



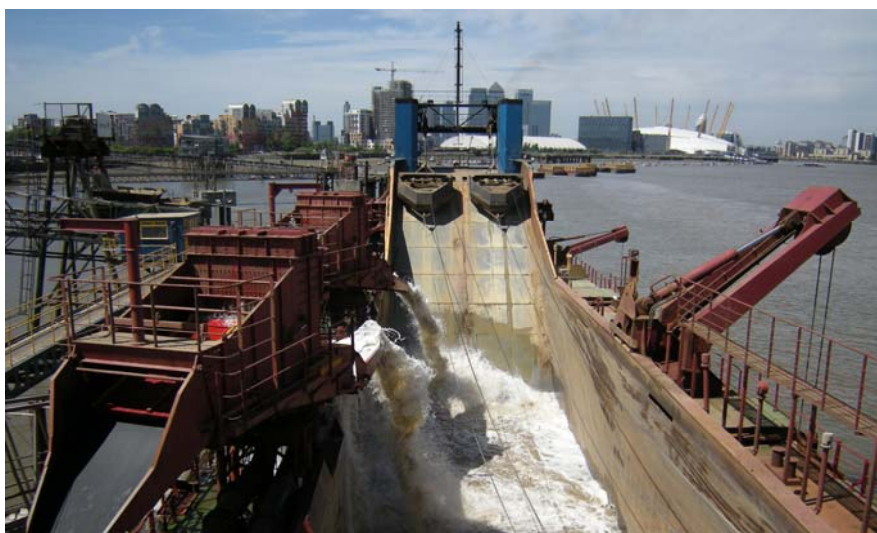
**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

United Kingdom Minerals Yearbook 2010

Minerals and Waste Programme

Open Report OR/11/032



BRITISH GEOLOGICAL SURVEY

MINERALS AND WASTE PROGRAMME

OPEN REPORT OR/11/032

United Kingdom Minerals Yearbook 2010

Statistical data to 2009

T. Bide, N. E. Idoine, T. J. Brown, K. Smith

Keywords

United Kingdom, minerals,
production, imports, exports.

Front cover

City of Westminster aggregates
dredger. BGS © NERC.
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Bibliographical reference

T. BIDE, N. E. IDOINE, T. J.
BROWN, K. SMITH. 2011. United
Kingdom Minerals Yearbook
2010. *British Geological Survey
Open Report*, OR/11/032.
104pp.

BRITISH GEOLOGICAL SURVEY

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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.

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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.

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Explanatory notes

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

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

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

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

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

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

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

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

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

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

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

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

Symbols: The following symbols are used throughout:

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

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

Trade: Trade figures from INTRASTAT, the system for measuring intra-EC trade became available from 1993. This was introduced following the abolition of customs controls as a result of the Single Market and trade figures are now compiled from data provided directly from companies instead of Customs documents. Extra-EC trade continues to be collected from Customs declarations as before. The transition from one system to another has produced some anomalous figures in terms

of the size of the trade in and unit value of certain commodities. These factors should be taken into consideration when evaluating trends. Figures given in this edition are the combined intra and extra-EC trade data.

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

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

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Sources of information

In compiling this volume the British Geological Survey 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 2003–2009

£ million

SITC section		2003	2004	2005	2006	2007	2008	2009
Imports (c.i.f.)								
0, 1	Food, beverages, tobacco	20 727.8	21 763.3	23 291.4	24 685.3	26 351.5	30 570.8	31 840.9
2, 4	Basic materials	6 733.6	6 968.6	7 366.7	8 497.5	10 115.7	11 411.2	8 096.0
	of which: Minerals	1 980.8	2 233.4	2 619.9	3 420.9	4 559.3	5 498.4	2 932.5
3	Fuels and related materials	11 162.8	16 209.1	23 535.0	29 531.8	29 470.4	44 289.5	31 721.3
	of which: Mineral-based	10 991.9	15 862.9	23 092.9	29 098.4	29 231.9	43 906.3	31 461.9
	Manufactured goods:							
5, 6	Semi-manufactures	57 949.8	62 171.0	64 754.7	71 723.1	76 718.3	81 638.4	76 663.1
	of which: Mineral-based	22 473.7	25 272.4	27 017.6	31 348.9	39 877.0	35 062.3	31 135.8
7, 8	Finished manufactures	138 263.3	144 032.6	151 715.1	166 367.3	166 661.7	171 678.0	157 080.1
9	Other (a)	6 113.7	3 884.1	1 847.1	24 977.9	3 600.3	5 286.0	5 025.7
	of which: Mineral-based	4 750.5	2 334.1	221.3	230.5	348.3	490.8	413.8
Total		240 951.0	255 028.6	272 510.0	325 783.0	312 917.9	344 874.0	310 427.1
All traded goods								
	of which: Mineral-based	40 196.9	45 702.8	52 951.7	64 098.7	74 016.4	84 957.8	65 944.1
	As % of all traded goods	16.7	17.9	19.4	19.7	23.7	24.6	21.2
Exports (f.o.b.)								
0, 1	Food, beverages, tobacco	10 879.8	10 615.2	10 690.2	11 080.1	11 752.6	13 670.8	14 398.2
2, 4	Basic materials	3 318.3	3 759.6	3 982.7	4 906.1	5 473.8	6 558.5	5 160.0
	of which: Minerals	1 673.2	2 064.2	2 186.1	2 893.7	3 372.5	4 141.9	2 998.0
3	Fuels and related materials	15 588.9	16 795.5	20 131.0	23 976.1	23 147.4	33 595.7	25 399.7
	of which: Mineral-based	15 421.9	16 644.7	20 030.0	23 872.3	23 035.7	33 485.2	25 239.0
	Manufactured goods:							
5, 6	Semi-manufactures	54 506.2	56 528.5	60 079.2	65 327.6	68 344.9	76 148.4	71 385.9
	of which: Mineral-based	21 103.8	22 932.3	25 962.2	28 775.7	30 464.8	33 924.9	27 555.7
7, 8	Finished manufactures	103 372.5	102 050.3	115 724.9	137 485.6	110 304.8	117 063.9	106 773.0
9	Other (a)	1 144.7	1 605.3	1 910.6	1 599.6	2 157.8	2 717.2	3 669.7
	of which: Mineral-based	399.0	826.1	878.6	378.1	923.9	863.7	1 555.8
Total		188 810.3	191 354.4	212 518.6	244 375.2	221 069.6	249 644.0	226 625.7
All traded goods								
	of which: Mineral-based	38 597.9	42 467.4	49 056.9	55 919.7	57 796.9	72 415.7	57 348.5
	As % of all traded goods	20.4	22.2	23.1	22.9	26.1	29.0	25.3

(a) Including non-monetary gold.

Balance of trade in minerals and mineral-based products 2005–2009

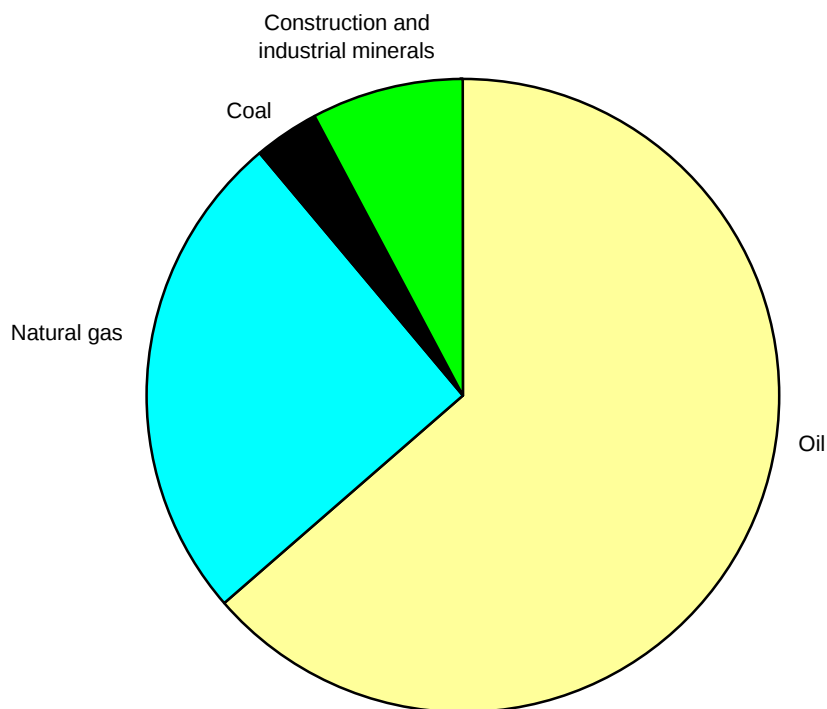
£ million (a)

SITC (R3) divisions	2005	2006	2007	2008	2009
27 Crude minerals and fertilisers:					
imports	396.9	491.4	479.1	554.7	448.6
exports	461.2	470.5	488.5	497.1	492.8
	+64.4	-20.9	+9.4	-57.6	+44.1
28 Metal ores and scrap:					
imports	2 223.0	2 929.5	4 080.2	4 943.7	2 483.9
exports	1 724.8	2 423.1	2 884.0	3 644.8	2 505.3
	-498.2	-506.4	-1 196.2	-1 298.9	+21.4
32 Coal, coke and briquettes:					
imports	1 992.9	2 225.9	2 105.3	3 688.4	2 702.4
exports	72.2	55.3	77.4	147.1	115.5
	-1 920.7	-2 170.6	-2 027.9	-3 541.2	-2 586.8
33 Petroleum, petroleum products and related materials					
imports	19 126.4	24 125.0	23 863.9	33 325.9	23 820.8
exports	18 419.1	21 823.7	21 203.8	30 074.4	23 038.7
	-707.3	-2 301.2	-2 660.1	-3 251.5	-782.1
34 Gas, natural and manufactured:					
imports	1 973.7	2 747.6	3 262.7	6 892.1	4 938.8
exports	1 538.7	1 993.2	1 754.5	3 263.7	2 084.7
	-434.9	-754.3	-1 508.2	-3 628.4	-2 854.1
51 Organic chemicals:					
imports	7 350.6	7 883.8	8 858.9	8 660.3	8 420.4
exports	6 629.5	8 018.4	7 562.2	8 322.0	8 996.7
	-721.2	+134.6	-1 296.7	-338.3	+576.3
52 Inorganic chemicals:					
imports	1 503.4	2 132.5	2 734.8	2 749.3	2 749.1
exports	1 522.0	2 117.3	2 766.5	2 885.2	2 775.4
	+18.6	-15.3	+31.8	+136.0	+26.3
56 Manufactured fertilisers:					
imports	142.5	144.9	201.5	379.3	188.0
exports	80.6	87.3	99.3	197.0	169.7
	-61.9	-57.7	-102.2	-182.3	-18.3
53–59 (part) Miscellaneous chemical products:					
imports	3 386.2	3 588.5	3 823.6	4 196.2	4 586.8
exports	3 761.3	3 359.3	3 522.3	3 750.9	3 423.3
	+375.0	-229.2	-301.3	-445.3	-1 163.5
66 Non-metallic mineral products:					
imports	6 954.8	7 165.0	6 840.3	7 136.4	5 823.3
exports	6 499.3	6 231.7	5 828.7	6 303.0	4 955.4
	-455.5	-933.3	-1 011.6	-833.4	-868.0
67 Iron and steel:					
imports	3 456.0	3 873.9	4 638.2	5 136.0	2 708.4
exports	4 081.6	3 918.8	4 676.1	5 314.1	3 067.6
	+625.7	+44.9	+37.9	+178.1	+359.2
68 Non-ferrous metals:					
imports	4 086.5	6 369.5	6 395.1	6 567.3	6 448.7
exports	3 881.3	4 840.2	5 792.2	6 910.2	3 973.6
	-205.1	-1529.3	-602.9	+342.9	-2 475.1
69 Manufactures of metal:					
imports (b)	137.6	190.9	224.5	237.5	211.0
exports (b)	161.2	202.8	217.4	242.5	194.1
	+23.6	+11.9	-7.1	+5.0	-17.0
96 Coin other than gold:					
imports	2.5	3.3	3.7	4.7	2.9
exports	36.2	29.3	38.0	48.2	76.9
	+33.7	+26.0	+34.3	+43.5	+74.0
97 Gold (non-monetary):					
imports	218.8	227.2	344.5	486.0	486.0
exports	842.4	348.8	885.9	815.5	1 478.9
	+623.6	+116.9	+541.4	+329.4	+992.8
Total imports	52 951.7	64 098.7	67 856.3	84 957.9	66 019.2
exports	49 711.3	55 919.7	57 796.8	72 415.7	57 348.5
	-3 240.4	-8 179.0	-10 059.5	-12 542.2	-8 670.7
Gold (monetary):					
imports	2 686.4	8 148.7	6 925.5	13 010.0	23 326.2
exports	3 497.0	1 229.3	1 413.4	7 725.2	1 082.0
	+810.6	-6 919.4	-5 512.1	-5 284.9	-22 244.2
Grand total imports	55 638.1	72 247.4	74 781.8	97 967.9	89 345.4
exports	53 208.3	57 149.0	59 210.2	80 140.8	58 430.5
	-2 429.8	-15 098.4	-15 571.6	-17 827.0	-30 914.9

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

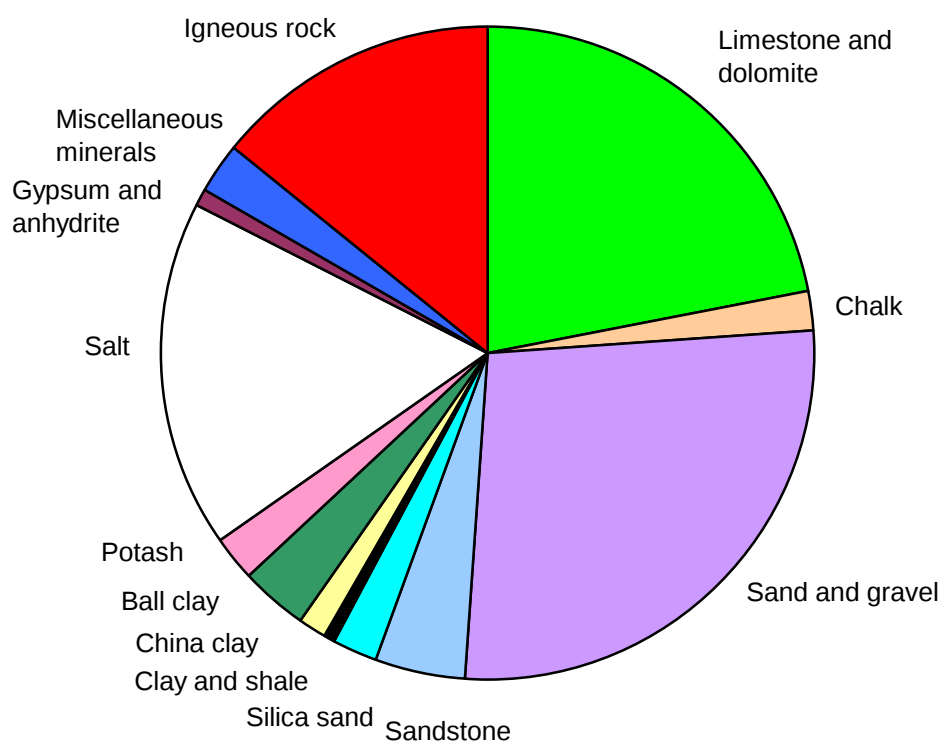
(b) Consists of semi-manufactures and articles of beryllium, cobalt, cadmium, magnesium, molybdenum, tantalum, titanium, tungsten, zirconium and other base metals not elsewhere included.

Value of United Kingdom production 2009
(total value £29 973 million)



Natural gas liquids is included in gas and petroleum figures

Value of United Kingdom construction and industrial minerals production 2009
(total value £2351 million)



Approximate value (a) of minerals produced in the United Kingdom 2002–2009

£ million

Mineral	2002	2003	2004	2005	2006	2007	2008	2009
Coal	889	794	800	722	705	708	1 154	973
Natural gas	8 199	7 554	7 115	8 902	11 741	9 377	10 612	7 570
Natural gas liquids	894	1 105	1 037	1 684	1 910	1 749	2 204	... (b)
Crude petroleum	13 629	13 365	13 424	16 656	17 935	18 979	25 102	19 075
Iron ore	0	0	0	0	0	0	0	0
Tin	—	—	—	—	—	—	—	—
Gold	—	—	—	—	—	1	3	4
Other non-ferrous metals	0	0	0	0	0	0	0	0
Sand and gravel	707	719	722	746	818	811	814	640
Limestone and dolomite	670	685	756	687	756	686	777	518
Igneous rock	336	366	396	335	374	392	426	336
Sandstone	108	133	157	146	143	135	120	106
Chalk	72	88	112	112	101	117	93	43
Common clay and shale	19	24	25	27	27	26	19	13
China clay	192	168	195	107	64	58	45	33
Ball clay	44	43	46	51	81	82	82	80
Fuller's earth	5	4	3	1	—	—	—	—
Salt	148	192	217	222	195	285	186	405
Silica sand	53	56	67	58	72	69	67	53
Potash	68	83	68	72	64	60	61	54
Fluorspar	5	6	5	5	7	7	5	3
Gypsum and anhydrite	17	17	19	17	19	19	19	19
Miscellaneous minerals	40	39	39	44	49	49	46	48
Total	26 095	25 441	25 203	30 594	35 061	33 610	41 835	29 973

At 2006 constant prices

Coal	989	856	841	744	705	687	1 089	906
Oil and gas	25 275	23 733	22 688	28 085	31 586	29 228	35 772	24 809
Metals	0	0	0	0	0	1	3	4
Construction and industrial minerals	2 763	2 827	2 973	2 711	2 770	2 715	2 604	2 189
Total	29 027	27 415	26 502	31 540	35 061	32 631	39 467	27 908

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

Source: British Geological Survey.

(b) Included in gas and petroleum figures

United Kingdom approximate value of minerals produced onshore and offshore 2002–2009

£ million

	2002	2003	2004	2005	2006	2007	2008	2009
Onshore	3 538	3 519	3 787	3 574	3 673	3 687	3 751	3 174
Offshore	22 482	21 839	21 416	27 019	31 387	29 923	38 084	26 798
Total	26 095	25 441	25 203	30 594	35 060	33 610	41 835	29 972

Source: British Geological Survey.

United Kingdom mining and quarrying: Gross value added (a) 2001–2008

£ million

	2001	2002	2003	2004	2005	2006	2007	2008
Production								
Mining and quarrying								
Mining and quarrying of energy producing materials								
Mining of coal	545	538	472	380	343	330	399	398
Extraction of mineral oil and natural gas	20 825	19 911	19 451	20 657	24 995	29 277	28 258	34 633
Other mining and quarrying	1 750	1 469	1 519	1 848	2 115	2 145	2 192	2 687
Total mining and quarrying	23 120	21 918	21 442	22 885	27 453	31 752	30 849	37 718
All industries	907 594	957 094	1 015 008	1 070 951	1 116 648	1 183 704	1 251 704	1 295 663
of which: minerals related (%)	3	2	2	2	2	3	2	3

(a) At current basic prices.

Source: Office for National Statistics.

2009 data not available at time of publishing

United Kingdom employment in the minerals industry, 2008 and 2009

Number

2008				2009				
Mineral	Great Britain (a)			Northern Ireland	Great Britain (a)			Northern Ireland
	Mines (d)	Quarries	Total		Mines (d)	Quarries	Total	
Ball clay	—	...	...	—	—	...	...	—
Chalk	—	151	151	(b)...	—	214	214	(b)...
Chert and flint	—	...	...	—	—	...	...	—
China clay	—	...	...	—	—	...	...	—
Clay and shale	—	360	360	(b)...	—	332	332	(b)...
Coal	3 860	2 201	6 061	—	3 931	2 229	6 097	—
Dolomite	—	290	290	—	—	301	301	—
Fireclay	...	...	8	(b)...	...	...	6	(b)...
Gypsum and anhydrite	...	...	...	—	...	...	...	—
Igneous rock	—	1 685	1 685	471	—	1 447	1 447	393
Limestone	—	2 620	2 620	302	—	2 419	2 419	150
Oil and gas	—	—	(c)	—	—	—	(c)	—
Peat	—	252	252	—	—	147	147	—
Potash	...	...	...	—	...	...	...	—
Salt	...	...	...	(b)...	...	...	...	(b)...
Sand and gravel	—	2 699	2 699	289	—	2 503	2 503	338
Sandstone	—	1 233	1 233	318	—	1 102	1 102	223
Silica sand	—	149	149	—	—	83	83	—
Silica stone	...	...	...	—	...	...	...	—
Slate	...	...	...	—	...	...	...	—
Soapstone and talc	...	...	...	—	...	...	...	—
Others	...	...	1 906	417	...	...	1 777	176
	...	...	...	1 797	...	...	...	1 280

(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 350 000, of which 34 000 are directly employed by exploration and production companies.

(d) Including surface and underground workers at mines.

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 2004–2010

Thousand tonnes

Mineral	2004	2005	2006	2007	2008	2009	2010 (Estimated)
Coal:							
Deep-mined	12 542	9 563	9 444	7 674	8 096	7 520	7 390
Opencast	11 993	10 445	8 635	8 866	9 509	9 854	10 319
Other (a)	561	490	438	467	449	500	450
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	70	65	65	62	48	49	...
Onshore	270	151	91	104	88	72	} 57 110
Offshore	96 071	88 003	79 856	71 959	69 529	59 598	
Crude oil							
Onshore	1 941	1 648	1 379	1 271	1 248	1 181	} 62 972
Offshore	85 575	75 530	68 287	69 086	65 497	62 820	
Condensates and other (c)							
Onshore	66	49	41	38	33	32	} 4 915
Offshore	7 792	7 493	6 872	6 437	6 168	5 378	
Iron ore	(h) 0.5	0.4	0.4	0.3	0.1	—	—
Non-ferrous ores (metal content):							
Tin	—	—	—	—	—	—	—
Lead (h)	0.5	0.4	0.4	0.3	0.3	0.3	0.3
Zinc	—	—	—	—	—	—	—
Gold (kg)	...	...	...	88	163	187	177
Silver (kg)	—	—	—	212	398	514	506
Chalk (e)	7 997	7 105	7 376	7 566	5 874	4 047	4 000
Clay and shale	11 164	10 898	10 432	10 104	8 459	5 310	4 721
Igneous rock (j) (k)	53 037	53 104	53 954	58 909	53 490	44 618	45 000
Limestone (excluding dolomite)	81 648	77 596	80 228	83 491	74 145	60 111	} 64 000
Dolomite (excluding limestone) (e)	12 226	11 514	12 101	7 622	5 509	3 164	
Sand and gravel:							
Land	78 145	75 171	71 418	72 810	66 640	50 973	} 66 800
Marine (i)	19 188	19 495	20 689	20 426	18 833	15 253	
Sandstone	18 844	18 685	18 038	16 806	12 255	12 335	12 500
Slate (g)	901	928	865	1 428	1 058	683	700
Ball clay (sales)	965	1 011	1 015	1 022	1 020	727	1 000
Barytes	61	64	48	53	43	36	33
Calcspars	—	—	—	—	—	—	—
Chert and flint	2	2	2	1	1	1	1
China clay (sales) (d)	1 945	1 911	1 762	1 671	1 355	1 060	900
China stone	2	2	1	1	0.4	(h) 0.4	0.5
Fireclay (e)	402	395	228	338	180	129	150
Fluorspar (h)	50	56	50	45	37	19	26
Fuller's earth (sales) (d) (f)	28	6	—	—	—	—	—
Gypsum (natural)	1 686	(h) 1 700	(h) 1 700	(h) 1 700	(h) 1 700	(h) 1 700	1 700
Lignite	...	...	...	...	...	...	...
Peat (000 m ³)	1 262	1 505	1 593	885	760	887	900
Potash (b)	912	732	716	712	673	(h) 673	600
Rock salt (h)	2 000	2 000	2 000	2 000	2 000	2 000	2 000
Salt from brine (h) (e)	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Salt in brine (h) (l)	2 800	2 800	2 800	2 800	2 800	2 800	2 800
Silica sand	5 011	4 146	5 174	4 909	4 777	3 755	4 000
Talc	4	6	4	3	2	3	3

(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); see p.86.

(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): 2004: 149; 2005: 129; 2006: 136; 2007: 160; 2008: 139; 2009: 120 and Jersey: 2004: 310; 2005: 305; 2006: 286; 2007: 295; 2008: 325; 2009: 279

(l) Used for purposes other than salt making.

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 2003–2009

Thousand tonnes

Mineral	2003	2004	2005	2006	2007	2008	2009
Coal:							
Deep-mined	15 044	12 081	9 011	8 954	7 452	7 817	7 397
Opencast	4 068	3 037	1 456	966	1 619	2 139	2 137
Other (a)	...	...	...	...	...	...	...
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	...	...	...	...	...	...	...
Onshore	...	...	...	...	...	...	...
Offshore	...	...	...	...	...	...	...
Crude oil							
Onshore	...	...	...	...	...	...	...
Offshore	...	...	...	...	...	...	...
Condensates and other (c)	...	...	...	...	...	...	...
Iron ore	1	(e) 0.5	(e) 0.5	—	—	—	—
Non-ferrous ores (metal content):							
Tin	—	—	—	—	—	—	—
Lead (e)	0.7	0.5	0.4	0.4	0.2	0.1	0.1
Zinc	—	—	—	—	—	—	—
Chalk	8 066	7 997	7 105	7 376	7 565	5 874	4 047
Clay and shale (b)	10 021	10 357	10 074	9 437	9 269	7 682	4 666
Igneous rock	21 878	20 174	20 576	22 076	21 865	21 056	17 846
Limestone (j)	69 507	72 173	67 325	67 356	67 378	60 738	48 751
Dolomite (k)	10 327	...	...	10 238	...	...	...
Sand and gravel:							
Land	58 484	62 735	58 926	56 148	54 512	61 669	37 810
Marine (g)	16 997	17 939	18 383	19 602	19 274	17 746	14 380
Sandstone	7 005	7 076	6 910	7 041	6 918	5 854	3 980
Slate (i)	...	...	...	...	...	...	...
Anhydrite	...	...	...	...	...	...	...
Ball clay (sales)	885	965	1 011	1 015	1 022	1 020	727
Barytes	...	...	...	11	10	7	3
Calcspar	...	...	...	...	...	...	...
Chert and flint	...	2	2	2	1	1	1
China clay (sales) (l)	2 097	1 945	1 911	1 762	1 671	1 355	1 060
China stone	2	2	2	1	1	0	0
Fireclay	483	338	346	213	305	168	128
Fluorspar (e)	56	50	56	50	43	37	19
Fuller's earth (sales) (h) (l)	34	28	6	—	—	—	—
Gypsum (natural)	(e) 1 700	1 686	(e) 1 700	(e) 1 700	(e) 1 700	(e) 1 700	(e) 1 700
Lignite	...	...	...	...	...	...	...
Peat (000 m ³)	1 228	903	928	857	654	496	476
Potash (d)	1 040	912	732	716	712	673	600
Potter's clay	...	...	...	...	...	...	...
Rock salt	...	...	...	...	...	...	...
Salt from brine (e)	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Salt in brine (e) (f)	3 200	2 800	2 800	2 800	2 800	2 800	2 800
Silica sand	3 588	4 525	3 572	4 540	4 335	4 208	3 293
Silica stone and ganister	...	1	...	...	...	...	...

(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) Used for purposes other than salt making.

(g) Including marine-dredged landings at foreign ports (exports); see p.86.

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

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

(j) Including dolomite for constructional uses.

(k) 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.

(l) 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 2003–2009

Thousand tonnes

Mineral	2003	2004	2005	2006	2007	2008	2009
Coal:							
Deep-mined	589	461	552	485	253	110	99
Opencast	1 189	1 405	1 235	1 257	1 060	1 632	1 598
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	348	445	354	604	405	104	151
Igneous rock	2 507	2 295	2 364	2 596	2 474	3 028	1 932
Limestone (d)	13 208	12 926	12 759	13 707	14 549	12 114	8 131
Dolomite (f)	...	...	...	...	...	...	...
Sand and gravel:							
Land	1 503	1 871	1 634	1 528	1 187	1 275	795
Marine	1 230	1 249	1 112	1 087	1 152	1 086	873
Sandstone	3 179	3 241	3 233	3 415	3 558	2 323	2 667
Slate (c)	...	...	...	...	...	...	...
Fireclay	—	30	—	—	—	—	—
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 2003–2009

Thousand tonnes

Mineral	2003	2004	2005	2006	2007	2008	2009
Coal:							
Deep-mined	—	—	—	—	—	—	—
Opencast	6 869	7 547	7 753	6 487	6 188	5 678	6 037
Other (a)	...	...	...	...	...	...	...
Natural gas and oil:							
Methane (oil equivalent)							
Colliery	...	...	...	...	...	...	...
Onshore	—	—	—	—	—	—	—
Offshore	...	...	...	...	...	...	...
Crude oil							
Onshore	—	—	—	—	—	—	—
Offshore	...	...	...	...	...	...	...
Condensates and other (b)	...	...	...	...	...	...	...
Clay and shale	311	362	469	390	429	674	494
Igneous rock	20 920	23 724	23 052	23 194	26 345	22 925	19 082
Limestone (d)	1 730	1 746	1 746	1 534	1 555	1 473	1 210
Dolomite (f)	...	...	...	...	...	...	...
Sand and gravel (land-won)	8 103	8 455	8 808	8 592	9 025	8 097	7 512
Sandstone	1 481	1 613	1 466	1 372	1 502	1 381	1 895
Slate (c)	...	...	...	...	...	...	...
Barytes	...	...	...	37	42	36	34
Fireclay	45	35	49	15	32	12	1
Honestone	...	—	...	...	...	...	...
Peat (000 m3)	779	359	577	736	231	265	412
Silica sand	...	...	522	542	503	508	403
Talc	6	4	6	4	3	2	3

(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.

Northern Ireland mineral production by county 2009

Thousand tonnes

County	Limestone	Sand & gravel	Basalt & igneous rock (a)	Sandstone	Others (b)	Total
Down	—	128	986	3 268	351	4 734
Antrim	224	753	2 688	—	834	4 499
Armagh	770	190	402	525	525	2 412
Fermanagh	2 436	65	114	—	60	2 675
Londonderry	24	1 155	764	—	67	2 010
Tyrone	518	2 565	803	0	161	4 046
Total	3 972	4 856	5 758	3 793	1 998	20 377

(a) Excluding granite.

Source: Department of Enterprise, Trade and Investment.

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

Minerals produced in Northern Ireland, the Isle of Man, Guernsey and Jersey 2005-2009

Thousand tonnes

	2005	2006	2007	2008	2009
Northern Ireland					
Limestone	5 588	6 385	5 904	3 739	3 972
Sand and gravel	5 803	5 150	8 086	7 134	4 856
Basalt and igneous rock (a)	7 112	6 087	8 225	6 481	5 758
Sandstone	7 076	6 211	4 828	2 697	3 793
Granite					
Clay and shale					
Others (b)	2 090	1 698	2 468	2 931	1 998
Total	27 669	25 530	29 511	22 982	20 377
Isle of Man					
Limestone	89	110	112	113	352
Sand and gravel	197	358	206	197	171
Igneous rock	81	66	104	158	132
Slate	55	69	58	64	45
Total	422	602	480	532	701
Guernsey					
Igneous rock	129	136	160	139	120
Jersey					
Igneous rock (c)	305	326	295	325	279
Sand and gravel	70	75	65	67	67

(a) Excluding granite.

(c) BGS estimates.

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

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

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

Commodity	Region															Total
	North East England	Yorkshire & the Humber	North West England	East Midlands	West Midlands	East of England	Greater London	South East England	South West England	England Total	Wales	Scotland	Isle of Man	Northern Ireland	Channel Islands	
Anhydrite	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	1
Ball clay	—	—	—	—	—	—	—	—	18	18	—	—	—	—	—	18
Barytes	—	—	—	4	—	—	—	—	—	4	—	1	—	—	—	5
Calcite	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	1
Chalk	—	15	—	3	—	14	—	19	1	52	—	—	—	3	—	55
Chert	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
China clay	—	—	—	—	—	—	—	—	16	16	—	—	—	—	—	16
China clay waste	—	—	—	—	—	—	—	—	13	13	—	—	—	—	—	13
Clay & shale	5	26	13	19	24	7	—	28	15	137	10	3	—	6	—	156
Coal, underground	—	4	—	2	1	—	—	—	1	8	6	—	—	—	—	14
Coal, opencast	5	3	1	3	1	—	—	—	—	13	8	24	—	—	—	45
Fireclay	—	3	1	1	2	—	—	—	—	7	—	2	—	—	—	9
Flint	—	—	—	—	—	4	—	2	—	6	—	—	—	—	—	6
Fluorspar	1	1	—	7	—	—	—	—	—	9	—	—	—	—	—	9
Gold	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Gypsum	—	—	1	3	1	—	—	1	—	6	—	—	—	—	—	6
Igneous & metamorphic rock	8	—	3	7	3	—	—	—	18	39	14	115	2	34	3	207
Iron ore - ironstone	—	2	—	—	1	—	—	4	—	7	—	—	—	—	—	7
Lead	—	—	—	3	—	—	—	—	—	3	—	—	—	—	—	3
Limestone / dolomite	19	35	22	53	8	4	—	13	89	243	49	13	2	17	—	324
Marble	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Mine drainage gas	—	2	—	1	—	—	—	—	—	3	—	—	—	—	—	3
Natural gas	—	10	1	2	—	—	—	1	1	15	—	—	—	—	—	15
Oil	—	—	—	22	—	—	—	20	3	45	—	—	—	—	—	45
Peat	1	3	9	—	—	2	—	—	39	54	2	23	—	—	—	79
Potash	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Salt	—	1	4	—	—	1	—	—	—	6	—	—	—	1	—	7
Sand	6	6	5	2	3	14	1	33	15	85	1	16	—	1	1	104
Sand & gravel	8	29	25	43	35	92	7	61	33	333	13	113	3	62	—	524
Sandstone	19	54	37	18	21	8	—	6	24	187	27	49	—	30	—	293
Silica sand	1	2	5	1	2	15	—	7	1	34	1	6	—	—	—	41
Slate	—	—	10	—	—	—	—	—	8	18	11	—	3	—	—	32
Slate waste	—	—	1	—	—	—	—	—	—	1	13	—	—	—	—	14
Talc	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Tin	—	—	—	—	—	—	—	—	2	2	—	—	—	—	—	2
Total	73	197	138	195	103	161	8	195	297	1 367	156	367	10	155	4	2 059

(a) As at May 2011.

Source: British Geological Survey

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

Abrasives, natural

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Carats					£ thousand				
Abrasives										
Imports										
Natural abrasives										
Industrial diamonds	25 367 064	11 884 651	7 524 168	5 127 610	3 321 670	12 673	70 193	11 164	12 307	7 623
	Tonnes									
Dust and powder of precious and semi-precious stones	27	49	49	39	19	9 247	11 260	10 749	9 352	6 756
Pumice	71 598	97 832	206 353	2 259	1 668	1 213	1 659	2 546	2 013	1 130
Other	6 877	8 106	11 827	13 424	11 748	1 193	1 697	2 532	3 517	2 634
	Carats									
Exports										
Natural abrasives										
Industrial diamonds	21 647 850	13 652 233	4 754 029	6 121 081	4 440 922	20 924	18 891	17 485	17 700	13 977
	Tonnes									
Dust and powder of precious and semi-precious stones	25	16	31	151	27	12 180	11 288	13 310	12 052	8 315
Pumice	138	70	40	76	307	275	227	93	293	534
Other	796	852	1 180	1 339	1 203	489	511	612	1 056	1 283

Aggregates

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Aggregates										
Production										
Sand and gravel (a)	94 666 000	92 107 000	93 236 000	85 473 000	66 226 000					
Crushed rock (b)	141 636 000	145 578 000	148 534 000	127 996 000	104 626 000					
Total	236 302 000	237 685 000	241 770 000	213 469 000	170 852 000					
Imports										
Natural aggregates-										
Sand and gravel	643 594	634 844	896 715	647 603	444 725	14 117	17 583	18 260	16 043	12 212
Crushed rock (c)	1 516 919	2 270 355	1 909 733	1 984 383	1 609 546	19 037	27 202	27 501	34 449	26 157
Total	2 160 513	2 905 198	2 806 448	2 631 986	2 054 271	33 154	44 785	45 761	50 492	38 369
Exports										
Natural aggregates-										
Sand and gravel (d)	8 453 949	9 308 961	8 089 175	7 747 635	6 236 662	40 493	45 498	46 624	50 027	48 688
Crushed rock	4 850 971	5 322 099	5 959 212	5 260 973	4 916 514	25 141	25 773	33 637	36 693	36 965
Total	13 304 920	14 631 060	14 048 387	13 008 608	11 153 176	65 634	71 271	80 261	86 720	85 653

(a) Including production from marine dredging.

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

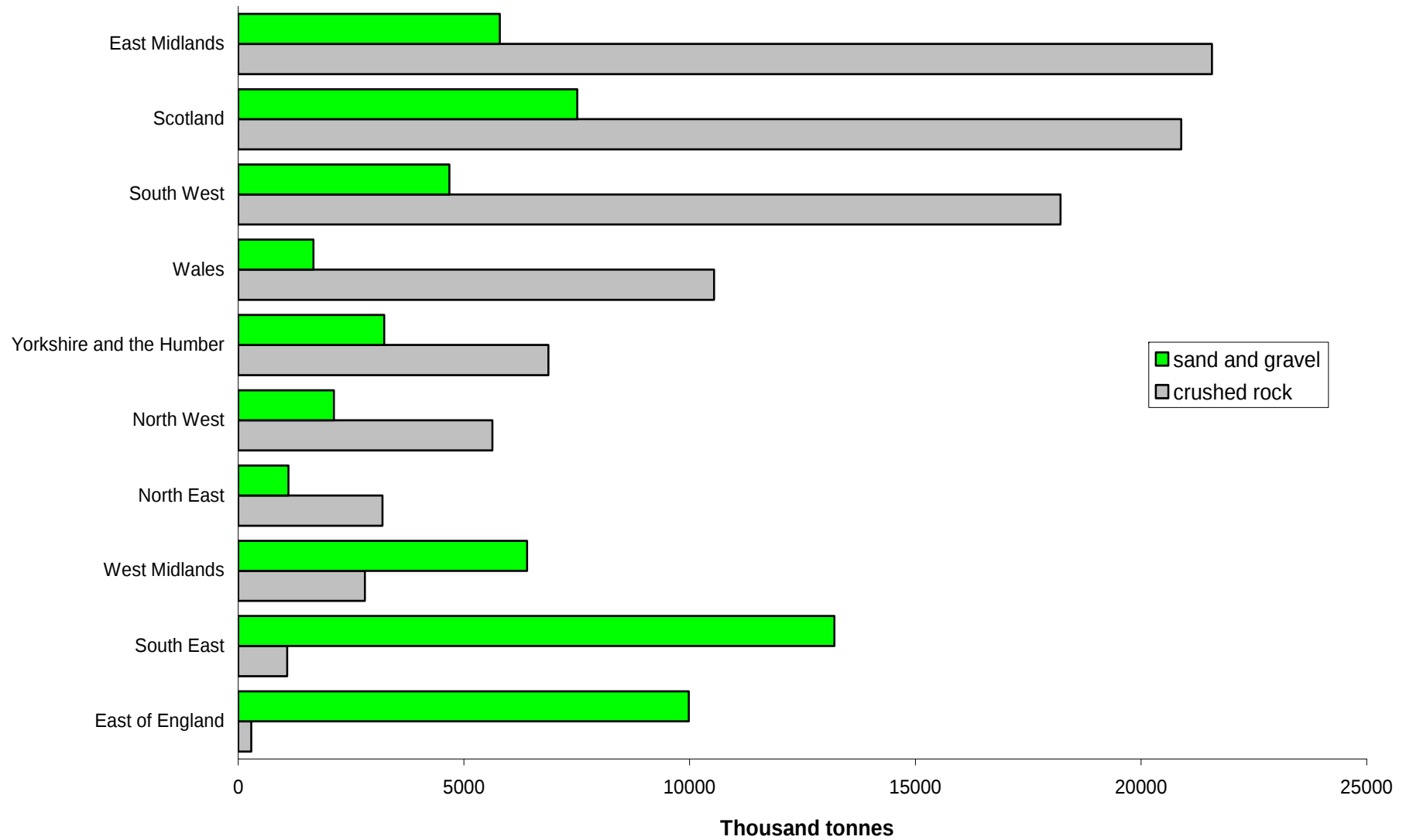
(c) For a number of years, a significant amount of armourstone imports were believed to be wrongly classified as 'granite, crude'. In 2009, this figure was 259 337 tonnes, and this has reduced from 1 331 520 tonnes in 2005, suggesting this issue is being addressed.

(d) Principally marine-dredged sand and gravel.

Source: HM Revenue and Customs.

However, the Crown Estate Commissioners give the following figures for marine-dredged sand and gravel landed at foreign ports (tonnes): 2005: 6 471 453; 2006: 6 714 659; 2007: 6 649 041; 2008: 6 211 703; 2009: 5 660 522.

Great Britain production of crushed rock aggregate and sand and gravel by region 2009



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

(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.

Survey for England and Wales. British Geological Survey.

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

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

Survey for England and Wales. British Geological Survey.

(c) Confidential, but totals remain correct

England and Wales summary sales of primary aggregates, by region 2009

Thousand tonnes

Region	Land-won sand and gravel		Marine sand and gravel		Total sand and gravel		Crushed rock		Total primary aggregate	
	AMRI	AM	AMRI	AM	AMRI	AM	AMRI	AM	AMRI	AM
	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009
North East	(a)	758	(a)	563	1 110	1 321	3 194	3 328	4 304	4 649
North West	(a)	2 180	(a)	97	2 121	2 276	5 629	5 897	7 750	8 174
Yorkshire and the Humber	3 183	2 929	52	192	3 235	3 122	6 868	7 240	10 103	10 362
West Midlands	6 397	5 860	0	0	6 397	5 860	2 808	2 639	9 205	8 500
East Midlands	5 798	5 501	0	0	5 798	5 501	21 575	21 421	27 373	26 922
East of England	9 571	9 666	409	322	9 980	9 989	289	289	10 269	10 278
South East	5 446	6 007	3 899	4 985	9 345	10 992	1 085	1 294	10 430	12 286
London	447	577	3 419	3 662	3 866	4 239	0	0	3 866	4 239
South West	4 226	3 152	451	487	4 677	3 638	18 218	17 206	22 895	20 844
England	37 810	36 631	8 719	10 308	46 529	46 938	59 666	59 314	106 195	106 253
South Wales	220	144	841	613	1 061	757	7 674	8 185	8 735	8 942
North Wales	575	589	32	32	607	621	2 868	3 245	3 475	3 866
Wales	795	733	873	645	1 668	1 378	10 542	11 430	12 210	12 808
England and Wales	38 605	37 363	9 592	10 953	48 197	48 317	70 208	70 744	118 405	119 061

(a) Confidential, but totals remain correct

Sources: Annual Minerals Raised Inquiry, Office for National Statistics,
Aggregate Minerals Survey, British Geological Survey

Great Britain estimated consumption of natural aggregates 1960–2009

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	67	(d) 51	12	130	42	36	79	208
2008	59	47	9	115	37	35	72	187
2009	45	38	8	91	30	26	56	147

(a) Including dolomite.

(d) BGS estimate.

(b) Total production, excluding marine-dredged material for export; see table on p.86.

Source: Office for National Statistics.

(c) The following amounts of crushed rock aggregate, believed to be mainly igneous rock, were exported (million tonnes): 2005: 5; 2006: 5; 2007: 6; 2008: 5; 2009: 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) 1960–2009**

Year	Value of new con- struction work (a)	Estimated consumption of aggregate			Total value of all construc- tion 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	£ 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	107 852	1.2	0.8	2.0
2005	59 412	2.1	1.4	3.4	107 007	1.1	0.8	1.9
2006	62 145	2.0	1.3	3.3	108 364	1.2	0.7	1.9
2007	64 544	2.0	1.2	3.2	110 952	1.2	0.7	1.9
2008	62 492	1.8	1.2	3.0	109 716	1.0	0.7	1.7
2009	54 649	1.7	1.0	2.7	97 152	0.9	0.6	1.5

(a) Valued at constant 2005 prices.

Source: Department for Business, Innovation & Skills.

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

Source: British Geological Survey.

Aluminium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Aluminium										
<i>Production</i>										
Unwrought-										
Primary	368 477	360 325	364 595	326 900	252 000					
Secondary	204 200	204 200	193 900	145 800	205 200					
<i>Consumption</i>										
Unwrought-										
Primary	353 249	362 267	363 480	339 440	270 000					
Secondary	186 522	169 983	174 073	369 083	344 400					
Ferro-aluminium (a)	2 890	3 030	3 140	2 950	2 190					
<i>Imports</i>										
Scrap	116 285	137 626	158 827	145 819	117 651	91 004	120 370	145 358	155 175	94 893
Ash and residues	744	1 766	2 273	1 136	526	456	910	1 516	1 744	418
Unwrought	114 189	169 259	201 262	160 797	304 621	129 794	238 404	284 302	234 827	326 050
Unwrought alloys	87 063	245 496	93 145	93 210	43 601	104 159	147 969	150 316	152 037	60 882
<i>Exports</i>										
Scrap	474 587	385 211	906 831	872 988	422 574	299 115	351 964	491 914	574 214	333 723
Ash and residues	553	90	5	631	132	266	35	374	1 990	407
Unwrought	48 684	17 530	30 631	20 690	17 688	73 852	27 142	44 194	31 790	19 211
Unwrought alloys	329 691	331 598	269 523	265 018	305 849	381 248	514 295	420 852	426 355	369 575

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

Aluminium compounds

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Aluminium compounds										
<i>Imports</i>										
Oxide (alumina)	755 443	823 115	787 218	705 033	352 250	129 663	169 916	166 674	169 891	86 601
Hydroxide	130 321	101 126	112 287	110 503	98 516	26 646	22 582	22 834	27 336	25 911
Fused Oxide (a)	36 277	36 099	30 960	50 448	20 646	13 164	13 527	11 779	23 988	11 911
Fluorides	5 849	7 983	4 897	4 553	3 024	2 859	2 938	2 790	3 668	3 405
<i>Exports</i>										
Oxide (alumina)	4 336	9 979	9 016	9 517	16 810	2 145	5 094	3 699	3 367	5 458
Hydroxide (b)	20 600	1 900	5 200	5 300	4 400	3 100	800	1 000	2 000	1 600
Fused Oxide (a)	5 408	6 252	8 801	9 329	5 819	4 137	5 335	5 600	7 138	5 581
Fluorides	427	0	213	210	156	41	2	92	119	229

(a) Artificial corundum.

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

Antimony

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Antimony										
<i>Imports</i>										
Metal	60	81	110	98	88	180	380	428	972	566
Oxide	2 048	2 291	1 917	2 454	1 548	3 959	5 316	5 399	6 272	5 249
<i>Exports</i>										
Metal	54	27	21	35	75	267	200	169	297	640
Oxide	621	397	379	558	407	1 190	928	936	1 655	1 203

Arsenic

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Arsenic										
<i>Imports</i>										
Elemental	3	49	70	52	60	90	415	212	240	380
<i>Exports</i>										
Elemental	1	1	0	0	0	32	34	3	98	9

Asbestos

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Asbestos										
<i>Imports</i>										
Fibre	...	0	187	...	11	...	1	1	...	1
Waste	...	...	...	...	...	...	...	...	...	...
Fabricated asbestos	281	86	50	53	11	732	786	1 486	1 799	507
Friction material with a basis of asbestos etc.	7 806	13 199	6 794	7 464	7 392	33 207	41 779	37 129	44 863	32 224
Articles of asbestos cement etc.	71 389	69 731	86 963	65 502	66 397	22 491	24 150	30 496	28 467	28 750
<i>Exports</i>										
Fibre	(a) 1	0	...	...	...	(a) 7	1	...	...	...
Waste	...	...	...	...	...	...	...	...	...	...
Fabricated asbestos	1 868	915	132	200	223	10 107	2 376	1 429	1 886	1 529
Friction material with a basis of asbestos etc.	2 706	2 877	3 152	3 453	2 772	29 082	31 927	33 282	45 785	36 490
Articles of asbestos cement etc.	16 917	16 902	18 285	15 994	8 452	7 222	6 803	6 618	7 586	4 952

(a) Unmanufactured asbestos, including fibre and waste.

Asphalt, natural

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Asphalt, natural										
<i>Imports</i>	47 510	138 249	183 969	152 309	48 668	6 027	18 069	30 046	32 946	10 837
<i>Exports</i>	166 866	160 972	287 977	141 900	190 764	17 221	20 040	36 092	22 126	41 322

Ball clay

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Ball clay										
<i>Production (sales) (a)</i>	1 011 425	1 015 101	1 022 472	1 020 496	727 076					
<i>Imports</i>	12 938	19 304	18 126	12 197	16 340	1 112	1 781	1 754	1 880	1 578
<i>Exports (a)</i>	845 597	853 177	864 133	853 177	513 010					

(a) Source: The Kaolin and Ball Clay Association

Barytes

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Barytes										
<i>Production</i>										
Barium minerals- Barytes	64 000	48 000	53 000	43 000	36 000					
<i>Imports</i>										
Barium minerals (a)	54 753	78 225	84 617	56 794	61 308	2 720	4 009	4 286	4 251	4 558
<i>Exports</i>										
Barium minerals (a)	16 334	4 250	9 242	9 976	13 095	2 655	1 577	2 024	2 320	3 407

(a) Mainly barites with some witherite.

Bauxite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Bauxite										
<i>Imports</i> (a)	103 522	86 882	48 741	57 971	37 461	9 743	6 500	5 421	13 042	13 455
<i>Exports</i> (a)	4 325	28 636	4 276	6 121	3 873	1 478	1 887	1 683	2 137	1 816

(a) Excluding refractory grade bauxite.

Bentonite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Bentonite										
<i>Imports</i>	151 179	173 483	157 388	205 853	140 301	10 462	13 970	11 693	16 658	12 534
<i>Exports</i>	49 514	42 548	47 122	43 261	34 622	14 145	12 549	14 773	15 234	13 828

Beryllium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Beryllium										
<i>Imports</i>										
Metal	208	306	13	28	3	710	1 752	3 803	1 702	1 308
Oxides and hydroxides	7	7	6	11	2	452	502	410	891	207
<i>Exports</i>										
Metal	11	8	10	10	0	586	673	2 989	263	113

Bismuth

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Bismuth										
<i>Imports</i>										
Metal	2 858	2 347	1 908	1 582	310	11 596	12 234	23 190	16 140	2 622
<i>Exports</i>										
Metal	2 426	2 703	2 588	905	941	10 384	16 043	28 291	12 763	9 142

Boron

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Boron										
<i>Imports</i>										
Boron minerals (a)	5 732	3 470	4 360	2 322	879	1 342	1 162	1 324	627	345
<i>Exports</i>										
Boron minerals (a)	33	186	545	254	5	9	127	135	77	10

(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 <http://stats.berr.gov.uk/construction/building>)

Bromine

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Bromine										
<i>Imports</i>										
	7 995	7 592	5 266	5 903	6 534	3 280	4 584	4 625	4 476	6 661
<i>Exports</i>										
	235	1 138	1 470	1 015	497	639	1 935	2 236	1 716	1 463

Building and dimension stone

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Building and dimension stone										
<i>Production (a)</i>										
Sandstone	(b) 470 000	434 000	419 000	499 000	722 000					
Igneous rock	150 000	(b) 150 000	(b) 50 000	279 000	408 000					
Limestone	589 000	379 000	(b) 320 000	307 000	(b) 300 000					
Dolomite	(b) 8 000	(b) 3 000	(b) 1 000	2 000	(b) 1 000					
Total	(b) 1 217 000	(b) 966 000	(b) 790 000	1 087 000	(b)1 431 000					
<i>Imports</i>										
<i>Unworked-</i>										
Marble and other calcareous stone	63 046	32 609	37 404	37 444	26 787	18 901	17 463	20 144	21 150	16 466
Granite (c)	1 331 520	491 438	442 911	1 058 054	361 043	43 026	33 622	43 987	54 092	40 792
Sandstone	193 793	255 732	322 530	264 202	202 831	25 501	31 694	41 949	38 988	27 176
Other stone	28 138	116 986	68 726	54 415	48 823	4 580	12 024	10 393	10 983	10 208
<i>Worked-</i>										
Marble and other calcareous stone	77 698	100 555	111 039	114 870	100 648	52 806	65 977	63 620	74 273	70 696
Granite	88 916	114 802	114 967	115 495	94 003	57 884	66 403	74 519	80 043	66 539
Other stone	42 395	41 470	64 610	61 324	98 462	17 780	17 632	26 035	27 885	30 246
Paving stones and flagstones	168 548	220 005	297 099	176 448	136 981	22 825	30 337	43 258	30 602	22 748
<i>Exports</i>										
<i>Unworked-</i>										
Marble and other calcareous stone	2 126	1 549	2 227	1 019	728	287	184	553	264	493
Granite	1 974	2 394	7 634	8 629	5 722	292	983	2 125	1 741	1 215
Sandstone	5 683	5 426	1 081	354	243	949	764	269	109	149
Other stone	784	638	8 928	888	276	220	167	419	161	107
<i>Worked-</i>										
Marble and other calcareous stone	2 905	4 068	4 740	2 934	1 603	4 951	6 441	7 319	5 292	3 294
Granite	607	517	429	786	1 904	623	1 233	627	1 391	2 069
Other stone	5 688	5 958	7 022	7 372	2 797	5 070	4 475	5 860	5 386	5 406
Paving stones and flagstones	6 709	6 669	3 716	2 483	3 321	2 035	1 847	1 125	1 314	1 229

(a) Great Britain only.

(b) BGS estimate.

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

Cadmium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Cadmium										
<i>Consumption</i>	27	20	87	96	96					
<i>Imports</i>										
Metal	206	129	276	212	246	538	642	1 218	957	827
Pigments	53	220	102	104	63	145	299	386	506	255
<i>Exports</i>										
Metal	79	7	76	54	25	167	46	334	739	440
Pigments	707	672	962	537	620	6 162	6 571	6 546	6 272	7 533

Cement

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Cement										
<i>Production</i>										
Cement, clinker (a)	10 074 000	10 069 000	10 227 000	8 700 000	6 421 000					
Cement, finished (a)	11 216 000	11 469 000	11 887 000	10 071 000	7 623 000					
	Cubic metres									
Ready-mixed concrete	22 432 000	23 029 000	23 548 000	20 051 000	14 069 000					
	Tonnes									
<i>Consumption (home deliveries)</i>										
Finished cement (a) (b)	11 004 000	11 221 000	11 638 000	9 937 000	7 474 000					
<i>Imports</i>										
Portland cement clinkers	406 044	516 583	836 788	366 791	206 857	25 125	38 834	59 190	34 947	19 471
Aluminous cement	13 561	13 967	14 770	8 946	8 248	3 645	3 960	3 876	2 698	2 644
Portland cement	1 645 088	1 397 025	1 534 683	1 731 228	1 718 146	77 236	69 931	81 685	93 946	98 170
Other cement	24 144	12 824	11 445	19 378	22 567	2 804	3 244	2 862	4 148	5 345
<i>Exports</i>										
Portland cement clinkers	134 992	91 357	28 432	15 071	4 708	1 657	2 510	1 856	1 248	950
Aluminous cement	55 934	69 458	63 756	57 963	42 725	17 933	24 515	22 386	20 022	16 500
Portland cement	320 680	521 784	459 629	230 920	92 628	24 987	31 713	30 877	18 540	10 884
Other cement	12 620	17 400	24 695	35 160	8 635	2 328	3 184	4 354	4 630	2 155

(a) Great Britain only.

(b) Excluding imports.

Chalk (see Limestone)

China clay

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
China clay										
<i>Production (sales) (a) (b)</i>	1 910 874	1 762 328	1 671 426	1 355 365	1 059 848					
<i>Imports (c)</i>	72 812	79 958	54 888	67 349	61 164	8 741	10 007	8 064	12 116	14 028
<i>Exports (a) (b) (c)</i>	1 698 747	1 566 025	1 490 416	1 188 267	932 180					

(a) Dry weight.

(b) Source: The Kaolin and Ball Clay Association.

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

China stone (see Feldspar)

Chromium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Chromium										
<i>Apparent consumption (a)</i>	56 200	39 800	60 300	81 500	18 200					
<i>Consumption in Iron and Steel Industry (b)</i>	52 070	54 670	60 980	68 770	24 100					
<i>Imports</i>										
Ores and concentrates	122 042	74 907	103 551	117 715	33 867	6 031	4 344	6 698	21 106	6 789
Ferro-chrome										
Under 4% carbon	9 712	7 049	11 396	13 250	5 730	9 092	6 607	11 820	31 747	10 517
4%-6% carbon	31	399	1 383	1 081	683	14	351	1 094	878	423
Over 6% carbon	53 735	45 046	34 197	65 360	28 471	21 902	18 869	17 514	75 033	20 200
Ferro-silico-chrome	728	350	1 242	128	26	217	128	635	136	59
Oxides and hydroxides (c)	9 500	7 100	13 000	9 000	3 300	5 700	5 000	9 200	12 400	4 300
Metal	1 723	4 022	2 134	3 099	2 904	6 963	12 883	9 820	15 062	12 132
<i>Exports</i>										
Ores and concentrates	228	47	178	—	32 507	101	15	37	...	3 168
Ferro-chrome										
Under 4% carbon	507	436	376	461	294	892	582	564	2 018	954
4%-6% carbon	...	938	622	160	39	...	243	371	324	75
Over 6% carbon	5 605	2 684	1 940	755	1 141	3 307	2 234	2 686	1 379	1 653
Ferro-silico-chrome	8	8	35	9	50	7	12	80	24	244
Oxides and hydroxides (d)	21 500	15 100	12 700	14 500	4 900	28 000	21 100	18 400	33 600	12 200
Metal	4 547	5 123	6 777	6 501	5 058	17 291	20 563	27 595	38 623	33 207

(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 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Clays (not elsewhere specified)										
<i>Production</i>										
Clay and shale	10 898 000	10 432 000	10 104 000	8 459 000	5 310 000					
<i>Imports</i>										
Unspecified clays	99 221	75 154	79 697	55 659	87 620	13 430	13 511	15 407	17 332	12 520
<i>Exports</i>										
Unspecified clays	13 811	12 998	19 184	15 120	8 702	3 515	2 754	4 608	5 927	2 533

Great Britain production of clay and shale by end-use and area of origin 2009

Thousand tonnes

Area of origin	Bricks, pipes and tiles	Cement	Construc- tional use	Other uses	Total
Durham	...	—	—	—	...
Northumberland	...	—	—	—	...
Tyne and Wear	55	—	—	—	55
North East	...	—	—	—	...
Humberside	...	...	—	1	...
North Yorkshire	...	—	...	100	...
South Yorkshire	...	—	...	—	93
West Yorkshire	174	—	—	—	174
Yorkshire and the Humber	285	...	...	101	544
Derbyshire	...	...	—	—	305
Leicestershire	...	...	—	—	481
Nottinghamshire	...	—	...	—	...
Lincolnshire	—	—	...	—	...
East Midlands	...	...	...	—	970
Cambridgeshire	...	—	—	—	...
Suffolk	—	—	—	—	—
Essex	...	—	...	—	4
Hertfordshire	14	—	—	—	14
East of England	...	—	...	—	...
Buckinghamshire	...	—	—	—	...
Surrey	...	—	—	—	...
Kent	—	—	32	1	33
East Sussex	...	—	—	—	...
West Sussex	259	—	—	—	259
Hampshire	...	—	—	—	...
Greater London	—	—	...	—	...
South East	...	—	...	1	446
Avon	...	—	—	—	...
Cornwall	—	—	—	—	—
Devon	—	—	—	—	—
Dorset	...	—	—	—	...
Gloucestershire	...	—	...	11	57
Wiltshire	—	25	—	4	29
South West	100	25	...	16	...
Shropshire	...	—	—	—	...
Staffordshire	...	...	—	—	784
Warwickshire	52	...	—	—	...
West Midlands	101	—	—	—	101
West Midlands	773	832	—	—	1 606
Cumbria	24	—	...	—	...
Cheshire	...	—	...	...	...
Greater Manchester	...	—	—	...	...
Lancashire	...	—	...	—	187
North West	155	—	181	1	336
England	2 785	1 397	365	118	4 666
Clwyd	—	—	2	—	2
Gwynedd	—	—	1	—	1
Dyfed	—	—	...	—	...
Powys	1	—	...	—	...
Wales	1	—	149	—	151
South of Scotland	—	—	...	—	...
West Central Scotland	10	—	...	—	...
East Central Scotland	—	—	...	—	...
Tayside and Fife	—	—	...	—	...
Scotland	10	—	483	—	494
Great Britain	2 797	1 397	998	118	5 310

Source: Office for National Statistics.

Great Britain production of clay and shale by end-use 1996–2009

Thousand tonnes

Year	Bricks, pipes and tiles	Cement	Lightweight aggregate	Construc- tional use	Other uses	Total
1996	8 162	2 169	—	1 196	(a) 277	11 804
1997	7 560	2 339	—	1 104	(a) 319	11 322
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

(a) BGS estimate.

Source: Office for National Statistics.

Coal

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Coal										
<i>Production</i>										
Bituminous	20 498 000	18 517 000	17 070 000	18 053 000	17 874 000					
<i>Consumption</i>										
	61 842 000	67 450 000	62 886 000	58 212 000	48 786 000					
<i>Imports</i>										
Anthracite	187 388	125 011	135 941	213 318	207 327	13 262	9 444	7 769	27 725	25 757
Bituminous and Other	43 890 778	49 544 012	43 024 560	43 038 043	36 553 574	1 864 790	2 095 699	1 951 342	3 480 141	2 632 676
Total	44 078 166	49 669 023	43 160 501	43 251 361	36 760 900	1 878 052	2 105 143	1 959 111	3 507 866	2 658 434
Briquettes of Coal	6 125	9 604	6 127	13 164	6 484	789	1 211	1 068	1 348	1 480
Lignite (including agglomerated)	1 930	1 215	384	986	2 537	543	395	329	507	660
<i>Exports</i>										
Anthracite	169 252	137 353	123 549	165 473	119 472	12 704	10 739	10 474	15 647	15 587
Bituminous and Other	380 426	354 281	419 193	742 582	391 414	26 996	24 795	30 528	80 084	56 545
Total	549 678	491 634	542 742	908 055	510 886	39 701	35 534	41 002	95 730	72 132
Briquettes of Coal	19 885	18 982	26 590	51 782	67 618	2 155	2 073	2 976	7 869	12 142
Lignite (including agglomerated)	3 149	3 804	2 966	3 157	2 795	311	481	410	591	600

**Total permitted opencast reserves (working sites and sites not yet worked)
at 31 December**

	Tonnes		
Mineral Planning Authority	2007	2008	2009
Derbyshire	994 340	1 335 291	968 207
Leicestershire	725 000	287 501	23 353
East Midlands	1 719 340	1 622 792	991 560
Durham	—	—	1 274 500
Northumberland	5 149 871	6 235 129	7 670 105
Newcastle	—	—	—
North East	5 149 871	6 235 129	8 944 605
Bolton	816 096	568 600	306 472
St Helens	—	—	—
North West	816 096	568 600	306 472
Barnsley	—	—	—
Calderdale	7 965	7 965	—
Kirklees	42 531	38 676	34 688
Leeds	—	—	50 000
Rotherham	—	—	44 000
Wakefield	187 327	47 469	—
Yorkshire and the Humber	237 823	94 110	128 688
Shropshire	320 297	320 297	320 297
Telford and Wrekin	—	—	900 000
West Midlands	320 297	320 297	1 220 297
England	8 243 427	8 840 928	11 591 622
Carmarthenshire	—	39 619	—
Neath Port Talbot	3 393 590	2 713 724	2 411 416
Merthyr Tydfil	10 791 317	10 420 951	9 788 669
Powys	2 646 020	2 260 455	1 846 580
Wrexham	—	—	—
Wales	16 830 927	15 434 749	14 046 665
Clackmannanshire	—	—	—
Dumfries and Galloway	2 428 956	1 876 482	1 975 977
East Ayrshire	9 251 681	14 287 004	11 101 990
Falkirk	190 767	190 767	190 767
Fife	3 235 659	3 452 833	2 911 261
Midlothian	400 270	182 036	172 177
North Lanarkshire	—	—	102 000
South Lanarkshire	13 769 166	12 146 340	12 725 886
West Lothian	—	—	0
Scottish Borders	450 000	450 000	400 000
Scotland	29 726 499	32 585 462	29 580 058
Great Britain	54 800 853	56 861 139	55 218 345

Source: The Coal Authority and planning authorities in England , Scotland and Wales

UK supply of coal 2009

Thousand tonnes

	Bituminous		Anthracite	Total
	Steam coal	Coking coal		
Production				
Mine production	...	246	...	17 374
Other sources	...	...	...	500
Stock change	...	259	...	-6 608
Total production	...	505	...	11 266
Imports				
European Union	1 136	-	41	1 177
Australia	444	2 487	-	2 931
Canada	-	201	-	201
Colombia	5 250	-	-	5 250
Indonesia	721	-	-	721
China P.R.	602	-	14	616
South Africa	3 043	-	20	3 063
Russia	18 472	304	34	18 810
USA	3 122	1 578	-	4 700
Other countries	104	594	-	698
Total imports	32 894	5 164	109	38 167
Total exports	-526	-6	-115	-646
Total supply	...	5 663	...	48 787

Source: Department of Energy and Climate Change

Great Britain production of deep-mined and opencast coal 1980–2009

Thousand tonnes

Year	Deep-mined			Opencast			Deep-mined and opencast		
	Anthracite	Bituminous	Total	Anthracite	Bituminous	Total	Anthracite	Bituminous	Total
1980	1 607	110 823	112 430	1 295	14 484	15 779	2 902	125 307	128 209
1981	1 566	108 907	110 473	1 343	13 485	14 828	2 909	122 392	125 301
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	...	...	17 874

(a) BGS estimate.

Source: Department of Energy and Climate Change

United Kingdom regional deep-mined coal production 2006–2011 (a)

Thousand tonnes

County/Unitary authority	2006/07	2007/08	2008/09	2009/10	2010/11
Doncaster	58	118	489	730	827
Kirklees	19	14	16	18	8
Rotherham	811	917	1 124	1024	855
Warwickshire	2 247	2 560	3116	2349	3173
Derbyshire	26	24	21	20	23
Nottinghamshire	2 642	2 125	1 938	1735	1737
North Yorkshire	1 908	1 569	1 183	1014	1624
Gloucestershire	0	0	0	0	0
England	7 711	7 327	7 887	6 890	8 247
Rhondda, Cynon Taff	423	145	—	—	—
Neath Port Talbot	11	19	121	83	43
Torfaen	5	5	4	1	1
Wales	440	168	125	84	44
Scotland	—	—	—	—	—
United Kingdom	8 150	7 495	8 012	6 974	8 292

(a) Financial years to March.

Source: The Coal Authority.

United Kingdom regional opencast coal production 2006–2011 (a)

Thousand tonnes

County/Unitary authority	2006/07	2007/08	2008/09	2009/10	2010/11
Barnsley	—	—	—	—	—
Bolton	—	186	257	285	372
Calderdale	1	—	—	1	—
Kirklees	—	12	6	2	—
Rotherham	18	—	—	4	36
Wakefield	—	82	187	12	—
Lancashire	—	—	1	—	—
Leicestershire	8	110	441	293	31
Derbyshire	—	17	127	488	630
Durham	134	91	—	—	192
Newcastle upon Tyne	89	7	—	—	62
Northumberland	768	1 306	1 142	1 033	1 438
Leeds	—	—	—	26	71
Telford & Wrekin	—	—	—	—	69
Cumbria	—	—	—	—	—
England	1 018	1 811	2 161	2 144	2 900
Blaenau Gwent	—	—	—	—	14
Merthyr Tydfil	—	38	447	670	896
Carmarthenshire	32	18	8	—	—
Neath Port Talbot	807	665	832	480	497
Powys	412	361	408	416	395
Wales	1 252	1 082	1 695	1 566	1 801
Dumfries & Galloway	233	751	562	624	647
Falkirk	5	—	—	—	—
Midlothian	246	85	258	178	184
West Lothian	495	260	—	—	—
East Ayrshire	3 257	3 380	3 330	2 760	2 524
Fife	1 046	735	748	819	775
North Lanarkshire	—	—	—	2	38
South Lanarkshire	860	710	1 063	1 596	1 647
Scotland	6 143	5 921	5 961	5 979	5 816
United Kingdom	8 412	8 815	9 817	9 689	10 517

(a) Financial years to March.

Source: The Coal Authority.

Cobalt

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Cobalt										
<i>Consumption in Iron and Steel Industry (a)</i>	20	20	20	20	10					
<i>Apparent consumption (a) (b)</i>	1 100	2 000	2 900	2 400	1 100					
<i>Imports</i>										
Scrap	593	744	866	880	358	4 988	4 527	10 316	12 130	4 195
Unwrought	2 557	2 855	3 670	3 748	3 131	43 929	39 515	73 809	114 725	48 235
Wrought	738	828	885	767	439	12 012	16 942	11 182	14 241	18 134
Oxides	107	195	180	138	168	1 392	2 291	3 394	4 021	2 309
<i>Exports</i>										
Scrap	391	467	766	1 178	834	3 117	3 203	6 984	10 915	2 924
Unwrought	648	630	679	804	1 187	13 173	12 932	17 036	28 019	27 420
Wrought	432	597	855	633	552	14 113	19 281	20 921	26 806	24 439
Oxides	994	750	689	798	891	10 706	9 167	13 909	22 944	13 809

(a) Metal content.

(b) BGS estimate; see explanatory notes

Coke and breeze

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Coke and breeze										
<i>Production</i>										
Coke oven - coke	4 105 000	4 384 000	4 451 000	4 324 000	3 663 000					
Coke oven - breeze	259 000	245 000	25 000	35 000	29 000					
<i>Consumption</i>										
Coke oven coke	3 639 000	3 847 000	4 024 000	3 900 000	2 843 000					
Breeze	1 363 000	1 415 000	1 229 000	1 204 000	892 000					
<i>Imports</i>										
Coke from coal	554 707	804 872	691 402	509 265	89 717	71 763	80 803	98 135	107 977	14 962
<i>Exports</i>										
Coke from coal	191 854	93 505	97 608	172 201	91 678	24 350	10 740	10 459	28 927	16 972
Coke from lignite	...	...	20 813	...	0	...	...	1 365	...	0

Copper

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Copper										
<i>Consumption</i>										
Unwrought-										
Refined	165 406	172 092	41 454	42 920	22 800					
Copper in scrap for direct use (a)	120 000	120 000	120 000	120 000	120 000					
<i>Imports</i>										
Ores and concentrates	251	2 571	1 676	699	581	736	1 537	1 218	1 500	928
Matte and cement	5	15	2	7	1	76	63	51	134	23
Scrap	42 264	19 744	21 852	21 132	18 549	25 644	43 789	53 297	53 211	39 973
Ash and residues	1 108	610	1 089	635	217	579	758	1 395	782	156
Unwrought-										
Unrefined	1 978	264	7 401	5 529	3 034	4 307	600	23 350	18 981	14 557
Refined	181 767	183 727	46 820	47 716	45 249	364 395	668 026	170 610	187 844	145 913
Alloys	5 371	5 813	5 488	5 173	3 766	9 428	18 155	18 339	15 991	11 931
Master Alloys	820	930	714	548	300	1 934	3 113	2 827	2 778	1 447
<i>Exports</i>										
Ores and concentrates	13	12	2	118	68	168	177	36	137	107
Matte and cement	41	515	16	28	14	523	1 864	181	215	118
Scrap	238 557	311 058	346 361	358 981	429 467	247 351	587 992	646 751	775 054	693 154
Ash and residues	675	1 168	465	723	832	74	522	196	591	1 407
Unwrought-										
Unrefined	271	153	786	3 066	205	2 772	1 922	4 844	16 062	2 508
Refined	15 982	5 969	8 489	4 850	14 059	33 657	18 721	29 618	20 571	41 963
Alloys	12 681	13 661	12 533	11 603	7 906	23 456	41 189	46 032	45 706	26 335
Master Alloys	2 332	3 590	5 609	6 219	3 933	6 160	14 471	21 354	25 047	12 728

(a) Additional to that used in secondary metal.

Crushed rock (see also Aggregates)

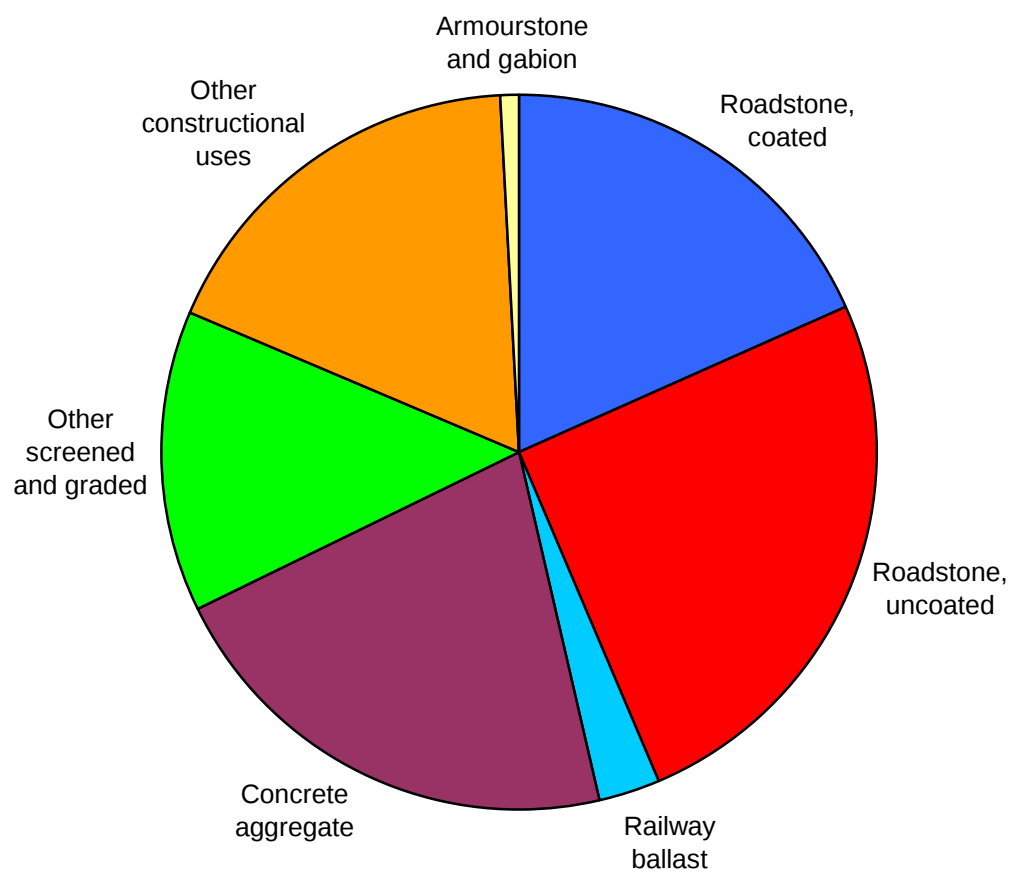
United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Crushed rock										
<i>Production (a)</i>	141 636 000	145 578 000	148 534 000	127 996 000	104 626 000					
<i>Imports (b)</i>	1 516 919	2 270 355	1 909 733	1 984 383	1 609 546	19 037	27 202	27 501	34 449	26 157
<i>Exports</i>	4 850 971	5 322 099	5 959 212	5 260 973	4 916 514	25 141	25 773	33 637	36 693	36 965

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

(b) For a number of years a significant amount of armourstone imports are believed to have been wrongly classified as 'granite, crude'. In 2009, this figure was 259 337 tonnes, and this has reduced from 1 331 520 tonnes in 2005, suggesting this issue is being addressed.

Great Britain production of crushed rock by end-use 2009
(total production 91.1 million tonnes)



Great Britain production of crushed rock by region 1980–2009

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

(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 by end-use and area of origin 2009

Thousand tonnes

Area of origin	Roadstone				Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Total
	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings						
North East	575	...	582	...	...	527	398	624	...	3 194
North West	696	...	810	—	...	1 564	...	1 131	...	5 629
Yorkshire and the Humber	336	1 007	1 430	181	—	2 012	755	1 102	45	6 868
West Midlands	893	426	...	...	...	...	...	...	...	2 808
East Midlands	2 150	892	6 052	217	1 821	4 331	3 626	2 304	182	21 575
East of England	—	—	—	—	—	—	—	...	—	289
South East	—	—	...	—	—	...	...	...	...	1 085
South West	1 359	1 906	3 903	...	...	6 022	1 163	3 710	...	18 218
England	6 009	5 078	13 376	752	...	14 735	7 077	10 384	...	59 666
Wales	1 316	1 951	1 830	192	...	2 317	773	2 044	...	10 542
Scotland	1 814	541	6 516	308	...	2 541	4 506	3 805	...	20 895
Great Britain	9 139	7 570	21 722	1 252	2 556	19 593	12 356	16 234	681	91 103

Source: Office for National Statistics.

Great Britain production of crushed rock for aggregate 2009

Thousand tonnes

Mineral	Roadstone				Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Total
	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings						
Limestone (inc. dolomite)	3 317	2 928	10 572	...	...	12 737	5 538	9 305	221	44 876
Igneous rock	4 887	2 305	10 021	...	...	5 741	6 391	5 514	393	38 448
Sandstone	935	2 337	1 128	354	—	1 116	427	1 415	68	7 779
Total	9 139	7 570	21 721	1 252	2 556	19 594	12 356	16 234	682	91 103

Source: Office for National Statistics.

Great Britain production of crushed rock by end-use 1997–2009

Thousand tonnes

Year	Roadstone				Railway ballast	Fill	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Total
	Coated	Uncoated	Surface dressing chippings								
1997	23 906	40 186	...	(a) 2 304	49 092	18 300	...	...	...	...	133 787
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

(a) BGS estimate.

Source: Office for National Statistics.

Great Britain production of crushed rock, gravel and sand for use in concrete, 1997–2009

Thousand tonnes

Year	Sandstone	Igneous rock	Limestone and dolomite	Gravel (a)	Concreting sand (a)	Total
1997	324	3 490	14 486	28 235	30 130	76 665
1998	686	3 749	15 711	30 369	30 244	80 759
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

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

Source: Office for National Statistics.

Great Britain production of crushed rock for use as roadstone, 1997–2009

Thousand tonnes

Year	Sandstone		Igneous rock		Limestone and dolomite		Total	
	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated
1997	2 835	2 741	10 947	12 392	10 124	25 054	23 906	40 186
1998	3 506	2 689	9 273	10 100	10 352	24 027	23 131	36 816
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

(a) Including surface dressing chippings

Source: Office for National Statistics.

(b) Excluding surface dressing chippings

Great Britain production of crushed rock for railway ballast, 1997–2009

Thousand tonnes

Year	Sandstone	Igneous rock	Limestone and dolomite	Total
1997	(a) 343	1 870	(a) 89	(a) 2 304
1998	(a) 351	2 008	(a) 122	(a) 2 481
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

(a) BGS estimate.

Source: Office for National Statistics.

England production of crushed rock by end-use 1997–2009

England production of crushed rock by end use 1997 - 2009										Thousand tonnes
Year	Roadstone			Railway ballast	Fill and ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & Gabion	Total
	Coated	Uncoated	Surface dressing chippings							
1997	17 405	28 125	...	...	33 252	12 754	...	...	...	91 535
1998	16 076	25 516	...	...	33 080	14 003	...	...	...	88 675
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

Source: Office for National Statistics.

Wales production of crushed rock by end-use 1997–2009

Thousand tonnes										
Year	Roadstone			Railway ballast	Fill and ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & Gabion	Total
	Coated	Uncoated	Surface dressing chippings							
1997	3 235	4 827	...	...	8 946	3 575	...	...	...	20 585
1998	3 318	4 222	...	...	8 445	3 919	...	...	...	19 903
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

Source: Office for National Statistics.

Scotland production of crushed rock by end-use 1997–2009

Scotland production of crushed rock by end-use 1997-2009										Thousand tonnes
Year	Roadstone			Railway ballast	Fill and ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & Gabion	Total
	Coated	Uncoated	Surface dressing chippings							
1997	3 266	7 233	...	...	9 198	1 971	...	...	...	21 667
1998	3 738	7 077	...	...	10 098	2 224	...	...	...	23 138
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

Source: Office for National Statistics.

Diamond

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Carats					£ thousand				
Diamond										
<i>Imports</i>										
Unsorted	33 441 810	14 408 621	13 661 786	10 283 610	8 348 854	542 182	556 447	573 786	876 344	834 518
Gem-										
Rough	78 735 595	78 790 692	81 195 314	59 534 653	44 064 081	3 731 322	3 575 369	2 999 781	2 761 345	2 013 574
Cut	12 039 040	7 370 573	973 433	1 343 330	868 406	632 372	798 474	752 728	911 691	689 890
Industrial	25 367 064	11 884 651	7 524 168	5 127 610	3 321 670	12 673	70 193	11 164	12 307	7 623
Dust	125 510 400	199 882 920	198 484 150	187 268 975	88 148 090	8 677	10 325	10 046	8 665	6 404
<i>Exports</i>										
Unsorted	16 818 545	3 544 216	5 307 857	3 388 395	4 090 534	1 087 752	301 075	363 578	477 338	488 658
Gem-										
Rough	76 400 064	88 991 279	84 573 134	66 479 817	43 775 775	3 477 092	3 944 529	3 337 596	3 448 031	2 381 592
Cut	5 330 874	2 341 635	477 463	795 612	257 202	510 487	447 503	538 638	699 752	657 011
Industrial	21 647 850	13 652 233	4 754 029	6 121 081	4 440 922	20 924	18 891	17 485	17 700	13 977
Dust	124 529 495	111 788 350	104 552 775	122 681 695	105 427 132	11 791	11 200	13 014	11 492	7 796

Diatomite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Diatomite										
<i>Imports (a)</i>	29 208	28 290	24 224	23 084	22 014	4 658	4 710	4 437	4 548	5 001
<i>Exports (a)</i>	708	687	1 238	903	533	598	1 085	1 025	502	288

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

Dolomite (see Limestone)

Feldspar

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Feldspar										
<i>Production</i>										
China stone	1 835	1 441	1 112	430	(a) 400					
<i>Imports</i>										
Feldspar	23 139	17 098	26 751	18 899	9 299	1 428	1 096	1 687	1 406	661
Nepheline-syenite	47 672	81 960	40 484	44 275	32 462	4 052	4 201	3 617	4 355	3 516
<i>Exports</i>										
Feldspar	48	38	40	82	369	18	121	20	28	30
Nepheline-syenite	38	557	2 430	902	204	14	271	635	520	62

(a) BGS estimate

Fireclay

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Fireclay										
<i>Production (a)</i>	395 000	228 000	338 000	180 000	129 000					
<i>Imports</i>										
Fireclay	497	1 279	1 467	2 556	2 273	156	377	244	402	514
Fireclay bricks etc	8 261	7 651	8 166	7 070	3 229	3 958	2 800	3 478	4 960	1 509
Refractory hollow-ware	1 676	1 969	1 357	2 272	2 090	2 956	2 688	2 670	3 557	4 306
<i>Exports</i>										
Fireclay	91	179	94	54	92	90	117	79	33	62
Fireclay bricks etc	3 135	2 676	3 283	4 347	3 455	4 336	4 800	3 957	5 319	4 441
Refractory hollow-ware	3 009	2 989	2 386	1 274	1 297	14 715	15 361	16 218	17 071	14 687

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

Great Britain production of fireclay by area of origin 2009

Thousand tonnes

Area of origin	Total
Northumberland	...
Tyne and Wear	...
North East	...
West Yorkshire	8
Yorkshire and the Humber	8
Leicestershire	...
East Midlands	...
Shropshire	41
West Midlands	41
England	128
Wales	—
West Central Scotland	1
Scotland	1
Great Britain	129

Source: Office for National Statistics.

Great Britain production of fireclay by end-use 1997–2009

Thousand tonnes

Year	Refractory purposes	Bricks, pipes and tiles	Other uses	Total
1997	170	168	—	338
1998	...	331	...	577
1999	...	243	...	545
2000	...	287	...	595
2001	...	170	...	459
2002	...	...	...	491
2003	267	219	43	528
2004	...	...	...	402
2005	...	...	...	395
2006	...	...	...	228
2007	...	...	...	338
2008	...	...	...	180
2009	...	...	...	129

Source: Office for National Statistics.

Fluorspar

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Fluorspar										
<i>Production</i>	56 417	49 676	44 936	36 801	18 536					
<i>Imports</i>	4 051	6 620	3 875	8 429	6 436	94	976	1 040	2 389	2 574
<i>Exports</i>	4 315	2 451	589	187	303	1 070	476	304	156	184

Fuller's earth

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Fuller's earth										
<i>Crude Production</i>	—	—	—	—	—					
<i>Sales (a)</i>	(b) 6 200	—	—	—	—					
<i>Imports</i>	3 122	14 700	...	...	...	504	1 408	...	...	...
<i>Exports</i>	778	1 102	...	...	...	417	279	...	...	...

(a) BGS estimates based on data from producing companies. Dry weight.

(b) Including sales from stockpiles.

Gas, natural (see Petroleum)

Germanium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Germanium										
<i>Imports</i>										
Metal	5	2	3	1	3	2 094	1 205	872	400	802
<i>Exports</i>										
Metal	1	1	0	0	53	75	157	135	277	308

Gold

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Gold										
<i>Production (a)</i>	—	—	0	0	0					
<i>Imports</i>										
Waste and scrap	66	8	17	43	213	33 304	8 185	13 157	35 655	24 161
Unwrought (b)	339	1 152	725	878	1 158	2 825 803	8 263 982	7 017 522	13 136 670	23 560 892
Semi-manufactured	12	547	287	36	9	38 060	90 711	226 489	307 054	148 367
<i>Exports</i>										
Waste and scrap	541	314	282	272	533	52 473	36 296	37 334	293 085	1 041 439
Unwrought (b)	585	149	211	579	78	4 217 538	1 407 212	2 169 760	8 068 006	1 326 269
Semi-manufactured	53	24	44	24	19	70 236	52 874	76 554	162 089	147 766

- (a) Small quantities have been produced in Northern Ireland as follows:
2007: 88 kilograms; 2008: 163 kilograms; and 2009: 187 kilograms.
- (b) Mainly refined gold bullion in the form accepted in inter-bank transaction.

Granite (see Igneous rock)

Graphite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Graphite										
<i>Imports</i>										
Natural graphite	17 766	16 978	17 225	14 309	7 850	9 453	9 243	8 642	7 766	5 516
Artificial graphite	13 761	15 334	16 112	20 728	10 813	15 165	15 435	15 136	21 815	18 104
Graphite crucibles etc	811	1 100	1 333	991	788	2 788	3 506	3 531	3 401	2 880
<i>Exports</i>										
Natural graphite	2 685	2 979	3 065	3 156	2 271	3 204	3 183	3 760	3 906	3 015
Artificial graphite	11 450	9 300	8 765	6 792	5 450	10 431	10 537	11 275	17 974	13 008
Graphite crucibles etc	9 111	11 699	10 900	11 342	6 412	17 647	21 255	22 612	25 447	17 751

Gypsum

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Gypsum and plaster										
<i>Production</i>										
Gypsum, natural (a)	1 700 000	1 700 000	1 700 000	1 700 000	1 700 000					
<i>Imports</i>										
Gypsum-										
Gypsum	627 595	369 714	196 613	140 783	396 138	9 738	8 415	8 511	8 522	8 104
Calcined gypsum (plasters)	133 522	92 069	52 678	88 766	60 337	11 003	10 976	10 674	12 433	13 540
<i>Exports</i>										
Gypsum-										
Gypsum	2 299	2 679	1 248	1 493	1 978	599	559	584	955	777
Calcined gypsum (plasters)	54 356	63 533	57 988	48 340	32 551	11 836	13 680	13 668	13 647	12 067

(a) BGS Estimates.

UK production of desulphogypsum 2000-2010

	Thousand Tonnes										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Drax	565	506	485	699	653	565	610	645	744	...	...
Ratcliffe-on-Soar	260	291	358	384	350	235	204	254	338	263	266
West Burton	—	—	—	—	274	335	289	255	217	164	144
Eggborough	—	—	—	—	—	31	46	36	66	...	40
Cottam	—	—	—	—	—	19	196	257	225	164	210
Total	825	797	843	1 083	1 228	1185	1303	1447	1590	...	...

Hafnium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Hafnium										
<i>Imports</i>	23	14	16	41	7	934	919	708	1 832	1 426
<i>Exports</i>	1	8	1	1	18	137	336	56	254	1 342

Igneous rock

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	209	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Igneous rock – see also Building and dimension stone										
<i>Production (a)</i>	53 104 000	53 954 000	58 909 000	53 490 000	44 618 000					
<i>Imports</i>										
Granite-										
Worked	88 916	114 802	114 967	115 495	94 003	57 884	66 403	74 519	80 043	66 539
Unworked	1 331 520	491 438	442 911	1 058 054	361 043	43 026	33 622	43 987	54 092	40 792
<i>Exports</i>										
Granite-										
Worked	607	517	429	786	1 904	623	1 233	627	1 391	2 069
Unworked	1 974	2 394	7 634	8 629	5 722	292	983	2 125	1 741	1 215

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

Great Britain production of igneous rock by end-use and area of origin 2009

Thousand tonnes

Area of origin	Roadstone										Total	
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	Railway ballast	Concrete aggregate	Other screened & graded	Other con- structural uses	Armour- stone & gabion		Industrial uses
North East	...	...	...	...	...	...	108	...	...	...	...	1 115
East Midlands	—	1 446	561	3 458	217	1 821	2 033	1 146	1 070	95	1	11 848
South West	2	...	...	...	...	...	...	218	378	9	—	2 439
West Midlands	...	...	...	285	12	...	77	...	...	...	...	...
North West	...	...	228	...	—	...	...	265	25	—	—	...
England	...	2 925	1 334	4 167	318	...	3 198	1 949	1 653	...	...	17 846
Wales	7	325	...	227	...	...	167	151	426	...	—	1 932
Scotland	...	1 636	...	5 627	272	...	2 376	4 292	3 435	207	...	19 082
Great Britain	408	4 887	2 305	10 021	...	...	5 741	6 391	5 514	393	...	38 860
England			Wales				Scotland					
County		Total		County		Total		Region			Total	
Northumberland		...		Mid Glamorgan		...		South of Scotland			424	
Durham		...		Powys		830		West Central Scotland			6 775	
Cumbria		...		Dyfed		...		East Central Scotland			2 354	
Shropshire		1 160		Gwynedd		627		Tayside and Fife			1 143	
Warwickshire		...		Wales		1 932		North East Scotland			2 052	
Leicestershire		11 848						Highlands			6 034	
Somerset		...						Western Isles			...	
Devon		164						Shetland			...	
Cornwall		...										
England	17 846										Scotland	19 082

Source: Office for National Statistics.

England production of igneous rock by end-use 1997–2009

Thousand tonnes

Year	Roadstone					Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses	Other uses	Total
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings								
1997	49	3 120	4 412	5 141	...	1 020	1 434	...	5 073	...	...	87	20 335
1998	26	2 505	3 384	2 935	...	944	...	...	5 926	...	...	...	17 228
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

Source: Office for National Statistics.

Wales production of igneous rock by end-use 1997–2009

Thousand tonnes

Year	Roadstone					Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses	Other uses	Total
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings								
1997	(a) 11	...	359	472	...	...	...	...	486	...	...	—	2 172
1998	4	...	339	578	...	...	203	...	364	...	...	...	2 110
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

(a) BGS estimate.

Source: Office for National Statistics.

Scotland production of igneous rock by end-use 1997–2009

Thousand tonnes

Year	Roadstone					Railway ballast	Concrete aggregate	Other screened & graded	Other constructional uses	Armour-stone & gabion	Industrial uses	Other uses	Total
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings								
1997	129	...	693	6 778	...	...	...	...	7 812	...	...	(a) 24	19 863
1998	107	...	934	6 587	...	...	...	...	8 140	...	...	2	20 500
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

(a) BGS estimate.

Source: Office for National Statistics.

Insulating materials

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Insulating materials										
Imports										
Mineral wools (a)	33 438	44 986	36 100	24 135	25 128	35 145	34 486	34 748	32 142	34 156
Expanded minerals (b)	101 740	98 909	170 284	111 091	30 732	8 127	9 123	9 663	8 663	5 523
Other (c)	46 278	42 734	45 972	43 244	32 068	37 553	40 520	38 309	38 139	32 841
Exports										
Mineral wools (a)	25 329	29 911	33 825	24 700	29 984	41 965	51 274	58 525	39 471	35 600
Expanded minerals (b)	18 214	18 844	20 009	19 581	10 973	15 259	17 693	18 668	22 236	14 126
Other (c)	59 040	65 952	57 570	58 762	42 351	58 321	66 845	61 163	70 153	57 472

(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 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Iodine										
<i>Imports</i>	1 093	1 020	1 225	1 107	1 075	8 606	10 728	11 828	10 923	13 753
<i>Exports</i>	197	315	369	175	121	2 038	3 891	4 557	1 826	2 153

Iron compounds and earth colours

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Iron compounds and earth colours										
<i>Imports</i>										
Natural micaceous oxides	...	...	...	...	...	...	...	...	...	...
Earth colours containing 70% or more ferric oxide	152	122	136	74	213	40	34	48	25	217
Other iron compounds- Oxides and hydroxides	44 125	37 755	37 993	36 145	21 412	23 158	23 389	22 333	25 271	18 624
<i>Exports</i>										
Natural micaceous oxides	...	...	...	...	...	...	...	...	...	...
Earth colours containing 70% or more ferric oxide	58	20	79	450	543	147	34	150	646	598
Other iron compounds- Oxides and hydroxides	7 784	7 894	7 265	7 784	4 313	9 532	9 193	8 593	11 318	7 723

Iron ore

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Iron ore										
Production (a)	354	341	(b) 300	145	—					
Fe content (b)	195	190	170	80	—					
<i>Consumption</i>										
Home-produced (b)	350	340	300	140	—					
Imported	15 989 700	16 538 800	16 607 000	15 338 400	11 171 300					
<i>Imports</i>										
Iron ore	16 204 615	16 370 705	17 435 472	15 282 786	9 185 919	458 754	539 498	644 177	938 415	468 519
Fe content (b)	9 700 000	9 000 000	10 600 000	9 300 000	5 600 000					
<i>Exports</i>										
Iron ore	2 107	5 229	5 396	7 731	32 579	534	1 256	1 734	953	3 014

(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 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Iron and steel										
<i>Production</i>										
Pig iron	10 188 800	10 695 700	10 959 800	10 136 800	7 671 000					
Crude steel-										
Alloy qualities	862 400	760 100	778 600	824 900	393 500					
Other	12 376 500	13 828 600	13 613 700	12 695 600	9 681 000					
Total	13 238 900	13 904 600	14 392 300	13 520 500	10 080 000					
<i>Consumption</i>										
Scrap (a)	4 531 000	4 811 000	5 144 000	4 888 000	3 459 000					
Pig iron (a)	9 983 000	10 444 000	10 729 000	9 931 000	7 540 000					
Finished steel (b)	10 761 000	12 813 000	12 832 000	11 808 000	7 011 000					
<i>Imports</i>										
Scrap	180 261	154 967	204 100	228 294	213 818	81 783	84 007	159 432	133 546	80 685
Pig iron	102 531	81 689	89 863	61 657	19 703	19 955	15 201	17 957	21 724	5 758
Shot, powder, sponge etc	40 574	34 768	25 772	27 003	17 483	32 971	28 676	27 009	26 470	15 722
Ferro-alloys	276 930	288 116	298 803	314 921	161 078	190 858	194 384	271 513	430 007	155 169
Iron and steel-										
Ingots and other primary forms	722 452	1 053 176	849 803	679 019	212 829	258 168	362 218	352 643	409 887	176 318
<i>Exports</i>										
Scrap	6 105 955	7 407 174	6 013 907	6 616 708	6 007 656	938 844	1 191 273	1 335 853	1 868 340	1 184 693
Pig iron	1 387	5 407	15 892	2 523	27 765	905	1 114	4 353	2 308	5 254
Shot, powder, sponge etc	46 947	44 736	45 051	43 775	37 314	35 060	38 375	39 693	43 529	31 752
Ferro-alloys	49 637	41 879	41 841	41 963	29 668	457 209	389 373	361 635	366 798	126 154
Iron and steel-										
Ingots and other primary forms	2 246 377	2 692 654	3 514 850	3 348 794	2 118 701	965 422	1 012 574	1 450 504	1 619 056	936 583

(a) Consumption in steel making only.

(b) Net home disposals.

Consumption in the United Kingdom iron and steel industry 2000–2009

Thousand tonnes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Iron ore –										
Home produced (a)	1	1	0	1	1	0	0	0	0	0
Imported (b)	16 955	15 108	13 181	15 766	16 011	15 990	16 539	16 607	15 338	11 171
Manganese ore	36	4	4	0	6	3	6	3	4	21
Iron and steel scrap (f)	5 675	4 864	4 138	4 390	5 123	4 531	4 811	5 144	4 888	3 459
Pig iron (f)	10 970	9 713	8 312	9 955	10 010	9 983	10 444	10 729	9 931	7 540
Alloy metals (c) –										
Nickel	14	14	15	16	17	14	13	12	12	8
Molybdenum	2	2	2	2	2	2	2	2	3	1
Tungsten	0	0	0	0	0	0	0	0	0	0
Vanadium	1	1	1	0	0	0	0	0	0	0
Cobalt	0	0	0	0	0	0	0	0	0	0
Chromium	53	47	46	53	54	52	55	61	69	24
Niobium	0	0	0	0	0	0	0	0	1	0
Ferro-alloys –										
Ferro-manganese	106	91	77	94	95	92	97	100	94	70
Ferro-silico-manganese	27	24	21	23	23	22	24	24	23	17
Ferro-aluminium	3	3	3	3	3	3	3	3	3	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	42	36	35	37	37	36	38	39	37	27
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	86
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)	338	261	223	254	262	243	445	474	420	369
Limestone (e)	2 166	1 889	1 684	2 019	2 068	1 951	2 028	1 822	1 664	1 095
Lime (e)	660	561	501	530	584	593	631	585	496	378
Zinc for galvanising	87	64	66	62	53	57	60	58	52	41
Tin for tinplating	3	3	3	2	3	3	2	3	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 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Lead										
<i>Production</i>										
Concentrate (a)										
Pb content	(b) 400	(b) 400	(b) 300	(b) 300	243					
Unwrought-										
Bullion	36 000	36 000	36 000	36 000	36 000					
Refined										
Primary (c)	161 350	174 703	119 000	139 000	157 865					
Secondary	143 000	144 000	144 000	144 000	144 000					
<i>Consumption</i>										
Refined	281 686	300 000	244 800	222 123	188 726					
<i>Imports</i>										
Ores and concentrates	(b) 84	(b) 78	(b) 72	(b) 116	24	(b) 89	(b) 94	(b) 91	(b) 169	30
Ash and residues	358	447	443	423	133	136	148	670	200	90
Scrap	3 898	5 914	17 685	4 621	4 962	1 948	4 098	15 842	5 287	4 695
Unwrought										
Unrefined-										
Bullion (d)	173 910	120 871	119 726	194 113	130 312	143 042	130 338	191 196	252 593	194 998
Other	4 170	2 745	3 160	1 190	1 300	2 092	2 224	3 446	1 698	1 180
Refined	23 366	50 504	28 020	18 379	14 179	13 623	32 754	33 596	22 523	14 569
Alloys	3 811	644	7	19 924	1 798	2 424	517	35	24 743	2 741
<i>Exports</i>										
Ores and concentrates	507	202	19	177	67	337	147	91	277	98
Ash and residues	99	484	704	535	515	22	113	300	536	327
Scrap	27 248	1 859	31 942	47 660	56 055	11 791	1 364	31 087	44 505	48 579
Unwrought										
Unrefined-										
Bullion	474	73	...	...	0	329	72	...	...	3
Other	3 046	3 074	1 257	1 725	45	1 302	596	825	1 854	38
Refined	49 073	86 124	66 895	77 795	126 697	32 048	66 656	92 463	96 383	144 935
Alloys	38 806	48 589	39 246	57 466	54 505	25 241	37 477	56 008	79 823	70 000

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

(b) BGS estimate.

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

(d) Containing substantial quantities of silver.

Limestone, dolomite and chalk

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Limestone – see Building and										
Dimension stone										
<i>Production</i>										
Limestone	77 596 000	80 228 000	83 491 000	74 145 000	60 111 000					
Dolomite	11 514 000	12 101 000	7 622 000	5 509 000	3 163 000					
<i>Imports</i>										
Dolomite	218 932	111 177	146 587	146 620	149 802	4 032	3 135	3 721	4 954	4 612
Limestone flux (a)	132 061	22 067	32 446	38 404	24 368	4 492	1 615	1 679	1 699	1 764
Lime	13 995	20 681	23 946	11 452	9 091	2 035	2 388	2 747	1 887	1 235
<i>Exports</i>										
Dolomite (b)	144 707	47 360	4 642	4 786	3 438	5 106	2 230	252	249	245
Limestone flux (a)	265 228	307 136	348 347	261 462	226 165	3 991	5 744	4 894	3 168	2 763
Lime	94 648	101 138	103 928	115 728	95 357	10 989	11 740	12 831	13 946	13 382
Chalk										
<i>Production (c)</i>	7 105 000	7 376 000	7 566 000	5 874 000	4 047 000					
<i>Imports</i>	3 675	4 249	5 689	5 447	3 878	384	315	450	716	627
<i>Exports</i>	43 846	36 918	34 594	126 594	30 890	1 994	1 670	2 082	4 510	1 870

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

(b) Crude

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

Great Britain production of limestone, dolomite and chalk by broad end-uses 2009

Thousand tonnes

Mineral	Constructional uses (b)	Cement	Agricultural uses	Industrial uses (a)	Total
Limestone	46 320	...	...	2 577	56 139
Dolomite	1 955	—	...	...	3 163
Chalk	530	...	...	...	4 046
Total	48 805	8 208	1 927	4 408	63 348

(a) Including material for calcination.

Source: Office for National Statistics.

(b) Including building stone.

Great Britain production of limestone, dolomite and chalk for agricultural and industrial uses (a) 2009

Thousand tonnes

Use	Limestone	Dolomite	Chalk	Total	Of which for conversion by calcination
Agricultural	...	...	...	1 927	
Iron and steel	...	...	...	2 822	...
Glass making	...	...	...	200	
Asphalt filler	95	—	—	95	
Other fillers	...	—	...	834	
Chemical use	...	—	...	102	...
Building materials	...	—	...	122	
Water and effluent treatment and pollution control	...	—	...	233	...
Total	3 768	1 208	1 359	6 335	831

(a) Including material for calcination.

Source: Office for National Statistics.

Great Britain production of limestone and chalk for cement, 1997–2009

Thousand tonnes

Year	Limestone	Chalk	Total
1997	(a) 9 959	(a) 6 157	16 115
1998	(a) 10 465	(a) 6 736	17 201
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

(a) BGS estimate.

Source: Office for National Statistics.

Great Britain production of limestone, dolomite and chalk for agricultural uses, 1997–2009

Thousand tonnes

Year	Limestone	Dolomite	Chalk	Total	Calcination (a)
1997	...	...	590	3 053	42
1998	(b) 1 009	...	...	2 343	10
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	—

(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, 1997–2009

Thousand tonnes

Year	Limestone	Dolomite	Chalk	Total	Calcination
1997	...	...	(c) 2 035	11 332	(a) 5 579
1998	(c) 7 705	...	...	11 345	(a) 5 694
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

(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, 1996–2009

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)
1996	5 091	2 185	344	1 561	342	399	1 127	11 048
1997	...	...	361	...	340	...	...	11 332
1998	...	2 047	375	...	...	459	...	11 345
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

(a) Including material for calcination.

Source: Office for National Statistics.

Great Britain production of limestone, dolomite and chalk for calcination by end-use, 1996–2009

Thousand tonnes

Year	Agriculture	Iron and Steel	Chemicals	Building materials	Others	Total
1996	20	2 400	2 184	398	92	5 094
1997	42	2 595	2 332	435	217	5 621
1998	10	3 035	2 047	459	153	5 704
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

Source: Office for National Statistics.

Great Britain production of limestone, dolomite and chalk for iron and steel making, 1996–2009

Thousand tonnes

Year	Limestone	Dolomite and chalk	Total	Calcination (a)
1996	3 043	2 048	5 091	2 400
1997	2 935	...	...	2 595
1998	3 346	...	...	3 035
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	...

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

Source: Office for National Statistics.

Great Britain production of limestone by end-use and area of origin 2009

Thousand tonnes

Area of origin	For constructional uses (a)										For other uses										Total			
	Roadstone																							
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	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)					
North East	...	...	...	481	...	—	418	...	...	...	...	—	—	—	—	—	—	—	—	2 182				
Yorkshire and the Humber	...	335	...	1 399	...	—	...	632	997	45	91	...	—	—	—	—	—	—	—	6 277				
East Midlands	...	705	331	...	—	—	2 298	2 480	1 204	...	299	359	...	...	...	...	...	...	...	14 955				
East of England	—	—	—	—	—	—	—	—	...	—	...	—	—	—	—	—	—	—	—	...				
South East	2	—	—	...	—	—	...	...	...	...	...	—	—	—	—	—	—	—	—	1 088				
South West	...	1 022	...	3 560	—	...	5 031	928	3 194	34	364	...	—	—	...	—	...	...	...	16 831				
West Midlands	2	...	...	...	—	—	...	...	198	—	...	—	1 111	—	—	—	—	...	...	...				
North West	...	...	293	...	—	—	1 116	431	960	37	49	...	...	—	—	—	—	...	—	5 440				
England	...	2 741	...	8 983	...	...	10 700	4 908	8 056	189	908	1 293	...	...	...	...	...	...	615	48 751				
Wales	...	...	...	1 472	1	...	2 011	560	1 221	25	...	...	...	—	—	—	—	...	—	8 131				
Scotland	...	...	...	117	—	—	26	71	28	7	163	—	705	—	—	—	—	...	...	1 210				
Great Britain	...	3 317	2 928	10 572	...	...	12 737	5 538	9 305	221	...	...	...	...	...	...	...	95	...	58 092				
England										Wales										Scotland				
County		Total		County		Total		County		Total		County		Total		Region		Total						
Avon		3 388		Northumberland		...		Clwyd		2 958		East Central Scotland		...										
Buckinghamshire		1		North Yorkshire		4 811		Dyfed		1 297		Highlands		142										
Cambridgeshire		...		Nottinghamshire		...		Gwent		...		North East Scotland		151										
Cleveland		...		Oxfordshire		...		Gwynedd		...		Tayside and Fife		...										
Cornwall		...		Shropshire		...		Mid Glamorgan		2 808		West Central Scotland		...										
Cumbria		2 683		Somerset		10 301		Powys		...														
Derbyshire		11 744		South Yorkshire		...		South Glamorgan		631						Scotland		1 210						
Devon		...		Staffordshire		...		West Glamorgan		...														
Dorset		236		Tyne and Wear		...																		
Durham		1 751		Wiltshire		21						Wales		8 131										
Gloucestershire		1 334		West Yorkshire		...																		
Hereford and Worcester		...																						
Humberside		13		England		48 751																		
Kent		...																						
Lancashire		2 758																						
Leicestershire		...																						
Lincolnshire		581																						
Northamptonshire		...																						

(a) Including dolomite.

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

(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).

Source: Office for National Statistics.

England production of limestone by end-use 1998–2009

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																	
1998	...	4 441	4 425	21 124	...	12	12 094	...	21 989	...	765	...	...	...	...	...	...	255	...	...	2 775	79 780
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	

(a) Including dolomite.

(d) For water & effluent treatment and pollution control

(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).

Source: Office for National Statistics.

Wales production of limestone by end-use 1998–2009

Thousand tonnes

Year	For constructional uses (a)																			For other uses										Total
	Roadstone																													
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	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										
1998	37	1 107	341	2 849	...	(e) 110	3 607	...	6 653	...	119	...	...	...	...	...	—	...	...	—	17 136									
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									

(a) Including dolomite.

(d) For water & effluent treatment and pollution control

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

(e) BGS estimate.

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

Source: Office for National Statistics.

Scotland production of limestone by end-use 1998–2009

Thousand tonnes

Year	For constructional uses (a)										For other uses										Total
	Roadstone																				
	Building stone	Sold coated	For coating at remote plants	Uncoated	Surface dressing chippings	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	
1998	...	38	—	53	...	—	10	...	123	...	(d) 125	—	...	...	...	...	—	...	...	—	1 535
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

(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, 1975–2009

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
1975	300	90	8	1 735	280	65	1 205	8
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	109	224	—	1 095	—	—	378	—

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 on p.62 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 by end-use and area of origin 2009

Thousand tonnes

Area of origin	Building stone	Constructional use (a)	Agricultural use (b)	Other uses (b)	Total
North East	...	1 344	...	...	2 012
Yorkshire and the Humber	...	...	...	...	352
East Midlands	—	...	...	...	...
England	...	...	408	...	...
Wales	—	...	—	—	...
Scotland	—	...	...	—	...
Great Britain	...	1 954	...	...	3 164

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

Source: Office for National Statistics.

(b) Including material for calcination.

Great Britain production of dolomite by end-use 1997–2009

Thousand tonnes

Year	Building stone	Constructional use (a)	Agricultural use (b)	Other uses (b)	Total
1997	(c) 10	14 465	...	...	17 282
1998	10	13 070	...	...	15 632
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

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

Source: Office for National Statistics.

(b) Including material for calcination.

(c) BGS estimate.

England (d) production of dolomite by end-use 1997–2009

Thousand tonnes

Year	Building stone	Constructional use (a)	Agricultural use (b)	Other uses (b)	Total
1997	(c) 10	11 607	1 070	(c) 1 593	14 280
1998	...	11 289	...	...	13 723
1999	...	9 681	...	...	11 485
2000	15	9 509	...	...	11 120
2001	...	...	426	...	...
2002	9	...	543	...	...
2003	7	...	676	...	10 327
2004	8	...	...	...	...
2005	...	8 177	568	...	...
2006	...	8 434	...	...	10 238
2007	...	...	601	...	...
2008	2	...	539	...	...
2009	...	...	408	...	...

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

(d) Small amounts of dolomite are also produced in Wales and very minor amounts in Scotland.

(b) Including material for calcination.

(c) BGS estimate.

Source: Office for National Statistics.

Great Britain production of chalk by end-use and area of origin 2009

Thousand tonnes

Area of origin	Cement	Construc- tional use	Agricultural use	Industrial uses	Total
Humberside	...	...	58	...	1 703
North Yorkshire	—	6	—	—	6
Yorkshire and the Humber	...	...	58	...	1 709
Lincolnshire	—	...	...	—	...
East Midlands	—	...	...	—	...
Cambridgeshire	...	—	...	...	...
Norfolk	—	—	...	—	...
Suffolk	—	—	...	...	...
Essex	—	—	...	—	...
Hertfordshire	—	—	43	—	43
Bedfordshire	...	—	—	—	...
East of England	...	—	135	...	...
Kent	—	349	47	—	397
West Sussex	—	—	35	—	35
Hampshire	—	...	...	—	...
Surrey	—	—	...	—	...
Isle of Wight	—	...	5	—	...
South East	—	...	...	—	471
Devon	—	—	...	—	...
Wiltshire	69	—	—	—	69
South West	69	—	...	—	...
Great Britain (England)	...	530	...	...	4 047

Source: Office for National Statistics.

England production of chalk by end-use 1997–2009

Thousand tonnes

Year	Cement	Construc- tional use	Agricultural use	Industrial uses	Total
1997	(a) 6 157	768	590	...	9 550
1998	(a) 6 736	768	...	397	9 934
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

(a) BGS estimate.

Source: Office for National Statistics.

Lithium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Lithium										
<i>Imports</i>										
Oxide and hydroxide	446	385	614	466	914	1 299	1 364	2 212	1 764	3 743
Carbonate	657	650	779	536	622	1 158	1 525	2 150	1 804	2 477
<i>Exports</i>										
Oxide and hydroxide	125	94	92	232	569	289	288	389	494	2 268
Carbonate	203	271	158	216	193	396	723	572	377	671

Magnesia

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Magnesia										
<i>Imports</i>										
Dolomite (c)	218 932	111 177	146 587	146 620	149 802	4 032	3 135	3 721	4 954	4 612
Magnesite	13 896	10 644	10 194	7 016	3 567	1 843	1 076	969	906	556
Magnesia-										
Dead burned	14 934	5 366	22 256	14 239	8 178	3 987	2 145	4 453	4 028	3 378
Caustic-calcined	49 037	44 641	35 650	40 402	32 537	8 004	6 937	5 335	7 824	8 136
Other	14 872	14 890	7 276	4 659	3 158	4 135	4 824	3 805	4 186	3 628
Kieserite	52 658	150 248	230 504	14 047	11 610	1 722	2 421	2 841	2 506	2 437
Magnesite or chrome-magnesite										
refractory bricks and shapes (a) (b)	35 280	27 792	30 884	29 876	18 981	16 519	18 171	18 886	19 800	13 369
<i>Exports</i>										
Dolomite (c)	144 707	47 360	4 642	4 786	3 438	5 106	2 230	252	249	245
Magnesite	87	26	51	316	518	42	48	129	169	583
Magnesia-										
Dead burned	2 273	1 612	2 022	1 287	902	1 488	896	952	713	612
Caustic-calcined	2 712	3 160	2 632	1 778	1 703	2 457	2 771	2 185	1 064	1 543
Other	15 092	14 264	11 717	10 582	7 057	11 935	12 074	10 262	10 411	7 763
Magnesite or chrome-magnesite										
refractory bricks and shapes (a) (b)	5 333	3 619	2 409	1 364	651	5 045	3 826	2 189	2 091	1 156

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

(b) Including dolomite bricks.

(c) Crude.

Magnesium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Magnesium										
<i>Imports</i>										
Ferro-silico-magnesium	5 448	3 810	2 303	1 614	512	2 754	1 738	1 168	1 744	536
Scrap	2 389	1 982	2 721	1 685	748	966	780	789	816	380
Unwrought	5 322	6 408	5 201	3 813	1 763	5 567	6 325	6 229	8 700	3 740
Unwrought alloys	7 954	7 197	3 904	3 618	2 386	8 628	7 376	4 557	8 351	6 222
Wrought	3 187	3 077	3 602	4 750	3 576	7 724	7 600	8 208	16 710	13 762
<i>Exports</i>										
Ferro-silico-magnesium	542	653	917	976	458	409	441	807	1 231	709
Scrap	1 933	1 772	2 398	2 222	1 937	1 702	1 413	2 938	4 439	3 665
Unwrought	650	209	8	38	13	808	275	82	220	242
Unwrought alloys	5 537	4 872	4 911	4 062	2 470	13 258	12 601	11 559	14 155	13 412
Wrought	282	605	1 533	1 333	674	2 873	3 084	5 448	5 856	5 109

Manganese

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Manganese										
<i>Consumption in Iron and Steel Industry</i>										
Ore	2 900	6 000	3 300	4 100	20 500					
Ferro-manganese	92 120	96 770	100 100	93 990	69 770					
Ferro-silico-manganese	22 170	23 620	24 430	22 940	17 030					
<i>Apparent consumption (a)</i>	104 000	116 000	125 000	120 000	68 000					
<i>Imports</i>										
Ores and Concentrates	698	8 458	1 569	4 133	941	244	431	433	1 045	613
Ferro-manganese	...	86 598	100 694	96 461	49 700	38 427	37 430	57 728	130 012	45 265
Ferro-silico-manganese	57 136	59 985	56 036	52 966	37 114	24 041	23 440	29 887	59 497	24 468
Scrap	0	1	60	751	83	1	1	99	1 528	172
Unwrought	7 858	8 169	6 728	7 895	3 295	8 199	6 752	9 303	15 160	4 488
Wrought	365	394	232	126	746	533	542	599	535	1 380
Oxides	7 232	7 216	9 646	7 913	5 438	1 995	1 813	1 979	3 348	3 009
<i>Exports</i>										
Ores and Concentrates	64	200	114	244	65	40	192	88	207	90
Ferro-manganese	...	946	1 136	1 210	963	1 297	949	1 359	1 293	933
Ferro-silico-manganese	5 003	60	7	49	65	1 513	90	11	27	59
Scrap	...	0	...	314	126	...	1	...	103	37
Metal (b)	3 100	2 000	2 100	3 100	1 800	4 200	* 2 500	3 600	6 100	1 800
Oxides	3 440	6 284	3 785	4 571	1 768	957	1 529	1 026	1 597	1 289

(a) BGS estimates; see explanatory notes.

(b) BGS estimates, based on known imports into certain countries, may include some scrap.

Marble

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Marble										
<i>Imports</i>										
Dimension stone-										
Unworked	63 046	32 609	37 404	37 444	26 787	18 901	17 463	20 144	21 150	16 466
Worked	77 698	100 555	111 039	114 870	100 648	52 806	65 977	63 620	74 273	70 696
Crushed and powdered	169 551	245 601	248 711	233 499	177 802	4 344	10 242	11 217	12 482	8 586
<i>Exports</i>										
Dimension stone-										
Unworked	2 126	1 549	2 227	1 019	728	287	184	553	264	493
Worked	2 905	4 068	4 740	2 934	1 603	4 951	6 441	7 319	5 292	3 294
Crushed and powdered	2 834	1 176	3 229	2 637	1 723	173	213	641	484	317

Mercury

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Mercury										
<i>Imports</i>										
Elemental	32	2	3	2	1	314	107	91	57	29
Oxide	0	0	0	...	...	3	2	...	...	...
<i>Exports</i>										
Elemental	191	79	4	6	179	996	491	59	102	741
Oxide	0	1	...	...	...	1	10	...	...	...

Mica

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Mica										
<i>Imports</i>										
Crude (a)	296	251	289	377	328	125	108	92	129	139
Ground	6 684	5 856	6 705	7 061	6 396	1 710	1 824	1 831	2 308	1 862
Waste	4 485	3 474	3 433	2 030	49	563	404	476	336	4
Worked	1 809	726	919	1 310	604	4 141	4 861	4 277	5 357	5 023
<i>Exports</i>										
Crude (a)	22	0	2	14	4	43	1	2	28	2
Ground	4 030	4 593	3 818	4 735	3 928	2 782	4 694	2 835	3 612	3 741
Waste	0	...	0	...	12	14	...	6	...	11
Worked	361	412	629	690	650	4 517	4 844	6 065	8 310	6 395

(a) Including sheets or splittings.

Molybdenum

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Molybdenum										
<i>Consumption in Iron and Steel</i>										
Industry (a)	2 040	2 140	2 390	2 700	940					
<i>Apparent consumption (a) (b)</i>	7 100	7 900	5 400	4 000	1400					
<i>Imports</i>										
Roasted molybdenite concentrates	16 916	16 591	15 215	13 075	8 486	188 684	214 773	271 386	312 431	91 550
Other ores and concentrates	1 684	2 441	3 165	2 055	521	37 649	44 661	47 323	45 898	6 401
Ferro-molybdenum	861	640	515	369	325	14 352	15 250	13 635	9 489	4 028
Scrap	1 036	899	751	846	469	31 807	23 074	16 698	22 499	6 494
Powders	143	436	58	69	153	695	923	1 436	3 060	2 714
Unwrought	135	145	192	102	50	5 955	4 978	5 788	3 855	1 216
Wrought	1 563	1 965	389	69	34	9 077	7 393	7 978	4 158	1 424
Oxides and hydroxides	630	635	513	1 433	510	26 908	21 064	19 655	32 752	4 450
<i>Exports</i>										
Roasted molybdenite concentrates	119	100	6	3	3	2 981	427	122	72	30
Other ores and concentrates	60	66	72	61	32	518	700	720	1 145	130
Ferro-molybdenum	11 501	12 004	11 823	11 283	7 634	318 935	262 368	263 672	284 904	87 193
Scrap	450	259	207	217	356	10 788	5 638	3 971	5 848	4 490
Powders	52	17	14	—	53	857	359	55	34	745
Unwrought	47	1	2	2	3	413	38	121	54	61
Wrought	129	318	13	22	21	4 151	8 202	1 833	2 197	1 476
Oxides and hydroxides	2	...	2	8	0	941	3	5	109	10

(a) Metal content.

(b) BGS estimates; see explanatory notes

Nepheline syenite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Nepheline syenite										
<i>Imports</i>	47 672	81 960	40 484	44 275	32 462	4 052	4 201	3 617	4 355	3 516
<i>Exports</i>	38	557	2 430	902	204	14	271	635	520	62

Nickel

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Nickel										
<i>Production (a)</i>	37 600	36 750	34 050	40 800	17 800					
<i>Consumption (c)</i>										
Iron and steel industry	14 380	13 370	12 450	12 140	7 980					
Other (b)	18 000	19 000	20 000	20 000	24 000					
Total (d)	32 400	32 400	32 400	32 400	32 400					
<i>Imports</i>										
Mattes, sinters etc.	57 492	56 336	62 637	63 553	25 929	253 895	369 361	735 537	3 550	177 459
Ash and residues	...	50	0	0	...	...	8	13	6	...
Scrap	10 927	7 975	10 376	10 291	9 593	31 417	37 625	55 794	53 910	32 297
Ferro-nickel	11 325	13 169	14 960	16 520	2 777	22 137	34 683	70 052	44 805	6 221
Unwrought	24 019	17 414	21 044	16 888	8 003	195 283	237 631	412 993	182 155	75 146
Unwrought alloys	1 629	2 883	2 947	3 210	3 596	12 304	27 115	37 999	38 922	39 009
Oxides	277	59	49	13	1	1 780	534	773	158	31
<i>Exports</i>										
Mattes, sinters etc.	196	517	40	26	107	1 520	3 612	575	902	617
Ash and residues	1 246	4 331	15 623	13 588	6 450	12 019	25 412	107 080	74 891	24 272
Scrap	14 119	15 555	16 872	18 229	12 693	46 495	50 350	70 146	74 878	39 925
Ferro-nickel	55	329	52	81	18	873	1 471	1 378	1 779	350
Unwrought	38 524	31 610	24 147	26 235	15 834	267 251	314 738	458 448	324 550	142 166
Unwrought alloys	6 141	6 486	4 375	4 378	4 753	62 045	75 063	80 199	72 035	68 164
Oxides	3	7	8	19	8	38	101	85	316	157

(a) Nickel content of refinery products.

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

(c) Metal content.

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

Niobium (see Tantalum and Niobium)

Peat

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Thousand cubic metres					£ thousand				
Peat										
<i>Production</i>	1 505	1 593	885	760	887					
	Tonnes									
<i>Imports</i>										
Peat and agglomerated peat	426 908	433 419	508 843	430 590	448 001	28 463	22 332	24 861	26 555	25 285
<i>Exports</i>										
Peat and agglomerated peat	32 219	20 736	33 514	41 645	42 965	3 631	3 544	4 249	4 859	7 546

Perlite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Perlite										
<i>Imports</i>	34 450	101 910	150 255	45 064	36 315	2 624	3 357	3 200	3 304	2 675
<i>Exports</i>	938	885	947	702	414	163	201	218	74	90

Petroleum and natural gas (also see Primary fuels)

In September 2010, the Department of Energy and Climate Change (DECC) published updated figures for the estimated ranges of UK hydrocarbon reserves and ultimate recovery to the end of 2009. These were based on data provided by hydrocarbon companies during February and March 2009 and included both onshore and offshore areas.

	Proven	Probable	Proven and probable	Possible	Maximum
Total oil reserves (a)	378	390	769	343	1111
Estimated ultimate recovery (a)	3761	390	4152	343	4494
Total gas reserves (b)	256	308	564	276	840
Estimated ultimate recovery (b)	2538	308	2846	276	3122

(a) millions of tonnes

(b) billion (10⁹) cubic metres

The reserves estimates show that the amount of oil produced in 2009 (68 million tonnes) was replaced by an almost identical increase in the estimate of remaining oil reserves (67 million tonnes). The proven and probable reserves now stand at 769 million tonnes, which is a decrease of 1 million tonnes compared to 2008.

Annual net gas production was 57 billion cubic metres (bcm) in 2009. The estimate of proven plus probable reserves now stand at 564 bcm which is a reduction of 37 bcm compared to the previous year. Taking production into account means that there was an effective reserves replacement of 20 bcm. The development of three offshore dry gas fields approved during 2009 (Babbage, Topaz and Seven Seas) contributed to the gains in proven reserves.

The figures for cumulative production (3383 million tonnes of oil and 2282 billion cubic metres of gas to end 2009) have been added to the remaining reserves to give the 2010 estimates of ultimate recovery.

Development and production

DECC approved 9 new offshore developments during 2010 (compared with 6 in 2009):

Field name	Field type	Block number	Operator at time of approval	When approved
Maule	Oil	21/10	Apache	March
Bacchus	Oil	22/06a	Apache	June
Athena	Oil	14/18b	Ithaca	September
Huntington	Oil	22/14b	E.ON Ruhrgas	November
Laggan	Condensate	206/01	Total	March
Tormore	Condensate	205/05a	Total	March
Islay	Condensate	3/15	Total	July
Jasmine	Condensate	30/6a	ConocoPhillips	October
Wingate	Gas	44/24b	Wintershall	September

There were also approvals for 4 incremental projects associated with existing offshore fields, Balmoral (in Block 16/21), Armada (22/05a), Judy/Joanne (30/7a) and West Franklin (29/05b).

In September, approval was granted to Egdon Resources for re-development of the onshore Kirkleatham gasfield in North Yorkshire. Consent was also given for Alkane Energy to extract coal mine methane vent gas at the site of two abandoned mines, Florence Colliery in Staffordshire and King's Mill in Nottinghamshire, to use in electricity generation.

Fields which produced their first hydrocarbons were:

Field name	Field type	Block number	Operator at time of approval	Date on stream
Lochranza	Oil	15/20a	Maersk	January
Maule	Oil	21/10	Apache	June
Bardolino	Oil	22/13a	Shell	September
Burghley	Oil	16/22	Talisman	October
Auk North	Oil	30/16	Talisman	November
Ceres	Gas	47/9b	Centrica	March
Eris	Gas	47/8c	Centrica	March
Babbage	Gas	48/2a	E.ON Ruhrgas	August

The Lochranza oilfield was discovered by well 15/20a-3 in 1986 in Tertiary fan sandstones, which are now assigned to the Mey Sandstone Member of the Paleocene Lista Formation. It has been developed by Maersk with two horizontal production wells tied back to the subsea facilities of nearby Dumbarton field, which itself has been redeveloped (and renamed by Maersk) from the formerly depleted and abandoned Donan field.

Maule was discovered by Apache in October 2009 in a well drilled from the Forties Alpha platform (21/10-A52) and has been developed using the infrastructure of the Forties field. The reservoir is an Eocene sandstone unit overlying the late Paleocene Forties Sandstone Member. Initial production was from a single well with a flow rate of about 11,750 barrels per day and recoverable reserves are estimated to be about 8 million barrels of oil equivalent.

Bardolino was discovered by well 22/13a-1 in 1989 and has been developed by Shell as a near-field satellite though a single well that is tied back via the Howe subsea manifold to the platform of the Nelson field. Production capacity, from a basal Upper Jurassic reservoir that consists of Fulmar and Hugin sandstones is estimated to be about 4500 barrels of oil equivalent per day, with a field life expectancy of about 11 years.

Burghley was discovered in 2005 by well 16/22-7 and has been developed by Talisman through a pipeline linking it to the floating production vessel of the Balmoral field in the adjoining block (16/21). Burghley has a Paleocene sandstone reservoir and production is expected to reach 15,000 barrels of oil and 2.9 MMscf million standard cubic feet (0.821 MMcm, million cubic metres) gas per day, with a potential field life of 15 years.

Auk North in Block 30/16 is another Talisman development brought onstream with three horizontal wells completed subsea and tied back to the Fulmar A platform. Estimated reserves are 13 million barrels of oil equivalent proved or 17 million proved and probable. Production from the Rotliegend reservoir is predicted to peak at 10,000 barrels of oil equivalent per day.

Ceres was discovered in 1982 by well 47/9b-4. Following the completion of a successful appraisal well (47/9c-11X) as a production well in 2008, the Ceres gas field has been developed by Centrica as a single well tieback to the subsea manifold of the Mercury field, jointly with the nearby Eris gas field, which was discovered by well 47/8c-4 in 2007. Both fields have Rotliegend sandstone reservoirs (Permian).

Babbage was discovered by well 48/2-2 in 1989 and subsequently upgraded following the results of well 48/2a-4 drilled by E.ON Ruhrgas UK North Sea in 2006. Phase one of the Babbage development included the installation of a platform, drilling 3 production wells and laying a 28 km pipeline for export through the West Sole system. Gas production from the low permeability Leman Sandstone Formation (Permian) is expected to be about 2.12MMcm per day (~75 MMscf per day), with a potential total of 5000 MMcm (~176.6 billion cubic feet) over a predicted field life of 20 years.

Exploration and appraisal

DECC figures show that 28 exploration, 34 appraisal and 130 development wells were drilled offshore in 2010. While the number of drilled appraisal and development wells remained comparable to long term averages, for exploration wells the low level of activity that has characterised the present century was maintained, with the 28 wells representing only half the mean number of exploration wells drilled annually between 1966 and 2009 (Figure 1). A fall in the number of exploration wells in the central North Sea was balanced by a rise of activity in both the northern and southern North Sea areas.

Onshore, the total of 8 exploration wells was equal to the annual mean for the previous 10 years, while the figures for appraisal (1) and development (12) wells showed a slight decrease. At a site east of Blackpool, Cuadrilla Resources drilled a well with a target depth of 2800 metres (9100 feet) in search of shale gas in the Carboniferous Bowland Shale Formation. Shale gas is an unconventional hydrocarbon resource and consists of the gas that remains trapped in shale after forming from the breakdown of organic material. It can be extracted by fracturing the host rock in situ by pumping water usually with a small proportion of chemical additives into the formation. The initial well was reported as a success and further investigations are planned.

The following exploration wells were classified by DECC as significant discoveries, with flow rates >15MMscf per day gas (~0.530 MMcm) or 1000 barrels per day oil:

Well	Hydrocarbon type	Discovery operator at end of 2010	Date of discovery
28/9-1	Oil	Encore	June
211/8c-4	Oil	Valiant	June
206/4-2	Gas	Total	October
28/9-2	Oil	Encore	December

Well 28/9-1 drilled by EnCore Oil in its Catcher prospect discovered light oil (API ~ 30°) in a reservoir identified as the Cromarty Sandstone Member (early Eocene), with porosities of about 34%. A subsequent sidetrack (28/9-1Z) targeting the company's Catcher East prospect confirmed that the reservoirs in the two areas were in communication and established a proven oil column of 80 metres (267 feet). A further sidetrack (28/9-1Z) downdip in the south-west of the area found an oil-water contact that was consistent with the level of hydrocarbons in the previous wells. The potential reserves of up to 300 million barrels of oil originally estimated by the operator were subsequently revised downwards to 60-100 million barrels of recoverable reserves, but the whole accumulation, which lies in a shallow previously unexplored part of the West Central Shelf, remains one of the biggest of recent discoveries in the UK sector of the North Sea.

The Varadero prospect of EnCore Oil was drilled by well 28/9-2 in the same block as its Catcher discovery and found a 120 metres (400 feet) thick oil column with 106 feet of net pay in early Eocene fan sandstones of the Tay Sandstone Member. The reservoir shows porosities of 33% with the oil measured at 26° API.

Well 211/8c-4 drilled by Valiant Petroleum in its Northern North Sea Tybalt East prospect proved an oil column of 84 metres (278 feet) in submarine fan sandstones of the Upper Jurassic Magnus Sandstone Member. A sidetrack (211/8c-4Z) investigating the Tybalt West prospect proved a thicker sandstone interval and showed that this structure was probably in communication with Tybalt East. Flow rates of 5400 barrels per day of light oil (API 38-40°) and 3.3 MMscf (~ 0.117 MMcm) of gas per day were recorded in the sidetrack well. Valiant is to carry out further appraisal before it considers development, possibly in conjunction with its nearby discoveries in blocks in Blocks 211/8a and 211/13a.

In the West of Shetland area, well 206/4-2 drilled by Total in its Edradour prospect discovered reserves of gas and gas condensate in a Cretaceous reservoir, but was suspended without testing at the end of the year. It was later confirmed as a significant discovery by DECC and lies close to the Laggan and Tormore fields, which are currently under development by the same operator.

There were several other reported discoveries which remained untested. These included well 205/21a-5 drilled by Hurricane in their Whirlwind prospect, West of Shetland, which encountered hydrocarbons in two intervals, one of which consisted of fractured Lewisian basement. In the southern North Sea, Dana Petroleum announced that well 48/1a-5 discovered potential gas reserves of 130 billion cubic feet in the Leman Sandstone reservoir of their Platypus prospect, while in the central North Sea, Wintershall reported a Tertiary discovery in their Blakeney prospect, drilled by well 21/27b-7.

Previous discoveries that were successfully appraised included Cladhan in the northern North Sea, where well 210/29a-4Z drilled by Sterling Resources was reported to have encountered a gross hydrocarbon column 48 metres (159 feet) thick in a Jurassic reservoir composed of channel sands with a mean porosity of 21%. A restricted test established a flow rate of 5,903 barrels per day of light oil (34°API). Following the results of a subsequent sidetrack (210/29a-4Y) estimated possible reserves were revised upwards to more than 250 million barrels. On the East Shetland Platform, Xcite Energy drilled well 9/3b-6 as a further appraisal of the Bentley field. It proved an oil column 34 metres (113 feet) thick in the Dornoch Formation and a subsequent sidetrack (9/3b-6Z) flowed 2,900 barrels per day of oil on testing. Bentley is a heavy oil accumulation (10-12°API) with total reserves of up to 680 million barrels. The reservoir has porosities of 36% and good permeability, but the heavy oil will need to be recovered using downhole pumps, with recoverable reserves currently estimated as 160 million barrels. Nearby, the Kraken discovery made by well 9/2-1a and confirmed by well 9/2b-2 in the Heimdal Sandstone Member of the Paleocene Lista Formation was appraised by wells 9/2b-4 and 9/2b-4Z, drilled by Nautical. The wells were reported to be successful, proving oil-bearing sandstones with porosities of up to 40%, but testing was incomplete because of operational difficulties.

In the Outer Moray Firth, Nexen drilled well 15/26b-10 to appraise the Rochelle West discovery, which could be developed as a tie-back to the Lower Cretaceous East Rochelle field. In the same area, Nexen well 15/23d-15 encountered only minor hydrocarbons in an attempt to prove a northern extension of the Bugle oilfield, which was discovered in Upper Jurassic fan sandstones in 1997.

In the central North Sea close to the Ettrick field, well 20/2a-9 was drilled by Nexen as a successful appraisal of the Blackbird discovery. It proved 75 feet of oil-bearing reservoir sands in the Upper Jurassic and flowed 7,000 barrels per day on testing, before being suspended as a possible producer. Further south, near the Judy-Joanne High, well 30/6a-8 drilled by Ithaca Energy proved 22 feet of net pay in the Mey Sandstone Member of the Paleocene Lista Formation in a down dip extension of the Stella gas condensate discovery in well 30/6-6Z. A subsequent test flowed 2,850 barrels per day light oil (39°API) from sandstones with porosities of 27%, and together with the results of a further sidetrack (30/6a-8Z) confirmed a substantial increase in the size of the original discovery, with proven reserves rising to more than 20 million barrels of oil equivalent.

In the southern North Sea, wells 44/11-4 and 44/11-5 were drilled by GDF Suez as western appraisals of the Cygnus discovery. Both wells flowed at similar rates, producing 28-29 MMcfd gas from the Leman Sandstone (Permian) reservoir. Reserves in Cygnus are likely to increase (possibly up to 1Tcf), with the eastern part of the structure already estimated to contain 500 billion cubic feet.

West of Shetland, well 205/21a-4Z was drilled by Hurricane to appraise the Lancaster discovery where oil was found in a reservoir composed of fractured Lewisian basement. Flow rates of 2350 and 2450 barrels per day of 38°API oil were achieved in two separate tests.

Oil Price

After starting the year at around \$80, the price of a barrel of Brent crude oil fell below \$70 at the beginning of February before rising steadily to reach \$89 in early May. A sharp decrease in the first three weeks of May brought a return to February's low before seven months of fluctuating increases, linked to rising demand in the developing world, political instability in the Middle East and prolonged cold weather in Europe and the USA, saw a barrel reach an annual high of almost \$95 by the end of the year.

Regulation

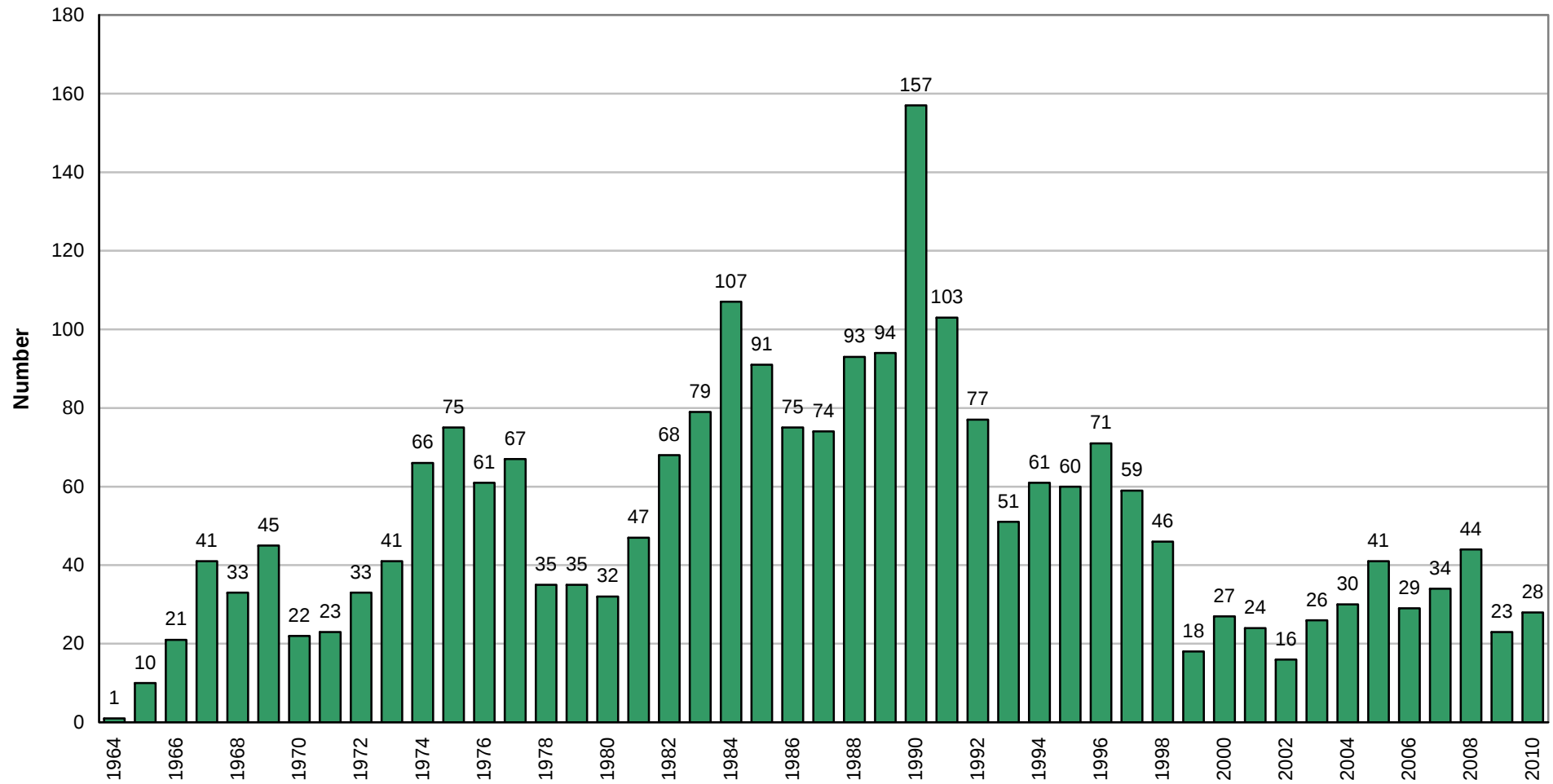
In their annual forecast published in February, the industry body Oil and Gas UK expressed concerns about the lack of investment funds available to maximise recovery of resources from the UK's mature basins with their aging infrastructure, but pointed out that the industry with its expenditure of £12.3 billion in exploration, development and production operations, remains the UK's largest industrial investor.

The main rate of corporation tax for companies operating within the North Sea regime remaining at 30%. In their annual economic report published in July, Oil and Gas UK pointed out that in the previous fiscal year the oil and gas industry had contributed £6.4 billion in corporation tax, representing nearly 20% of the total received by the Exchequer. To help encourage developments in High Pressure High Temperature areas, the budget made some changes to the field allowance, while also extending the benefits of the allowance to previously decommissioned fields.

The redetermination by DECC of the oil accumulation north of the Tern field as a new field to be known as Tern North had the effect of making it exempt from Petroleum Revenue Tax. Such redeterminations may become more common in future, as efforts increase to stimulate marginally economic developments.

In April, DECC and the UK Health and Safety Executive had to consider the possible impact on deepwater drilling around the UK of the explosion of the *Deepwater Horizon* drilling rig in the Gulf of Mexico. Although the last blowout incident in the UK was in 1991, and up to 400 wells have been drilled safely in deepwater to the West of Shetland, DECC reacted by announcing plans to increase rig inspections. However, calls from the European Union to suspend licensing were resisted and, by the end of the year, Chevron were pressing ahead investigating their Lagavulin prospect in the Atlantic west of Shetland, with deepwater well 217/15-1, the northernmost well yet drilled in UK waters.

Total number of offshore exploration wells by year 1964-2010



Source: Department of Energy and Climate Change

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Petroleum										
<i>Production</i>										
Crude petroleum	77 179 000	69 665 000	70 357 000	65 765 000	64 001 000					
Condensates and other (a)	7 543 000	6 913 000	6 475 000	6 201 000	5 410 000					
Refined petroleum products	85 673 000	82 839 000	81 278 000	81 278 000	74 857 000					
<i>Consumption (inland deliveries)</i>										
<i>of refined products</i>										
<i>Used as fuels-</i>										
Refineries	5 602 000	4 878 000	4 681 000	4 751 000	4 544 000					
Power generation	1 596 000	1 527 000	1 390 000	1 982 000	1 771 000					
Elsewhere	63 716 000	63 653 000	63 392 000	61 406 000	58 413 000					
Not used as fuels	10 439 000	9 756 000	7 967 000	7 883 000	7 255 000					
Total	80 736 000	79 814 000	77 430 000	76 021 000	71 983 000					
<i>Imports</i>										
Crude petroleum	54 067 943	55 735 570	44 129 689	52 103 843	50 656 965	11 519 286	14 579 475	11 671 463	20 537 880	14 519 898
Partly refined petroleum and refined products	28 967 912	32 427 307	40 845 976	26 175 761	26 122 966	7 573 519	9 536 164	12 173 132	12 769 749	9 287 712
<i>Exports</i>										
Crude petroleum	50 619 044	47 864 601	47 058 702	43 354 245	43 550 953	10 979 393	12 929 441	12 663 222	16 674 142	12 536 388
Partly refined petroleum and refined products	31 553 984	31 621 552	29 396 482	31 936 044	32 271 444	7 402 777	8 801 422	8 515 217	13 373 616	10 482 121
Natural gas										
<i>Production</i>										
<i>Methane (b)</i>										
Colliery	65 000	65 000	62 000	48 000	49 000					
Offshore and onshore	88 154 000	79 947 000	72 063 000	69 617 000	59 670 000					
<i>Consumption</i>										
Natural gas (c)	86 630 000	89 375 000	90 169 000	93 063 000	85 873 000					
<i>Imports</i>										
Liquefied natural gas (e)	468 994	3 230 963	1 281 448	766 281	9 508 135					
Natural gas in gaseous state (e)	13 069 842	16 911 082	26 555 349	33 229 870	29 055 304					
Total	13 538 836	20 142 045	27 836 797	33 996 151	38 563 438	1 730 000	2 510 000	2 885 000	6 425 000	4 775 000
Other natural gas (d) (b)	856 485	3 262 978	1 198 737	1 046 202	533 498	231 638	810 593	379 858	465 986	164 980
<i>Exports</i>										
Liquefied natural gas and										
Natural gas in gaseous state (e)	8 270 123	10 369 017	10 589 741	10 547 780	11 788 544	735 000	1 315 000	995 000	1 945 000	1 220 000
Other natural gas (d) (b)	3 502 748	2 508 137	2 402 752	3 295 288	2 798 642	860 649	751 469	758 232	1 318 884	865 965

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

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

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

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

(e) Tonnes of oil equivalent, converted from GWh using 85.985 GWh to 1 tonne of oil equivalent. Source: Department of Energy and Climate Change.

Oil and gas field tables

United Kingdom production of onshore and offshore crude petroleum and natural gas by fields are produced by the Department of Energy and Climate Change. To avoid duplication, these tables will no longer be reproduced in this publication. To view this data please visit <https://www.og.decc.gov.uk/information/statistics.htm>

Phosphorus

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Phosphorus										
<i>Consumption in Iron and Steel Industry</i>										
Ferro-phosphorus	1 130	1 200	1 240	1 160	860					
<i>Imports</i>										
Phosphate rock	30 177	7 803	23 052	28 971	5 600	1 925	766	1 486	3 604	865
Ammonium phosphates	121 703	129 771	208 736	105 024	102 567	18 127	19 703	42 766	48 306	27 488
Superphosphates	164 196	141 417	172 560	126 083	126 402	18 410	15 974	31 497	53 975	21 044
Basic slag	3 878	6 289	...	...	...	198	262	...	...	...
Other phosphatic fertilisers	11 911	9 409	26 718	24 870	4 986	1 063	1 172	2 746	5 319	443
Elemental phosphorus	9 468	—	...	0	108	12 846	—	...	36	734
Phosphoric acids	161 905	170 353	149 686	110 067	77 210	36 875	41 196	38 229	64 480	51 989
Calcium phosphates	111 811	120 402	113 632	79 069	81 205	19 754	22 607	22 397	32 904	26 146
Sodium phosphates and orthophosphates	37 701	52 735	74 532	16 482	14 249	15 228	24 188	24 585	17 662	14 639
Polyphosphates including ammonium and sodium	56 016	25 236	51 155	29 107	27 030	17 080	11 337	13 348	25 957	21 591
<i>Exports</i>										
Phosphate rock	1 548	335	504	759	514	208	254	313	622	353
Ammonium phosphates	227	269	276	31 217	179	357	349	263	20 978	392
Superphosphates	0	1 470	12	0	236	0	301	21	23	104
Basic slag	—	0	...	...	...	—	1	...	...	...
Other phosphatic fertilisers	457	476	44	...	17	186	103	41	...	27
Elemental phosphorus	1 227	24	2	100	0	2 166	21	25	132	12
Phosphoric acids	8 320	10 760	7 124	4 020	3 554	4 835	5 629	4 653	4 991	3 851
Calcium phosphates	14 750	23 267	23 698	5 704	3 506	9 359	13 226	14 980	4 466	3 017
Sodium phosphates and orthophosphates	6 558	4 724	3 382	2 443	1 326	4 151	2 775	2 420	2 950	2 021
Polyphosphates including ammonium and sodium	24 003	23 587	21 691	15 790	11 765	16 165	15 049	13 463	18 665	15 541

Platinum group metals

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Platinum group metals										
Imports										
Scrap	1 271	1 149	1 456	1 417	1 100	213 125	224 707	261 626	696 282	435 759
Unwrought or partly worked-										
Platinum	52	23	26	30	30	383 876	332 670	389 203	432 806	568 901
Palladium	31	37	42	33	37	95 291	178 290	199 298	135 692	214 272
Other platinum metals	7	9	7	5	7	96 755	204 830	303 995	252 822	114 883
Exports										
Scrap	2 881	3 507	3 794	4 279	4 273	24 592	53 027	60 527	84 625	50 605
Unwrought or partly worked-										
Platinum	42	43	53	41	43	619 359	734 052	895 179	1 069 051	954 655
Palladium	52	49	57	47	53	221 800	261 717	329 468	329 534	284 178
Other platinum metals	18	23	24	23	20	243 111	486 989	805 069	1 047 491	271 233

Potassium compounds

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Potassium compounds										
<i>Indigenous production</i>										
KCl product	732 000	716 000	712 000	673 000	(b) 673 000					
<i>Apparent consumption (a)</i>										
Potassic fertilisers										
(K ₂ O content)	337 200	301 300	338 600	254 700	...					
<i>Imports</i>										
Crude natural salts	9 517	10 696	...	...	...	459	573	...	...	...
Sulphate	12 206	14 274	16 166	15 157	15 766	2 149	2 583	3 457	4 423	6 380
Chloride	198 893	170 942	202 623	165 331	80 842	22 001	19 835	25 097	...	33 207
Other potassic fertilisers	945	1 310	10 813	11 919	10 422	553	519	1 216	2 364	1 450
<i>Exports</i>										
Crude natural salts	14	14	...	...	...	15	41	...	...	...
Sulphate	6	39	163	93	443	20	16	20	42	311
Chloride (b)	340 000	430 000	350 000	283 000	200 000	...	...	...	...	...
Other potassic fertilisers	699	612	399	562	228	463	412	379	487	261

(a) Home deliveries plus imports.

(b) BGS estimates.

Precious and semi-precious stones

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Precious and semi-precious stones (excluding diamond) (a)										
<i>Imports</i>										
Natural stones	98	326	235	97	124	65 870	73 492	110 025	105 565	94 979
Synthetic stones	28	18	48	69	66	5 390	5 686	5 103	5 184	4 048
Dust and powder	2	3	1	2	1	569	935	704	686	352
<i>Exports</i>										
Natural stones	3	2	31	3	5	62 092	61 510	71	100 384	80 485
Synthetic stones	1	1	5	5	1	1 393	844	1 403	3 381	10 250
Dust and powder	0	0	4	9	6	389	87	296	560	519

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

Primary fuels

United Kingdom production of primary fuels 1984–2009 (energy supplied basis)

Million tonnes of oil equivalent (a)

Year	Coal	Petroleum	Natural gas (b)	Nuclear electricity	Hydro-electricity (c)	Total (d)
1984	31	138	36	15	0	219
1985	57	139	40	17	0	253
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

(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) 1984–2009 (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)
1984	49	85	48	15	0	—	196
1985	65	72	52	17	0	—	206
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	76	96	18	1	1	233
2005	40	77	94	18	1	1	235
2006	43	77	89	17	1	1	233
2007	41	76	90	14	1	0	227
2008	38	75	93	12	1	1	225
2009	31	71	86	15	1	0	211

(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 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Pumice										
<i>Imports</i>	71 598	97 832	206 353	2 259	1 668	1 213	1 659	2 546	2 013	1 130
<i>Exports</i>	138	70	40	76	307	275	227	93	293	534

Pyrite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Pyrite										
<i>Imports</i>										
Iron pyrites (incl. cupreous)-										
Unroasted	26	19	105	704	104	30	7	24	153	38
Roasted	1 911	1 282	131 230	693	232	251	171	5 649	98	67
<i>Exports</i>										
Iron pyrites (incl. cupreous)-										
Unroasted	4	2	122	161	21	20	7	20	5	62
Roasted	4	6	95	90	0	2	5	43	15	10

Quartz and quartzite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Quartz and quartzite										
<i>Imports</i>										
Quartzite	193	306	2 512	353	318	400	512	377	324	213
Quartz	1 259	5 235	7 143	4 036	1 989	466	1 078	1 659	3 140	2 372
<i>Exports</i>										
Quartzite	2 652	170	45	99	25	360	296	225	102	14
Quartz	529	1 367	541	657	832	364	291	310	344	1 115

Radioactive and associated materials

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Radioactive and associated materials										
<i>Imports</i>										
Natural and enriched uranium, plutonium, artificial radioactive isotopes, and their compounds,	...	...	...	...	...	591 337	1 176 048	1 708 433	1 130 734	1 330 313
<i>Exports</i>										
Natural and enriched uranium, plutonium, artificial radioactive isotopes, and their compounds	...	...	...	...	...	657 761	709 205	1 708 528	1 626 085	1 808 150

Rare earths

United Kingdom summary 2005-2009

Commodity	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
	Tonnes					£ thousand				
Rare earths										
Imports										
Rare earth metals (a)	166	88	88	133	99	656	486	865	1 297	907
Cerium compounds	2 324	1 615	2 167	2 067	612	4 017	3 253	4 768	5 802	1 932
Other rare earth compounds (b)	775	600	664	251	103	5 082	2 768	4 152	3 461	3 648
Ferro-cerium and other pyrophoric alloys	19	60	77	57	148	2 819	4 012	81	109	210
Exports										
Rare earth metals (a)	26	29	143	237	54	283	453	610	798	503
Cerium compounds	121	111	37	73	105	3 153	1 596	545	1 257	1 692
Other rare earth compounds (b)	1 189	954	1 089	622	459	6 076	5 669	4 634	2 673	2 606
Ferro-cerium and other pyrophoric alloys	2	76	80	7	6	17	125	160	86	113

(a) Including yttrium and scandium

(b) Including yttrium and scandium compounds.

Salt

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Salt										
<i>Production</i>										
Salt, rock (a)	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000					
Salt from brine (a)	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000					
Salt in brine (a) (b)	2 800 000	2 800 000	2 800 000	2 800 000	2 800 000					
<i>Imports</i>										
	87 623	246 879	237 772	237 288	410 434	17 121	17 673	18 097	21 973	30 365
<i>Exports</i>										
	538 796	557 311	514 868	873 708	449 303	26 517	29 091	28 112	33 995	31 509

(a) BGS estimate.

(b) Used for purposes other than salt making.

Sand and gravel (see also Aggregates)

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Sand and gravel										
<i>Production (a)</i>	94 666 000	92 107 000	93 236 000	85 473 000	66 226 000					
<i>Consumption (b)</i>										
Building sand	13 233 000	12 105 000	12 207 000	10 595 000	7 941 000					
Concreting sand	29 848 000	29 815 000	30 202 000	26 885 000	21 570 000					
Gravel and hoggin	39 311 000	38 321 000	36 092 000	34 648 000	26 199 000					
Total	82 392 000	80 242 000	78 501 000	72 127 000	55 709 000					
<i>Imports</i>	643 594	634 844	896 715	647 603	444 725	14 117	17 583	18 260	16 043	12 212
<i>Exports (c)</i>	8 453 949	9 308 961	8 089 175	7 747 635	6 236 662	40 493	45 498	46 624	50 027	48 688

(a) Including production from marine dredging.

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

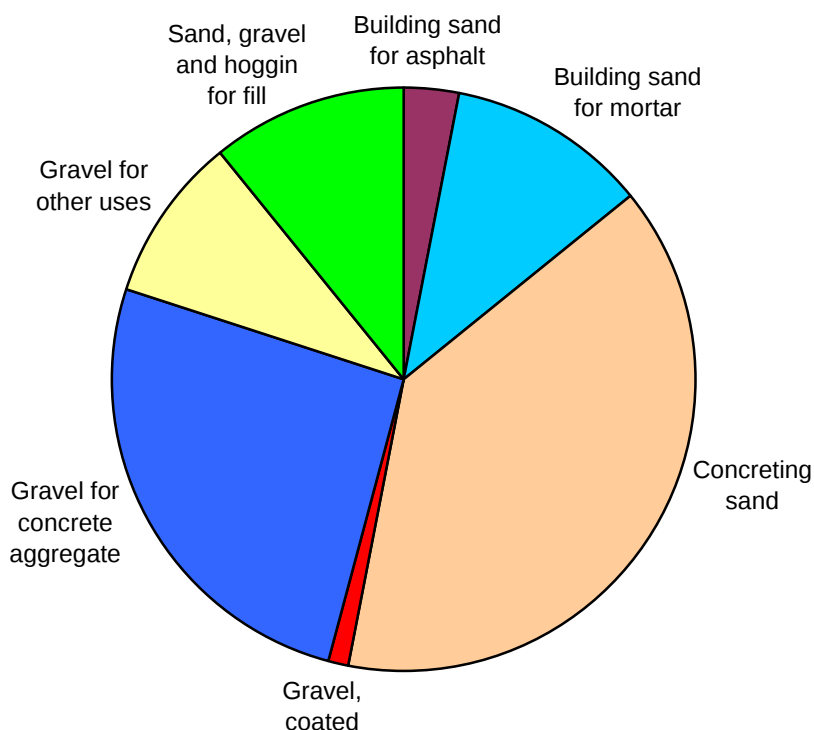
(c) Principally marine-dredged sand and gravel.

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):

2005: 6 471 453; 2006: 6 714 659; 2007: 6 649 041; 2008: 6 211 703
2009: 5 660 522

Great Britain production of sand and gravel by end-use 2009 (total production 55.7 million tonnes)



United Kingdom production of sand and gravel 1980–2009

Million tonnes

Year	Land-based production		Marine-dredged			Total production United Kingdom	For beach replenish- ment (c) (d)	
	Great Britain	Northern Ireland	Total	For home market	For export			Total
	(a)	(b)		(a)	(c)			
1980	83.6	3.8	87.4	12.5	4.5	17.0	104.4	0.9
1981	78.0	3.7	81.7	11.5	3.8	15.3	97.0	1.3
1982	79.3	3.7	83.0	11.9	2.9	14.8	97.8	2.1
1983	88.0	3.2	91.2	12.8	3.1	15.9	107.1	1.4
1984	87.1	3.5	90.6	12.6	2.8	15.4	106.0	1.2
1985	87.8	3.6	91.4	13.8	2.5	16.3	107.7	1.7
1986	90.2	4.2	94.4	15.3	2.3	17.6	112.0	2.2
1987	95.4	3.6	99.0	16.2	2.6	18.8	117.8	5.5
1988	110.5	3.9	114.4	19.6	2.4	22.0	136.4	3.9
1989	110.5	4.6	115.1	20.7	2.6	23.3	138.4	4.3
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

Sources:

(a) Office for National Statistics.

(b) Department of Enterprise, Trade & Investment.

(c) Crown Estate Commissioners.

(d) 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 2009

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	...	184	574	—	...	...	...	1 110
Yorkshire and the Humber	...	570	1 157	...	832	355	...	3 235
East Midlands	...	603	2 494	...	1 439	691	263	5 798
East of England	...	915	3 619	...	2 627	804	1 543	9 980
South East	...	1 125	4 495	...	5 137	714	1 537	13 211
South West	65	448	2 555	...	916	...	418	4 677
West Midlands	88	653	2 445	...	1 934	835	...	6 397
North West	...	587	1 044	—	...	218	135	2 121
England								
Land-won	...	...	...	...	...	...	...	37 810
Marine (b)	...	...	...	...	...	...	...	8 719
Total	(a) 1 020	(a) 5 085	(a) 18 382	(a) 542	(a) 13 111	(a) 3 908	(a) 4 481	(a) 46 529
Wales								
Land-won	...	...	...	—	...	...	...	795
Marine (b)	...	...	...	—	...	...	...	873
Total	(a) 148	(a) 458	(a) 657	—	(a) 238	(a) 94	(a) 74	(a) 1 668
Scotland								
Total	477	753	2 530	84	1 103	1 099	1 466	7 512
Great Britain								
Land-won	...	5 773	17 367	625	10 190	...	5 684	46 117
Marine (b)	...	523	4 203	—	4 262	...	337	9 592
Total	(a) 1 645	(a) 6 296	(a) 21 570	625	(a) 14 452	(a) 5 101	(a) 6 021	(a) 55 709

(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 1980–2009

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
1980	3 872	3 207	4 250	9 090	10 440	7 234	36 331	6 279	80 704	4 033	11 421	96 158
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

(a) Including marine-dredged material.

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

(b) From 2000, excludes Cumbria.

(c) From 2000, includes Cumbria.

Source: Office for National Statistics.

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

England production of sand and gravel by end-use 1997–2009

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						
1997								
Land-won	...	9 050	21 982	...	19 315	419	...	63 010
Marine (a)	...	326	3 577	...	6 250	—	...	10 406
Total	2 634	9 376	25 559	653	25 565	419	9 210	73 416
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

(a) Excluding marine-dredged landings at foreign ports (exports), see p.86.

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 1997–2009

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						
1997								
Land-won	27	162	598	—	327	—	338	1 452
Marine (a)	32	590	774	—	201	—	1	1 598
Total	59	752	1 372	—	528	—	339	3 050
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

(a) Excluding marine-dredged landings at foreign ports (exports), see p.86.

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 1997–2009

Thousand tonnes

Year	Sand		Gravel				Sand, gravel and hoggins 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						
1997	547	1 268	3 199	48	2 142	64	2 632	9 900
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

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

Source: Office for National Statistics.

Sandstone

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009
	Tonnes				
Sandstone – see Building and dimension stone					
<i>Production</i>	18 685 000	18 038 000	16 806 000	12 255 000	12 335 000

Great Britain production of sandstone by end-use and area of origin 2009

Thousand tonnes

Area of origin	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			
North East	...	—	—	...	—	—	—	—	48	—	—	85		
Yorkshire and the Humber	133	1	...	31	...	—	...	123	105	—	—	1 431		
North West	109	...	...	...	—	—	448	...	146	...	—	1 082		
West Midlands	5	...	...	...	...	—	...	...	128	—	...	...		
East Midlands	61	—	—	...	—	—	—	—	30	...	—	181		
East of England	...	—	—	—	—	—	—	—	...	—	—	72		
South East	1	—	—	—	—	—	—	—	...	—	—	...		
South West	14	...	...	...	—	—	...	18	138	...	—	407		
England	368	370	...	226	...	—	837	220	675	55	...	3 980		
Wales	...	...	1 289	131	...	—	139	63	397	...	...	2 667		
Scotland	...	...	...	771	35	—	140	144	342	...	...	1 895		
Great Britain	722	935	2 337	1 128	354	—	1 116	427	1 415	68	41	8 542		
England														
Wales														
County	Total		County		Total		County						Total	
Cheshire	...		Northumberland		...		Clywd						...	
Cornwall	...		Oxfordshire		—		Dyfed						...	
Cumbria	...		Shropshire		...		Gwent						...	
Derbyshire	...		Somerset		...		Mid Glamorgan						496	
Devon	...		South Yorkshire		2		Powys						...	
Dorset	...		Staffordshire		11		West Glamorgan						645	
Durham	...		Warwickshire		2									
Gloucestershire	23		West Sussex		...								Wales	2 667
Greater Manchester	164		West Yorkshire		525									
Hereford & Worcester	...		Wiltshire		...									
Leicestershire	...													
Norfolk	72		England		3 980									
North Yorkshire	904													
Northamptonshire	...													
Scotland														
Region												Total		
East Central Scotland												27		
Highlands												62		
North East Scotland												...		
Orkney												...		
Shetland												...		
South of Scotland												1 194		
Tayside and Fife												1		
West Central Scotland												...		
Scotland												1 895		

England production of sandstone by end-use 1997–2009

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	
1997	(a) 243	366	876	1 604	...	55	176	...	4 312	...	...	(a) 14	7 646
1998	254	371	949	1 457	...	63	...	...	4 146	...	...	...	7 792
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

(a) BGS estimate.

Source: Office for National Statistics.

Wales production of sandstone by end-use 1997–2009

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	
1997	(a) 5	...	443	767	...	...	...	...	1 219	...	...	57	3 098
1998	16	...	667	795	...	...	109	...	...	...	...	...	3 214
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

(a) BGS estimate.

Source: Office for National Statistics.

Scotland production of sandstone by end-use 1997–2009

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	
1997	8	...	454	370	...	...	...	...	356	...	...	—	1 712
1998	17	...	606	437	...	...	...	...	...	...	...	—	2 539
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

(a) BGS estimate.

Source: Office for National Statistics.

Selenium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes				£ thousand					
Selenium										
<i>Imports</i>										
Elemental	488	786	1 350	409	273	7 629	5 005	6 300	8 645	7 414
<i>Exports</i>										
Elemental	106	95	118	221	96	5 670	2 533	2 955	3 719	3 230

Sepiolite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes				£ thousand					
Sepiolite										
<i>Imports</i>	65 565	72 340	282 733	227 453	70 651	7 955	10 922	22 553	43 004	13 367

Silica sand

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes				£ thousand					
Silica sand										
<i>Production (a)</i>	4 146 000	5 174 000	4 909 000	4 777 000	3 755 000					
<i>Imports</i>	127 992	190 813	61 454	48 112	79 629	8 453	9 234	8 516	8 045	8 076
<i>Exports</i>	174 236	388 440	222 581	156 451	115 746	4 586	6 402	6 393	4 614	4 794

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

Great Britain production of silica sand by end-use and area of origin 2009

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)	...	...	...	...	...
East of England (e)	...	...	...	163	...
South East (f)	—	...	226	...	568
South West (g)	—	—	...	...	34
North West (h)	297	...	305	...	1 050
England	...	...	1 029	837	3 293
Wales (i)	—	—	...	...	59
Scotland (j)	...	241	...	...	403
Great Britain	...	...	1 096	988	3 755

(a) From Tyne & Wear and Durham

(b) From North Yorkshire and Humberside

(c) From Nottinghamshire and Lincolnshire

(d) From Staffordshire, West Midlands and Hereford and Worcester

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

(f) From Oxfordshire, Surrey, Kent and Hampshire

(g) From Gloucestershire, Wiltshire, Dorset and Devon

(h) From Greater Manchester and Cheshire

(i) From Clwyd and Dyfed

(j) From South of Scotland, West Central Scotland, East
Central Scotland, Tayside and Fife, Highlands and Orkney

Source: Office for National Statistics.

Silicon

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Silicon										
<i>Consumption in Iron and Steel Industry</i>										
Ferro-silicon	35 850	37 610	38 900	36 520	27 110					
Calcium silicide	80	90	90	80	60					
Ferro-silico-zirconium	60	60	70	70	50					
Ferro-silico-manganese	22 170	23 620	24 430	22 940	17 030					
<i>Imports</i>										
Elemental silicon-										
Containing not less than 99.99% silicon	2 744	2 203	1 504	2 788	2 673	54 393	46 953	49 825	88 581	105 259
Other	74 359	27 309	24 284	54 019	65 436	61 024	25 192	25 025	83 887	98 160
Doped silicon	319	399	467	378	296	33 309	30 409	35 333	35 288	31 544
Ferro-silicon	58 225	64 610	66 838	59 438	31 091	26 065	28 782	33 311	42 239	26 667
Ferro-silico-manganese	57 136	59 985	56 036	52 966	37 114	24 041	23 440	29 887	59 497	24 468
Ferro-silico-magnesium	5 448	3 810	2 303	1 614	512	2 754	1 738	1 168	1 744	536
Ferro-silico-chrome	728	350	1 242	128	13	217	128	635	136	30
<i>Exports</i>										
Elemental silicon-										
Containing not less than 99.99% silicon	597	788	571	645	739	23 535	19 922	23 458	38 735	52 704
Other	1 869	6 175	10 754	14 488	7 014	2 148	6 420	11 815	24 901	13 343
Doped silicon	359	545	957	622	331	64 963	80 048	85 190	78 997	57 775
Ferro-silicon	...	2 733	2 314	3 250	3 338	3 173	3 331	3 096	4 728	4 154
Ferro-silico-manganese	5 003	60	7	49	65	1 513	90	11	27	59
Ferro-silico-magnesium	542	653	917	976	458	409	441	807	1 231	709
Ferro-silico-chrome	8	8	35	9	50	7	12	80	24	122

Sillimanite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Sillimanite										
<i>Imports</i>										
Sillimanite minerals (a)	39 650	10 268	10 239	11 920	7 763	2 441	1 898	1 774	2 515	2 064
Mullite	10 430	7 468	12 036	6 488	5 255	3 828	3 288	3 963	3 588	2 770
Chamotte earth (b)	23 462	19 120	29 416	22 243	28 501	2 582	2 351	3 393	3 635	5 231
<i>Exports</i>										
Sillimanite minerals (a)	14	41	75	16	157	14	17	43	8	49
Mullite	2 403	1 884	2 355	2 060	1 257	1 833	1 457	1 811	1 825	1 567
Chamotte earth (b)	59	112	235	162	572	65	78	132	110	168

(a) Andalusite, kyanite and sillimanite.

(b) Calcined refractory clay including flint clay.

Silver

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Silver										
<i>Production</i> (a)	—	—	0	0	1					
<i>Imports</i>										
Scrap (b)	2 283	2 742	3 049	4 223	3 311	157 000	311 032	590 691	636 999	301 611
Unwrought	1 144	6 898	3 500	3 328	6 374	181 193	1 036 089	642 960	874 396	1 931 139
Partly worked	342	419	2 018	616	276	54 351	53 981	57 981	73 951	55 069
Silver in unrefined lead bullion (c)	350	240	240	390	260					
<i>Exports</i>										
Scrap (b)	3 325	3 785	5 051	5 447	8 412	27 905	37 217	38 340	57 315	56 820
Unwrought	2 050	762	1 806	5 909	905	360 137	164 306	408 430	1 307 184	266 091
Partly worked	240	307	214	162	39	16 469	26 417	27 564	19 567	13 865

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

(b) Including scrap of platinum group metals.

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

Slate

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Slate										
<i>Production</i>										
Architectural and cladding uses, roofing and damp proof courses	...	...	...	...	42 000					
Powder and granules	...	...	...	...	14 000					
Crude blocks	92 000	76 000	41 000	37 000	29 000					
Fill and other uses	690 000	714 000	1 332 000	967 000	597 000					
Total	928 000	865 000	1 428 000	1 058 000	683 000					
<i>Imports</i>										
Unworked (a)	27 693	52 135	45 556	32 258	21 718	7 769	11 029	11 709	9 059	6 879
Roofing and wall tiles	165 790	156 784	174 574	179 150	140 691	53 385	51 255	59 391	66 118	57 688
Other worked slate (b)	55 854	55 401	41 222	30 012	30 015	10 237	10 778	9 217	8 448	8 074
<i>Exports</i>										
Unworked (a)	4 441	450	255 297	56 907	225 232	565	332	1 846	803	1 837
Roofing and wall tiles	24 963	9 348	13 230	8 459	13 010	12 331	5 410	7 275	5 940	8 201
Other worked slate (b)	2 868	4 266	7 133	6 014	11 165	2 515	2 932	2 280	1 588	1 122

(a) Including roughly split or squared

(b) Including articles of slate or agglomerated slate.

Strontium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Strontium										
<i>Imports</i>										
Carbonate	4 672	1	3	212	7	1 287	7	13	25	13
<i>Exports</i>										
Carbonate	11	425	513	2	2	41	300	71	17	95

Sulphur

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Sulphur										
<i>Supply</i>										
Produced (a)	124 000	115 000	130 000	135 000	145 000					
Imported (b)	31 485	18 942	13 679	9 638	6 285					
Sulphur, zinc concentrates (imported) (c)	260	175	60	107	25					
<i>Imports</i>										
Sulphur-										
Crude	24 222	11 608	5 101	64	74	921	663	266	45	60
Refined	7 263	7 334	8 577	9 574	6 211	1 096	1 017	2 931	4 278	2 900
Sublimed, colloidal etc	577	1 297	1 073	1 186	473	408	1 001	832	1 268	805
<i>Exports</i>										
Sulphur-										
Crude	105	113	8 207	13 182	2 545	163	228	262	1 699	201
Refined	326	643	15 268	27 872	38 723	459	991	1 525	10 764	3 101
Sublimed, colloidal etc	1 458	1 312	624	1 144	1 902	533	392	265	744	976

(a) Produced from oil refineries.

(b) Including waste and residues.

(c) Sulphur content calculated at 29%

Talc

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Talc										
<i>Production</i>	6 000	4 325	2 850	2 410	2 861					
<i>Imports</i>	65 496	55 200	54 812	53 864	39 520	10 816	10 815	11 176	12 468	12 640
<i>Exports</i>	5 244	4 626	2 389	3 129	2 402	1 415	1 501	878	1 140	1 058

Tantalum and Niobium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Tantalum and Niobium										
<i>Consumption in Iron and Steel Industry</i>										
Niobium (a)	410	430	480	540	190					
<i>Imports</i>										
Ores and concentrates	2	13	0	6	5	75	222	17	264	148
Ferro-niobium	1 175	1 098	1 490	1 189	686	6 884	7 427	12 836	13 659	9 955
Tantalum	97	119	96	161	145	9 895	9 501	6 572	8 443	11 647
Niobium (b)	123	143	140	154	98	2 250	7 953	2 972	6 975	9 342
<i>Exports</i>										
Ferro-niobium	79	74	49	58	52	607	513	944	1 148	935
Tantalum	131	83	77	55	72	21 641	11 569	4 706	2 255	3 144
Niobium (b)	26	9	124	148	23	357	315	2 012	3 021	947

(a) Metal content.

(b) Including rhenium.

Tellurium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Tellurium										
<i>Imports</i>	104	38	38	151	53	1 780	806	1 070	11 650	5 366
<i>Exports</i>	36	53	40	3	112	1 607	1 753	1 781	338	9 453

Tin

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Tin										
<i>Consumption</i>										
Refined	3 203	4 080	4 080	3 000	3 000					
<i>Imports</i>										
Concentrates	...	0	0	0	6	...	43	39	25	122
Scrap	468	1 728	452	448	121	206	510	317	334	251
Ash and residues	...	...	...	0	0	...	...	...	1	3
Unwrought	4 812	3 558	13 630	7 181	4 522	21 677	17 917	32 618	55 479	39 257
Unwrought alloys	2 067	891	525	400	370	5 605	5 029	5 535	6 533	5 648
<i>Exports</i>										
Concentrates	2	4	373	254	61	10	21	2 012	1 158	448
Scrap	20 603	35 252	27 329	19 110	22 597	16 374	31 425	43 699	24 197	29 286
Ash and residues	97	165	124	...	...	210	474	199	...	...
Unwrought	1 608	8 395	4 085	1 264	928	7 899	43 259	29 224	11 781	8 500
Unwrought alloys	442	698	696	532	537	2 336	4 107	5 332	5 671	3 296

Titanium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Titanium										
<i>Production</i>										
Titanium dioxide pigment (a)	274 000	275 000	268 000	255 000	230 000					
<i>Apparent consumption (b)</i>	43 200	78 800	68 200	63 900	24 100					
<i>Consumption in Iron and Steel Industry</i>										
Ferro-titanium	970	1 020	1 050	990	730					
<i>Imports</i>										
Ores and concentrates										
Ilmenite	80 435	175 882	181 794	194 719	112 068	4 631	25 815	27 878	38 401	33 818
Other (rutile)	109 238	48 147	42	37	23	24 777	12 111	36	34	80
Scrap	12 685	14 375	12 585	12 367	8 972	81 768	88 437	45 141	32 945	11 106
Unwrought	10 490	10 736	11 966	13 868	9 989	78 936	75 833	70 708	78 778	52 522
Wrought	4 763	5 156	6 354	6 071	4 218	94 902	141 150	176 721	186 129	160 102
Ferro-titanium (c)	1 883	1 087	1 677	1 290	396	11 011	6 434	6 732	3 612	399
Oxides	8 316	10 769	6 981	6 925	4 933	11 095	11 521	8 884	10 053	9 101
Pigments based on titanium dioxide	58 786	60 759	67 727	51 822	48 931	79 997	82 835	113 787	71 395	72 302
Titanium slag	64 849	91 603	151 494	158 195	127 224	28 718	27 968	33 379	38 966	36 298
<i>Exports</i>										
Ores and concentrates										
Ilmenite	87	58	26	21	19	586	199	100	165	56
Other (rutile)	27	99	...	0	22	256	780	...	29	94
Scrap	3 057	4 280	4 476	3 973	3 269	19 696	28 935	20 964	12 714	5 096
Unwrought	5 443	2 952	3 263	2 754	2 823	49 550	31 888	17 402	13 252	8 265
Wrought	8 712	6 795	5 196	4 428	3 464	133 007	169 621	178 876	198 153	156 703
Ferro-titanium (c)	17 361	17 645	19 515	18 557	13 098	118 690	108 240	79 176	59 013	23 486
Oxides	1 549	1 224	1 130	1 104	845	3 506	3 792	2 392	3 536	3 693
Pigments based on titanium dioxide	214 192	181 023	210 938	221 399	203 028	257 482	220 091	247 463	276 503	298 629

(a) Artikol estimates.

(b) BGS estimates; see explanatory notes.

(c) Including ferro-silico-titanium.

Tungsten

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Tungsten										
<i>Consumption in Iron and Steel</i>										
Industry (a)	40	40	40	50	20					
<i>Imports</i>										
Ores and concentrates	4 914	34	2	11	35	813	229	27	25	44
W content	2 530	177	...	6	...					
Scrap	1 978	1 841	1 823	1 291	1 157	12 339	16 240	18 787	15 129	11 134
Unwrought	705	2 766	389	430	283	9 615	22 773	5 953	6 903	5 456
Wrought	521	111	713	144	38	6 240	5 015	6 828	4 257	2 995
Ferro-tungsten (b)	36	134	33	27	26	344	948	397	487	348
Carbide	974	913	1 409	1 023	614	14 301	18 831	25 842	19 982	11 808
Tungstates	43	39	51	31	6	287	379	590	348	144
Oxides and hydroxides	318	707	746	96	36	3 987	9 535	8 566	1 171	154
<i>Exports</i>										
Ores and concentrates	5	1	36	21	3	51	44	589	136	93
W content	3	0	...	11	...					
Scrap	1 130	1 161	1 991	1 399	1 429	5 815	8 062	17 528	14 390	11 089
Unwrought	242	845	373	182	65	3 285	6 659	4 232	2 979	1 681
Wrought	360	93	80	44	47	2 200	2 532	3 091	3 976	1 975
Ferro-tungsten (b)	37	17	8	31	1	315	246	112	256	25
Carbide	83	251	303	51	80	1 637	3 937	7 874	1 704	211
Tungstates	33	12	11	5	8	77	181	182	85	650
Oxides and hydroxides	46	4	0	402	55	794	143	4	4 782	367

(a) Metal content.

(b) Including ferro-silico-tungsten.

Vanadium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Vanadium										
<i>Consumption in Iron and Steel</i>										
Industry (a)	70	80	90	100	40					
<i>Imports</i>										
Unwrought	458	174	583	314	112	5 598	3 133	5 232	6 277	3 218
Wrought	354	233	...	...	...	3 893	4 944	...	...	...
Ferro-vanadium	609	1 623	755	543	209	14 660	10 669	11 036	12 812	2 394
Oxides	339	472	425	344	84	3 804	4 063	3 053	4 813	699
<i>Exports</i>										
Unwrought	(b) 18	(b) 0	(b) 2 182	2	18	468	47	902	43	395
Wrought	415	69	...	...	...	8 253	127	...	...	...
Ferro-vanadium	157	151	96	79	64	...	2 728	1 400	922	958
Oxides	20	23	697	589	487	241	80	10 420	8 870	4 992

(a) Vanadium content of ferro-vanadium

(b) Including scrap

Vermiculite

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Vermiculite										
<i>Imports</i>	32 063	34 772	34 072	29 200	24 515	4 073	4 484	4 182	4 319	4 115
<i>Exports</i>	31	101	5	24	188	112	69	52	109	934

Zinc

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Zinc										
<i>Consumption</i>										
Slab	161 676	161 676	172 000	151 500	99 000					
<i>Imports</i>										
Ores and concentrates (a)	903	603	164	257	119	866	881	418	424	341
Ash and residues	6 838	5 632	4 918	4 632	3 160	2 106	3 863	3 553	2 122	11 203
Scrap	188	334	30	103	344	57	243	41	54	258
Unwrought	135 840	119 676	122 458	119 911	84 594	103 949	215 030	222 907	134 468	96 839
Unwrought alloys	16 128	15 666	13 201	8 524	1 869	10 207	29 565	28 338	9 611	2 407
<i>Exports</i>										
Ores and concentrates	141	468	82	246	11 418	90	1 237	301	209	1 691
Ash and residues	28 472	7 009	7 068	13 786	9 585	24 231	5 807	6 677	8 597	6 268
Scrap	9 881	4 571	7 543	5 699	6 030	6 673	4 948	9 610	4 973	5 144
Unwrought	1 661	5 325	5 932	3 883	3 600	1 406	8 776	10 236	4 639	4 560
Unwrought alloys	38 267	37 120	33 799	28 408	13 578	32 540	61 587	63 495	38 083	15 562

(a) Zinc and mixed zinc-lead concentrates.

Zirconium

United Kingdom summary 2005-2009

Commodity	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	Tonnes					£ thousand				
Zirconium										
<i>Consumption in Iron and Steel Industry</i>										
Ferro-silico-zirconium	60	60	70	70	50					
<i>Apparent consumption (a)</i>	11 000	8 000	7 000	7 000	3 000					
<i>Imports</i>										
Ores and Concentrates (b)	19 519	13 729	11 007	13 092	6 386	9 012	8 769	7 296	8 145	5 910
Scrap	129	114	62	65	49	695	465	278	263	311
Unwrought	65	175	150	403	82	1 252	2 346	1 071	4 490	1 830
Wrought	144	178	235	53	72	1 758	4 131	3 411	1 745	852
<i>Exports</i>										
Ores and concentrates	699	902	1 096	716	742	534	847	1 022	746	966
Scrap	20	25	41	2	11	153	111	104	33	42
Unwrought	46	5	0	54	0	73	22	6	72	53
Wrought	61	60	13	5	7	411	1 934	779	715	1 362

(a) BGS estimates, see explanatory notes.

(b) Mainly zircon.