dolomite.

(b) For filler in asphalt and as mine dust.

(c) For other fillers, powders and whittings (e.g. in animal feed, polymers, paint, paper and pharmaceuticals).

(d) For water & effluent treatment and pollution control

Source: Office for National Statistics.

Wales production of limestone by end-use 1999–2011

I thousand tonnes

Year	For constructional uses (a)					For other uses														Total	
	Roadstone					Railway ballast	Concrete aggregate	Other screened and graded	Other constructional uses	Armour-stone & Gabion	Agricultural use	Iron and steel	Cement	Chemical uses	Building materials	Environmental uses (d)	Glass making	Asphalt filler (b)	Other fillers (c)		Other uses
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings																
1999	52	...	275	3 136	...	...	3 688	...	6 502	...	110	...	...	...	...	...	—	...	...	...	17 220
2000	45	...	206	2 177	...	...	3 375	...	6 676	...	106	880	...	...	...	...	—	12	...	...	15 543
2001	44	...	328	1 731	...	...	4 299	...	4 802	...	101	...	...	...	...	...	—	—	8	...	14 238
2002	45	912	...	1 280	...	—	4 115	...	4 761	...	...	...	887	...	...	...	—	3	11	—	12 850
2003	39	866	...	1 756	...	...	...	...	3 845	...	133	565	1 238	...	...	...	—	...	...	—	13 208
2004	29	953	...	1 416	...	...	2 977	...	3 142	...	99	643	1 142	...	1	—	—	...	...	...	12 926
2005	9	...	...	1,474	...	...	1,829	1,912	3,471	...	100	565	...	—	—	—	—	...	...	...	12,759
2006	...	1,260	...	1,495	...	...	...	1,909	4,460	...	85	...	...	—	—	—	—	...	...	...	13,707
2007	13	...	...	1,584	...	...	...	1,767	...	...	89	...	1,491	...	—	—	—	...	...	...	14,549
2008	...	...	341	1,357	—	...	...	926	4,222	...	85	...	1,238	...	—	—	—	...	...	...	12,114
2009	...	...	...	1,472	1	...	2,011	560	1,221	25	...	...	...	—	—	—	—	...	...	...	8,131
2010	...	454	210	1,351	—	...	1,770	914	1,401	...	118	...	746	...	—	—	—	...	...	...	7,878
2011 (a)	...	345	...	964	—	...	1,831	...	1,352	...	...	...	818	...	—	—	—	...	...	...	7,897

(a) Including dolomite.

(b) For filler in asphalt and as mine dust.

(c) For other fillers, powders and whittings (e.g. in animal feed, polymers, paint, paper and pharmaceuticals).

(d) For water & effluent treatment and pollution control.

(e) BGS estimate.

Source: Office for National Statistics.

Scotland production of limestone by end-use 1999–2011

Thousand tonnes

Year	For constructional uses (a)					For other uses														Total	
	Roadstone					Railway ballast	Concrete aggregate	Other screened and graded	Other constructional uses	Armour-stone & Gabion	Agricultural use	Iron and steel	Cement	Chemical uses	Building materials	Environmental uses (d)	Glass making	Asphalt filler (b)	Other fillers (c)		Other uses
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings																
1999	(e) 4	...	—	80	...	—	11	...	144	...	...	—	...	...	...	...	—	...	...	—	1 507
2000	...	...	—	90	...	—	17	...	149	...	...	—	...	...	...	...	—	...	...	—	1 722
2001	...	...	—	127	...	—	24	...	126	...	148	—	1 218	...	...	...	—	...	...	—	1 733
2002	1	26	...	96	...	—	12	...	119	...	...	—	1 160	...	...	...	—	...	...	—	1 635
2003	...	30	...	104	...	—	...	...	98	...	174	—	1 248	...	...	...	—	...	...	—	1 730
2004	...	77	...	112	...	—	4	...	79	...	136	—	1 210	—	—	—	—	...	...	—	1 746
2005	...	...	...	103	...	—	9	29	111	12	113	—	1,216	—	—	—	—	...	...	—	1,746
2006	...	44	...	77	...	—	...	30	128	...	...	—	1,042	—	—	—	—	...	...	—	1,534
2007	...	...	...	85	...	—	...	39	...	...	...	—	...	—	—	—	—	...	...	—	1,555
2008	...	...	—	78	...	—	...	136	23	...	...	—	...	—	—	—	—	...	...	—	1,473
2009	...	...	...	117	—	—	26	71	28	7	163	—	705	—	—	—	—	...	...	—	1,210
2010	—	...	...	105	...	—	31	53	21	...	...	—	...	—	—	—	—	...	...	—	1,072
2011(a)	...	—	—	150	...	—	27	...	26	...	...	—	...	—	—	—	—	...	...	—	1,251

(a) Including dolomite.

(b) For filler in asphalt and as mine dust.

(c) For other fillers, powders and whittings (e.g. in animal feed, polymers, paint, paper and pharmaceuticals).

(d) For water & effluent treatment and pollution control.

(e) BGS estimate.

Source: Office for National Statistics.

Great Britain consumption of dolomite, limestone and lime in iron and steel production, 1976–2011

Thousand tonnes

Year	Dolomite, incl. calcined dolomite (dolime)			Limestone			Lime	
	Blast furnaces and sinter plants	Steel furnaces	Other purposes	Blast furnaces and sinter plants	Steel furnaces	Other purposes	Steel Furnaces	Other purposes
1976	517	150	0	1,777	334	7	1,288	36
1977	643	192	—	1,487	252	5	1,175	14
1978	647	183	—	1,399	106	—	1,227	—
1979	859	323	—	1,090	116	—	1,323	—
1980	389	182	—	611	7	—	663	—
1981	400	308	—	1,031	2	—	911	—
1982	280	255	—	888	2	—	799	—
1983	400	298	—	1,164	1	—	865	—
1984	405	310	—	1,143	1	—	824	—
1985	425	284	—	1,562	—	—	801	—
1986	333	270	—	1,494	2	—	680	—
1987	405	275	—	1,827	—	—	761	—
1988	477	319	—	1,948	—	—	810	—
1989	430	315	—	2,062	—	—	822	—
1990	410	287	—	1,992	—	—	778	—
1991	323	264	—	2,124	—	—	696	—
1992	391	246	—	2,033	—	—	682	—
1993	276	238	—	2,077	—	—	719	—
1994	201	264	—	2,236	—	—	767	—
1995	67	316	—	2,318	—	—	787	—
1996	59	397	—	2,225	—	—	744	—
1997	42	462	—	2,445	—	—	751	—
1998	3	492	—	2,411	—	—	739	—
1999	5	364	—	2,408	—	—	698	—
2000	1	337	—	2,166	—	—	660	—
2001	7	254	—	1,889	—	—	561	—
2002	8	215	—	1,684	—	—	501	—
2003	8	246	—	2,019	—	—	530	—
2004	3	260	—	2,068	—	—	584	—
2005	0	243	—	1,951	—	—	593	—
2006	183	262	—	2,028	—	—	631	—
2007	184	291	—	1,822	—	—	585	—
2008	166	254	—	1,664	—	—	496	—
2009	145	224	—	1,095	—	—	378	—
2010	156	243	—	948	—	—	371	—
2011	127	217	—	932	—	—	395	—

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.

Great Britain production of dolomite (a) by end-use 1999–2011

Thousand tonnes

Year	Building stone	Constructional use	Agricultural use (b)	Other uses (b)	Total
1999	14	11 833	...	...	13 698
2000	15	11 409	...	...	13 069
2001	34	12 381	...	...	14 314
2002	9	11 839	...	...	12 946
2003	7	10 391	...	...	...
2004	8	10 832	...	...	12 226
2005	...	...	...	...	11,514
2006	...	10,283	...	...	12,100
2007	...	5,898	...	...	7,622
2008	2	3,918	...	...	5,510
2009	...	1,954	...	...	3,164
2010	...	3,222	...	...	4,540
2011	(c)	(d) 3 124	...	...	4,490

(a) Data also included in table for 'Limestone'.

Source: Office for National Statistics.

(b) Including material for calcination.

(c) Included in constructional use.

(d) Including building stone.

England production of chalk by end-use 1999–2011

Thousand tonnes

Year	Cement	Constructional use	Agricultural use	Industrial uses	Total
1999	(a) 6 345	1 021	...	...	9 667
2000	(a) 6 288	683	...	352	9 213
2001	5 111	925	...	...	8 205
2002	5 550	904	...	...	8 587
2003	5 360	561	...	...	8 066
2004	5 177	705	...	...	7 997
2005	...	795	...	...	7,105
2006	...	681	...	...	7,376
2007	...	698	...	...	7,565
2008	...	497	...	...	5,874
2009	...	530	...	...	4,047
2010	...	312	...	...	3,626
2011	...	276	...	...	3,996

(a) BGS estimate.

Source: Office for National Statistics.

Lithium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Lithium										
<i>Imports</i>										
Oxide and hydroxide	614	466	914	218	215	2 212	1 764	3 743	1 138	1 213
Carbonate	779	536	622	427	376	2 150	1 804	2 477	1 546	1 664
<i>Exports</i>										
Oxide and hydroxide	92	232	569	144	7	389	494	2 268	667	279
Carbonate	158	216	193	123	50	572	377	671	315	273

Magnesia

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Magnesia										
<i>Imports</i>										
Dolomite	146 587	146 620	149 802	149 695	144 280	3 721	4 954	4 612	4 961	5 675
Magnesite	10 194	7 016	3 567	8 640	7 903	969	906	556	1 438	1 413
Magnesia-										
Dead burned	22 256	14 239	8 178	5 716	6 235	4 453	4 028	3 378	3 216	3 388
Caustic-calcined	35 650	40 402	32 537	37 527	40 534	5 335	7 824	8 136	10 992	11 590
Other	7 276	4 659	3 158	5 833	5 494	3 805	4 186	3 628	5 624	5 563
Kieserite	230 504	14 047	11 610	18 284	11 158	2 841	2 506	2 437	3 960	2 951
Magnesite or chrome-magnesite										
refractory bricks and shapes (a)(b)	30 884	29 876	18 981	25 057	31 338	18 886	19 800	13 369	16 516	21 724
<i>Exports</i>										
Dolomite (c)	4 642	4 786	3 438	2 675	1 078	252	249	245	227	111
Magnesite	51	316	518	470	745	129	169	583	464	752
Magnesia-										
Dead burned	2 022	1 287	902	1 729	2 270	952	713	612	869	1 632
Caustic-calcined	2 632	1 778	1 703	4 927	19 316	2 185	1 064	1 543	3 642	6 512
Other	11 717	10 582	7 057	7 841	6 456	10 262	10 411	7 763	8 545	7 617
Kieserite	175	137	22	42	48	47	44	12	27	16
Magnesite or chrome-magnesite										
refractory bricks and shapes (a)(b)	2 409	1 364	651	459	1 525	2 189	2 091	1 156	792	1 123

(a) Fired bricks and shapes only; unfired (chemically bonded) products excluded.

(b) Including dolomite bricks.

(c) Crude.

Magnesium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Magnesium										
<i>Imports</i>										
Ferro-silico-magnesium	2 303	1 614	512	931	1 328	1 168	1 744	536	1 006	1 583
Scrap	2 721	1 685	748	875	847	789	816	380	819	767
Unwrought	5 201	3 813	1 763	3 171	2 810	6 229	8 700	3 740	6 231	6 507
Unwrought alloys	3 904	3 618	2 386	4 252	4 521	4 557	8 351	6 222	9 054	10 651
Wrought	3 602	4 750	3 576	6 631	6 893	8 208	16 710	13 762	22 348	24 407
<i>Exports</i>										
Ferro-silico-magnesium	917	976	458	366	338	807	1 231	709	457	550
Scrap	2 398	2 222	1 937	3 143	3 976	2 938	4 439	3 665	6 179	7 360
Unwrought	8	38	13	209	175	82	220	242	564	519
Unwrought alloys	4 911	4 062	2 470	1 872	2 110	11 559	14 155	13 412	11 007	13 536
Wrought	1 533	1 333	674	626	855	5 448	5 856	5 109	4 301	6 164

Manganese

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Manganese										
<i>Consumption in Iron and Steel Industry</i>										
Ore	3 300	4 100	20 500	–	–					
Ferro-manganese	100 100	93 990	69 770	67 560	65 870					
Ferro-silico-manganese	24 430	22 940	17 030	16 490	16 080					
<i>Apparent consumption (a)</i>	125 000	120 000	68 000	72 000	73 000					
<i>Imports</i>										
Ores & Concentrates (b)	1 569	4 133	941	1 517	1 656	433	1 045	613	678	828
Ferro-manganese	100 694	96 461	49 700	46 985	39 159	57 728	130 012	45 265	47 612	36 925
Ferro-silico-manganese	56 036	52 966	37 114	49 280	51 928	29 887	59 497	24 468	42 091	41 491
Scrap	60	751	83	155	102	99	1 528	172	285	222
Unwrought	6 728	7 895	3 295	4 499	4 329	9 303	15 160	4 488	7 178	9 039
Wrought	232	126	746	1 965	1 013	599	535	1 380	3 664	2 090
Oxides	9 646	7 913	5 438	9 344	12 323	1 979	3 348	3 009	4 433	6 064
<i>Exports</i>										
Ores & Concentrates	114	244	65	97	129	88	207	90	62	112
Ferro-manganese	1 136	1 210	963	8 361	819	1 359	1 293	933	8 522	1 210
Ferro-silico-manganese	7	49	65	52	132	11	27	59	55	75
Oxides	3 785	4 571	1 768	4 173	5 315	1 026	1 597	1 289	1 714	2 995
Metal (c)	2 100	3 200	2 200	2 000	2 100	3 600	6 400	4 600	4 100	5 600

(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 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Marble										
<i>Imports</i>										
Dimension stone-										
Unworked	37 404	37 444	26 787	21 339	20 655	20 144	21 150	16 466	15 556	14 965
Worked	111 039	114 870	100 648	92 078	88 210	63 620	74 273	70 696	59 417	53 335
Crushed and powdered	248 711	233 499	177 802	190 740	190 848	11 217	12 482	8 586	10 558	12 085
<i>Exports</i>										
Dimension stone-										
Unworked	2 227	1 019	728	822	698	553	264	493	1 221	805
Worked	4 740	2 934	1 603	1 332	965	7 319	5 292	3 294	3 310	1 967
Crushed and powdered	3 229	2 637	1 723	830	798	641	484	317	271	263

Mercury

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Mercury										
<i>Imports</i>										
Elemental	3	2	1	22	0	91	57	29	71	14
<i>Exports</i>										
Elemental	4	6	179	9	5	59	102	741	194	263

Mica

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Mica										
<i>Imports</i>										
Crude (a)	289	377	328	43	243	92	129	139	20	99
Ground	6 705	7 061	6 396	7 341	7 926	1 831	2 308	1 862	2 225	2 360
Waste	3 433	2 030	49	902	0	476	336	4	245	12
Worked	919	1 310	604	654	878	4 277	5 357	5 023	4 317	4 852
<i>Exports</i>										
Crude (a)	2	14	4	12	4	2	28	2	5	12
Ground	3 818	4 735	3 928	4 125	4 234	2 835	3 612	3 741	3 679	3 527
Waste	0	...	12	...	...	6	...	11	...	...
Worked	629	690	650	706	926	6 065	8 310	6 395	7 595	9 289

(a) Including sheets or splitting.

Molybdenum

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Molybdenum										
<i>Consumption in Iron and Steel Industry (a)</i>										
Industry (a)	2 390	2 700	940	1 330	1 500					
Apparent consumption (a)(b)	5 400	4 000	1 400	2 100	4 300					
<i>Imports</i>										
Roasted molybdenite concentrates	15 215	13 075	8 486	12 359	15 844	271 386	312 431	91 550	156 244	211 067
Other ores and concentrates	3 165	2 055	521	222	0	47 323	45 898	6 401	2 601	0
Ferro-molybdenum	515	369	325	322	573	13 635	9 489	4 028	5 292	8 950
Scrap	751	846	469	815	787	16 698	22 499	6 494	14 078	14 189
Powders	58	69	153	147	192	1 436	3 060	2 714	3 127	4 949
Unwrought	192	102	50	69	56	5 788	3 855	1 216	1 821	1 626
Wrought	389	69	34	68	380	7 978	4 158	1 424	2 969	4 797
Oxides and hydroxides	513	1 433	510	1 638	2 316	19 655	32 752	4 450	21 771	30 719
<i>Exports</i>										
Roasted molybdenite concentrates	6	3	3	288	3	122	72	30	3 559	30
Other ores and concentrates	72	61	32	17	0	720	1 145	130	80	0
Ferro-molybdenum	11 823	11 283	7 634	11 248	12 948	263 672	284 904	87 193	168 557	184 969
Scrap	207	217	356	490	299	3 971	5 848	4 490	7 061	5 236
Powders	14	-----	53	31	48	55	34	745	1 000	1 477
Unwrought	2	2	3	13	7	121	54	61	308	228
Wrought	13	22	21	37	49	1 833	2 197	1 476	1 879	2 434
Oxides and hydroxides	2	8	0	5	2	5	109	10	59	38

(a) Metal content.

(b) BGS estimates; see explanatory notes.

Nepheline syenite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Nepheline syenite										
<i>Imports</i>										
Imports	40 484	44 275	32 462	39 092	35 573	3 617	4 355	3 516	4 038	4 475
<i>Exports</i>										
Exports	2 430	902	204	291	337	635	520	62	83	101

Nickel

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Nickel										
<i>Production (a)</i>	34 050	40 800	17 800	28 900	36 300					
<i>Consumption</i>										
Iron and steel industry (b)	12 450	12 140	7 980	9 540	11 770					
Other (b)(c)	20 000	20 000	3 000	11 000	7 000					
Total (b)(d)	32 400	32 400	11 400	20 470	18 600					
<i>Imports</i>										
Mattes, sinters etc.	62 637	63 553	25 929	50 263	58 519	735 537	3 550	177 459	509 294	612 378
Ash and residues	0	0	...	...	10	13	6	...	...	1 497
Scrap	10 376	10 291	9 593	8 154	6 741	55 794	53 910	32 297	43 239	46 529
Ores & concentrates	663	241	150	16	1	10 513	3 550	1 701	165	16
Ferro-nickel	14 960	16 520	2 777	6 284	13 888	70 052	44 805	6 221	22 518	51 589
Unwrought	21 044	16 888	8 003	14 200	12 707	412 993	182 155	75 146	199 286	193 423
Unwrought alloys	2 947	3 210	3 596	3 310	4 644	37 999	38 922	39 009	41 797	66 642
Oxides	49	13	1	6	5	773	158	31	142	172
<i>Exports</i>										
Mattes, sinters etc.	40	26	107	389	157	575	902	617	1 283	1 502
Ash and residues	15 623	13 588	6 450	8 995	10 789	107 080	74 891	24 272	80 198	104 565
Ores & concentrates	46	61	182	54	51	980	381	2 322	974	1 084
Scrap	16 872	18 229	12 693	19 361	17 405	70 146	74 878	39 925	66 581	83 488
Ferro-nickel	52	81	18	15	49	1 378	1 779	350	327	385
Unwrought	24 147	26 235	15 834	18 639	28 994	458 448	324 550	142 166	258 660	416 592
Unwrought alloys	4 375	4 378	4 753	4 530	6 025	80 199	72 035	68 164	75 753	111 615
Oxides	8	19	8	2	2	85	316	157	87	79

(a) Nickel content of refinery products.

(b) Metal content.

(c) Not independently recorded; obtained by subtraction. Believed to include stocks.

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

Niobium (see Tantalum and Niobium)

Peat

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Thousand cubic metres					£ thousand				
Peat										
<i>Production</i>	885	760	887	1 004	825					
<i>Imports</i>										
Peat and agglomerated peat	508 843	430 590	448 001	622 917	639 755	24 861	26 555	25 285	33 268	36 665
<i>Exports</i>										
Peat and agglomerated peat	33 514	41 645	42 965	51 867	53 505	4 249	4 859	7 546	6 647	7 423

Perlite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Perlite										
<i>Imports</i>	150 255	45 064	36 315	58 456	98 437	3 200	3 304	2 675	5 357	12 950
<i>Exports</i>	947	702	414	1 059	1 116	218	74	90	822	825

Petroleum (also see Primary fuels)

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Petroleum										
<i>Production</i>										
Crude petroleum	70 357 000	66 745 000	64 001 000	58 988 000	63 498 000					
Condensates and other (a)	6 475 000	6 168 000	5 378 000	4 915 000	3 401 000					
Refined petroleum products	81 278 000	81 278 000	74 893 000	72 871 000	74 496 000					
<i>Consumption (inland deliveries) of refined products</i>										
<i>Used as fuels-</i>										
Refineries	4 676 000	4 752 000	4 399 000	4 474 000	4 391 000					
Power generation	1 126 000	1 575 000	1 568 000	1 143 000	832 000					
Elsewhere	63 654 000	61 511 000	58 535 000	58 027 000	57 009 000					
<i>Not used as fuels</i>	7 967 000	8 032 000	7 365 000	7 530 000	7 255 000					
Total	77 428 000	76 119 000	71 962 000	71 691 000	69 487 000					
<i>Imports</i>										
Crude petroleum	44 129 689	52 103 843	50 656 965	50 447 008	53 647 056	11 671 463	20 537 880	14 519 898	19 489 775	28 080 175
Partly refined petroleum and refined products	40 845 976	26 175 761	26 122 966	26 913 407	26 595 080	12 173 132	12 769 749	9 287 712	11 996 861	15 786 493
<i>Exports</i>										
Crude petroleum	47 058 702	43 354 245	43 550 953	41 591 305	34 304 184	12 663 222	16 674 142	12 536 388	15 840 899	17 100 556
Partly refined petroleum and refined products	29 396 482	31 936 044	32 271 444	31 346 754	32 980 472	8 515 217	13 373 616	10 482 121	13 746 412	18 818 633

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

Oil and gas field statistics

United Kingdom production data for onshore and offshore crude petroleum and natural gas by field are provided by the Department of Energy and Climate Change. To view these data please visit: <https://www.gov.uk/oil-and-gas-uk-field-data>.

Natural gas

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Natural gas										
<i>Production</i>										
Methane										
Colliery (a)	62 000	63 000	67 000	63 000	58 000					
Offshore and onshore (a)	72 063 000	69 617 000	59 670 000	57 124 000	45 230 000					
Consumption (b)	90 169 000	93 037 000	85 995 000	93 303 000	77 246 000					
<i>Imports</i>										
Liquefied natural gas (c)	1 281 434	766 298	9 508 135	17 522 810	23 278 977					
Natural gas in gaseous state (c)	26 555 263	33 229 849	29 055 363	32 458 908	26 416 914					
Total (c)	27 836 698	33 996 147	38 563 499	49 981 718	49 695 891	2 885 000	6 425 000	4 775 000	6 650 000	9 050 000
Other natural gas (d)	1 198 737	1 046 202	533 498	568 388	546 281	379 858	465 986	164 980	255 576	308 636
<i>Exports</i>										
Liquefied natural gas and natural gas in gaseous state (c)	9 361 445	9 543 217	11 160 939	14 461 473	15 239 637	995 000	1 945 000	1 420 000	1 990 000	3 115 000
Other natural gas (d)	2 402 752	3 295 288	2 798 642	2 584 168	2 332 695	758 232	1 318 884	865 965	1 181 234	1 277 730

- (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 Energy and Climate Change.
 (d) Includes propane, liquefied propane, butane, liquefied butane, ethylene, gaseous hydrocarbons.

Phosphorus

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Phosphorus										
<i>Consumption in Iron and Steel Industry</i>										
Ferro-phosphorus	1 240	1 160	860	840	820					
<i>Imports</i>										
Phosphate rock	23 052	28 971	5 600	9 873	15 885	1 486	3 604	865	1 020	1 602
Ammonium phosphates	208 736	105 024	102 567	109 084	98 794	42 766	48 306	27 488	36 326	42 713
Superphosphates	172 560	126 083	126 402	219 783	166 269	31 497	53 975	21 044	51 763	57 417
Other phosphatic fertilisers	26 718	24 870	4 986	11 266	9 560	2 746	5 319	443	1 395	1 397
Elemental phosphorus	...	0	108	152	1 585	...	36	734	324	3 352
Phosphoric acids	149 686	110 067	77 210	90 655	87 356	38 229	64 480	51 989	45 147	51 810
Calcium phosphates	113 632	79 069	81 205	68 902	86 333	22 397	32 904	26 146	22 009	35 390
Sodium phosphates and orthophosphates	74 532	16 482	14 249	11 258	12 005	24 585	17 662	14 639	10 362	11 198
Polyphosphates including ammonium and sodium	51 155	29 107	27 030	28 450	28 853	13 348	25 957	21 591	21 318	26 133
<i>Exports</i>										
Phosphate rock	504	759	514	615	573	313	622	353	634	359
Ammonium phosphates	276	31 217	179	170	317	263	20 978	392	363	497
Superphosphates	12	...	236	235	1 147	21	23	104	68	376
Other phosphatic fertilisers	44	...	17	42	139	41	...	27	40	38
Elemental phosphorus	2	100	0	16	4	25	132	12	55	52
Phosphoric acids	7 124	4 020	3 554	3 251	2 347	4 653	4 991	3 851	2 605	2 207
Calcium phosphates	23 698	5 704	3 506	2 459	3 716	14 980	4 466	3 017	1 981	2 704
Sodium phosphates and orthophosphates	3 382	2 443	1 326	1 389	694	2 420	2 950	2 021	2 147	1 472
Polyphosphates including ammonium and sodium	21 691	15 790	11 765	8 666	4 285	13 463	18 665	15 541	9 716	5 465

Platinum group metals

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Platinum group metals										
<i>Imports</i>										
Unwrought or partly worked-										
Platinum	26	30	30	59	46	389 203	432 806	568 901	1 866 543	1 567 856
Palladium	42	33	37	73	42	199 298	135 692	214 272	728 069	630 010
Other platinum metals	7	5	7	9	8	303 995	252 822	114 883	219 027	179 756
Waste & scrap	1 456	1 417	1 100	820	1 557	261 626	696 282	435 759	475 114	792 811
<i>Exports</i>										
Unwrought or partly worked-										
Platinum	53	41	43	24	38	895 179	1 069 051	954 655	787 176	1 272 690
Palladium	57	47	53	43	51	329 468	329 534	284 178	455 590	744 465
Other platinum metals	24	23	20	23	17	805 069	1 047 491	271 233	416 542	354 043
Waste & scrap	3 794	4 279	4 273	528	287	60 527	84 625	50 605	62 151	38 349

Potassium compounds

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Potassium compounds										
<i>Indigenous production</i>										
KCl product	712 000	673 000	(a) 700 000	(a) 700 000	(a) 770 000					
<i>Apparent consumption</i>										
Potassic fertilisers (K ₂ O content) (b)	338 600	254 700	(a) 134 000	(a) 327 000	(a) 205 000					
<i>Imports</i>										
Sulphate	16 166	15 157	15 766	15 766	13 232	3 457	4 423	6 380	4 068	4 751
Chloride	202 623	165 331	80 842	270 096	153 141	25 097	...	33 207	71 094	49 041
Other potassic fertilisers	10 813	11 919	10 422	10 565	2 373	1 216	2 364	1 450	1 471	508
<i>Exports</i>										
Sulphate	163	93	443	71	108	20	42	311	75	54
Chloride (c)	220 600	244 300	205 600	339 000	429 000	36 891	204 382	80 287	102 142	111 813
Other potassic fertilisers	399	562	228	420	5 283	379	487	261	513	1 473

(a) BGS Estimates.

(b) Home deliveries plus imports.

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

Precious and semi-precious stones

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Precious and semi-precious stones (excluding diamond) (a)										
<i>Imports</i>										
Natural stones	235	97	124	416	319	110 025	105 565	94 979	126 780	135 843
Synthetic stones	48	69	66	84	103	5 103	5 184	4 048	4 638	5 609
Dust and powder	1	2	1	4	5	704	686	352	382	572
<i>Exports</i>										
Natural stones	31	3	5	11	9	71	100 384	80 485	106 276	137 162
Synthetic stones	5	5	1	24	20	1 403	3 381	10 250	6 182	3 033
Dust and powder	4	9	6	8	1	296	560	519	701	352

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

United Kingdom production of primary fuels 1986–2011 (energy supplied basis)

Million tonnes of oil equivalent (a)

Year	Coal	Petroleum	Natural gas (b)	Nuclear electricity	Hydro-electricity (c)	Total (d)
1986	66	139	42	15	0	262
1987	63	135	44	14	0	257
1988	63	126	42	17	0	249
1989	61	100	41	18	0	221
1990	56	100	46	16	0	219
1991	58	100	51	17	0	227
1992	52	104	52	19	1	227
1993	42	110	61	22	1	235
1994	30	139	65	21	0	257
1995	33	143	71	21	1	270
1996	31	142	84	22	0	282
1997	30	140	86	23	0	282
1998	26	145	90	23	1	287
1999	23	150	99	22	1	298
2000	20	138	108	20	1	289
2001	20	128	106	21	0	277
2002	19	127	104	20	1	273
2003	18	116	103	20	0	260
2004	16	105	96	18	1	238
2005	13	93	88	18	1	217
2006	11	84	80	17	1	197
2007	11	84	72	14	1	186
2008	11	79	70	12	1	177
2009	11	75	60	15	1	167
2010	11	69	57	14	1	158
2011	12	57	45	16	2	137

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

(b) Including colliery methane.

(c) Including, from 1988, other renewable primary electricity sources (wind, etc.).

(d) Including, from 1988, small amounts of primary heat sources (solar, geothermal, etc.), solid renewable sources (wood, waste, etc.) and gaseous renewable sources (landfill gas, sewage gas, etc.).

Source: Department of Energy and Climate Change.

United Kingdom consumption of energy (primary fuel input) 1986–2011 (energy supplied basis)

Million tonnes of oil equivalent (a)

Year	Coal	Petroleum	Natural gas (b)	Nuclear electricity	Hydro-electricity (c)	Net imports of electricity	Total (d)
1986	70	71	53	15	0	0	210
1987	72	69	54	14	0	1	211
1988	70	74	51	17	0	1	213
1989	67	75	49	18	0	1	211
1990	67	77	51	16	0	1	214
1991	67	77	55	17	0	1	220
1992	63	78	55	19	1	1	217
1993	55	78	63	22	1	1	221
1994	51	77	65	21	0	2	218
1995	49	75	69	21	1	1	218
1996	46	78	81	22	0	1	230
1997	41	76	84	23	0	1	227
1998	41	76	87	23	1	1	231
1999	37	76	91	22	1	1	230
2000	38	76	96	20	1	1	234
2001	41	75	95	21	0	1	236
2002	38	74	94	20	1	1	230
2003	41	74	95	20	0	0	232
2004	39	75	97	18	1	1	234
2005	40	78	94	18	1	1	236
2006	44	77	89	17	1	1	233
2007	41	76	90	14	1	0	228
2008	38	75	93	12	1	1	226
2009	32	71	86	15	1	0	212
2010	32	70	93	14	1	0	218
2011	32	68	77	16	2	1	203

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

(b) Including colliery methane.

(c) Including, from 1988, other renewable primary electricity sources (wind, etc.).

(d) Including, from 1988, small amounts of primary heat sources (solar, geothermal, etc.), solid renewable sources (wood, waste, etc.) and gaseous renewable sources (landfill gas, sewage gas, etc.).

Source: Department of Energy and Climate Change.

Pumice

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Pumice										
<i>Imports</i>	206 353	2 259	1 668	2 062	2 067	2 546	2 013	1 130	1 183	810
<i>Exports</i>	40	76	307	704	136	93	293	534	997	448

Pyrite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Pyrite										
<i>Imports</i>										
Iron pyrites (incl.cupreous)-										
Unroasted	105	704	104	2 581	1 734	24	153	38	1 333	502
Roasted	131 230	693	232	–	598	5 649	98	67	–	138
<i>Exports</i>										
Iron pyrites (incl.cupreous)-										
Unroasted	122	161	21	2	40	20	5	62	5	53
Roasted	95	90	0	28	10	43	15	10	15	5

Quartz and quartzite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Quartz and quartzite										
<i>Imports</i>										
Quartzite	2 512	353	318	92	161	377	324	213	137	171
Quartz	7 143	4 036	1 989	4 015	6 108	1 659	3 140	2 372	4 013	6 075
<i>Exports</i>										
Quartzite	45	99	25	34	0	225	102	14	20	9
Quartz	541	657	832	1 045	744	310	344	1 115	771	607

Radioactive and associated materials

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Radioactive and associated materials										
<i>Imports</i>										
Natural and enriched uranium, plutonium, artificial radioactive isotopes, and their compounds	...	...	...	...	...	1 708 433	1 130 734	1 330 313	1 258 131	1 273 267
<i>Exports</i>										
Natural and enriched uranium, isotopes, and their compounds	...	...	...	...	...	1 708 528	1 626 085	1 808 150	2 113 690	1 692 614

Rare earths

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Rare earths										
<i>Imports</i>										
Metals (a)	88	133	99	119	79	865	1 297	907	2 231	2 300
Cerium compounds	2 167	2 067	612	1 119	1 713	4 768	5 802	1 932	4 694	24 746
Other rare earth compounds (b)	664	251	103	322	629	4 152	3 461	3 648	3 999	8 282
Ferro-cerium & other pyrophoric alloys	77	57	148	150	79	81	109	210	173	146
<i>Exports</i>										
Metals (a)	143	237	54	46	272	610	798	503	1 158	1 702
Cerium compounds	37	73	105	182	149	545	1 257	1 692	2 349	2 409
Other rare earth compounds (b)	1 089	622	459	614	347	4 634	2 673	2 606	5 033	6 094
Ferro-cerium & other pyrophoric alloys	80	7	6	37	48	160	86	113	439	136

(a) Including yttrium and scandium.

(b) Including yttrium and scandium compounds.

Salt

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Salt										
<i>Production</i>	5 600 000	5 565 000	6 166 000	6 666 000	6 060 000					
<i>Imports</i>	237 772	237 288	410 434	1 288 253	1 814 865	18 097	21 973	30 365	64 295	89 009
<i>Exports</i>	514 868	873 708	449 303	450 246	489 633	28 112	33 995	31 509	35 354	41 551

Sand and gravel (also see Aggregates)

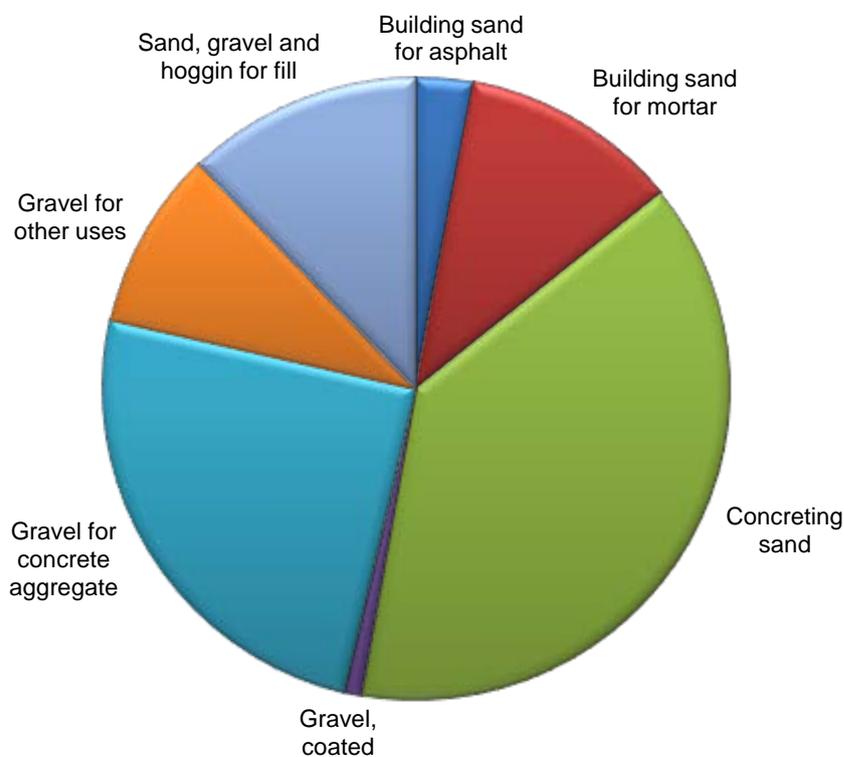
United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Sand and gravel										
<i>Production</i>										
Sand & gravel (a)	93 236 000	85 473 000	66 226 000	61 700 000	(d)63 113 000					
<i>Consumption</i>										
Building sand (b)	12 207 000	10 595 000	7 941 000	7 710 000	7 549 000					
Concreting sand (b)	30 202 000	26 885 000	21 570 000	20 947 000	22 591 000					
Gravel and hoggin (b)	36 092 000	34 648 000	26 199 000	19 052 000	24 875 000					
Total (b)	78 501 000	72 127 000	55 709 000	54 330 000	55 015 000					
<i>Imports</i>	896 715	647 603	444 725	343 749	357 607	18 260	16 043	12 212	10 874	12 455
<i>Exports (c)</i>	8 089 175	7 747 635	6 236 662	6 081 730	5 413 300	46 624	50 027	48 688	44 819	45 163

- (a) Including production from marine dredging.
 (b) Great Britain: production for the home market including landings of marine dredged materials at British ports.
 (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): 2007: 6 649 041; 2008: 6 211 703; 2009: 5 660 522; 2010: 5 192 348; 2011: 6 098 020.
 (d) Includes an estimate for Northern Ireland.

Great Britain production of sand and gravel by end-use 2010

Great Britain production of sand and gravel by end-use 2010
 (total production 54.3 million tonnes)



United Kingdom production of sand and gravel 1990–2011

Million tonnes

Year	Land-based production			Marine-dredged			Total production United Kingdom	For beach replenishment (c) (e)
	Great Britain (a)	Northern Ireland (b)	Total	For home market (a)	For export (c)	Total		
1990	99.0	4.0	103.0	17.2	3.8	21.0	124.0	2.3
1991	85.5	3.8	89.3	12.4	4.6	17.0	106.3	1.9
1992	78.3	3.7	82.0	10.6	6.3	16.9	98.9	1.3
1993	79.4	4.3	83.7	10.1	6.2	16.3	100.0	0.8
1994	86.3	5.1	91.5	11.3	6.6	18.0	109.4	1.3
1995	78.0	5.3	83.3	11.6	6.8	18.4	101.7	5.2
1996	70.5	5.3	75.7	11.5	6.7	18.2	93.9	7.2
1997	74.4	5.1	79.5	12.0	6.9	18.9	98.4	4.9
1998	73.0	5.3	78.3	13.0	7.0	20.0	98.3	2.4
1999	74.8	5.5	80.3	13.4	7.2	20.7	101.0	2.8
2000	74.9	5.1	80.0	14.4	7.3	21.7	101.6	2.4
2001	74.6	6.2	80.8	13.6	7.0	20.6	101.4	1.6
2002	69.9	5.5	75.4	12.8	6.2	19.0	94.4	1.5
2003	68.1	4.9	73.0	12.1	6.1	18.2	91.2	2.1
2004	73.1	5.1	78.1	13.0	6.1	19.2	97.3	1.8
2005	69.4	5.8	75.2	13.0	6.5	19.5	94.7	1.5
2006	66.3	5.2	71.5	14.0	6.7	20.7	92.1	4.1
2007	64.7	8.1	72.8	13.8	6.6	20.4	93.2	2.1
2008	59.5	7.1	66.6	12.6	6.2	18.8	85.5	2.2
2009	46.1	4.9	51.0	9.6	5.7	15.3	66.2	4.5
2010	45.0	2.2	47.2	9.3	5.2	14.5	61.7	1.0
2011	43.8	(d) 2.0	45.8	11.2	6.1	17.3	63.1	1.5

Sources:

- (a) Office for National Statistics.
- (b) Department of Enterprise, Trade & Investment.
- (c) Crown Estate Commissioners.
- (d) BGS estimate.

- (e) 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 by end-use and area of origin 2011

Thousand tonnes

Area of origin	Sand		Gravel				Sand, gravel and hoggin for fill	Total
	Building sand		Concreting sand	Coated with a bituminous binder	Concrete aggregate	Other screened & graded gravels (c)		
	For asphalt	For use in mortar						
North East	...	...	(a) ...	—	(a) ...	...	(a) ...	(a) ...
Yorkshire and the Humber	...	...	...	...	(a) ...	...	...	(a) 3 441
East Midlands	...	...	...	...	...	...	...	...
East of England	...	(a) ...	(a) ...	...	(a) ...	(a) ...	(a) ...	(a) ...
South East	(a) ...	(a) ...	(a) ...	...	(a) ...	(a) ...	(a) ...	(a) ...
South West	...	(a) ...	(a) ...	...	(a) ...	(a) ...	(a) ...	(a) ...
West Midlands	...	...	...	...	...	...	...	6 418
North West	...	(a) ...	(a) ...	—	40	...	...	...
England								
Land-won	...	...	...	...	...	...	...	36 589
Marine (b)	...	...	...	...	...	...	...	10 450
Total	(a) ...	(a) 5 197	(a) 19 635	...	(a) 12 730	(a) 3 480	(a) 4 676	(a) 47 039
Wales								
Land-won	...	...	...	—	...	...	...	870
Marine (b)	...	...	...	—	...	...	...	740
Total	(a) ...	(a) 382	(a) 719	—	(a) 377	(a) ...	(a) 70	(a) 1 610
Scotland								
Total	484	561	2 237	...	996	...	913	6 366
Great Britain								
Land-won	...	5 626	17 178	504	9 497	...	5 254	43 826
Marine (b)	...	514	5 413	—	4 606	...	405	11 189
Total	(a) 1 406	(a) 6 140	(a) 22 591	504	(a) 14 103	(a) 4 609	(a) 5 659	(a) 55 015

(a) Including marine-dredged material.

(b) Excluding marine-dredged landings at foreign ports (exports).

(c) This heading is now believed to include material previously classified as construction fill.

Source: Office for National Statistics.

Great Britain production of sand and gravel (a) by region 1981–2011

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
1981	2 798	3 043	4 668	8 109	9 217	6 532	35 864	5 843	76 074	3 492	9 886	89 453
1982	2 685	3 410	4 397	9 892	9 100	7 026	35 374	6 017	77 901	3 444	9 861	91 206
1983	3 087	3 730	4 690	9 847	10 470	7 581	39 035	8 017	86 457	4 033	10 309	100 799
1984	3 062	4 080	4 680	10 827	10 604	6 934	38 862	7 010	86 060	3 437	10 178	99 675
1985	2 717	3 823	4 537	10 728	10 609	7 540	39 930	6 981	86 865	3 420	11 320	101 605
1986	2 863	4 036	4 686	10 486	11 743	7 547	42 192	7 152	90 706	4 083	10 710	105 498
1987	2 932	4 006	4 780	11 095	13 348	8 306	43 563	8 495	96 525	4 793	10 311	111 629
1988	3 291	4 156	5 306	14 138	15 603	11 361	50 970	9 843	114 667	4 734	10 753	130 154
1989	3 802	4 709	5 722	14 020	15 892	10 145	51 208	9 142	114 640	4 588	12 004	131 232
1990	3 951	4 641	5 485	12 581	14 051	8 762	42 516	7 559	99 547	3 990	12 634	116 172
1991	3 017	4 243	4 960	10 698	12 683	7 288	33 318	6 045	82 253	3 439	12 226	97 918
1992	2 732	3 894	4 028	9 976	12 072	6 456	28 590	6 171	73 290	3 205	11 774	88 898
1993	2 856	4 028	4 539	10 345	12 364	5 962	28 600	6 138	74 833	3 278	11 359	89 470
1994	3 268	4 843	4 907	12 207	12 860	6 947	31 140	6 765	82 937	3 312	11 423	97 672
1995	3 086	4 529	4 333	10 722	11 556	6 550	28 046	6 684	75 506	3 260	10 889	89 656
1996	2 909	3 792	3 923	9 633	10 827	5 623	26 485	5 790	68 983	3 111	9 904	81 997
1997	3 109	4 294	4 041	9 966	10 899	5 899	29 154	6 054	73 416	3 050	9 900	86 366
1998	3 056	3 579	4 381	9 721	10 416	5 979	29 637	6 166	72 935	2 959	10 074	85 968
1999	3 117	3 801	4 872	9 901	10 216	6 395	30 821	6 016	75 139	3 039	10 031	88 209
2000	2 003	4 003	4 559	9 879	10 253	15 637	22 553	7 385	76 272	2 939	10 022	89 234
2001	1 566	3 402	5 171	9 894	9 716	15 694	22 004	7 126	74 572	2 886	10 753	88 210
2002	1 344	3 890	4 999	9 159	9 608	15 317	19 872	7 131	71 320	2 758	8 643	82 721
2003	1 254	5 220	4 770	9 590	9 842	14 381	17 915	6 413	69 385	2 733	8 103	80 221
2004	1 576	3 992	5 197	9 401	10 906	15 461	19 885	8 065	74 482	3 120	8 455	86 057
2005	1 575	3 674	5 248	9 250	9 235	15 561	19 362	6 934	70 838	2 746	8 808	82 392
2006	1 471	3 599	5 016	9 396	8 979	13 588	20 194	6 793	69 035	2 615	8 592	80 242
2007	1 411	3 592	5 098	10 025	8 485	13 283	18 442	6 801	67 137	2 339	9 025	78 501
2008	1 288	2 813	5 014	10 476	7 477	12 060	16 582	5 960	61 669	2 361	8 097	72 127
2009	1 110	2 121	3 235	6 397	5 798	9 980	13 211	4 677	46 529	1 668	7 512	55 709
2010	1 150	1 841	3 195	6 074	5 503	9 711	13 145	4 714	45 332	1 633	7 365	54 330
2011	...	...	3 441	6 418	...	...	...	...	47 039	1 610	6 366	55 015

(a) Including marine-dredged material.

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

(b) From 2000, excludes Cumbria.

(c) From 2000, includes Cumbria.

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

Source: Office for National Statistics.

England production of sand and gravel by end-use 1998–2011

Thousand tonnes

Year	Sand		Gravel				Sand, gravel and hoggin for fill	Total
	Building sand		Concreting sand	Coated with a bituminous binder	Concrete aggregate	Other screened & graded gravels (b)		
	For asphalt	For use in mortar						
1998								
Land-won	...	8 645	21 892	...	20 495	433	...	61 241
Marine (a)	...	274	3 861	...	7 375	3	...	11 694
Total	1 991	8 919	25 753	408	27 870	436	7 559	72 935
1999								
Land-won	...	...	22 936	...	20 421	...	7 591	62 954
Marine (a)	...	...	4 297	...	7 292	...	167	12 185
Total	1 847	9 372	27 234	150	27 713	1 065	7 758	75 139
2000								
Land-won	...	9 189	22 769	...	20 164	746	...	63 196
Marine (a)	...	345	4 206	...	8 272	—	...	13 076
Total	1 817	9 533	26 975	135	28 436	746	8 631	76 272
2001								
Land-won	...	...	...	...	...	...	...	62 177
Marine (a)	...	...	...	...	...	...	...	12 395
Total	1 605	9 317	27 658	189	26 731	3 994	5 077	74 572
2002								
Land-won	...	...	...	...	...	...	...	59 633
Marine (a)	...	...	...	...	...	...	...	11 687
Total	1 397	9 233	27 331	...	25 422	3 580	...	71 320
2003								
Land-won	...	...	...	...	...	...	...	58 484
Marine (a)	...	...	...	...	...	...	...	10 901
Total	...	9 810	27 452	...	24 110	2 927	3 718	69 385
2004								
Land-won	1 876	...	...	285	...	...	...	62 735
Marine (a)	—	...	...	—	...	...	...	11 747
Total	1 876	9 268	27 856	285	25 013	3 931	6 253	74 482
2005								
Land-won	1 303	...	...	261	...	4 970	...	58 926
Marine (a)	—	...	...	—	...	66	...	11 912
Total	1 303	9 514	25 882	261	23 382	5 036	5 459	70 838
2006								
Land-won	1 847	...	...	199	...	...	...	56 148
Marine (a)	—	...	...	—	...	...	...	12 887
Total	1 847	7 985	25 618	199	23 328	4 565	5 492	69 035
2007								
Land-won	...	...	...	226	...	...	...	54 512
Marine (a)	...	...	...	—	...	...	...	12 625
Total	1 864	8 128	25 891	226	21 247	4 493	5 288	67 137
2008								
Land-won	...	...	...	...	...	...	...	50 134
Marine (a)	...	...	...	...	...	...	...	11 535
Total	1 622	6 985	23 048	66	17 071	3 317	9 560	61 669
2009								
Land-won	...	...	...	542	...	...	...	37 810
Marine (a)	...	...	...	—	...	...	...	8 719
Total	1 020	5 085	18 382	542	13 111	3 908	4 481	46 529
2010								
Land-won	...	...	...	...	...	...	...	36 723
Marine (a)	...	...	...	—	...	...	...	8 609
Total	...	4 929	17 758	...	12 169	3 439	5 558	45 332
2011								
Land-won	...	...	...	...	...	...	...	36 589
Marine (a)	...	...	...	—	...	...	...	10 450
Total	...	5 197	19 635	...	12 730	3 480	4 676	47 039

(a) Excluding marine-dredged landings at foreign ports (exports).

Source: Office for National Statistics.

(b) From 2001, this heading is believed to include material previously classified as construction fill.

Wales production of sand and gravel by end-use 1998–2011

Thousand tonnes

Year	Sand		Gravel				Sand, gravel and hoggin for fill	Total
	Building sand		Concreting sand	Coated with a bituminous binder	Concrete aggregate	Other screened & graded gravels (b)		
	For asphalt	For use in mortar						
1998								
Land-won	...	270	712	—	370	—	...	1 701
Marine (a)	...	497	570	—	162	—	...	1 258
Total	45	768	1 282	—	532	—	333	2 959
1999								
Land-won	...	...	683	—	453	2	354	1 800
Marine (a)	...	...	543	—	175	—	3	1 240
Total	37	789	1 226	—	628	2	357	3 039
2000								
Land-won	...	331	502	—	404	...	386	1 658
Marine (a)	4	620	489	—	164	—	3	1 280
Total	...	951	991	—	568	...	389	2 939
2001								
Land-won	...	...	...	—	...	116	...	1 670
Marine (a)	...	...	...	—	...	—	...	1 216
Total	16	1 120	923	—	524	116	187	2 886
2002								
Land-won	...	...	...	—	...	...	...	1 613
Marine (a)	...	...	...	—	...	—	...	1 145
Total	...	862	1 140	—	487	134	...	2 758
2003								
Land-won	...	...	...	—	...	...	...	1 503
Marine (a)	...	...	...	—	...	—	...	1 230
Total	...	987	1 073	—	430	...	107	2 733
2004								
Land-won	...	...	...	—	...	142	...	1 871
Marine (a)	...	...	...	—	...	—	...	1 249
Total	16	688	1 364	—	526	142	384	3 120
2005								
Land-won	...	...	...	...	...	262	...	1 634
Marine (a)	...	...	...	...	...	—	...	1 112
Total	...	974	824	...	450	262	206	2 746
2006								
Land-won	...	...	...	...	...	206	...	1 528
Marine (a)	—	...	...	...	...	—	...	1 087
Total	...	954	978	...	280	206	179	2 615
2007								
Land-won	...	...	...	—	...	178	...	1 187
Marine (a)	—	...	...	—	...	—	...	1 152
Total	...	749	902	—	443	178	...	2 339
2008								
Land-won	...	...	...	—	...	...	...	1 275
Marine (a)	...	...	...	—	...	...	...	1 086
Total	49	660	1 032	—	382	95	143	2 361
2009								
Land-won	...	...	...	—	...	...	...	795
Marine (a)	...	...	...	—	...	...	...	873
Total	148	458	657	—	238	94	74	1 668
2010								
Land-won	...	...	...	—	...	...	...	901
Marine (a)	...	...	...	—	...	...	...	732
Total	...	505	658	—	244	128	...	1 633
2011								
Land-won	...	...	...	—	...	...	...	870
Marine (a)	...	...	...	—	...	...	...	740
Total	...	382	719	—	377	...	70	1 610

(a) Excluding marine-dredged landings at foreign ports (exports).

Source: Office for National Statistics.

(b) From 2001, this heading is believed to include material previously classified as construction fill.

Scotland (land-won) production of sand and gravel by end-use 1998–2011

Thousand tonnes

Year	Sand		Gravel				Sand, gravel and hoggin for fill	Total
	Building sand		Concreting sand	Coated with a bituminous binder	Concrete aggregate	Other screened & graded gravels (a)		
	For asphalt	For use in mortar						
1998	447	1,153	3,210	79	1,968	198	3,020	10,074
1999	455	1,195	3,270	95	2,008	198	2,809	10,031
2000	...	1,274	3,202	67	1,749	...	3,031	10,022
2001	374	1,079	3,075	72	2,715	1,056	2,382	10,753
2002	...	1,096	2,753	...	1,790	1,021	1,581	8,643
2003	359	1,053	2,886	...	1,724	...	1,132	8,103
2004	181	732	3,309	79	1,994	740	1,421	8,455
2005	...	1,070	3,142	...	2,182	851	986	8,808
2006	...	968	3,219	...	1,745	877	1,197	8,592
2007	...	1,000	3,409	80	1,931	1,058	...	9,025
2008	397	882	2,805	88	1,334	1,189	1,403	8,097
2009	477	753	2,530	84	1,103	1,099	1,466	7,512
2010	533	675	2,531	...	1,081	1,479	...	7,365
2011	484	561	2,237	...	996	...	913	6,366

(a) From 2001, this heading is believed to include material previously classified as construction fill.

Source: Office for National Statistics.

Sandstone

United Kingdom summary 2006–2010

Commodity	2007	2008	2009	2010	2011
	Tonnes				
Sandstone – see Building and dimension stone					
<i>Production</i>	16,806,000	12,255,000	12,335,000	11,556,000	(a) 12 277 000

(a) Includes an estimate for Northern Ireland.

England production of sandstone by end-use 1999–2011

Thousand tonnes

Year	Roadstone											Total	
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses		Other uses
1999	420	333	1 090	...	...	68	548	...	3 502	...	...	...	7 241
2000	214	332	1 201	1 334	...	...	581	...	3 598	...	...	...	7 401
2001	253	...	1 375	987	...	110	1 061	...	2 474	...	...	...	7 201
2002	269	...	1 442	771	...	121	760	...	3 153	...	...	...	7 006
2003	...	511	1 644	854	...	80	891	...	2 713	...	...	...	7 005
2004	398	377	1 490	813	203	70	728	1 032	1 904	25	36	...	7 076
2005	424	558	1 345	971	184	55	304	967	2 028	36	39	...	6 910
2006	396	...	1 046	799	187	...	252	1 310	2 499	...	30	...	7 041
2007	365	348	...	824	...	...	...	878	...	...	...	...	6 918
2008	339	...	1 157	646	...	157	607	1 007	1 453	49	...	...	5 854
2009	368	370	...	226	...	—	837	220	675	55	...	...	3 980
2010	512	...	...	600	...	...	532	248	695	...	...	...	4 176
2011	304	459	1 050	774	...	...	335	445	806	...	...	...	4 454

(a) BGS estimate.

Source: Office for National Statistics.

Wales production of sandstone by end-use 1999–2011

Thousand tonnes

Year	Roadstone											Total	
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses		Other uses
1999	21	493	706	...	...	—	99	...	(a) 922	...	...	...	2 973
2000	...	...	673	433	...	...	...	...	1 355	...	...	...	2 941
2001	...	...	913	439	...	—	180	...	1 132	...	...	...	3 094
2002	10	...	...	416	...	—	426	...	1 023	...	...	—	3 136
2003	...	433	792	430	...	...	641	...	871	...	...	—	3 179
2004	...	529	...	246	173	1	399	480	817	...	—	...	3 241
2005	...	...	646	218	206	—	171	524	660	22	—	...	3 233
2006	14	...	...	234	185	—	...	593	941	11	—	...	3 415
2007	24	...	1 262	281	99	—	225	427	...	16	...	...	3 558
2008	18	...	...	155	...	—	...	112	430	...	...	...	2 323
2009	...	...	1 289	131	...	—	139	63	397	...	...	...	2 667
2010	...	446	1 244	108	128	—	126	171	369	...	...	...	2 807
2011	10	...	...	128	...	—	...	245	360	...	...	...	3 114

(a) BGS estimate.

Source: Office for National Statistics.

Scotland production of sandstone by end-use 1999–2011

Thousand tonnes

Year	Roadstone											Total	
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses		Other uses
1999	14	229	290	460	...	(a) 70	126	...	(a) 466	...	...	2	1 657
2000	...	...	523	434	...	...	...	...	371	...	...	—	1 715
2001	18	...	136	305	...	...	184	...	685	...	...	...	1 603
2002	...	108	...	502	...	69	297	...	489	...	...	—	1 645
2003	63	103	104	457	...	65	245	...	442	...	...	1	1 481
2004	28	141	...	145	116	...	87	272	643	...	1	...	1 613
2005	33	...	37	263	...	...	76	170	431	21	1	...	1 466
2006	25	141	...	302	143	...	...	134	356	...	...	...	1 372
2007	30	...	...	244	...	...	...	148	...	...	1	...	1 502
2008	143	...	...	308	...	...	...	204	310	...	...	...	1 381
2009	...	...	...	771	35	—	140	144	342	...	...	...	1 895
2010	...	...	...	558	...	1	201	213	496	...	—	...	1 806
2011	19	...	...	512	27	1	...	221	646	117	—	...	1 910

(a) BGS estimate.

Source: Office for National Statistics.

Selenium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Selenium										
<i>Imports</i>										
Elemental	1 350	409	273	1 817	471	6 300	8 645	7 414	17 505	28 027
<i>Exports</i>										
Elemental	118	221	96	297	212	2 955	3 719	3 230	9 657	17 276

Sepiolite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Sepiolite										
<i>Imports</i>										
	282 733	227 453	70 651	...	...	22 553	43 004	13 367	...	...

Silica sand

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Silica sand										
<i>Production (a)</i>										
	4 909 000	4 777 000	3 755 000	4 070 000	3 969 000					
<i>Imports</i>										
	61 454	48 112	79 629	148 619	310 715	8 516	8 045	8 076	10 603	17 191
<i>Exports</i>										
	222 581	156 451	115 746	100 773	64 924	6 393	4 614	4 794	4 325	4 069

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

Great Britain production of silica sand by end-use and area of origin 2011

Thousand tonnes

Area of origin	Foundry uses	Glass manufacture	Other industrial uses	Agricultural, horticultural & leisure uses	Total
North East (a)	—	—	—	...	...
Yorkshire and the Humber (b)	...	...	...	...	...
East Midlands (c)	...	—	...	...	...
West Midlands (d)	3	...	...	...	...
East of England (e)	...	...	...	...	...
South East (f)	...	...	...	...	...
South West (g)	...	—	...	...	...
North West (h)	356	...	...	...	...
England	...	...	918	982	3,533
Wales (i)	—	—	—	...	...
Scotland (j)	...	...	37	...	...
Great Britain	382	1,528	956	1,104	3,969

(a) From Tyne & Wear and Northumberland.

(b) From North Yorkshire, South Yorkshire and Humberside.

(c) From Derbyshire, Nottinghamshire and Lincolnshire.

(d) From Staffordshire, West Midlands, Warwickshire and Hereford & Worcester.

(e) From Norfolk, Suffolk, Essex, and Bedfordshire.

(f) From Berkshire, West Sussex, Surrey and Kent.

(g) From Cornwall, Dorset and Devon.

(h) From Cumbria and Cheshire.

(i) From Clwyd and Dyfed.

(j) From West Central Scotland, East Central Scotland, and Tayside & Fife.

Source: Office for National Statistics.

Silicon

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Silicon										
<i>Consumption in Iron and Steel Industry</i>										
Ferro-silicon	38 900	36 520	27 110	26 250	25 600					
Calcium silicide	90	80	60	60	60					
Ferro-silico-zirconium	70	70	50	50	50					
Ferro-silico-manganese	24 430	22 940	17 030	16 490	16 080					
<i>Imports</i>										
Elemental silicon-										
Containing not less than										
99.99% silicon	1 504	2 788	2 673	3 299	3 577	49 825	88 581	105 259	102 641	103 355
Other	24 284	54 019	65 436	96 352	97 428	25 025	83 887	98 160	156 601	189 956
Ferro-silico-chrome	1 242	128	13	9	362	635	136	30	10	409
Ferro-silico-magnesium	2 303	1 614	512	931	1 328	1 168	1 744	536	1 006	1 583
Ferro-silico-manganese	56 036	52 966	37 114	49 280	51 928	29 887	59 497	24 468	42 091	41 491
Ferro-silicon	66 838	59 438	31 091	43 703	45 918	33 311	42 239	26 667	41 390	47 339
Doped silicon	467	378	296	434	700	35 333	35 288	31 544	49 386	57 901
<i>Exports</i>										
Elemental silicon-										
Containing not less than										
99.99% silicon	571	645	739	1 135	1 274	23 458	38 735	52 704	56 225	57 962
Other	10 754	14 488	7 014	1 767	2 389	11 815	24 901	13 343	4 585	4 973
Ferro-silico-chrome	35	9	50	22	364	80	24	244	43	268
Ferro-silico-magnesium	917	976	458	366	338	807	1 231	709	457	550
Ferro-silico-manganese	7	49	65	52	132	11	27	59	55	75
Ferro-silicon	2 314	3 250	3 338	2 958	6 594	3 096	4 728	4 154	5 530	9 006
Doped silicon	957	622	331	675	481	85 190	78 997	57 775	71 505	72 414

Sillimanite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Sillimanite										
<i>Imports</i>										
Sillimanite minerals (a)	10 239	11 920	7 763	7 419	12 485	1 774	2 515	2 064	2 076	3 801
Chamotte earth (b)	29 416	22 243	28 501	52 384	19 473	3 393	3 635	5 231	10 670	3 633
Mullite	12 036	6 488	5 255	8 276	3 491	3 963	3 588	2 770	3 538	2 774
<i>Exports</i>										
Sillimanite minerals (a)	75	16	157	274	558	43	8	49	77	130
Chamotte earth (b)	235	162	572	1 146	900	132	110	168	273	279
Mullite	2 355	2 060	1 257	1 104	1 204	1 811	1 825	1 567	1 280	1 416

(a) Andalusite, kyanite and sillimanite.

(b) Calcined refractory clay including flint clay.

Silver

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Silver										
Production (a)	0	0	1	1	1					
Imports										
Ores & concentrates	8	8	1	10	1	4 215	9 011	299	687	3
Waste & scrap	3 049	4 223	3 311	4 137	13 714	590 691	636 999	301 611	611 252	679 084
Unwrought	3 500	3 328	6 374	2 977	3 355	642 960	874 396	1 931 139	1 254 899	2 484 852
Partly worked	2 018	616	276	301	331	57 981	73 951	55 069	89 044	159 143
Silver in unrefined lead bullion (b)	240	390	260	300	260					
Exports										
Ores & concentrates	2	0	1	2	0	12	2	25	22	77
Waste & scrap (c)	5 051	5 447	8 412	5 160	11 650	38 340	57 315	56 820	132 182	309 795
Unwrought	1 806	5 909	905	2 467	3 019	408 430	1 307 184	266 091	995 488	2 049 742
Partly worked	214	162	39	113	918	27 564	19 567	13 865	41 897	554 052

(a) Small quantities have been produced in Northern Ireland as follows:
2007: 212 kilograms; 2008: 398 kilograms; 2009: 514 kilograms;
2010: 506 kilograms; 2011: 531 kilograms.

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

(c) Including scrap of platinum group metals.

Slate

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Slate										
<i>Production</i>										
Architectural & cladding uses, roofing & damp proofing courses	...	...	42 000	...	26 000					
Powder and granules	...	...	14 000	...	15 000					
Crude blocks	41 000	37 000	29 000	35 000	22 000					
Fill and other uses	1 332 000	967 000	597 000	615 000	700 000					
Total	1 428 000	1 058 000	683 000	695 000	763 000					
<i>Imports</i>										
Unworked (a)	45 556	32 258	21 718	25 080	23 063	11 709	9 059	6 879	6 604	4 687
Worked	215 796	209 162	170 706	193 162	187 125	68 608	74 566	65 762	71 578	72 290
of which:										
Roofing and wall tiles	174 574	179 150	140 691	163 494	...	59 391	66 118	57 688	63 112	...
Other worked slate	(b) 41 222	(b) 30 012	(b) 30 015	(b) 29 668	...	(b) 9 217	(b) 8 448	(b) 8 074	(b) 8 466	...
<i>Exports</i>										
Unworked (a)	255 297	56 907	225 232	46 745	62 901	1 846	803	1 837	920	922
Worked	20 363	14 473	24 175	21 830	14 370	9 555	7 528	9 323	8 083	7 414
of which:										
Roofing and wall tiles	13 230	8 459	13 010	10 319	...	7 275	5 940	8 201	6 349	...
Other worked slate	(b) 7 133	(b) 6 014	(b) 11 165	(b) 11 511	...	(b) 2 280	(b) 1 588	(b) 1 122	(b) 1 734	...

(a) Including roughly split or squared.

(b) Including articles of slate or agglomerated slate.

Strontium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Strontium										
<i>Imports</i>										
Carbonate	3	212	7	70	32	13	25	13	45	30
<i>Exports</i>										
Carbonate	513	2	2	5	2	71	17	95	66	71

Sulphur

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Sulphur										
<i>Supply</i>										
Produced (a)	130 000	135 000	145 000	160 000	170 000					
Imported (b)	13 679	9 638	6 285	10 475	10 981					
Sulphur, zinc concentrates (imported) (c)	60	107	25	195	124					
<i>Imports</i>										
Sulphur-										
Crude	5 101	64	74	274	590	266	45	60	435	755
Refined	8 577	9 574	6 211	10 201	10 391	2 931	4 278	2 900	4 942	6 110
Sublimed, colloidal etc	1 073	1 186	473	767	691	832	1 268	805	946	875
<i>Exports</i>										
Sulphur-										
Crude	8 207	13 182	2 545	41 491	101 964	262	1 699	201	2 299	8 820
Refined	15 268	27 872	38 723	1 198	3 686	1 525	10 764	3 101	2 007	1 544
Sublimed, colloidal etc	624	1 144	1 902	1 349	2 151	265	744	976	1 096	822

- (a) Produced from oil refineries.
 (b) Including waste and residues.
 (c) Sulphur content calculated at 29%.

Talc

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Talc										
<i>Production</i>										
	2 850	2 410	2 861	2 633	3 709					
<i>Imports</i>										
	54 812	53 864	39 520	50 309	53 339	11 176	12 468	12 640	15 312	15 952
<i>Exports</i>										
	2 389	3 129	2 402	3 074	3 171	878	1 140	1 058	1 497	1 405

Tantalum and Niobium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Tantalum and Niobium										
<i>Consumption in Iron and Steel Industry</i>										
Niobium (a)	480	540	190	270	300					
<i>Imports</i>										
Ores & concentrates	0	6	5	...	...	17	264	148	...	...
Ferro-niobium	1 490	1 189	686	859	395	12 836	13 659	9 955	13 712	7 288
Tantalum	96	161	145	284	176	6 572	8 443	11 647	10 642	21 418
Niobium (b)	140	154	98	104	176	2 972	6 975	9 342	9 331	12 560
<i>Exports</i>										
Ferro-niobium	49	58	52	224	179	944	1 148	935	4 284	5 210
Tantalum	77	55	72	191	97	4 706	2 255	3 144	8 657	10 129
Niobium (b)	124	148	23	45	72	2 012	3 021	947	3 971	5 878

(a) Metal content.
(b) Including rhenium.

Tellurium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Tellurium										
<i>Imports</i>										
	38	151	53	98	54	1 070	11 650	5 366	14 999	10 996
<i>Exports</i>										
	40	3	112	92	75	1 781	338	9 453	9 004	14 820

Tin

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Tin										
<i>Consumption</i>										
Refined	4 080	3 000	3 000	3 000	2 390					
<i>Imports</i>										
Concentrates	0	0	6	0	0	39	25	122	45	48
Ash and residues	...	...	...	...	...	...	...	...	...	...
Unwrought	13 630	7 181	4 522	4 327	4 186	32 618	55 479	39 257	58 068	68 910
Unwrought alloys	525	400	370	365	396	5 535	6 533	5 648	6 829	11 722
Scrap	452	448	121	196	121	317	334	251	384	668
<i>Exports</i>										
Concentrates	373	254	61	163	58	2 012	1 158	448	954	371
Ash and residues	124	...	...	...	...	199	...	...	...	...
Unwrought	4 085	1 264	928	1 856	1 797	29 224	11 781	8 500	24 891	30 504
Unwrought alloys	696	532	537	389	545	5 332	5 671	3 296	4 037	6 606
Scrap	27 329	19 110	22 597	13 115	4 414	43 699	24 197	29 286	12 682	10 404

Titanium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Titanium										
<i>Production</i>										
Titanium dioxide pigment	(a) 268 000	(a) 255 000	(a) 230 000	...	...			
<i>Apparent consumption</i> (b)	69 300	65 500	24 800	43 500	33 200					
<i>Consumption in Iron and Steel Industry</i>										
Ferro-titanium	1 050	990	730	710	690					
<i>Imports</i>										
Titanium minerals	181 836	194 756	112 091	90 622	32 127	27 914	38 435	33 898	31 752	11 905
Unwrought	11 966	13 868	9 989	7 994	10 636	70 708	78 778	52 522	52 867	74 526
Scrap	12 585	12 367	8 972	8 388	9 930	45 141	32 945	11 106	24 707	36 399
Wrought	6 354	6 071	4 218	4 299	49 277	176 721	186 129	160 102	153 972	215 133
Ferro-titanium (c)	1 677	1 290	396	274	187	6 732	3 612	399	813	721
Oxides	6 981	6 925	4 933	6 503	9 218	8 884	10 053	9 101	11 106	18 969
Pigments based on titanium dioxide	67 727	51 822	48 931	52 957	53 093	113 787	71 395	72 302	86 182	113 505
Titanium slag	151 494	158 195	127 224	187 913	...	33 379	38 966	36 298	31 090	...
<i>Exports</i>										
Titanium minerals	26	21	41	20	32	100	194	150	35	88
Scrap	4 476	3 973	3 269	4 180	5 757	20 964	12 714	5 096	15 804	23 440
Unwrought	3 263	2 754	2 823	3 683	1 263	17 402	13 252	8 265	25 579	8 732
Wrought	5 196	4 428	3 464	4 197	4 907	178 876	198 153	156 703	155 259	187 664
Ferro-titanium (c)	19 515	18 557	13 098	15 197	17 662	79 176	59 013	23 486	43 348	60 009
Oxides	1 130	1 104	845	867	1 658	2 392	3 536	3 693	2 464	3 489
Pigments based on titanium dioxide	210 938	221 399	203 028	207 651	221 532	247 463	276 503	298 629	322 674	433 688

(a) Articol estimates.

(b) BGS estimates; see explanatory notes.

(c) Including ferro-silico-titanium.

Tungsten

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Tungsten										
<i>Consumption in Iron and Steel</i>										
Industry (a)	40	50	20	20	30					
<i>Imports</i>										
Ores & concentrates							25	44	40	388
Scrap	1 823	1 291	1 157	1 278	1 633	18 787	15 129	11 134	15 973	29 479
Unwrought	389	430	283	353	284	5 953	6 903	5 456	5 470	8 358
Wrought	713	144	38	45	82	6 828	4 257	2 995	4 384	5 412
Ferro-tungsten (b)	33	27	26	48	44	397	487	348	763	1 010
Carbide	1 409	1 023	614	1 111	3 622	25 842	19 982	11 808	27 735	96 915
Tungstates	51	31	6	4	1	590	348	144	116	92
Oxides and hydroxides	746	96	36	24	30	8 566	1 171	154	117	266
<i>Exports</i>										
Ores & concentrates	36	21	3	29	35	589	136	93	327	783
Scrap	1 991	1 399	1 429	1 451	1 862	17 528	14 390	11 089	15 563	33 580
Unwrought	373	182	65	162	218	4 232	2 979	1 681	2 502	7 281
Wrought	80	44	47	36	55	3 091	3 976	1 975	2 645	4 551
Ferro-tungsten (b)	8	31	1	4	3	112	256	25	112	81
Carbide	303	51	80	41	597	7 874	1 704	211	983	2 984
Tungstates	11	5	8	6	10	182	85	650	117	258
Oxides and hydroxides	0	402	55	6	10	4	4 782	367	68	44

(a) Metal content.

(b) Including ferro-silico-tungsten.

Vanadium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Vanadium										
<i>Consumption in Iron and Steel</i>										
Industry (a)	90	100	40	50	60					
<i>Imports</i>										
Unwrought	(b) 583	314	112	197	376	(b) 5 232	6 277	3 218	4 670	7 219
Oxides	425	344	84	5	17	3 053	4 813	699	74	73
Ferro-vanadium	755	543	209	340	368	11 036	12 812	2 394	4 413	5 256
<i>Exports</i>										
Unwrought	2 182	2	18	23	32	902	43	395	682	682
Oxides	697	589	487	694	6	10 420	8 870	4 992	7 806	70
Ferro-vanadium	96	79	64	24	52	1 400	922	958	328	712

(a) Vanadium content of ferro-vanadium.

(b) Including scrap.

Vermiculite

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Vermiculite										
<i>Imports</i>	34 072	29 200	24 515	58 456	98 437	4 182	4 319	4 115	5 357	12 950
<i>Exports</i>	5	24	188	1 059	1 116	52	109	934	822	825

Zinc

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Zinc										
<i>Consumption</i>										
Slab	172 000	151 500	99 000	96 641	86 892					
<i>Imports</i>										
Ores & concentrates (a)	164	257	119	574	426	418	424	341	970	749
Ash and residues	4 918	4 632	3 160	2 898	7 300	3 553	2 122	11 203	1 243	1 280
Unwrought	122 458	119 911	84 594	97 066	85 516	222 907	134 468	96 839	144 172	127 929
Unwrought alloys	13 201	8 524	1 869	2 973	9 306	28 338	9 611	2 407	4 156	14 185
Scrap	30	103	344	447	339	41	54	258	409	365
<i>Exports</i>										
Ores & concentrates	82	246	11 418	8 405	9 714	301	209	1 691	2 992	5 425
Ash and residues	7 068	13 786	9 585	9 139	7 283	6 677	8 597	6 268	8 422	7 383
Unwrought	5 932	3 883	3 600	3 580	2 724	10 236	4 639	4 560	4 937	4 959
Unwrought alloys	33 799	28 408	13 578	14 561	12 737	63 495	38 083	15 562	21 409	19 227
Scrap	7 543	5 699	6 030	14 903	12 545	9 610	4 973	5 144	18 207	16 005

(a) Zinc and mixed zinc-lead concentrates.

Zirconium

United Kingdom summary 2007–2011

Commodity	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
	Tonnes					£ thousand				
Zirconium										
<i>Apparent consumption (a)</i>	7 000	7 000	3 000	4 000	7 000					
<i>Consumption in Iron and Steel Industry</i>										
Ferro-silico-zirconium	70	70	50	50	50					
<i>Imports</i>										
Ores and Concentrates (b)	11 007	13 092	6 386	8 450	14 709	7 296	8 145	5 910	7 204	18 710
Scrap	62	65	49	139	197	278	263	311	885	1 140
Unwrought	150	403	82	190	345	1 071	4 490	1 830	3 088	4 504
Wrought	235	53	72	82	74	3 411	1 745	852	1 219	1 174
<i>Exports</i>										
Ores and concentrates	1 096	716	742	1 405	1 661	1 022	746	966	1 728	3 482
Scrap	41	2	11	76	12	104	33	42	338	114
Unwrought	0	54	0	0	88	6	72	53	6	153
Wrought	13	5	7	15	2	779	715	1 362	336	232

(a) BGS estimates; see explanatory notes.

(b) Mainly zircon.