World Mineral Production

2007–2011

British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

BRITISH GEOLOGICAL SURVEY

WORLD MINERAL PRODUCTION 2007–11

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Keyworth, Nottingham British Geological Survey 2013

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First Published 2013

BRITISH GEOLOGICAL SURVEY

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

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Bibliographical reference
BRITISH GEOLOGICAL SURVEY. 2013. *World mineral production 2007-11*. (Keyworth, Nottingham: British Geological Survey.)

Cover photograph: A BHP Billiton loco transporting Iron Ore through the Pilbara, Western Australia. BHP Billiton operates more than 1600 kilometres of rail in the Pilbara. The 426 kilometre Newman rail line, pictured, is one of Australia's longest privately owned railways. Image © BHP Billiton

ISBN 978-0-85272-757-7 (print version)

ISBN 978-0-85272-758-4 (website version)

PREFACE

This volume is the latest in the series *World Mineral Production*, published by the British Geological Survey. It comprises the most recent addition to a continuous dataset on global mineral production which stretches back to 1913, and includes the preceding titles *World Mineral Statistics* and *Statistical Summary of the Minerals Industry*. The data for 2011 represents the 99th year of this dataset and we have therefore decided to prepare for a "Centenary Edition" next year.

This publication is compiled from a comprehensive database, maintained by the British Geological Survey, through which we aim to provide a reliable, comprehensive and continuous set of data covering most of the minerals that enter international trade. In this volume we have set out the production figures by country for more than 70 mineral commodities, over the five-year period from 2007 to 2011. The objective of this series remains to present the latest production information obtained from official bodies in individual countries, although other sources are also used to ensure completeness and accuracy. The cooperation afforded to the British Geological Survey by numerous national and international organisations is gratefully acknowledged.

The statistics contained in this volume for 2011 reveal global outputs of many metals and minerals have remained relatively flat compared to 2010 with single digit percentage increases or decreases. However, there are a few exceptions with the largest growth being in zirconium minerals (up 23 per cent), lithium (up 21 per cent based on lithium content) and mined nickel (metal content up 20 per cent). The global production levels of iron ore continue to increase (up 15 per cent in 2011) as does the global output of crude petroleum (up 14 per cent in 2011). In contrast, the global production of bromine in 2011 decreased 18 per cent compared to the previous year, while feldspar output was down by eight per cent.

There continued to be a high level of interest in the security of mineral supply during the year at the worldwide, European and UK scales. In March 2012 the UK Government issued its response to the House of Commons Science & Technology Committee's report into *Strategically Important Metals* in a document entitled *Resource Security Action Plan: Making the most of valuable materials*. This document recognises the concerns that have been raised and sets out high level actions to be undertaken by Government and business in partnership to address resource risks. The BGS has an important role to play in the provision of information to underpin these actions and this includes the data contained in this volume.

At a European level, the BGS is involved with the newly developed *European Innovation Partnership on Raw Materials.* This has been approved by all member states of the European Union with the expressed purpose of contributing to mid- and long-term security of supply of raw materials by increasing the competitiveness of European industries, improving resource efficiency and expanding recycling activities in the EU. The partnership will be developing its Strategic Implementation Plan during 2013 and is looking to support innovative research relating to the entire raw materials supply chain through the forthcoming Horizon 2020 funding programme.

Security of supply concerns have also led the EU to commission new research on specific aspects of raw materials supply. For example, a consortium, including BGS, has recently started work on a two-year *Study on structured statistical information on the quality and quantity of EU raw material deposits* which is examining resources and reserves data across Europe. Another study focusing on rare earth elements in Europe, also to be conducted by a consortium that includes the BGS, will start early in 2013.

I would welcome any comments and suggestions that might help us to meet your changing needs, particularly with respect to the coverage of statistics and the format in which they are made available.

John N Ludden
Executive Director

British Geological Survey
Keyworth
Nottingham

January 2013

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EXPLANATORY NOTES

Coverage

World Mineral Production covers the majority of economically important mineral commodities. For each commodity constant efforts are made to ensure that as many producing countries as possible are reported. For some commodities, where statistics on production are not publicly available, estimates are made. Users of this compilation are advised that more statistical information than can be included in a publication of this nature is held in the British Geological Survey files and is available for consultation. Historical data (1913–1970) can be obtained from the predecessors to this series entitled *World Mineral Statistics* and the *Statistical Summary of the Mineral Industry*. copies of these publications are available in the World Archive section of the website: www.mineralsUK.com.

Arrangement of countries

Countries are ordered alphabetically in geographical groupings as follows:

Europe
Africa
North and Central America, including the Caribbean
South America
Asia
Australasia, including the Pacific Islands

So far as possible the nomenclature follows the London Diplomatic List.

Metals

Mine production of many metals is expressed in terms of metal content. This is clearly indicated at the head of the table, adjacent to the unit used. For aluminium, cobalt, copper, iron, lead, nickel, tin and zinc, mine production and metal production are shown in separate tables. Unless otherwise specified, metal production statistics relate to metal recovered from both domestic and imported materials, whether primary or secondary, but exclude remelted material.

World totals

For certain minerals and metals no world total is shown due to the non-availability of certain individual country totals.

Exclusion of Warranty

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Acknowledgements

Compilation of this volume of mineral statistics has been possible only by obtaining information from a very large number of organisations throughout the world, chiefly home and overseas government departments and specialist national or international authorities concerned with particular sectors of the minerals or metals industries. To all these bodies the British Geological Survey expresses its grateful acknowledgement for

the information made available, whether in published form or provided by direct correspondence. Particular acknowledgement is made to the Mines Departments and other government agencies of many countries whose regular statements, yearbooks and other reports are worthy of direct consultations by readers in search of detail.

Specialist commodity organisations which have kindly allowed information to be reproduced include the International Copper Study Group, the International Lead and Zinc Study Group, the International Nickel Study Group, the Barytes Association and the International Fertilizer Industry Association Ltd. In a few instances, information on specific commodities has been obtained directly from company sources. The co-operation of other members of the International Consultative Group on Metal Statistics is also gratefully acknowledged.

Supplementary information is also obtained from publications dealing with a wider range of commodities such as Société de l'Industrie Minérale, *Annuaire Statistique Mondial des Minerais et Métaux;* World Bureau of Metal Statistics, *World Metal Statistics* and*, Metallstatistik;* publications of the Interstate Statistical Committee of the CIS, the United States Geological Survey, and United Nations agencies.

In addition, information has been obtained from the websites of the following organisations, companies, statistical offices and government departments: Kaolin & Plastic Clays Europe; International Iron and Steel Institute; Kimberley Process; Eurofer; World Nuclear Association; Organisation of the Petroleum Exporting Countries; Eurostat; European Aggregates Association; Instituto Latinoamericano del Fierro y el Acero; RNC Gold; Glencairn Gold; Glamis Gold; Goldcorp; Inmet Mining; Stillwater Mining; Aluminium de Greece; New Boliden; Eurozinc Mining Corporation; Norilsk Nickel; Qatar Steel Company; Iamgold Corp, Lundin Mining; Xstrata; Anglo American; Rio Tinto; Aura Minerals Inc; Breakwater Resources; Nyrstar, Lappland Goldminers, Outokumpu, Dragon Mining, Agnico Eagle, Talvivaara, Endomines, Norsk Hydro, Rusal, Institute of Argentinean Petroleum and Gas, Argentina; Institute of Argentinean Steel, Argentina; Acero Argentinos; Northern Territory Government, Australia; Department of Primary Industries Victoria, Australia; Mineral Resources Tasmania, Australia; Australian Bureau of Agricultural & Resource Economics; Vereinigung der Osterreichishen Zementindustrie, Austria; Energy Bangla, Bangladesh; Petrobangla, Bangladesh; Central Bank of Barbados; Federation de l'Industrie Cimentiere Belge, Belgium; Statistics Belgium; Belgian Steel Federation, Instituto Nacional de Estatistica Boliva; Cámara Boliviana de Hidrocarburos, Bolivia; Ministry of Mining and Metallurgy, Bolivia; Republika Srpska Institute of Statistics, Bosnia & Herzegovina; Departamento Nacional De Producao Mineral, Brazil; Grupo Paranapanema, Brazil; Agencia Nacional do Petroleo, Brazil; Associação Brasileira do Alumínio, Brazil; Ministerio de Minas y Energia, Brazil; Sindicato da Indústria Carbonífera de Santa Catarina, Brazil; Natural Resources Canada; Statistics Canada; Canadian Association of Petroleum Producers; Mineral Resources of Quebec, Canada; Chilean Copper Commission; National Service for Geology and Mining, Chile; China Mining Association; National Bureau of Statistics, China; Ministerio De Minas Y Energia, Columbia; Unidad de Planeación Minero Energética, Columbia; Central National de la Statistique et des Etudes, Economiques, Republic of Congo; Oficina Nacional de Estadisticas, Cuba; Czech Republic Statistical Office; Statistics Denmark; Danish Energy Agency, Denmark; Banco Central de la Republica Dominicana, Dominican Republic, Banco Central del Ecuador; Geological Survey of Finland; Federation des Minerais, Mineraux Industrielles et Metaux non Ferreux, France; Comite Professionel de Petrole, France; Ministere de l'Economie, des Finances et de l'Industrie, France; Unicem, France; Infociments, France; Statistisches Bundesamt Deutschland, Germany; National Statistical Service of Greece; National Bank of Guyana; Ministerio de Energia y Minas, Guatemala; Federacciai, Italy; Unione Petrolifera, Italy; Istituto Nazionale di Statistica, Italy; Salt Industry Centre, Japan; Statistics Agency of Kazkhstan; Korea Institute of Geoscience and Mineral Resources, Republic of Korea; Statistical Office of Kosovo; Statec, Luxembourg; Bank Negara Malaysia; Pemex, Mexico; Secteria de Economia, Mexico; Servicio Geologico de Mexico; Mineral Resources & Petroleum Authority of Mongolia; Statistics Office of Montenegro; Bank al Maghrib, Morocco; Ministry of Mines, Morocco; Ministry of Mines and Energy, Namibia; Centraal Bureau voor de Statistiek, Netherlands; Staatstoezicht op de Mijnen, Netherlands; Ministry of Economic Development, New Zealand; Central Bank, Nicaragua; National Burea of Statistics, Nigeria; Statistisk Sentralbyra, Norway; Norwegian Petroleum Directorate, Geological Survey of Norway; Ministry of National Economy, Oman; Direccion de Estadistica y Censo, Panama; Chamber of Mines and Petroleum, Papua New Guinea; PeruPetro; Ministerio de Energia y Minas, Peru; Sociedad Nacional de Mineria Petroleo y Energia, Peru; Mines and Geosciences Bureau, Philippines; Instituto Nacional de Estatistica, Portugal; Federal State Statistics Service, Russia, National Bank of Rwanda; Agence Nationale de la Statistique et de la Démographie, Senegal; Statistical Office of the Republic of Serbia; Central Bank of Sierra Leone; Statistical Office of the Republic of Slovenia; Unesid, Spain; Staatsolie Maatschappij, Suriname; Sveriges Geologiska Undersokning, Sweden; Jernkontoret, Sweden; Statistiska Centralbyran, Sweden; Bank of Thailand; Central Bank of Trinidad and Tobago; Department of Business, Innovation and Skills, United Kingdom; Office for National Statistics, United Kingdom; Energy Information Administration, United States of America; Direccion Nacional de Minería y Geología, Uruguay; General Statistics Office, Vietnam; Central Statistical Organisation, Republic of Yemen.

Units

The Statistics shown in this volume are expressed in metric units. The following factors are given for converting to non-metric units:

tonnes × 0.9842 = long tons
tonnes × 1.1023 = short tons
kilograms × 2.2046 = pounds
kilograms × 32.1507 = troy ounces
cubic metres × 35.3147 = cubic feet
1 tonne of crude petroleum equals on average 7 barrels of crude petroleum.
1 flask mercury = 34.5 kilograms
1 metric ton unit = 10 kilograms

Symbols

...	figures not available
0	quantity less than half unit shown
—	nil
*	estimated
BGS	British Geological Survey

STATISTICAL INFORMATION

Production of bauxite

tonnes (metric)

Country	2007	2008	2009	2010	2011
Bosnia & Herzegovina	866 933	1 018 333	555 820	827 909	707 712
France	160 000	* —	* —	* —	* —
Greece	2 125 900	2 174 000	1 935 000	1 902 000	2 324 000
Hungary	546 310	511 337	317 000	365 000	277 800
Montenegro	667 053	671 811	45 779	61 205	158 614
Russia	6 053 900	5 675 000	5 300 000	5 035 000	5 380 000
Turkey	863 404	818 928	406 700	855 000	* 600 000
Ghana	1 033 368	796 000	440 000	512 208	400 069
Guinea	18 519 010	17 682 330	14 774 240	16 427 300	17 593 100
Mozambique	8 650	5 443	3 600	8 600	10 400
Sierra Leone	1 169 036	954 370	742 820	1 089 131	1 457 507
Tanzania	5 003	20 601	122 920	* 130 000	* 130 000
Jamaica	14 567 738	14 636 102	8 103 884	8 539 853	10 188 916
Mexico	20 000	20 000	20 000	21 250	14 400
USA (b)	141 914	98 796	30 240	59 143	63 121
Brazil (c)	25 460 700	28 097 500	26 074 400	32 028 000	33 694 700
Guyana	2 242 928	2 092 237	1 484 935	1 082 512	1 818 399
Suriname	5 273 195	5 333 031	3 388 419	3 096 650	3 236 116
Venezuela	5 593 308	4 192 014	3 610 859	3 126 242	2 454 769
China	20 446 000	25 176 900	29 213 100	36 837 200	* 37 000 000
India (d)	22 624 960	15 460 202	14 124 093	12 640 785	12 992 000
Indonesia	* 16 000 000	* 18 000 000	* 15 000 000	* 27 000 000	* 41 000 000
Iran (a)	520 800	520 000	522 018	681 235	* 680 000
Iraq	—	4 928	250	3 350	—
Kazakhstan	4 962 600	5 160 100	5 131 000	5 310 200	5 495 200
Malaysia	156 785	295 176	274 456	124 274	188 141
Pakistan (e)	18 118	35 759	15 629	11 131	9 033
Vietnam	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Australia	62 428 000	64 038 000	66 168 000	68 535 000	69 977 000
World Total	213 000 000	214 000 000	198 000 000	226 000 000	248 000 000

Notes
(1) This table includes production of refractory bauxite

(a) Years ended 20 March following that stated
(b) Data for Alabama only
(c) Including beneficiated and direct shipping ore
(d) Years ended 31 March following that stated
(e) Years ended 30 June of that stated

Production of alumina

tonnes (Al_2O_3 content)

Country	2007	2008	2009	2010	2011
Azerbaijan	184 500	164 879	9 590	—	6 188
Bosnia & Herzegovina	303 799	294 455	191 792	269 414	261 874
France	* 600 000	630 000	348 000	481 000	470 000
Germany	* 900 000	* 1 000 000	1 154 000	* 1 000 000	* 1 000 000
Greece	512 785	524 875	517 400	510 250	526 305
Hungary	* 301 000	* 299 000	* 185 000	* 214 000	* 250 000
Ireland, Republic of	1 800 000	1 890 000	1 240 000	1 864 000	1 922 000
Italy	1 100 000	1 045 000	92 000	—	—
Montenegro	240 186	220 426	58 528	—	—
Romania	22 830	344	44 000	414 000	484 000
Russia	3 332 308	3 112 000	2 794 000	2 857 000	2 825 000
Spain	1 300 000	1 300 000	* 1 300 000	* 1 300 000	* 1 300 000
Turkey	163 435	* 160 000	* 100 000	* 160 000	* 100 000
Ukraine	1 655 718	1 673 000	1 524 000	1 534 000	1 601 000
Guinea	542 100	593 000	530 000	597 000	574 000
Canada	1 454 390	1 491 523	1 232 604	1 416 594	1 473 271
Jamaica	3 940 589	3 995 358	1 773 600	1 590 658	1 959 926
USA	4 236 000	4 298 000	3 064 000	3 950 000	4 360 000
Brazil	7 077 600	7 822 300	8 617 900	9 433 400	1 018 200
Suriname	2 178 472	2 153 968	1 536 187	1 486 449	1 421 464
Venezuela	1 751 000	1 591 000	1 376 000	1 244 000	1 222 162
China	19 453 000	23 029 200	23 792 900	29 064 900	34 172 000
India (b)	3 320 169	3 620 252	3 432 716	3 576 917	* 3 970 000
Iran (a)	174 461	200 042	210 385	236 476	232 000
Japan	* 650 000	* 600 000	* 550 000	* 550 000	* 550 000
Kazakhstan	1 537 000	1 600 000	1 608 000	1 640 000	1 670 000
Australia	18 844 000	19 446 000	19 939 000	19 806 000	18 727 000
World Total	77 600 000	82 800 000	77 200 000	85 200 000	82 100 000

Notes
(1) Where possible figures in this table show the alumina equivalent (Al_2O_3) of total hydrate produced, whether or not calcined
(2) The figures in this table represent alumina produced from bauxite. Alumina-rich materials can also be derived from salt slags formed during the production of secondary aluminium

(a) Years ended 20 March following that stated
(b) Years ended 31 March following that stated

Production of primary aluminium

tonnes (metric)

Country	2007	2008	2009	2010	2011
Azerbaijan	39 241	61 604	10 145	379	6 817
Bosnia & Herzegovina	147 193	155 909	130 042	150 488	130 900
France	430 159	389 000	345 000	356 000	334 000
Germany	551 000	605 880	291 750	402 480	432 472
Greece	167 937	162 339	134 737	137 000	165 150
Iceland	446 297	761 204	804 605	825 803	780 853
Italy	179 500	186 400	165 800	129 500	141 900
Montenegro	135 151	111 513	63 960	82 043	92 838
Netherlands	296 900	317 000	306 000	* 300 000	* 300 000
Norway	1 362 000	1 368 000	1 090 000	1 400 000	1 982 000
Poland	43 000	31 000	—	—	—
Romania	283 449	288 156	228 630	241 000	261 000
Russia	3 955 417	4 190 000	3 815 000	3 947 000	3 992 000
Slovakia	160 461	162 995	149 604	163 000	162 840
Slovenia	111 016	83 300	35 148	40 177	75 300
Spain	405 100	405 800	334 600	335 000	335 000
Sweden	99 842	81 913	69 708	93 000	111 000
Turkey	63 400	61 100	30 000	54 100	56 400
Ukraine	113 437	88 800	50 000	25 000	7 000
United Kingdom	364 595	326 900	252 000	186 000	213 000
Cameroon	87 000	91 000	73 000	76 000	69 000
Egypt (a)	331 504	392 963	400 369	352 818	353 904
Ghana	12 900	9 300	—	—	35 000
Mozambique	564 000	536 000	545 000	557 000	562 000
Nigeria	—	9 000	11 000	18 000	15 000
South Africa	899 000	811 000	809 000	807 000	810 000
Canada	3 082 625	3 120 148	3 030 269	2 963 200	2 987 964
USA	2 553 900	2 658 300	1 727 200	1 727 300	1 990 000
Argentina	292 744	399 714	405 779	410 947	415 799
Brazil	1 654 800	1 661 000	1 535 900	1 536 200	1 440 400
Venezuela	615 000	607 000	569 000	353 658	330 000
Bahrain	865 883	871 658	847 700	850 700	881 310
China	12 558 600	13 178 200	12 890 500	16 244 100	18 061 700
India (c)	1 239 581	1 347 127	1 480 568	1 621 035	* 1 660 000
Indonesia	242 100	242 500	257 600	253 300	246 300
Iran (b)	215 981	241 300	281 300	282 000	321 900
Japan	6 600	6 600	5 100	4 700	4 700
Kazakhstan	12 000	106 000	128 000	227 000	248 800
Oman	—	49 000	351 000	367 000	373 000
Qatar	—	—	* 10 000	* 190 000	* 480 000
Tajikistan	419 060	399 500	359 400	348 900	277 600
United Arab Emirates	889 548	891 723	1 009 800	1 400 000	1 750 000
Australia	1 957 000	1 974 000	1 943 000	1 927 000	1 945 000
New Zealand	351 100	315 500	271 000	344 000	357 000
World Total	38 200 000	39 800 000	37 200 000	41 700 000	45 200 000

Notes

(1) The figures in this table are for primary aluminium only. Aluminium can also be produced from secondary sources and may be recovered from salt slags

(a) Years ended 30 June of that stated
(b) Years ended 20 March following that stated
(c) Years ended 31 March following that stated

Mine production of antimony

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Russia	* 3 000	* 3 000	* 3 000	* 3 000	* 3 000
Turkey	* 1 200	* 1 300	* 1 300	* 1 300	* 1 300
South Africa	3 436	3 674	2 090	2 257	2 391
Canada	193	132	64	69	68
Guatemala	365	—	—	—	—
Mexico	414	380	74	71	5
Bolivia	3 881	3 905	2 990	4 980	3 947
Peru (a)	590	531	145	—	—
China	163 000	100 230	112 000	129 831	128 017
Kazakhstan	952	890	597	785	* 800
Kyrgyzstan	* 250	* 250	918	* 900	* 900
Pakistan (b)	119	245	75	25	—
Tajikistan	3 500	3 400	2 447	3 341	* 4 000
Thailand	271	422	555	705	442
Australia (b)	767	1 688	1 794	707	1 751
World Total	182 000	120 000	128 000	148 000	147 000

Notes
(1) This table includes antimony content of antimonial lead alloys
(2) In addition, Hungary is believed to produce antimony

(a) Including Sb content of antimonial lead plus Sb content of ores for export
(b) Years ended 30 June of that stated

Production of white arsenic

tonnes (metric)

Country	2007	2008	2009	2010	2011
Belgium	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Portugal	* 15	* 15	* 15	* 15	* 15
Russia	* 1 500	* 1 500	* 1 500	* 1 500	* 1 500
Namibia	610	574	—	—	—
Mexico	677	—	—	—	—
Bolivia	* 80	74	115	155	99
Chile (a)	11 400	* 10 000	* 11 000	* 11 000	* 10 000
Peru	4 321	4 822	300	—	—
China	* 25 000	* 25 000	* 25 000	* 25 000	* 25 000
Iran (b)	* 100	* 100	* 100	* 100	* 100
Japan	* 40	* 40	* 40	* 40	* 40
Kazakhstan	* 1 500	* 1 500	* 1 500	* 1 500	* 1 500

Notes
(1) This table includes calculated trioxide equivalent of arsenic metal produced except where this would involve double counting
(2) In addition to the countries listed, Austria, Finland, Hungary, Spain and the United Kingdom are believed to produce arsenic

(a) Exports
(b) Orpiment and realgar concentrates

Production of asbestos

tonnes (metric)

Country	2007	2008	2009	2010	2011
Russia	1 030 000	1 020 000	* 1 000 000	* 1 000 000	* 1 000 000
Slovakia	400	200	—	—	—
Zimbabwe					
Chrysotile	84 520	11 489	4 971	2 031	—
Canada					
Chrysotile	* 180 000	* 160 000	* 150 000	* 100 000	* 50 000
Argentina	282	298	322	341	* 350
Brazil	254 204	305 000	288 400	312 000	310 000
China	* 390 000	* 380 000	* 440 000	* 400 000	* 440 000
India					
Amphibole (a)	269	315	243	258	255
Kazakhstan	292 600	230 100	230 000	214 100	223 200
World Total	2 200 000	2 100 000	2 100 000	2 000 000	2 000 000

Notes
(1) In addition to the countries listed, Romania is believed to produce asbestos

(a) Years ended 31 March following that stated

Production of barytes

tonnes (metric)

Country	2007	2008	2009	2010	2011
Bosnia & Herzegovina	37	54	30	57	—
Bulgaria	50 900	40 100	14 300	500	200
Germany	88 265	78 941	45 606	55 887	55 342
Italy	* 5 000	* 5 000	* 3 500	* 3 500	* 3 500
Poland	2 000	308	—	—	—
Portugal	25	171	1 078	15	—
Russia	* 64 000	* 64 000	* 64 000	* 64 000	* 64 000
Slovakia	58 000	20 000	30 000	17 000	13 000
Spain	26 770	11 100	5 212	2 050	—
Turkey	150 000	150 000	213 187	225 000	225 000
United Kingdom	53 000	43 000	36 000	34 099	31 000
Algeria	63 098	60 088	37 981	42 254	* 40 000
Egypt	504	1 556	1 587	1 170	1 168
Morocco	664 708	725 060	586 937	572 429	769 504
Nigeria	18 047	* 16 000	14 314	10 749	* 11 000
Canada	9 000	12 300	15 000	22 000	22 000
Guatemala	—	—	13	11	334
Mexico	185 921	140 066	152 791	143 225	134 727
USA (b)	455 000	648 000	383 000	662 000	640 000
Argentina	3 798	3 170	3 416	2 900	3 000
Bolivia	8 245	10 900	1 900	7 845	21 297
Brazil (d)	37 000	42 000	38 550	* 40 000	* 40 000
Chile	77	—	—	—	—
Colombia	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Peru	27 369	45 199	27 881	52 275	86 790
Afghanistan	* 1 500	* 1 500	* 1 000	* 1 000	* 1 000
Burma (a)	5 918	6 889	7 008	14 119	31 791
China	4 300 000	5 000 000	2 900 000	3 900 000	4 300 000
India (a)	1 076 290	1 686 148	2 152 552	2 333 805	1 716 042
Iran (c)	249 495	226 590	361 217	326 275	* 330 000
Kazakhstan	130 000	170 000	170 000	200 000	200 000
Laos	1 000	1 000	12 460	17 500	12 400
Malaysia	—	4 372	22 390	1 000	—
Pakistan (e)	46 759	49 933	62 997	57 166	31 836
Saudi Arabia	30 000	30 000	30 000	30 000	* 30 000
Thailand	8 631	9 180	51 895	33 465	67 703
Vietnam	90 000	80 000	70 000	90 000	90 000
Australia	12 576	22 189	16 634	16 529	10 569
World Total	7 900 000	9 400 000	7 500 000	9 000 000	9 000 000

Notes
(1) This table may include small quantities of witherite
(2) In addition to the countries listed, Cuba is believed to produce barytes

(a) Years ended 31 March following that stated
(b) Sold or used by producers
(c) Years ended 20 March following that stated
(d) Including beneficiated and directly shipped material
(e) Years ended 30 June of that stated

Production of bentonite and fuller's earth

tonnes (metric)

Country	2007	2008	2009	2010	2011
Armenia					
Bentonite	1 129	50	238	1 397	835
Azerbaijan					
Bentonite	50 459	40 683	10 581	18 100	20 679
Bosnia & Herzegovina					
Bentonite (b)	32 912	30 504	16 042	314	* —
Bulgaria					
Bentonite	99 000	178 700	108 400	99 700	53 900
Croatia					
Bentonite	19 578	19 759	—	—	—
Cyprus					
Bentonite	154 655	155 125	152 722	162 969	160 625
Czech Republic					
Bentonite	335 000	235 000	177 000	183 000	160 000
Denmark					
Bentonite	20 093	22 458	24 040	23 832	38 300
France					
Bentonite	...	...	25 000	25 000	20 000
Germany					
Bentonite	384 709	414 336	326 461	362 623	375 332
Greece					
Bentonite	1 342 000	1 580 000	1 500 000	844 804	1 250 000
Hungary					
Bentonite	54 231	6 220	5 298	17 200	17 308
Italy					
Bentonite	305 905	161 313	114 682	110 982	102 756
Kosovo					
Bentonite	—	20 800	49 000	20 200	33 200
Macedonia					
Bentonite	22 509	13 689	9 033	7 084	8 914
Poland					
Bentonite	1 300	3 000	2 800	2 000	900
Romania					
Bentonite	16 911	16 638	13 756	21 637	19 864
Russia					
Bentonite	* 460 000	* 460 000	* 460 000	* 460 000	* 460 000
Slovakia					
Bentonite	149 000	145 000	109 000	153 000	213 000
Slovenia					
Bentonite	130	160	104	135	168
Spain					
Bentonite	147 253	154 534	147 090	157 001	110 721
Attapulgite	24 615	27 348	21 110	27 841	26 031
Sepiolite	717 728	737 659	573 937	557 862	566 270
Turkey					
Bentonite	748 170	683 253	753 155	718 260	379 918
Sepiolite	* 10 000	* 10 000	* 10 000	* 10 000	—
Ukraine					
Bentonite	314 000	200 000	195 000	185 000	211 000
Algeria					
Bentonite	32 600	30 595	31 612	34 126	* 30 000
Egypt					
Bentonite (e)	19 200	28 320	35 384	28 865	33 132
Malawi					
Bentonite	2 080	7 023	8 050	1 020	* 1 000
Morocco					
Bentonite	136 097	50 125	84 097	110 703	97 071
Fuller's earth (f)	121 737	140 875	132 110	82 570	103 682
Mozambique					
Bentonite	762	614	577	480	* 400
Senegal					
Attapulgite	* 150 000	166 900	180 900	204 300	180 300
South Africa					
Bentonite	45 778	44 067	40 340	82 341	120 417
Attapulgite	65 402	69 876	52 103	57 606	14 448

Production of bentonite and fuller's earth

tonnes (metric)

Country	2007	2008	2009	2010	2011
Canada					
Bentonite (g)	3 744	3 906	3 947	4 542	2 266
Cuba					
Bentonite	401	382	670	228	1 244
Guatemala					
Bentonite	259 799	62 749	14 287	22 423	12 270
Mexico					
Bentonite	613 895	374 933	511 430	590 998	563 795
Fuller's earth	34 175	66 123	108 139	170 350	107 436
USA					
Bentonite (c)	4 820 000	4 900 000	3 650 000	4 630 000	4 950 000
Fuller's earth (c)	2 660 000	2 510 000	2 010 000	2 050 000	2 100 000
Argentina					
Bentonite	250 260	265 782	148 099	204 209	* 200 000
Brazil					
Bentonite	329 647	340 141	217 926	326 428	* 330 000
Chile					
Bentonite	533	—	—	—	1 255
Peru					
Bentonite	21 451	31 557	119 452	44 266	27 534
Uruguay					
Bentonite	530	310	210	430	1 210
Burma					
Bentonite (d)	971	* 1 000	* 1 000	* 1 000	* 1 000
China					
Bentonite	* 3 300 000	* 3 300 000	* 3 400 000	* 3 400 000	* 3 400 000
India					
Bentonite (d)	* 563 000	* 671 000	* 561 000	* 739 000	* 996 000
Fuller's earth (d)	* 89 000	* 29 000	* 5 600	* 5 600	* 5 600
Indonesia					
Bentonite	* 5 500	* 6 000	* 6 000	* 6 500	* 6 500
Iran					
Bentonite (a)	254 084	375 898	387 437	350 208	* 350 000
Iraq					
Bentonite	570	1 605	3 959	6 127	6 452
Japan					
Bentonite	* 430 000	* 435 000	* 432 000	* 430 000	* 430 000
Fuller's earth	* 110 000	* 110 000	* 110 000	* 110 000	* 110 000
Korea (Rep. of)					
Bentonite	56 429	71 052	84 963	88 255	94 987
Fuller's earth	65 136	70 711	99 802	83 476	46 623
Pakistan					
Bentonite (e)	33 177	31 247	32 032	34 596	30 840
Fuller's earth (e)	11 378	10 998	10 213	11 219	6 774
Philippines					
Bentonite	1 148	1 422	1 413	1 475	2 087
Thailand					
Bentonite	650	210	110	130	55 220
Uzbekistan					
Bentonite	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
Vietnam					
Bentonite	* 20 000	* 20 000	* 20 000	* 20 000	* 20 000

Production of bentonite and fuller's earth

tonnes (metric)

Country	2007	2008	2009	2010	2011
Australia					
Bentonite (e)	* 116 300	* 85 800	* 124 400	* 131 300	* 77 700
Fuller's earth	* 10 000	* 10 000	* 10 000	* 10 000	* 14 300
New Zealand					
Bentonite	6 154	753	880	1 216	—
World Total Bentonite	16 000 000	15 700 000	14 200 000	14 900 000	15 500 000
World Total Fuller's Earth (b)	4 100 000	4 000 000	3 300 000	3 400 000	3 300 000

Notes
(1) Bentonites consist of montmorillonite (one of the smectite group of clay minerals) and occur in two main varieties, calcium bentonite, the most commonly occurring, and sodium bentonite, industrially the more important
(2) Calcium bentonite can be converted to sodium bentonite by a sodium-exchange process
(3) In some countries, such as the United Kingdom, calcium bentonite is known as fuller's earth, a term which is also used to refer to attapulgite, a mineralogically distinct clay mineral but exhibiting similar properties
(4) In addition to the countries listed, Austria is believed to produce bentonite and France may produce fuller's earth

(a) Years ended 20 March following that stated
(b) Including attapulgite and sepiolite
(c) Sold or used by producers
(d) Years ended 31 March following that stated
(e) Years ended 30 June of that stated
(f) Smectite
(g) Sales

Production of beryl

tonnes (metric)

Country	2007	2008	2009	2010	2011
Madagascar (a)	* 12	* 12	* 12	* 12	* 12
Mozambique	31	8	45	* 22	* 22
Uganda	2	—	—	—	—
Zambia	* 5	* 4	* 6	* 6	* 6
USA (b)	3 810	4 410	3 030	* 4 460	* 4 500
China	* 500	* 500	* 500	* 500	* 500

Notes
(a) Includes ornamental and industrial products
(b) Includes bertrandite ore, calculated as equivalent to beryl containing 11% beryllium oxide

Mine production of bismuth

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Bulgaria	* 45	* 45	* 45	* 45	* 45
Romania	* 40	* 40	* 40	* 40	* 40
Russia	* 55	* 70	* 65	* 50	* 45
Canada	145	71	86	92	92
Mexico	1 170	1 132	854	982	935
Bolivia	147	28	54	87	41
Peru (a)	1 114	1 061	423	—	—
China	1 363	1 453	1 688	1 589	* 1 600
Japan (a)	408	480	423	454	483
Kazakhstan	* 145	* 150	* —	* —	* —
Australia	* 100	* 100	* 100	* 100	* 100
World Total	4 700	4 600	3 800	3 400	3 400

Notes
(1) The figures in this table are in some instances derived from reported bismuth content of refined and impure metal plus recoverable in ores and concentrates exported
(2) Production for some countries may include bismuth produced from imported ores but it is thought that any resulting duplication is insignificant in the countries shown
(3) In addition to the countries listed, Brazil is believed to produce bismuth

(a) Metal production

Production of borates

tonnes (metric)

Country	2007	2008	2009	2010	2011
Russia	* 400 000	* 400 000	* 400 000	* 400 000	* 400 000
Turkey	1 997 163	2 139 224	1 687 102	1 910 000	2 273 122
USA (a)	* 1 150 000	* 1 150 000	* 1 200 000	* 1 200 000	* 1 250 000
Argentina	669 578	789 954	505 983	622 968	* 600 000
Bolivia	79 531	66 249	93 829	109 922	138 767
Chile	535 071	590 999	613 135	503 609	491 421
Peru	233 991	349 891	187 221	292 855	—
China	* 290 000	* 280 000	* 290 000	* 300 000	* 300 000
Iran (b)	1 603	1 020	388	* 500	* 500
Kazakhstan	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000

Notes
(a) Sold or used by producers
(b) Years ended 20 March following that stated

Production of bromine

kilograms

Country	2007	2008	2009	2010	2011
Russia	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Spain	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Ukraine	* 1 800 000	* 400 000	* 400 000	* 400 000	* 400 000
USA (a)	* 235 000 000	* 230 000 000	* 230 000 000	* 230 000 000	* 225 000 000
China	* 137 000 000	* 135 000 000	* 140 000 000	* 150 000 000	* 155 000 000
India (b)	1 664 640	2 118 740	1 862 480	1 587 000	1 572 160
Israel	159 395 000	164 042 000	127 689 000	184 696 000	202 313 000
Japan	* 20 000 000	* 20 000 000	* 20 000 000	* 20 000 000	* 20 000 000
Jordan	85 105 000	105 600 000	69 000 000	* 70 000 000	* 70 000 000
World Total	640 000 000	657 000 000	589 000 000	657 000 000	674 000 000

Notes
(a) Elemental bromine sold as such or used in the preparation of bromine compounds by primary producers
(b) Years ended 31 March following that stated

Production of cadmium

tonnes (metric)

Country	2007	2008	2009	2010	2011
Bulgaria	318	376	413	389	* 430
France	50	—	—	—	—
Netherlands	495	530	* 490	* 560	* 560
Norway	269	178	249	300	309
Poland	421	603	534	451	526
Russia	810	* 800	* 700	* 700	* 700
Canada (a)	1 388	1 409	1 299	1 357	1 203
Mexico	1 605	1 550	1 510	1 464	1 494
USA (a)	735	777	633	637	600
Argentina	35	38	36	35	35
Brazil	* 200	* 200	* 200	* 200	* 200
Peru	347	371	289	357	572
China	4 215	6 964	7 053	7 263	* 7 360
India (b)	589	507	553	550	* 460
Japan	1 939	2 126	1 824	2 053	1 755
Kazakhstan	1 300	1 100	1 300	1 400	* 1 400
Korea (Rep. of)	2 846	3 090	2 500	4 166	3 005
Korea, Dem. P.R. of	* 200	* 200	* 200	* 200	* 200
Australia	351	* 350	* 370	* 350	* 390
World Total	18 100	21 200	20 200	22 400	21 200

Notes
(1) Data in this table excludes secondary metal unless otherwise stated

(a) Including cadmium sponge and/or secondary metal
(b) Years ended 31 March following that stated

Production of chromium ores and concentrates

tonnes (metric)

Country	2007	2008	2009	2010	2011
Albania	194 760	220 536	288 759	334 467	187 788
Finland	556 000	614 000	247 000	598 000	693 000
Russia	776 681	913 000	416 194	* 400 000	* 400 000
Turkey	1 678 932	1 885 712	1 770 029	2 461 314	2 281 981
Madagascar	77 700	112 600	131 800	134 500	66 711
South Africa	9 646 958	9 682 640	6 864 938	10 871 095	10 721 360
Sudan	37 656	27 094	14 087	56 823	...
Zimbabwe	614 559	442 584	193 674	516 776	599 079
Brazil	627 772	664 000	365 000	520 000	567 444
Afghanistan	6 491	6 491	6 000	* 6 000	* 6 000
China	* 220 000	* 220 000	* 220 000	* 220 000	* 220 000
India (a)	4 872 847	4 073 479	3 425 580	4 262 207	3 735 000
Iran (b)(c)	139 114	268 586	274 511	350 000	330 000
Kazakhstan	4 590 000	4 207 000	4 678 000	5 092 000	5 059 000
Oman	407 822	859 748	636 482	865 400	616 700
Pakistan	* 300 000	* 390 000	* 300 000	* 540 000	* 450 000
Philippines (b)	31 593	15 268	14 322	14 807	25 483
United Arab Emirates	23 000	31 000	—	—	—
Vietnam	* 103 800	* 55 100	* 37 100	* 58 600	* 24 900
Australia	295 000	142 000	182 000	181 200	323 800
World Total	25 200 000	24 800 000	20 100 000	27 500 000	26 300 000

Notes
(1) In addition to the countries listed, Bulgaria is believed to produce chromite

(a) Years ended 31 March following that stated
(b) Including foundry sand and/or lumpy ore
(c) Years ended 20 March following that stated

Production of coal

tonnes (metric)

Country	2007	2008	2009	2010	2011
Albania					
Lignite	2 700	1 500	2 000	3 000	100
Bosnia & Herzegovina					
Brown coal & lignite	9 762 800	11 221 305	11 515 138	10 976 163	12 738 225
Bulgaria					
Lignite	25 325 000	26 007 800	25 014 800	27 148 300	34 496 200
Brown coal	2 833 500	2 643 200	2 243 800	2 321 200	2 743 500
Czech Republic					
Bituminous	12 462 000	12 197 000	10 621 000	11 193 000	10 967 000
Lignite	437 000	416 000	262 000	—	—
Brown coal	49 134 000	47 456 000	45 354 000	43 931 000	46 848 000
Georgia	18 891	12 000	213 188	267 664	350 417
Germany					
Anthracite & Bituminous	24 185 000	19 143 000	14 971 000	14 110 000	12 960 000
Brown coal	180 409 054	175 313 020	169 857 142	169 402 544	176 502 000
Greece					
Lignite	66 100 000	64 521 000	61 800 000	53 600 000	58 400 000
Hungary					
Lignite	8 351 563	8 041 168	8 026 587	8 203 000	8 800 783
Brown coal	1 450 400	1 386 140	952 000	911 000	757 900
Kosovo					
Lignite	—	7 842 000	7 839 173	7 958 090	8 212 103
Macedonia					
Lignite	6 569 220	7 669 103	7 395 915	6 583 000	7 902 000
Montenegro					
Lignite	1 195 515	1 740 076	957 164	1 937 847	1 972 671
Norway					
Bituminous (d)	3 223 000	3 429 000	2 437 000	1 685 000	1 640 000
Poland					
Bituminous	88 313 369	84 345 443	78 064 462	76 727 800	76 454 400
Lignite	57 537 727	59 668 166	57 108 304	56 510 100	62 841 300
Romania					
Lignite	35 671 000	34 529 000	28 460 152	28 774 244	33 779 130
Brown coal	97 000	205 000	63 458	62 448	46 071
Russia					
Coal	314 000 000	326 000 000	298 000 000	317 000 000	334 000 000
Serbia					
Bituminous	58 000	66 000	69 000	108 000	134 000
Lignite	36 803 000	(m)(b) 31 332 000	(b) 38 070 579	(b) 37 562 840	(b) 40 467 132
Brown coal	204 000	...	209 660	193 492	349 861
Slovakia					
Lignite	20 000	87 000	155 000	176 000	124 000
Brown coal	1 839 000	2 075 000	2 221 000	2 026 000	1 989 000
Slovenia					
Lignite	4 037 766	4 008 440	3 921 746	4 010 930	4 066 278
Brown coal	483 417	488 828	510 769	419 466	435 800
Spain					
Anthracite	3 485 083	3 152 550	4 306 033	3 212 603	2 489 797
Bituminous	4 387 416	4 085 652	2 898 340	2 776 918	1 774 991
Sub-bituminous	3 128 081	2 890 230	2 493 577	2 428 877	2 357 557
Lignite	6 112 946	—	—	—	—
Turkey					
Anthracite	3 230 787	3 343 409	3 773 603	6 312 137	5 619 316
Lignite	74 316 728	86 074 626	82 263 104	86 943 392	89 805 602
Ukraine					
Bituminous	75 538 400	77 802 200	54 977 000	54 952 000	62 661 000
Lignite	182 000	163 000	175 000	* 175 000	* 175 000
United Kingdom					
Bituminous (g)	17 070 000	18 053 000	17 874 000	18 417 000	18 492 000
Botswana	828 164	909 511	737 798	988 240	787 729
Congo, Democratic Republic					
Bituminous	126 100	128 800	133 400	133 400	* 133 400
Egypt	146 841	—	—	109 884	233 283
Malawi	58 550	57 477	59 201	79 186	* 79 000

Production of coal

tonnes (metric)

Country	2007	2008	2009	2010	2011
Mozambique					
Bituminous	23 602	37 700	25 924	35 737	82 920
Niger	171 296	182 912	225 072	246 558	* 250 000
Nigeria					
Sub-bituminous	* 20 000	* 30 000	* 40 000	44 148	* 44 000
South Africa					
Anthracite	2 348 955	2 207 304	1 657 860	2 073 889	2 553 635
Bituminous	245 251 281	250 006 054	248 923 814	255 131 918	250 203 209
Swaziland					
Anthracite	241 283	174 807	129 647	145 903	121 050
Tanzania					
Bituminous	27 198	15 242	16 500	* 18 000	* 18 000
Zambia					
Bituminous	14 058	* 14 000	* 14 000	—	—
Zimbabwe					
Bituminous	2 080 221	1 509 080	1 667 346	2 668 183	2 562 054
Canada					
Bituminous	32 325 000	32 839 000	27 959 000	33 704 000	34 621 000
Sub-bituminous	26 118 000	24 988 000	24 425 000	23 927 000	22 762 000
Lignite	10 541 000	9 921 000	10 550 000	10 264 000	9 731 000
Mexico					
Bituminous	16 792 109	15 038 557	13 555 680	16 318 120	20 967 630
USA					
Anthracite (k)	1 451 000	1 542 000	1 724 000	1 633 000	* 2 087 000
Bituminous (k)	492 428 000	503 768 000	457 320 000	444 074 000	* 454 054 000
Sub-bituminous	475 101 000	489 072 000	450 334 000	467 027 000	* 463 126 000
Lignite	71 306 000	68 675 000	65 772 000	70 943 000	* 73 483 000
Argentina					
Bituminous	250 000	207 983	181 474	140 000	* 150 000
Brazil					
Bituminous & lignite (e)	5 998 354	6 518 733	5 947 364	5 611 467	5 689 727
Chile					
Bituminous	184 122	212 375	118 305	106 018	131 430
Lignite	103 871	321 417	517 769	512 775	522 672
Colombia					
Bituminous	69 902 000	73 502 075	72 807 412	74 350 133	85 803 000
Peru					
Anthracite & Bituminous	100 594	136 435	156 372	91 960	164 392
Venezuela					
Bituminous	6 855 341	5 053 700	3 258 146	2 630 820	* 2 600 000
Afghanistan					
Bituminous	...	314 702	453 592	657 618	* 658 000
Bangladesh	388 376	677 098	857 648	730 866	666 635
Bhutan	105 261	123 704	48 545	87 814	148 244
Burma	282 655	241 299	231 271	235 743	351 770
China	2 692 000 000	2 802 000 000	2 973 000 000	3 235 000 000	3 520 000 000
India					
Bituminous (h)	457 082 000	492 757 000	532 042 000	533 223 000	546 884 000
Lignite (h)	33 980 000	32 421 000	34 071 000	37 651 000	80 686 000
Indonesia					
Anthracite & Bituminous	216 946 699	240 249 968	256 181 000	275 164 196	* 350 000 000
Iran					
Bituminous (c)	2 525 000	2 520 000	2 180 810	* 2 500 000	* 2 500 000
Japan					
Bituminous	* 1 340 000	* 1 300 000	* 1 100 000	* 1 000 000	* 1 000 000
Kazakhstan					
Bituminous	94 013 800	106 295 600	86 881 082	90 069 836	93 453 636
Lignite	4 370 100	4 776 700	4 612 000	6 607 026	7 591 322
Korea (Rep. of)					
Anthracite	2 886 000	2 772 544	2 518 940	2 083 972	2 084 474
Korea, Dem. P.R. of	* 24 100 000	* 25 060 000	* 36 000 000	* 41 000 000	* 41 000 000
Kyrgyzstan	400 000	436 678	546 971	549 000	1 061 000
Laos	681 715	379 273	466 082	501 600	511 700

Production of coal

tonnes (metric)

Country	2007	2008	2009	2010	2011
Malaysia	1 063 078	1 166 525	2 138 390	2 397 340	2 915 788
Mongolia					
Anthracite & semi-bituminous	4 664 900	5 228 000	...	...	...
Brown coal & lignite	4 572 700	4 843 900	(i) 14 365 500	(i) 25 161 900	(i) 32 029 700
Nepal					
Sub-bituminous (l)	16 374	13 845	14 819	* 16 000	* 16 000
Pakistan	3 702 162	4 066 409	3 679 185	3 535 828	3 291 617
Philippines					
Bituminous	3 401 136	3 609 316	4 687 277	6 650 357	6 881 474
Tajikistan	181 400	198 500	178 300	199 700	236 400
Thailand					
Lignite	18 239 176	18 095 335	16 360 261	18 399 399	21 324 406
Uzbekistan					
Bituminous	159 665	197 766	100 698	197 766	* 198 000
Lignite	3 282 194	3 091 685	3 553 443	3 101 665	* 3 100 000
Vietnam					
Anthracite	42 483 000	39 777 000	44 078 000	44 800 000	45 800 000
Australia					
Bituminous (f)	325 000 000	333 000 000	350 000 000	357 000 000	347 000 000
Brown coal (j)	65 613 000	66 033 000	68 252 000	68 751 000	66 733 000
New Zealand					
Bituminous	2 019 430	2 476 848	2 085 486	2 597 400	2 330 400
Sub-bituminous	2 555 830	2 179 081	2 218 143	2 438 200	2 294 200
Lignite	260 148	253 492	259 704	294 900	320 100
World Total	6 587 000 000	6 811 000 000	6 876 000 000	7 235 000 000	7 739 000 000

Notes

(1) There is no international agreement as to the separate definition of lignite and brown coal. In some cases they are distinguished. Elsewhere both may be aggregated under one or other term

(a) Including lignite
(b) Excluding production in Kosovo
(c) Years ended 20 March following that stated
(d) Spitzbergen: not including production from mines controlled by Russia
(e) Including beneficiated and directly shipped material
(f) Including sub-bituminous
(g) Including anthracite
(h) Years ended 31 March following that stated
(i) Coal; all forms
(j) Years ended 30 June of that stated
(k) Includes a small amount of refuse recovery
(l) Years ended 15 July of that shown
(m) Including brown coal

Mine production of cobalt

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Finland	* 120	* 100	* 27	* 140	480
Russia (a)	3 587	2 502	2 352	2 460	2 337
Botswana	242	337	342	272	149
Congo, Democratic Republic	17 886	42 461	56 258	97 693	108 888
Madagascar	—	—	—	700	—
Morocco (a)	1 573	1 791	1 600	1 582	1 518
South Africa (a)	307	244	238	840	862
Uganda (a)	698	663	673	624	661
Zambia (a)	4 335	3 841	1 535	5 134	5 956
Zimbabwe	29	28	39	58	174
Canada	8 692	8 953	3 919	4 636	7 071
Cuba	4 549	3 175	* 3 500	3 721	3 850
Brazil	1 311	2 631	2 075	3 139	3 150
China	6 100	6 630	6 000	6 500	* 6 800
Indonesia	* 650	* 650	* 650	* 650	* 650
Philippines	* 1 000	* 1 200	* 1 500	* 1 500	* 1 500
Australia (b)	5 325	5 770	5 365	4 838	4 254
New Caledonia	1 620	869	913	1 735	2 404
World Total	58 000	82 000	87 000	136 000	151 000

Notes
(1) There is frequently a considerable disparity between the cobalt content of ore raised and cobalt actually recovered
(2) Figures in this table relate where possible to cobalt recovered. The principal exceptions to this are Brazil and New Caledonia, the figures for which relate to cobalt in ore raised

(a) Metal
(b) Years ended 30 June of that stated

Production of cobalt metal

tonnes (metric)

Country	2007	2008	2009	2010	2011
Belgium (d)	2 825	3 020	2 150	2 600	3 187
Finland	9 173	9 645	8 970	9 429	10 627
France	305	311	368	302	354
Norway	3 939	3 719	3 510	3 208	3 067
Russia	3 587	2 502	2 352	2 460	2 337
Congo, Democratic Republic (c)	606	1 049	2 950	4 182	3 083
Morocco	1 573	1 791	1 600	1 582	1 518
South Africa (b)	307	244	238	840	862
Uganda	698	663	673	624	661
Zambia	4 435	3 841	1 535	5 134	5 956
Canada (a)	5 620	5 637	4 918	4 711	6 038
Brazil	1 148	994	1 012	1 369	1 613
China (d)	13 245	18 239	23 138	32 930	34 969
India	980	858	1 001	1 187	1 299
Japan	1 085	1 071	1 332	1 935	2 007
Australia	3 684	3 617	4 050	4 117	4 722
World Total	53 200	57 200	59 800	76 600	82 300

Notes

(1) In addition to the production listed above, several countries, including the United Kingdom, Finland and France, are known to produce substantial amounts of cobalt compounds

(a) Including oxides
(b) Includes metal and metal contained in sulphate
(c) Excludes white alloy and matte which are believed to be further processed in Belgium and elsewhere
(d) Some metal production in China is recorded in Belgium

Mine production of copper

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Albania	2 384	3 633	2 596	2 672	4 378
Armenia	17 629	18 754	23 233	31 062	33 597
Bulgaria	116 157	107 195	110 652	112 904	114 603
Cyprus	3 012	2 986	2 380	2 595	3 660
Finland	13 600	13 300	14 600	14 700	14 000
Georgia	11 300	18 700	16 600	11 300	10 200
Macedonia	7 029	8 051	7 440	7 900	7 600
Poland	451 900	429 687	439 365	425 700	426 700
Portugal	90 182	89 026	86 462	74 011	82 200
Romania	2 213	308	3 129	5 127	6 355
Russia	690 000	705 000	675 700	702 700	713 100
Serbia	16 500	17 600	19 400	22 500	25 800
Spain	6 281	7 071	17 663	54 335	67 983
Sweden	62 905	57 688	55 414	76 514	82 967
Turkey	81 000	83 000	87 070	81 500	95 000
Botswana	19 996	23 146	24 382	48 026	28 246
Congo, Democratic Republic	144 600	239 200	299 200	377 900	480 000
Mauritania	28 755	33 073	36 608	36 969	35 281
Morocco	5 592	5 929	11 830	14 986	12 076
Namibia	5 800	8 800	—	—	3 366
South Africa	97 000	108 700	107 600	102 600	96 600
Tanzania	3 276	2 852	3 079	6 400	6 700
Zambia	524 000	567 700	601 200	731 700	739 759
Zimbabwe	2 681	2 827	3 572	4 629	6 555
Canada	596 249	607 957	484 605	525 129	566 124
Dominican Republic	—	2 600	11 500	9 000	11 700
Mexico	337 527	246 593	240 648	270 136	443 621
USA	1 170 000	1 310 000	1 180 000	1 110 000	1 120 000
Argentina	180 223	156 900	143 084	140 300	116 700
Bolivia	606	567	620	2 100	4 176
Brazil	205 728	222 000	217 000	213 000	223 807
Chile	5 557 000	5 327 600	5 394 400	5 418 900	5 262 800
Colombia	840	1 050	1 140	711	808
Peru	1 190 274	1 267 867	1 276 249	1 247 184	1 235 198
Burma	15 100	6 900	9 800	* 12 000	* 12 000
China	946 200	1 092 700	1 062 000	1 179 500	1 299 300
India (a)	32 726	30 528	28 491	31 696	30 340
Indonesia	796 899	655 046	988 530	878 376	542 700
Iran	244 200	248 100	262 500	256 600	259 100
Kazakhstan	444 000	467 000	456 000	427 000	417 000
Korea, Dem. P.R. of	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
Laos	62 541	89 004	121 581	132 047	138 756
Malaysia	—	—	240	—	—
Mongolia	130 165	126 980	129 800	124 985	121 590
Oman	9 341	18 728	19 659	20 880	26 736
Pakistan	18 800	18 700	19 600	19 400	* 20 000
Philippines	22 862	21 235	49 060	58 412	63 835
Saudi Arabia	737	1 465	1 719	1 603	* 2 000
Uzbekistan	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Vietnam	12 500	11 525	12 925	12 250	11 250
Australia	871 000	886 000	856 000	871 000	960 000
Papua New Guinea	169 184	159 650	166 669	159 821	130 456
World Total	15 500 000	15 600 000	15 900 000	16 200 000	16 200 000

Notes
(a) Years ended 31 March following that stated

Smelter production of copper

tonnes (metric)

Country	2007	2008	2009	2010	2011
Armenia	6 954	6 480	6 858	7 644	8 876
Bulgaria	217 600	257 100	256 200	265 000	285 000
Finland	118 911	142 154	110 479	112 687	116 455
Germany	270 200	295 000	251 000	378 700	346 200
Norway	34 200	37 000	33 900	36 200	36 000
Poland	518 303	492 942	457 510	469 656	481 875
Russia	649 300	616 800	620 700	647 100	652 200
Serbia	30 200	31 900	27 000	20 000	28 200
Spain	257 348	259 897	264 971	259 119	260 730
Sweden	203 100	203 700	183 400	181 500	206 100
Turkey	17 900	38 000	—	—	35 600
Botswana	27 000	25 000	24 700	22 823	16 105
Congo, Democratic Republic (a)	1 800	—	—	—	—
Namibia	20 600	16 600	21 500	29 900	41 700
South Africa	111 900	94 800	86 900	75 900	82 400
Zambia (a)	224 000	232 000	334 000	487 000	511 200
Canada	470 713	443 710	316 510	318 006	304 724
Mexico	294 746	230 056	178 672	168 861	336 739
USA	617 000	573 800	597 400	601 200	538 400
Brazil	218 000	227 800	204 500	208 800	223 500
Chile	1 514 300	1 369 200	1 522 300	1 559 800	1 364 200
Peru	236 809	306 583	325 788	312 968	299 004
China	2 111 500	2 453 400	2 694 000	2 825 600	3 080 100
India	699 900	651 000	705 100	653 900	671 300
Indonesia	277 000	253 300	295 900	276 800	280 000
Iran	180 300	179 800	192 700	188 200	185 200
Japan	1 383 372	1 335 846	1 302 120	1 356 289	1 173 275
Kazakhstan	408 800	430 000	369 000	370 900	375 900
Korea (Rep. of)	470 000	502 000	455 400	475 900	449 200
Korea, Dem. P.R. of	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Oman	13 940	11 906	11 830	8 815	* 10 000
Pakistan	18 200	17 800	18 300	18 900	* 16 000
Philippines	219 900	239 700	230 100	216 200	205 000
Thailand	5 600	—	—	—	—
Uzbekistan	90 200	90 100	90 000	90 000	90 000
Vietnam	—	2 200	6 000	8 000	* 8 000
Australia	399 000	449 000	422 000	410 000	441 000
World Total	12 300 000	12 500 000	12 600 000	13 100 000	13 200 000

Notes

(1) This table shows primary metal in the form of blister and anode produced from concentrates, and may include copper produced from scrap but this is excluded when it can be separately identified

(a) Including leach cathodes

Production of refined copper

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria	81 400	106 700	96 200	113 700	112 500
Belgium	394 000	395 800	373 700	389 000	393 600
Bulgaria	69 900	114 200	183 600	195 400	201 100
Cyprus	3 012	2 986	2 380	2 595	3 660
Finland	109 870	131 249	105 411	120 528	124 360
Germany	665 517	689 763	668 945	704 300	708 800
Italy	28 600	24 200	6 500	1 800	2 000
Norway	34 200	37 000	33 900	36 200	36 000
Poland	532 975	526 808	502 462	547 074	571 000
Romania	18 589	15 300	4 600	—	—
Russia	948 300	876 800	855 000	899 600	912 000
Serbia	31 600	33 800	27 400	22 200	25 300
Spain	308 372	319 050	329 356	347 518	353 790
Sweden	213 894	227 774	205 759	190 497	219 316
Turkey	99 600	88 000	33 500	47 300	85 000
Ukraine	19 500	21 700	20 000	23 400	20 000
Congo, Democratic Republic	36 000	57 700	169 900	258 600	354 800
Egypt (a)	1 719	2 664	2 842	2 620	2 487
South Africa	110 700	92 700	88 600	76 200	79 500
Zambia	523 400	575 000	697 900	681 600	515 400
Zimbabwe	6 800	3 100	* 3 000	* 5 000	* 7 000
Canada	453 453	442 050	335 896	319 619	273 761
Mexico	357 300	295 000	260 700	247 300	400 000
USA	1 310 800	1 280 300	1 161 200	1 093 400	1 040 000
Argentina	* 16 000	* 16 000	* 16 000	* 16 000	* 16 000
Brazil	219 300	233 800	231 400	224 300	228 200
Chile	2 936 500	3 057 600	3 276 600	3 243 900	3 092 400
Peru	413 907	463 933	423 393	393 638	367 554
Burma	15 100	6 900	9 800	* 12 000	* 10 000
China	3 499 400	3 794 600	4 051 300	4 540 300	5 197 100
India (b)	501 485	513 640	532 865	512 124	* 525 000
Indonesia	256 900	253 400	284 800	277 500	257 000
Iran	204 300	200 600	210 300	219 800	227 200
Japan	1 576 818	1 539 957	1 439 843	1 548 688	1 328 288
Kazakhstan	408 026	398 411	312 767	323 368	338 524
Korea (Rep. of)	566 400	537 925	531 701	564 600	595 447
Korea, Dem. P.R. of	* 15 000	* 12 000	* 12 000	* 12 000	* 12 000
Laos	62 541	64 075	67 562	64 241	78 859
Mongolia	3 007	2 587	2 470	2 746	2 389
Oman	13 940	11 906	11 830	8 815	* 10 000
Philippines	160 200	174 600	178 000	176 000	164 000
Thailand	12 714	438	490	529	459
Uzbekistan	89 600	70 400	82 500	82 500	90 000
Vietnam	—	2 200	6 000	8 000	8 000
Australia	442 000	503 000	446 000	424 000	477 000
World Total	17 800 000	18 200 000	18 300 000	19 000 000	19 500 000

Notes
(1) Figures relate to both primary and secondary refined copper, whether electrolytic or fire refined. Metal recovered from secondary materials by remelting alone is excluded
(2) In addition to the countries listed, Albania and Colombia produce refined copper

(a) Years ended 30 June of that stated
(b) Years ended 31 March following that stated

Production of diamond

carats

Country	2007	2008	2009	2010	2011
Russia	38 291 200	36 925 150	34 759 400	34 856 600	35 139 800
Angola	9 701 709	8 906 974	13 827 609	8 362 139	8 328 519
Botswana	33 639 000	32 595 000	17 734 000	22 019 000	22 903 000
Cameroon (a)	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
Central African Republic	467 711	372 754	310 469	301 558	323 576
Congo	22 000	110 000	68 000	381 242	76 548
Congo, Democratic Republic	28 452 496	33 401 928	21 298 459	20 166 220	19 249 057
Ghana	839 235	598 042	354 443	308 679	283 369
Guinea	1 018 723	3 098 490	696 732	374 096	235 400
Lesotho	229 077	253 054	91 816	108 827	224 180
Liberia	21 699	46 963	36 828	22 018	39 865
Namibia	2 266 100	2 435 195	939 916	1 475 610	1 229 000
Sierra Leone	603 698	371 290	400 480	437 552	355 890
South Africa	15 247 122	12 901 018	6 118 974	8 870 967	7 046 644
Tanzania	282 786	237 676	181 874	80 498	28 378
Togo	13 452	8 787	125	96	71
Zimbabwe	695 016	797 198	963 502	8 435 224	8 502 648
Canada	17 007 850	14 802 699	10 946 098	11 773 000	10 795 000
Brazil	182 031	80 226	21 153	25 394	45 536
Guyana	268 925	168 926	143 982	49 920	52 273
Venezuela	14 502	9 381	7 730	2 099	—
China	* 1 070 000	* 1 100 000	* 1 100 000	* 1 100 000	* 1 100 000
India (b)	586	536	16 891	19 774	18 489
Indonesia	22 980	27 688	—	—	—
Australia	19 231 000	15 670 000	10 795 000	9 998 000	7 562 000
World Total	169 600 000	164 900 000	120 800 000	129 200 000	123 600 000

Notes
(1) This table does not show production of synthetic diamond
(2) So far as possible the amounts shown include estimates for illegal production
(3) Production of diamond from Ivory Coast has been under United Nations sanctions since 2004. It is believed illegal production continues but it is not possible to estimate the quantity involved

(a) Including artisanal production
(b) Years ended 31 March following that stated

Production of diatomite

tonnes (metric)

Country	2007	2008	2009	2010	2011
Czech Republic	19 000	31 000	—	32 000	46 000
Denmark					
Moler (d)	92 416	92 108	82 778	83 756	80 854
France	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Hungary	1 424	—	1 277	1 200	1 312
Poland	600	600	670	1 000	600
Romania	2 057	—	—	—	—
Spain (b)	45 480	46 192	29 194	64 346	83 624
Algeria	1 902	1 677	1 847	2 231	* 2 000
Ethiopia (a)	—	—	4 104	* 4 100	* 4 100
Kenya	201	72	231	* 250	* 250
Mozambique	651	379	200	* 40	...
Costa Rica	14 200	14 700	24 500	29 900	8 700
Mexico	82 519	128 536	80 807	91 710	84 231
USA (c)	687 000	764 000	575 000	595 000	600 000
Argentina	49 604	36 996	62 270	1 252 741	* 1 000 000
Brazil	9 600	12 100	7 500	9 300	* 10 000
Chile	25 405	25 497	23 027	30 925	22 938
Peru	21 603	12 200	9 946	18 886	54 163
China	* 420 000	* 440 000	* 440 000	* 400 000	* 440 000
Iran (e)	300	2 000	—	—	* —
Japan	* 120 000	* 115 000	* 110 000	* 110 000	* 100 000
Korea (Rep. of)	2 360	2 540	2 440	2 200	5 150
Saudi Arabia	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Thailand	1 260	4 075	5 600	7 100	38 130
Vietnam	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Australia (f)	* 33 600	* 21 200	* 13 900	* 13 600	* 12 000
New Zealand	—	—	10	95	—
World Total	1 717 000	1 837 000	1 561 000	2 836 000	2 680 000

Notes
(1) In addition to the countries listed, Egypt and Turkey are believed to produce diatomite

(a) Years ended 7 July of that stated
(b) Including Tripoli
(c) Sold or used by producers
(d) Moler is an impure diatomite containing a large proportion of clay
(e) Years ended 20 March following that stated
(f) Years ended 30 June of that stated

Production of feldspar

tonnes (metric)

Country	2007	2008	2009	2010	2011
Bulgaria	* 90 000	* 90 000	* 80 000	* 80 000	* 80 000
Czech Republic	514 000	488 000	431 000	388 000	407 000
Finland	48 980	45 250	23 120	28 013	26 292
France	* 650 000	* 650 000	* 650 000	* 650 000	* 650 000
Germany	171 303	161 416	140 000	* 150 000	* 150 000
Greece	95 000	62 000	55 737	23 050	10 200
Italy	3 524 389	4 727 000	* 4 700 000	* 4 700 000	* 4 700 000
Macedonia	32 814	28 920	19 377	23 188	25 032
Norway	65 000	62 000	48 000	56 000	25 271
Poland	497 900	599 100	445 500	513 700	* 550 000
Portugal	378 521	230 427	210 266	169 722	179 600

Production of feldspar

tonnes (metric)

Country	2007	2008	2009	2010	2011
Romania	41 477	22 995	14 317	6 049	3 814
Russia	* 160 000	* 160 000	* 160 000	* 160 000	* 160 000
Serbia	* 250	* 200	149	253	171
Slovakia	—	10 000	13 000	—	—
Spain	683 134	690 256	597 496	691 894	* 650 000
Sweden	25 000	22 000	18 000	22 000	30 000
Turkey	6 000 000	6 500 000	4 000 000	6 281 597	4 477 993
Ukraine	76 305	83 420	84 757	146 016	178 614
United Kingdom (c)(e)	1 112	430	—	—	—
Algeria	83 208	115 938	131 046	163 939	* 160 000
Egypt	135 290	168 673	353 700	405 600	* 210 000
Ethiopia	566	523	750	1 500	* 1 500
Morocco	37 955	30 080	* 35 000	* 40 000	43 889
Nigeria	...	...	13 631	1 616	* 1 600
South Africa	90 312	105 815	101 394	94 307	101 559
Cuba	5 600	4 300	4 700	2 800	3 100
Guatemala	10 480	45 854	5 672	15 720	7 516
Mexico	438 696	445 519	347 510	398 849	382 497
USA	730 000	680 000	550 000	670 000	690 000
Argentina	291 562	220 234	213 551	217 213	* 220 000
Brazil	166 000	122 000	115 000	* 120 000	* 120 000
Chile	6 704	17 834	9 079	7 723	7 563
Colombia	* 91 000	* 86 000	* 85 000	* 85 000	* 85 000
Ecuador	63 558	* 60 000	* 60 000	* 60 000	* 60 000
Peru	15 450	13 333	5 154	3 589	11 645
Uruguay	2 050	1 920	910	—	—
Venezuela	222 000	96 783	100 451	57 760	...
China	* 2 400 000	* 2 400 000	* 2 400 000	* 2 400 000	* 2 400 000
India (a)	488 458	531 689	496 997	472 041	542 184
Indonesia	* 25 000	* 26 000	* 26 000	* 26 000	* 26 000
Iran (b)	512 261	501 821	634 503	652 020	* 655 000
Japan (e)	* 750 000	* 700 000	* 700 000	* 650 000	* 600 000
Jordan	9 800	2 950	—	—	* —
Korea (Rep. of)	398 513	344 257	622 770	496 511	384 221
Malaysia	358 585	457 377	410 053	455 497	379 628
Pakistan (d)	26 120	18 737	37 881	54 198	23 254
Philippines	14 837	15 838	16 394	15 882	22 050
Saudi Arabia	73 000	55 000	55 000	42 300	* 40 000
Sri Lanka	46 583	55 212	73 365	75 405	53 337
Taiwan	—	4 379	—	20	50
Thailand	684 668	670 618	718 692	641 900	1 041 152
Uzbekistan	* 4 300	* 4 300	* 4 300	* 4 300	* 4 300
Vietnam	* 200 000	* 200 000	* 200 000	* 200 000	* 200 000
Australia (d)	* 105 000	* 102 000	* 100 000	* 103 000	* 94 000
World Total	21 544 000	22 940 000	20 319 000	22 724 000	20 875 000

Notes
(1) In addition to the countries listed, Slovakia is believed to produce feldspar

(a) Years ended 31 March following that stated
(b) Years ended 20 March following that stated
(c) China stone
(d) Years ended 30 June of that stated
(e) Including weathered granite feldspar

Production of fluorspar

tonnes (metric)

Country	2007	2008	2009	2010	2011
Bulgaria	—	—	32	10	31 800
Germany	54 359	48 519	49 962	59 086	65 619
Russia	* 180 000	* 269 000	* 240 000	* 250 000	* 250 000
Spain	155 197	148 736	122 533	132 341	117 333
United Kingdom	44 936	36 801	18 536	26 420	—
Egypt (c)	11 588	9 115	4 343	5 953	3 808
Kenya	82 000	98 248	15 667	40 800	95 100
Morocco	78 817	56 724	72 096	89 680	79 207
Namibia	118 766	118 263	80 857	104 494	94 000
South Africa	285 000	299 000	* 140 000	* 140 000	* 140 000
Mexico	933 361	1 057 649	1 045 940	1 067 386	1 206 907
Argentina	9 735	15 098	13 424	17 657	* 15 000
Brazil (a)	65 526	63 241	43 964	25 814	* 25 900
China	* 3 200 000	* 3 250 000	* 3 200 000	* 3 300 000	* 3 300 000
India (d)	7 764	9 990	13 781	7 544	4 900
Iran (b)	68 192	61 592	71 409	* 70 000	* 70 000
Kazakhstan	64 000	66 300	* 66 000	* 66 000	* 66 000
Korea, Dem. P.R. of	* 12 500	* 12 500	* 12 500	* 12 500	* 12 500
Kyrgyzstan	* 4 000	* 4 000	* 4 000	* 4 000	* 4 000
Mongolia	354 900	334 800	459 500	367 000	404 000
Pakistan (c)	1 505	2 612	493	222	198
Thailand	1 820	29 529	119 840	30 487	5 093
Vietnam	* 4 000	* 4 000	* 4 000	* 4 000	* 4 000
World Total	5 700 000	6 000 000	5 800 000	5 800 000	6 000 000

Notes
(1) In addition to the countries listed, Bulgaria is believed to produce fluorspar
(2) In addition, the USA produced the following amounts of fluorspar equivalent in fluorosilicic acid derived from processing phosphate rock ('000 t): 2005: 86; 2006: 70; 2007: 83; 2008: 92; 2009: 97

(a) Including beneficiated and directly shipped material
(b) Years ended 20 March following that stated
(c) Years ended 30 June of that stated
(d) Years ended 31 March following that stated

Production of primary gallium

Accurate data for gallium is difficult to obtain because it is produced only as a by-product of bauxite or zinc processing using proprietary techniques and the few producers do not report production figures. The United States Geological Survey estimates total world primary production as: 2007, 80 tonnes; 2008, 95 tonnes; 2009, 78 tonnes; 2010, 182 tonnes and 2011, 216 tonnes. In the 8th edition of their report on Gallium, Roskill Information Services estimated 2010 world primary production to be between 206 and 209 tonnes.

Producing countries, in decreasing order of production level, are believed to be China, Germany, Kazakhstan, Ukraine, Republic of Korea, Russia, Hungary and Japan.

There is also believed to be significant production of refined gallium from scrap recycling, particularly in China, Japan, United Kingdom and USA.

Production of germanium metal

tonnes (metric)

Country	2007	2008	2009	2010	2011
USA (a)	5	5	5	3	* 3
China	* 100	* 100	* 100	* 100	* 100
Japan	1	* 2	* 2	* 2	* 2
Other countries	* 45	* 35	* 15	* 15	* 15

Notes
(1) Germanium is also believed to be recovered from imported or domestic material in Belgium, Canada, Russia and Ukraine

(a) Including production of secondary metal

Mine production of gold

kilograms

Country	2007	2008	2009	2010	2011
Armenia	565	* 565	682	1 033	1 056
Azerbaijan	—	—	333	2 093	1 775
Bulgaria	3 964	4 160	4 482	4 489	5 302
Finland	1 639	1 336	3 808	5 644	6 438
Georgia	3 100	* 3 100	* 3 100	* 3 100	* 3 100
Greenland	1 835	1 648	—	—	93
Poland (d)	883	902	814	776	703
Romania	* 500	500	* 500	* 500	* 500
Russia	156 912	184 488	205 236	201 300	185 263
Serbia (d)	500	* 712	818	856	1 534
Slovakia	92	198	346	534	398
Sweden	5 159	4 953	5 542	6 285	5 994
Turkey	9 920	11 016	14 450	16 400	23 248
United Kingdom	88	163	187	177	202
Algeria	236	647	998	723	* 341
Botswana	2 722	3 176	1 626	1 774	1 562
Burkina Faso	2 250	7 633	13 181	22 926	31 711
Burundi	2 423	2 170	980	293	1 052
Cameroon	* 600	* 600	* 600	* 600	* 600
Chad	* 150	* 100	* 100	* 100	* 100
Congo, Democratic Republic	5 100	3 300	2 000	3 500	3 500
Egypt	—	—	—	4 675	6 305
Equatorial Guinea	* 200	* 200	* 200	* 200	* 200
Eritrea	87	32	* 30	* 30	11 788
Ethiopia	4 368	3 465	6 251	5 936	* 11 000
Gabon	* 300	* 300	* 300	* 300	* 300
Ghana	83 558	80 503	91 143	92 380	90 959
Guinea	15 303	17 981	21 402	24 836	15 779
Ivory Coast	1 243	4 205	6 947	5 316	10 685
Kenya	3 023	340	1 055	2 035	* 2 100
Liberia	311	624	524	666	469
Mali	52 753	41 160	42 364	38 524	40 415
Mauritania	2 332	5 528	7 838	8 326	8 211
Morocco (d)	771	587	470	650	520
Mozambique	97	298	511	106	* 500
Namibia	2 488	2 115	2 057	2 683	2 053
Niger	3 427	2 314	2 067	1 929	1 453
Nigeria	180	2 890	1 350	3 718	* 3 700
Senegal	* 600	* 600	5 655	5 354	4 089
Sierra Leone	212	196	157	270	164
South Africa	252 345	212 744	197 628	188 702	180 184
Sudan	2 701	2 251	1 922	2 129	2 231
Tanzania	40 193	36 434	39 113	39 448	40 390
Togo	10 159	11 835	12 955	10 452	16 469
Uganda (e)	2 543	2 055	931	918	163
Zambia (c)	1 269	1 693	3 108	3 410	3 493
Zimbabwe	7 018	3 579	4 966	9 620	12 993
Canada	102 377	96 501	97 235	102 693	100 379
Costa Rica	1 221	* 154	* 205	* 300	* 500
Dominican Republic	—	44	425	488	451
Guatemala	7 100	7 448	8 484	9 213	11 898
Honduras	3 012	1 846	2 127	2 200	1 893
Mexico	39 355	50 365	62 439	79 376	88 649
Nicaragua	3 330	2 960	2 590	4 924	6 395
Panama (b)	—	—	800	868	1 728
USA	238 136	233 327	223 323	231 000	234 000
Argentina	42 021	42 046	46 588	63 139	61 964
Bolivia	8 818	8 431	7 217	6 400	6 513
Brazil	49 600	54 000	56 100	57 900	65 200
Chile	41 528	39 162	40 834	39 494	45 137
Colombia	15 483	34 321	47 838	53 606	55 908
Ecuador	4 588	4 133	5 392	4 753	4 149
French Guiana	2 844	1 941	1 250	1 140	* 1 300
Guyana	7 412	8 131	9 326	8 744	11 293
Peru	170 128	179 870	182 390	164 070	164 008

Mine production of gold

kilograms

Country	2007	2008	2009	2010	2011
Suriname	8 585	10 290	12 800	12 933	12 606
Uruguay	3 172	2 429	2 010	1 704	1 899
Venezuela	11 809	10 815	12 232	6 991	* 7 000
Burma (d)	* 100	* 100	* 100	* 100	* 100
China (d)	275 000	285 000	313 980	340 880	360 960
India (a)	2 969	2 438	2 084	2 239	2 174
Indonesia	117 854	64 390	140 488	119 726	75 240
Iran (d)	252	303	340	341	* 400
Japan	8 869	6 868	7 708	8 544	8 200
Kazakhstan (d)	21 824	20 825	22 525	29 941	36 670
Korea (Rep. of)	162	175	274	235	209
Korea, Dem. P.R. of	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Kyrgyzstan	10 559	18 132	17 130	18 464	18 940
Laos	4 161	4 333	5 021	5 138	3 984
Malaysia	2 913	2 490	2 794	3 766	4 215
Mongolia	17 473	15 184	9 803	6 037	5 703
Oman	248	118	93	82	* 80
Philippines	38 792	35 568	37 047	40 847	31 120
Saudi Arabia	4 438	4 527	4 857	4 400	4 206
Taiwan	3	4	34	111	3
Tajikistan	2 000	1 672	1 361	2 049	2 240
Thailand	3 401	2 721	5 400	5 300	5 568
Uzbekistan	72 850	73 000	73 000	73 000	* 73 000
Vietnam	* 3 000	* 3 000	* 3 000	* 3 000	* 3 000
Australia	247 000	215 000	223 000	260 000	258 000
Fiji	29	700	1 091	1 903	1 572
New Zealand	8 833	13 403	13 442	13 469	11 761
Papua New Guinea	57 549	67 466	68 173	66 901	62 271
Solomon Islands	93	141	130	130	1 588
World Total	2 350 000	2 290 000	2 490 000	2 590 000	2 600 000

Notes
(1) In several countries substantial amounts of gold produced in small operations are not recorded in the official statistics used when compiling this table
(2) In addition to the countries listed, Benin, Central African Republic, Congo, Madagascar and Rwanda produce less than 100 kg gold per year
(3) Greece and Norway are believed to produce gold

(a) Years ended 31 March following that stated
(b) Fiscal years ending 31 May of the year following that stated
(c) Contained in blister copper, refinery muds and electrolytic copper
(d) Metal production
(e) Exports

Production of graphite

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria (a)	—	250	750	420	925
Bosnia & Herzegovina	393 762	272 084	133 819	45 079	...
Czech Republic	3 000	3 000	—	—	—
Norway	3 000	4 100	4 562	6 270	7 789
Romania	—	—	24 352	6 633	...
Russia	* 14 000	* 14 000	* 14 000	* 14 000	* 14 000
Turkey	—	3 236	2 400	—	—
Ukraine	* 8 000	* 8 000	* 8 000	* 8 000	* 8 000
Madagascar	5 400	4 900	3 400	3 654	3 951
Zimbabwe	5 418	5 134	2 463	741	7 252
Canada	15 000	20 000	* 7 000	* 20 000	* 20 000
Mexico	9 900	7 229	5 105	6 628	7 348
Brazil (b)	77 163	80 500	59 400	84 000	89 900
China (d)	1 800 000	* 1 800 000	* 1 800 000	* 1 800 000	* 1 800 000
India (a)(c)	170 813	117 767	124 625	114 836	143 429
Korea (Rep. of)	52	73	48	34	—
Korea, Dem. P.R. of	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Pakistan (e)	—	—	700	950	—
Sri Lanka	9 593	6 615	3 171	3 437	3 357
World Total	2 500 000	2 400 000	2 200 000	2 100 000	2 100 000

Notes
(1) This table includes all forms of amorphous and crystalline graphite but excludes synthetic material
(2) In addition to the countries listed, Egypt, Namibia and the USA are believed to produce graphite

(a) Crude
(b) Including beneficiated and directly shipped material
(c) Years ended 31 March following that stated
(d) Including flake graphite
(e) Years ended 30 June of that stated

Production of gypsum

tonnes (metric)

Country	2007	2008	2009	2010	2011
Armenia	54 600	45 900	40 100	* 40 000	* 40 000
Austria (a)	1 063 844	1 087 259	910 945	872 273	815 438
Azerbaijan	22 037	27 898	44 413	48 887	107 328
Bosnia & Herzegovina (a)	154 294	150 039	74 302	64 570	71 870
Bulgaria	234 300	21 200	127 600	109 200	114 800
Croatia	170 721	* 250 000	318 139	248 675	231 008
Cyprus	330 000	412 000	317 000	333 000	335 000
Czech Republic	66 000	35 000	13 000	5 000	11 000
France (a)	* 3 500 000	2 338 910	1 887 260	2 065 814	2 452 204
Germany (a)	1 898 000	2 112 000	1 898 000	1 822 000	2 021 000
Greece (a)	836 967	1 000 000	730 000	* 600 000	587 000
Hungary (a)	26 000	15 940	19 766	20 000	3 000
Ireland, Republic of	* 700 000	* 600 000	* 400 000	* 300 000	* 300 000
Italy	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000
Latvia (a)	346 000	349 000	175 870	176 510	216 000
Macedonia	255 500	242 400	154 550	143 118	162 984
Moldova (e)	* 800 000	* 700 000	* 200 000	* 300 000	* 400 000
Poland (a)	1 581 299	1 499 901	1 326 928	1 399 000	1 500 000
Portugal	418 035	372 731	335 189	336 755	337 272
Romania	1 004 150	832 248	720 713	639 010	* 660 000
Russia	* 3 000 000	* 3 600 000	* 2 900 000	* 2 900 000	* 2 900 000
Slovakia (a)	151 000	152 000	131 000	87 000	88 000
Spain	14 535 422	11 955 753	8 181 315	6 990 249	* 7 100 000
Switzerland	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Turkey	3 241 177	7 338 127	4 369 589	2 850 601	991 415
Ukraine	741 580	1 160 910	711 490	678 610	675 950
United Kingdom	* 1 700 000	* 1 700 000	* 1 700 000	* 1 700 000	* 1 700 000
Algeria	1 198 303	1 671 651	1 756 781	1 609 605	* 1 700 000
Angola	—	—	120 000	200 000	* 240 000
Egypt (a)	3 085 000	2 443 000	1 035 300	* 1 668 000	* 2 138 000
Eritrea	874	* 800	* 800	* 800	* 800
Ethiopia (d)	29 886	32 989	* 33 000	* 33 000	* 33 000
Kenya (a)	* 11 000	* 11 000	* 10 000	* 11 000	* 11 000
Libya	* 240 000	* 250 000	* 250 000	* 250 000	* 50 000
Madagascar	500	* 500	156	127	* 100
Mauritania	49 229	44 428	36 928	65 245	...
Morocco	* 600 000	* 600 000	* 600 000	* 600 000	* 600 000
Niger	4 615	8 661	19 737	7 559	* 8 000
Nigeria	579 000	* 380 000	* 160 000	—	* —
Somalia	* 1 500	* 1 500	* 1 500	* 1 500	* 1 500
South Africa	643 630	571 343	597 571	1 026 620	476 118
Sudan	7 974	12 705	30 000	31 000	* 30 000
Tanzania	2 730	55 730	8 105	26 918	38 659
Tunisia	157 000	177 000	360 000	435 000	* 435 000
Uganda	168	84	* 100	* 100	* 100
Canada (a)	7 638 000	5 797 000	3 540 000	2 717 000	2 555 000
Cuba	80 200	110 000	77 800	111 300	131 400
Dominican Republic	320 683	369 592	77 201	85 880	61 161
Guatemala	495 335	127 387	18 733	58 924	77 009
Honduras	* 5 500	* 5 500	* 5 500	* 5 500	* 5 500
Jamaica	227 697	238 274	156 877	147 143	79 521
Mexico	6 918 973	6 933 279	7 542 721	6 477 590	6 463 861
Nicaragua	43 300	49 900	37 400	20 300	29 700
USA	17 900 000	14 400 000	9 400 000	8 840 000	9 400 000
Argentina	1 226 530	1 257 310	1 356 025	1 346 535	* 1 350 000
Brazil	1 923 119	3 100 000	3 500 000	4 000 000	* 4 000 000
Chile	773 119	773 749	723 928	758 011	917 759
Colombia	* 200 000	* 200 000	* 190 000	* 200 000	* 200 000
Paraguay	* 4 500	* 4 500	* 4 500	* 4 500	* 4 500
Peru	330 687	463 134	321 012	313 025	479 950
Afghanistan	...	44 180	42 120	57 243	* 57 250
Bhutan	189 198	248 445	299 735	344 034	352 234
Burma (f)	76 401	91 013	84 516	76 391	76 669

Production of gypsum

tonnes (metric)

Country	2007	2008	2009	2010	2011
China	* 40 000 000	* 38 000 000	* 37 000 000	* 37 000 000	* 37 000 000
India (f)(g)	3 400 050	3 876 671	3 370 322	4 346 700	3 323 000
Indonesia	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Iran (c)	11 930 563	11 251 070	13 615 547	11 913 979	* 12 000 000
Iraq	1 285 000	1 279 000	5 026 495	8 276 733	11 350 170
Israel	82 974	9 975	9 152	99 730	20 437
Jordan	287 789	231 771	304 356	292 340	254 860
Kazakhstan	653 600	696 900	* 700 000	* 700 000	* 700 000
Laos	232 250	337 304	761 331	553 300	686 100
Mongolia	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Oman	183 200	179 800	333 400	653 200	1 254 100
Pakistan (b)	624 120	660 473	800 084	853 590	885 368
Saudi Arabia	* 750 000	* 750 000	* 750 000	* 750 000	* 750 000
Sri Lanka	—	617	358	104	542
Syria	447 900	572 886	403 137	* 405 000	* 405 000
Tajikistan	51 000	45 000	26 400	14 600	11 300
Thailand					
Gypsum	8 643 391	8 500 401	8 631 797	10 172 629	10 994 074
Anhydrite	692 877	488 681	633 820	536 120	614 148
Uzbekistan	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Vietnam	* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
Yemen, Republic of	92 000	104 000	* 110 000	* 110 000	* 110 000
Australia (b)	3 951 400	3 733 900	3 435 600	* 3 268 000	* 3 029 000
World Total	157 200 000	151 200 000	138 000 000	138 300 000	141 300 000

Notes
(1) Some countries produce large quantities of synthetic gypsum. Where possible, this output is excluded from the table

(a) Including anhydrite
(b) Years ended 30 June of that stated
(c) Years ended 20 March following that stated
(d) Years ended 7 July of that stated
(e) Excluding output from the region east of the River Nistru and the Municipality of Bender
(f) Years ended 31 March following that stated
(g) Including selenite

Refinery production of indium

tonnes (metric)

Country	2007	2008	2009	2010	2011
Belgium	* 30	* 30	* 30	* 30	* 30
Germany	* 10	* 10	* 10	* 10	* 10
Italy	* 5	* 5	* 5	* 5	* 5
Netherlands	* 5	5	* 5	* 5	* 5
Russia	* 10	* 10	* 4	* 4	* 4
United Kingdom	* 5	* 5	* 5	* 5	* 5
Canada	* 50	* 45	* 40	* 67	* 65
Brazil	...	...	* 5	* 5	* 5
Peru	5	6	2	—	2
China	* 370	* 340	* 330	* 340	* 340
Japan	* 60	* 65	* 67	* 70	* 70
Korea (Rep. of)	* 100	* 100	* 100	* 100	* 100

Production of iodine

kilograms

Country	2007	2008	2009	2010	2011
Azerbaijan	21 500	116 400	148 700	191 300	200 000
Russia	* 105 000	* 105 000	* 105 000	* 105 000	* 105 000
USA	* 1 200 000	* 1 200 000	* 1 250 000	* 1 250 000	* 1 270 000
Chile	15 473 000	15 503 000	17 399 000	15 793 000	16 000 000
China	* 570 000	* 570 000	* 580 000	* 590 000	* 590 000
Indonesia	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Japan	9 282 000	9 500 000	8 232 000	9 216 000	9 277 000
Turkmenistan	* 270 000	* 270 000	* 270 000	* 270 000	* 270 000
Uzbekistan	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
World Total	27 000 000	27 300 000	28 100 000	27 500 000	27 800 000

Production of iron ore

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria (b)	2 152 825	2 032 671	2 002 131	2 068 853	2 206 910
Azerbaijan	17 600	28 100	—	57 800	214 300
Bosnia & Herzegovina	2 943 963	2 667 359	2 727 452	1 401 000	1 891 000
Germany (f)(i)	421 711	455 100	363 699	390 353	489 091
Norway	630 000	746 000	896 000	3 266 000	2 532 100
Romania	8 157	—	—	—	—
Russia	105 000 000	99 900 000	92 000 000	95 500 000	104 000 000
Slovakia	570 000	392 000	—	—	—
Sweden	24 714 000	23 888 000	17 677 000	25 292 000	26 113 000
Turkey	4 549 556	3 990 110	4 169 972	5 378 455	5 754 426
Ukraine	77 930 000	72 688 000	66 452 000	78 541 000	80 900 000
United Kingdom (a)	* 300	145	—	—	—
Algeria	1 982 101	2 077 000	1 307 000	1 474 279	* 1 500 000
Egypt (d)	664 642	773 000	1 780 162	2 314 425	3 320 878
Mauritania	11 815 000	10 968 000	10 275 049	11 109 000	11 176 000
Morocco	47 958	22 878	30 523	44 665	78 926
Nigeria	57 900	62 000	99 424	50 000	* 50 000
South Africa (c)	42 100 887	48 982 537	55 313 053	58 709 330	58 056 897
Swaziland	—	—	—	—	79 553
Tunisia	180 600	108 300	151 200	180 500	171 200
Uganda	366	1 740	972	3 795	2 134
Zimbabwe	79 109	2 919	—	28	—
Canada (g)	33 158 000	32 102 000	31 699 000	37 001 000	33 573 000
Cuba	3 300	—	—	—	—
Guatemala	31 006	452	5 463	1 604	1 160
Mexico	16 540 000	17 709 000	17 693 000	21 210 000	19 403 000
USA	52 500 000	53 600 000	26 700 000	49 500 000	54 000 000
Brazil	354 674 378	351 200 000	331 000 000	372 300 000	460 400 000
Chile	8 817 700	9 315 580	8 242 300	9 129 500	12 624 600
Colombia	623 930	473 273	280 773	77 048	174 459
Peru	6 277 000	6 348 000	5 435 000	7 432 000	8 623 000
Venezuela	19 632 456	19 332 299	14 206 621	14 330 761	* 16 000 000
China	707 073 000	824 011 100	880 171 400	1 077 705 100	1 326 942 000
India (h)	213 246 000	212 960 000	218 553 000	207 998 000	168 534 000
Iran (e)	33 638 878	31 225 935	31 993 513	35 548 974	48 134 131
Iraq	40 000	3 000	—	—	26 639
Kazakhstan	19 582 200	21 486 300	46 248 000	50 190 000	51 742 000
Korea (Rep. of)	290 802	365 883	455 405	512 642	541 539
Korea, Dem. P.R. of	* 5 130 000	* 5 316 000	* 5 300 000	* 5 300 000	* 5 300 000
Malaysia (g)	802 030	981 932	1 470 186	3 557 813	7 695 577
Mongolia	265 100	1 387 400	1 379 000	3 203 200	5 678 300
Pakistan (d)	125 879	286 255	320 214	447 541	329 100
Philippines	—	—	—	—	126 177
Thailand	1 554 860	1 709 750	616 399	976 937	489 359
Vietnam	* 1 200 000	1 372 000	1 905 000	1 972 000	2 209 000
Australia	299 038 000	342 435 000	394 069 000	433 452 000	488 105 000
New Zealand	1 723 726	2 020 227	2 092 640	2 438 641	2 357 440
World Total	2 052 000 000	2 205 000 000	2 275 000 000	2 620 000 000	3 012 000 000

Notes

(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) Including micaceous iron oxide
(c) Including by-product magnetite
(d) Years ended 30 June of that stated
(e) Years ended 20 March following that stated
(f) Including manganiferous iron ore
(g) Including by-product iron ore
(h) Years ended 31 March following that stated
(i) Used as aggregate in the construction industry

Production of pig iron

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria	5 908 000	5 795 000	4 353 000	5 621 000	5 815 000
Belgium	6 577 000	6 977 000	3 087 000	4 688 000	4 700 000
Bosnia & Herzegovina	—	243 000	482 469	620 935	685 000
Bulgaria	1 069 000	441 000	—	—	—
Czech Republic	5 287 000	4 737 000	3 483 000	3 987 000	4 137 000
Finland	2 915 130	2 942 946	2 042 000	2 564 000	2 600 000
France	12 425 703	11 371 879	8 104 318	10 136 827	9 697 535
Germany	31 700 000	29 105 000	20 104 000	28 560 000	27 943 000
Hungary	1 393 655	1 288 758	1 050 000	1 325 000	1 315 000
Italy	11 100 000	10 400 000	5 670 000	8 555 000	9 824 000
Netherlands	6 412 000	6 130 000	4 655 000	5 799 000	5 943 000
Norway	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Poland	5 804 418	4 933 781	2 983 500	3 637 995	3 974 930
Romania	3 923 244	2 957 715	1 576 679	1 723 418	1 595 000
Russia	51 500 000	48 300 000	43 900 000	48 200 000	48 200 000
Serbia	1 485 000	1 582 000	964 607	1 158 628	1 197 693
Slovakia	4 012 000	3 529 000	3 019 000	3 649 000	3 346 000
Spain	3 976 000	3 784 000	2 920 000	3 572 000	3 540 000
Sweden	3 947 000	3 708 000	1 966 000	3 447 000	3 240 000
Turkey	6 235 537	6 697 372	6 913 325	16 362 115	17 235 903
Ukraine	35 650 000	30 991 000	25 683 000	27 366 000	28 878 000
United Kingdom	10 959 800	10 136 800	7 671 100	7 233 000	6 625 000
Algeria	1 193 000	690 000	680 000	696 000	360 000
Egypt	3 786 000	3 543 000	3 851 000	3 565 000	3 532 000
Libya	1 660 000	1 569 000	1 077 000	1 270 000	165 000
South Africa	7 094 000	6 540 000	5 784 000	6 386 000	6 165 000
Zimbabwe	38 000	1 000	—	—	—
Canada	9 490 000	9 474 000	5 615 000	8 266 000	7 520 000
Mexico	10 343 007	10 461 858	8 065 305	10 074 620	10 473 406
Trinidad & Tobago	2 062 800	1 601 000	1 181 700	1 751 800	1 705 600
USA	36 337 000	33 729 000	19 018 000	26 843 000	29 000 000
Argentina	4 389 100	4 428 000	2 849 000	4 098 500	4 470 900
Brazil	35 571 000	34 871 000	25 135 000	30 898 000	* 32 600 000
Chile	1 147 000	1 109 000	923 000	635 000	1 130 000
Colombia	340 900	308 100	342 000	327 000	295 000
Paraguay	110 000	95 000	71 000	81 000	45 000
Peru	495 500	466 000	100 000	100 000	95 000
Venezuela	7 435 300	6 827 200	5 508 000	3 760 000	4 470 000
China	476 516 300	478 244 200	552 834 600	597 333 400	629 693 000
India	56 598 000	58 229 000	61 677 000	64 987 000	66 460 000
Indonesia	1 321 000	1 209 000	1 119 000	1 274 000	1 228 000
Iran	9 609 000	9 600 000	10 760 000	10 532 000	12 670 000
Japan	86 770 755	86 171 136	66 942 610	82 283 358	81 028 352
Kazakhstan	3 795 352	3 105 548	2 997 000	265 392	3 141 000
Korea (Rep. of)	29 436 783	31 042 782	27 474 604	35 064 568	42 212 717
Korea, Dem. P.R. of	* 250 000	* 250 000	* 250 000	* 250 000	* 250 000
Malaysia	1 872 000	1 958 000	2 388 000	2 390 000	* 2 500 000
Pakistan (a)	1 008 778	993 371	791 052	483 298	433 104
Qatar	1 296 000	1 637 778	2 096 282	2 040 037	2 212 999
Saudi Arabia	4 101 000	4 500 000	4 623 000	4 937 000	5 153 000
Taiwan	10 518 000	9 823 000	7 939 000	9 358 000	12 940 000
Vietnam	170 000	255 000	275 000	500 000	600 000
Australia	6 369 000	6 057 000	4 370 000	6 259 000	5 265 000
New Zealand	679 000	622 000	608 000	667 000	659 000
World Total	1 024 000 000	1 006 000 000	978 000 000	1 106 000 000	1 159 000 000

Notes
(1) The data in this table include sponge iron and direct reduced iron (DRI) , where these have been separately identified

(a) Years ended 30 June of that stated

Production of crude steel

tonnes (metric)

Country	2007	2008	2009	2010	2011
Albania	263 271	250 000	221 000	390 000	464 000
Austria	7 577 000	7 594 000	5 662 000	7 206 000	7 474 000
Azerbaijan	468 000	278 100	150 300	129 125	234 002
Belarus	2 214 019	2 478 131	2 329 694	2 530 829	2 607 325
Belgium	10 692 000	10 673 000	5 635 000	7 973 000	8 026 000
Bosnia & Herzegovina	513 867	587 878	495 150	590 757	649 000
Bulgaria	1 909 000	1 330 000	726 000	744 000	835 000
Croatia	76 252	121 759	54 266	103 429	95 440
Czech Republic	7 059 000	6 387 000	4 594 000	5 180 000	5 583 000
Finland	4 430 726	4 416 792	3 066 000	4 030 000	3 985 000
France	19 249 862	17 879 161	12 840 108	15 413 577	15 780 639
Germany	48 550 000	45 832 000	32 670 000	43 830 000	44 284 000
Greece	2 554 000	2 477 000	2 000 000	1 821 000	1 934 000
Hungary	2 227 000	2 097 000	1 403 000	1 678 000	1 733 000
Italy	31 506 000	30 590 000	19 848 000	25 750 000	28 735 000
Latvia	696 000	635 000	692 000	655 000	568 000
Luxembourg	2 858 000	2 582 000	2 141 000	2 548 000	2 521 000
Macedonia	370 317	344 866	299 332	317 057	348 576
Moldova (a)	965 000	885 000	380 000	240 000	313 000
Montenegro	173 849	201 623	90 404	48 272	61 164
Netherlands	7 368 000	6 853 000	5 193 000	6 651 000	6 937 000
Norway	708 000	560 000	595 000	520 000	620 000
Poland	10 630 716	9 727 325	7 128 482	7 993 025	8 776 458
Portugal	1 847 000	1 630 000	1 587 000	1 351 000	1 351 000
Romania	6 269 486	5 035 164	2 772 679	3 720 775	3 835 000
Russia	72 400 000	68 700 000	59 200 000	66 300 000	68 400 000
Serbia	1 478 000	1 662 000	1 054 336	1 254 386	1 304 954
Slovakia	5 082 000	4 489 000	3 747 000	4 580 000	4 236 000
Slovenia	638 000	642 000	430 000	606 000	648 000
Spain	18 998 000	18 640 000	14 358 000	16 343 000	15 504 000
Sweden	5 672 900	5 197 600	2 803 700	4 845 600	4 867 000
Switzerland	1 264 000	1 312 000	934 000	1 320 000	* 1 400 000
Turkey	25 760 889	26 809 050	25 303 741	29 029 789	34 107 000
Ukraine	43 646 655	38 136 117	30 301 844	33 345 586	35 512 156
United Kingdom	14 392 300	13 520 500	10 074 500	9 708 000	9 478 000
Algeria	1 278 000	646 000	543 000	688 000	440 000
Egypt	6 224 000	6 198 000	5 541 000	6 676 000	6 486 000
Libya	1 250 000	1 137 000	914 000	825 000	100 000
Morocco	512 000	478 000	479 000	455 000	290 000
Nigeria	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
South Africa	9 098 000	8 550 000	7 484 000	7 617 000	6 650 000
Tunisia	60 900	82 200	99 500	115 100	* 115 100
Zimbabwe	23 000	—	—	—	—
Canada	15 572 000	14 845 000	9 286 000	13 013 000	13 090 000
Cuba	263 568	275 584	267 752	279 040	283 982
Dominican Republic	* 75 000	* 68 000	* 67 000	* 60 000	* 76 000
El Salvador	73 000	71 000	56 000	51 000	92 000
Guatemala	349 000	250 000	224 000	274 000	445 000
Mexico	17 572 676	17 209 020	14 131 810	16 869 675	18 101 282
Trinidad & Tobago	694 600	489 600	417 000	571 600	604 500
USA	98 102 000	91 350 000	58 196 000	80 495 000	86 000 000
Argentina	5 387 600	5 541 400	4 013 000	5 138 500	5 610 500
Brazil	33 782 000	33 716 000	26 506 000	32 948 000	35 220 000
Chile	1 678 000	1 549 000	1 308 000	1 011 000	1 768 000
Colombia	1 245 000	1 053 000	1 052 000	1 207 000	1 244 000
Ecuador	87 100	128 000	259 000	357 000	523 000
Paraguay	95 000	82 800	54 000	59 000	25 000
Peru	881 000	1 001 000	718 000	867 000	882 000
Uruguay	71 100	85 700	57 000	65 000	75 000
Venezuela	5 005 300	4 224 500	3 808 000	2 207 000	3 344 000

Production of crude steel

tonnes (metric)

Country	2007	2008	2009	2010	2011
Burma	* 25 000	* 25 000	* 25 000	* 25 000	* 25 000
China	489 288 000	503 057 500	572 182 300	637 229 900	683 883 000
India	53 468 000	57 791 000	63 527 000	68 321 000	72 200 000
Indonesia	4 160 000	3 915 000	3 501 000	3 664 000	3 621 000
Iran	10 051 000	9 964 000	10 873 000	11 995 000	13 040 000
Israel	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Japan	120 202 937	118 739 328	87 534 137	109 598 507	107 601 194
Jordan	* 150 000	* 150 000	* 150 000	* 150 000	* 150 000
Kazakhstan	4 784 105	4 243 582	4 146 000	4 220 000	4 699 000
Korea (Rep. of)	51 517 309	53 322 000	48 572 000	58 914 125	68 519 191
Korea, Dem. P.R. of	* 300 000	* 300 000	* 250 000	* 250 000	* 250 000
Kuwait	* 500 000	* 500 000	* 500 000	* 500 000	* 500 000
Malaysia	6 895 000	6 423 000	5 354 000	5 694 000	* 6 000 000
Mongolia	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Pakistan	1 090 000	* 1 000 000	* 800 000	* 800 000	* 850 000
Philippines	718 000	710 669	824 009	1 050 000	1 200 000
Qatar	1 174 917	1 434 652	1 472 612	1 974 937	2 010 000
Saudi Arabia	4 644 000	4 667 000	4 690 000	5 015 000	5 275 000
Singapore	640 000	764 000	664 000	728 000	752 000
Syria	* 70 000	* 70 000	* 70 000	* 70 000	* 70 000
Taiwan	20 700 389	19 882 000	15 873 000	20 498 146	22 879 000
Thailand	5 565 000	5 211 212	3 645 586	4 144 908	4 238 000
United Arab Emirates	* 90 000	* 90 000	* 90 000	* 90 000	* 90 000
Uzbekistan	649 000	682 000	716 000	716 000	733 000
Vietnam	2 024 000	2 250 000	2 700 000	4 314 000	4 900 000
Australia	8 057 000	7 724 000	5 135 000	7 408 000	6 404 000
New Zealand	845 000	799 000	765 000	853 000	844 000
World Total	1 348 000 000	1 334 000 000	1 231 000 000	1 429 000 000	1 516 000 000

Notes
(1) Unless otherwise indicated, these figures include production from scrap
(2) Small amounts of steel are believed to be produced in DR Congo, Estonia, Ghana, Kenya, Mauritania, Sri Lanka and Uganda

(a) Production from the region east of the River Nistru

Production of ferro-alloys

tonnes (metric)

Country	2007	2008	2009	2010	2011
Albania					
Ferro-chrome	920	16 315	5 705	23 233	28 433
Armenia					
Ferro-molybdenum	5 977	5 323	5 154	5 126	5 525
Austria					
Ferro-molybdenum	5 000	4 500	4 000	4 000	4 000
Ferro-nickel	3 000	2 000	2 500	2 500	2 500
Ferro-vanadium	6 500	6 300	6 200	8 000	8 000
Bulgaria					
Ferro-silicon	* 10 000	6 000	* 3 000	* —	* —
Czech Republic					
Ferro-vanadium	* 1 700	* 2 800	* 1 900	* 3 400	* 4 600
Finland					
Ferro-chrome	241 760	233 550	123 310	238 000	231 000
France					
Ferro-manganese	* 144 000	* 47 000	* 46 000	* 138 000	* 140 000
Ferro-silico-manganese	* 65 400	* 60 200	* 54 100	* 54 000	* 54 000
Ferro-silicon	* 31 000	* 30 000	* 18 300	* 27 000	* 27 000
Silicon metal	* 120 000	* 118 000	* 80 000	* 112 000	* 112 000
Georgia					
Ferro-manganese	* 5 000	* 5 000	* 4 500	* 4 500	* 4 500
Ferro-silico-manganese	107 986	123 468	112 016	203 791	226 592
Germany					
Ferro-chrome	22 030	26 960	13 667	* 20 000	* 20 000
Other ferro-alloys	* 5 000	* 5 000	—	—	* —
Silicon metal	29 379	29 092	27 620	30 105	30 134
Greece					
Ferro-nickel	93 300	83 200	42 400	69 600	94 000
Iceland					
Ferro-silicon	114 886	107 882	112 992	114 230	120 076
Italy					
Ferro-manganese	* 30 000	* 30 000	* 20 000	* 25 000	* 25 000
Ferro-silico-manganese	87 000	87 000	56 000	108 000	145 000
Macedonia					
Ferro-nickel	15 321	15 026	12 000	14 413	17 292
Ferro-silicon	78 892	97 605	7 657	30 044	56 167
Norway					
Ferro-manganese	* 130 000	* 130 000	* 130 000	* 130 000	* 130 000
Ferro-silico-manganese	293 699	273 485	* 250 000	* 250 000	* 250 000
Ferro-silicon	170 024	185 344	233 974	* 235 000	170 102
Other ferro-alloys	* 62 000	* 60 000	* 60 000	* 60 000	* 60 000
Silicon metal	* 140 000	* 155 000	* 150 000	* 150 000	* 150 000
Poland					
Ferro-manganese	2 093	8 475	1 736	800	...
Ferro-silico-manganese	15 590	25 061	72	100	...
Ferro-silicon	58 538	56 031	9 673	53 206	72 668
Other ferro-alloys	6 255	2 948	4 190	200	332
Romania					
Ferro-chrome	—	6 179	15 377	14 353	* 10 000
Ferro-silico-manganese	26 868	9 979	—	20 605	* 30 000
Russia					
Spiegeleisen	* 7 000	* 7 000	* 7 000	* 7 000	* 7 000
Ferro-chrome	564 474	475 686	378 000	414 000	* 414 000
Ferro-silico-chrome	97 915	72 050	8 285	4 200	* 4 200
Ferro-manganese	* 120 000	* 110 000	88 000	171 000	* 170 000
Ferro-silico-manganese	* 40 000	* 40 000	98 700	147 900	* 148 000
Ferro-nickel	31 871	31 411	31 529	34 363	* 34 400
Ferro-silicon	896 100	850 000	745 000	916 000	* 916 000
Other ferro-alloys	* 34 000	* 34 000	* 34 000	* 34 000	* 34 000
Silicon metal	* 54 500	* 54 000	23 900	48 700	* 48 700
Slovakia					
Ferro-silico-manganese	71 587	59 940	32 000	34 960	25 023
Ferro-silicon	8 583	10 844	4 600	26 419	31 845
Other ferro-alloys	74 065	61 194	22 250	38 860	23 497
Slovenia					
Ferro-silicon	* 6 000	* —	* —	* —	* —

Production of ferro-alloys

tonnes (metric)

Country	2007	2008	2009	2010	2011
Spain					
Ferro-manganese	* 155 000	* 163 000	* 68 000	* 152 000	* 152 000
Ferro-silico-manganese	* 153 000	* 160 000	* 67 000	* 150 000	* 150 000
Ferro-silicon	* 71 000	* 74 000	* 44 000	* 64 400	* 64 000
Silicon metal	* 32 000	* 33 000	* 23 000	* 32 500	* 33 000
Sweden					
Ferro-chrome	124 400	118 700	31 100	64 400	80 140
Ferro-silicon	4 300	—	—	—	—
Turkey					
Ferro-chrome	69 730	75 840	41 028	* 60 000	* 60 000
Ferro-silico-chrome	6 624	6 094	2 903	* 3 000	* 3 000
Ukraine					
Ferro-manganese	368 321	361 501	135 339	285 643	187 897
Ferro-silico-manganese	1 281 073	958 667	771 950	1 000 329	930 337
Ferro-nickel	95 619	97 848	76 487	102 940	89 903
Ferro-silicon	218 485	201 706	193 034	253 801	186 306
Other ferro-alloys	53 174	43 127	23 882	28 546	25 126
Egypt					
Ferro-silicon (d)	48 464	59 192	78 355	47 205	25 516
Other ferro-alloys (d)	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
South Africa					
Ferro-chrome	3 551 983	3 268 659	2 346 132	3 607 132	3 421 911
Ferro-manganese	* 672 000	* 498 000	* 265 000	* 517 000	* 696 000
Ferro-silico-manganese	* 355 000	* 263 000	* 140 000	* 273 000	* 696 000
Ferro-silicon	* 140 000	* 137 000	* 110 000	* 128 000	* 135 000
Ferro-vanadium	* 19 000	* 19 000	* 13 000	* 19 000	* 18 000
Silicon metal	* 50 108	* 49 146	* 39 000	* 46 000	* 48 000
Zimbabwe					
Ferro-chrome	187 327	145 430	72 223	154 336	161 839
Ferro-silicon	3 097	1 612	603	—	—
Canada					
Ferro-niobium	* 6 571	* 6 644	* 7 000	* 7 000	* 7 000
Ferro-silicon	* 35 000	* 35 000	* 27 200	* 35 000	* 35 000
Silicon metal	* 30 000	* 50 000	* 30 000	* 30 000	* 30 000
Dominican Republic					
Ferro-nickel	75 069	47 408	—	—	34 576
Mexico					
Ferro-manganese	74 578	97 366	42 492	81 019	73 684
Ferro-silico-manganese	109 286	114 320	85 065	134 470	139 047
USA					
Ferro-silicon	220 000	248 000	194 000	246 000	* 246 000
Silicon metal	* 143 000	* 143 000	* 143 000	* 143 000	* 143 000
Argentina					
Ferro-silico-manganese	8 917	9 172	6 644	10 900	* 10 000
Ferro-silicon	* 15 000	* 10 400	* 11 300	* 11 000	* 11 000
Brazil					
Ferro-chrome	177 656	209 273	108 893	172 800	145 000
Ferro-silico-chrome	12 943	13 674	1 750	13 100	11 600
Ferro-silico-magnesium	30 221	30 800	18 300	33 600	20 900
Ferro-manganese	135 757	149 900	44 600	87 200	77 000
Ferro-silico-manganese	225 373	238 000	109 500	218 700	218 600
Ferro-nickel	28 900	26 300	31 600	23 800	45 600
Ferro-niobium	71 676	81 600	48 900	77 200	81 900
Ferro-silicon	196 403	183 000	175 000	247 300	210 900
Other ferro-alloys	45 330	47 800	21 200	36 650	32 700
Silicon metal	225 120	219 600	154 000	184 100	210 400
Colombia					
Ferro-nickel	145 282	126 638	153 628	145 239	103 371
Venezuela					
Ferro-manganese	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Ferro-silico-manganese	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Ferro-nickel	68 506	42 300	40 113	40 150	* 40 000
Ferro-silicon	94 000	180 000	52 100	76 800	* 80 000

Production of ferro-alloys

tonnes (metric)

Country	2007	2008	2009	2010	2011
Bhutan					
Ferro-silicon	* 40 300	* 30 800	* 90 800	* 97 500	* 79 600
China					
Ferro-chrome	1 296 000	1 505 800	1 813 000	(c) ...	(c) ...
Ferro-silico-chrome	38 700	72 300	116 000	(c) ...	(c) ...
Other ferro-alloys	16 165 000	16 722 000	20 171 000	24 300 000	* 25 000 000
Silicon metal	* 1 080 000	* 1 100 000	* 993 000	* 1 050 000	* 1 050 000
India					
Ferro-aluminium (b)	9 377	8 170	7 017	7 538	7 393
Ferro-chrome (b)	948 601	817 239	892 923	1 003 598	906 556
Ferro-silico-magnesium (b)	13 525	13 400	17 132	19 079	24 452
Ferro-manganese (b)	391 210	384 577	356 123	402 017	446 733
Ferro-silico-manganese (b)	911 402	891 458	1 116 047	1 242 139	1 478 403
Ferro-molybdenum (b)	2 899	2 162	2 822	3 090	4 362
Ferro-silicon (b)	83 716	99 595	97 682	115 164	127 092
Ferro-titanium (b)	1 937	1 661	1 929	2 172	2 217
Ferro-vanadium (b)	1 585	1 501	1 389	1 521	2 459
Other ferro-alloys (b)	362	541	569	595	730
Indonesia					
Ferro-manganese	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
Ferro-silico-manganese	* 6 000	* 7 000	* 7 000	* 8 000	* 8 000
Ferro-nickel	18 532	17 566	12 550	18 688	19 690
Iran					
Ferro-chrome (a)	* 8 000	* 8 000	* 8 000	* 8 000	* 8 000
Ferro-silicon (a)	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Japan					
Ferro-chrome	12 016	13 888	7 698	16 208	17 217
Ferro-manganese	420 151	431 181	361 375	453 265	456 798
Ferro-silico-manganese	52 901	58 884	49 205	49 865	49 798
Ferro-molybdenum	4 573	4 554	3 598	4 615	5 167
Ferro-nickel	351 503	301 361	284 884	348 420	279 944
Ferro-vanadium	3 205	3 477	2 560	4 190	3 980
Other ferro-alloys	13 982	14 478	12 957	16 374	20 913
Kazakhstan					
Ferro-chrome	1 307 536	1 220 315	977 235	1 189 593	1 170 193
Ferro-silico-chrome	145 685	133 828	51 576	144 936	129 996
Ferro-silico-manganese	188 445	179 939	181 776	203 778	210 502
Ferro-silicon	59 886	54 964	30 028	4 456	1 527
Other ferro-alloys	1 222	1 473	1 205	1 283	3 118
Korea (Rep. of)					
Ferro-manganese	209 321	251 125	182 308	286 259	355 047
Ferro-silico-manganese	105 607	76 184	148 509	120 779	195 650
Other ferro-alloys	...	...	3 921	4 059	4 162
Korea, Dem. P.R. of					
Ferro-alloys	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Australia					
Ferro-manganese (d)	133 816	128 000	...	...	...
Ferro-silico-manganese (d)	105 800	126 000	...	...	...
Ferro-manganese & ferro-silico-manganese (d)	...	...	212 000	219 000	267 000
Silicon metal	* 33 000	* 33 000	* 33 000	* 33 000	* 33 000
New Caledonia					
Ferro-nickel	170 870	148 960	156 553	165 506	169 513

Notes
(a) Years ended 20 March following that stated
(b) Years ended 31 March following that stated
(c) Included with 'other ferro-alloys'
(d) Years ended 30 June of that stated

Production of kaolin

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria	16 929	16 460	18 148	18 914	18 897
Belgium	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Bosnia & Herzegovina	188 033	259 325	148 384	41 808	232 147
Bulgaria	* 240 000	* 220 000	* 140 000	* 190 000	* 250 000
Czech Republic (h)	682 000	664 000	488 000	636 000	660 000
France	307 253	335 520	350 000	350 000	* 350 000
Germany (g)	3 842 514	3 622 159	4 513 753	4 578 097	4 898 516
Greece	30 000	4 360	—	3 493	2 056
Hungary	2 136	—	—	—	—
Italy	* 180 000	* 180 000	* 180 000	* 180 000	* 180 000
Poland (f)	153 670	165 615	136 561	250 000	143 000
Portugal	183 598	217 434	274 925	273 890	322 041
Romania	7 576	3 060	651	326	—
Russia	* 45 000	* 45 000	* 45 000	* 45 000	* 45 000
Serbia	97 432	398 917	163 616	76 197	90 472
Slovakia	46 000	44 000	10 000	—	4 000
Spain (f)	489 428	355 739	270 298	310 993	302 580
Turkey	456 238	232 746	234 614	787 287	* 650 000
Ukraine (h)	244 000	240 000	* 100 000	* 100 000	* 100 000
United Kingdom	1 671 426	1 355 365	1 059 848	* 1 000 000	* 1 000 000
Algeria	106 567	50 788	87 766	71 065	* 70 000
Egypt	331 671	523 327	523 300	304 200	* 300 000
Eritrea	183	* 200	* 175	* 200	* 200
Ethiopia (a)	4 000	1 300	1 613	* 1 500	* 1 500
Kenya	910	940	* 850	* 900	* 900
Madagascar	...	...	90	259	—
Nigeria	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
South Africa	51 218	39 506	31 048	29 929	15 220
Sudan	27 846	87 151	36 799	32 696	* 30 000
Tanzania	1 020	13 926	18 624	42 649	...
Uganda	8 152	3 738	4 721	27 237	20 883
Cuba	2 000	—	—	100	—
Guatemala	28 225	2 803	1 879	2 143	1 620
Mexico	970 598	690 366	406 421	516 850	372 506
USA (e)	7 110 000	6 750 000	5 290 000	5 370 000	5 480 000
Argentina	69 354	73 838	78 792	* 78 722	80 000
Brazil (h)	2 480 000	2 667 000	1 987 000	1 900 000	2 200 000
Chile	87 901	63 526	48 354	62 226	59 912
Ecuador	18 618	15 000	* 15 000	* 15 000	* 15 000
Paraguay	* 66 000	* 66 000	* 66 000	* 66 000	* 66 000
Peru	4 772	13 215	9 655	16 446	18 169
Venezuela	238	1 896	300	9 444	...
Bangladesh (d)	* 19 400	* 6 500	—	—	—
China	2 781 000	* 3 000 000	* 3 000 000	* 3 000 000	* 3 000 000
India (i)(b)	115 139	96 344	79 963	74 742	* 65 000
Indonesia	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Iran (c)	947 884	1 274 092	907 487	1 480 291	* 1 500 000
Iraq	3 545	1 524	1 980	2 606	—
Japan	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
Jordan	100 584	181 018	177 471	114 931	89 903
Korea (Rep. of)	1 053 576	1 182 199	890 157	962 275	1 051 772
Malaysia	587 508	506 462	487 632	530 331	442 550
Pakistan (d)	30 979	31 512	17 169	22 769	16 055
Philippines	2 200	2 391	2 389	2 490	3 529
Saudi Arabia	4 415	5 560	4 166	* 4 200	* 4 200
Sri Lanka	11 178	10 039	9 538	8 207	11 157
Taiwan	5 060	33 745	18 413	18 097	16 936
Thailand (h)	159 186	162 215	131 131	156 827	175 881
Uzbekistan (i)	* 150 000	* 150 000	* 150 000	* 150 000	* 150 000
Vietnam	* 650 000	* 650 000	* 650 000	* 650 000	* 650 000

Production of kaolin

tonnes (metric)

Country	2007	2008	2009	2010	2011
Australia (d)	213 605	181 655	109 400	104 708	38 072
New Zealand	14 130	12 761	9 016	107 761	21 545
World Total	27 500 000	27 300 000	23 800 000	25 200 000	25 700 000

Notes
(1) In addition to the countries listed Denmark is believed to produce kaolin

(a) Years ended 7 July of that stated
(b) Years ended 31 March following that stated
(c) Years ended 20 March following that stated
(d) Years ended 30 June of that stated
(e) Sold or used by producers
(f) Washed
(g) Washed and dried
(h) Beneficiated
(i) Beneficiated; excludes directly used natural kaolin

Mine production of lead

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Bosnia & Herzegovina	4 633	6 029	3 781	5 811	6 648
Bulgaria (a)	17 768	14 577	12 981	12 705	14 369
Greece	13 400	14 000	10 000	12 200	13 400
Ireland, Republic of	56 800	50 200	49 500	39 100	50 700
Italy	3 000	3 000	2 000	3 000	3 000
Kosovo (a)	—	—	3 000	5 700	4 900
Macedonia	36 039	49 877	46 788	41 293	37 295
Poland	61 330	67 070	62 910	48 050	42 636
Romania	784	—	* 3 000	* 3 000	* 3 000
Russia	48 000	60 000	72 000	97 000	113 000
Serbia	1 600	1 600	1 800	1 800	2 100
Spain	—	—	1 000	300	5 705
Sweden	63 224	63 489	69 293	67 697	62 028
Turkey	20 800	31 800	21 600	38 500	39 500
United Kingdom	* 300	* 300	243	251	280
Morocco	42 240	33 477	34 517	32 647	30 850
Namibia	10 543	14 062	10 129	10 140	* 10 000
Nigeria	9 800	3 500	5 200	3 300	9 100
South Africa	41 857	46 440	49 149	50 625	54 460
Canada	75 135	99 810	68 839	64 844	54 797
Guatemala	363	—	—	—	—
Honduras	10 215	12 545	14 471	16 954	13 100
Mexico	137 133	141 173	143 838	192 062	223 717
USA	444 300	410 100	405 800	369 000	342 000
Argentina	17 045	20 788	24 753	22 600	22 800
Bolivia	22 798	81 602	84 538	72 803	100 051
Brazil	15 522	15 000	9 000	12 000	11 000
Chile	1 305	3 985	1 511	695	841
Peru	329 154	345 109	302 459	261 990	230 019
Burma	* 1 000	* 1 000	* 5 000	* 7 000	* 8 700
China	1 402 000	1 402 700	1 604 100	1 981 300	2 358 300
India (c)	77 717	82 053	82 629	83 342	91 493
Iran (b)	31 864	26 905	39 254	* 40 000	* 35 000
Kazakhstan	40 200	38 800	34 000	35 000	38 800
Korea (Rep. of)	12	225	1 032	584	1 289
Korea, Dem. P.R. of	* 35 000	* 33 000	* 25 000	* 26 000	* 26 000
Laos	222	710	400	542	544
Pakistan	—	—	—	1 000	2 900
Saudi Arabia	123	347	685	543	400
Tajikistan	—	—	—	3 900	6 000
Vietnam	* 4 400	* —	* 6 000	* 3 700	* 4 100
Australia	641 000	650 000	566 000	712 000	621 000
World Total	3 700 000	3 800 000	3 900 000	4 400 000	4 700 000

Notes
(a) Metal content of ore
(b) Years ended 20 March following that stated
(c) Years ended 31 March following that stated

Production of refined lead

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria	28 500	26 900	22 200	25 500	26 200
Belgium	117 000	104 000	109 000	121 000	119 000
Bulgaria	87 000	90 900	83 100	80 600	71 000
Czech Republic	34 000	36 000	29 000	30 000	34 000
Estonia	10 000	10 000	10 000	10 000	10 000
France	* 88 000	82 100	62 000	71 000	80 000
Germany	355 000	415 100	390 600	405 400	429 100
Greece	* 11 000	* 11 000	* 11 000	* 11 000	* 11 000
Ireland, Republic of	22 500	20 000	19 000	19 000	18 000
Italy	211 800	199 900	149 000	150 000	146 500
Kosovo	—	900	4 250	4 300	1 000
Netherlands	* 16 000	* 16 000	* 17 000	16 000	16 000
Poland	104 200	108 300	100 400	120 300	133 800
Portugal	5 000	5 000	4 000	4 000	4 000
Romania	39 369	39 596	8 687	11 263	6 854
Russia	103 000	112 000	90 000	96 000	103 000
Serbia	1 300	—	—	—	—
Slovenia	15 000	15 000	14 000	14 000	15 000
Spain	128 000	145 000	138 000	163 000	172 000
Sweden	69 730	56 812	51 574	59 179	52 438
Switzerland	* 9 000	* 8 000	800	—	—
Turkey	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Ukraine	62 100	54 700	60 600	71 500	55 300
United Kingdom	263 391	283 000	301 865	297 453	274 055
Algeria	6 000	6 000	6 000	9 000	9 000
Kenya	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Morocco	45 000	37 400	20 100	38 237	36 469
Nigeria	8 000	8 000	8 000	11 000	9 000
South Africa	59 000	62 000	58 000	51 000	56 000
Zambia	500	500	500	500	500
Canada	236 688	259 074	258 854	272 937	282 268
Costa Rica	—	—	—	—	4 000
El Salvador	10 000	11 000	12 000	11 000	12 000
Guatemala	8 000	12 000	17 000	22 000	24 000
Honduras	—	—	—	—	1 000
Mexico	204 838	206 364	200 411	225 980	251 729
USA (a)	1 303 000	1 280 500	1 214 100	1 256 000	1 250 000
Argentina	60 600	62 500	83 000	87 400	83 100
Brazil	131 000	144 000	155 000	172 000	184 000
Colombia	10 000	10 000	10 000	10 000	10 000
Peru	116 774	114 259	26 082	* —	* —
Venezuela	* 36 000	* 37 000	* 31 000	* 31 000	* 31 000
Burma	* 200	* 200	* 200	* 200	* 200
China	2 788 300	3 451 800	3 772 900	4 157 500	4 647 700
India	239 000	294 000	337 000	380 000	426 000
Indonesia	* 18 000	* 18 000	* 18 000	* 18 000	* 18 000
Iran	78 000	75 000	72 000	75 000	74 000
Israel	25 000	27 000	26 000	27 000	27 000
Japan	276 286	278 071	247 634	267 206	252 562
Kazakhstan	117 641	105 766	73 480	93 800	101 167
Korea (Rep. of)	260 000	268 000	329 000	321 000	421 000
Korea, Dem. P.R. of	* 7 000	* 6 000	* 5 000	* 5 000	* 5 000
Malaysia	17 000	39 000	54 000	26 000	44 000
Pakistan (b)	—	—	385	1 545	1 569
Philippines	* 34 000	* 34 000	* 32 000	* 30 000	* 34 000
Saudi Arabia	37 000	38 000	37 000	39 000	39 000
Taiwan	36 000	38 000	36 000	35 000	36 000
Thailand	73 159	73 303	55 504	55 504	42 223
United Arab Emirates	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000

Production of refined lead

tonnes (metric)

Country	2007	2008	2009	2010	2011
Australia	239 000	260 000	234 000	213 000	218 000
New Zealand	* 11 000	* 11 000	* 11 000	* 11 000	* 11 000
World Total	8 200 000	9 100 000	9 100 000	9 700 000	10 400 000

Notes
(1) Figures relate to both primary and secondary refined lead and include the lead content of antimonial lead

(a) Excluding lead content of primary antimonial lead
(b) Years ended 30 June of that stated

Production of lithium minerals

tonnes (metric)

Country	2007	2008	2009	2010	2011
Portugal					
Lepidolite	34 755	34 888	37 359	40 109	37 534
Spain					
Lepidolite	10 326	9 342	4 270	7 824	* 7 800
Canada	* 23 000	* 22 000	* 10 000	* —	* —
USA (a)	* 1 500	* 1 500	* 1 500	* 1 500	* 1 500
Argentina (c)(b)	17 691	17 784	12 800	16 500	* 15 000
Brazil					
Spodumene	7 991	14 460	15 929	15 733	* 15 800
Chile (c)	59 637	56 881	30 538	52 851	69 597
China	* 42 000	* 46 000	* 53 000	* 55 000	* 58 000
Australia					
Spodumene	245 279	239 528	197 482	303 729	421 228
World Total (Li content)	20 800	20 500	14 100	20 300	24 600

Notes
(1) In addition to the countries listed, Russia has also produced lithium minerals in the past

(a) Li content
(b) Chloride
(c) Carbonate

Production of magnesite

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria	811 556	837 476	544 716	757 063	867 912
Greece	351 414	361 165	380 834	396 497	393 880
Netherlands (f)	* 245 000	316 264	183 256	236 053	274 877
Poland	65 000	60 000	47 000	63 000	75 000
Russia	* 2 600 000	* 2 600 000	* 2 600 000	* 2 600 000	* 2 600 000
Slovakia	957 000	806 500	477 600	650 100	751 700
Spain	464 498	442 339	390 311	462 959	577 725
Turkey	1 984 908	2 143 047	861 180	1 541 860	* 1 000 000
South Africa	80 700	83 900	* 80 000	* 80 000	* 80 000
Zimbabwe	1 814	2 549	449	—	169
Canada (b)	* 140 000	* 140 000	* 140 000	* 150 000	* 150 000
Guatemala	7 612	11 757	17 247	—	311
Brazil (c)	399 314	421 300	410 000	439 500	500 000
Colombia	42 000	38 000	* —	* —	* —
China	* 14 000 000	* 15 600 000	* 13 000 000	* 14 000 000	* 14 500 000
India (e)	252 849	252 880	301 070	229 734	215 455
Iran (a)	112 229	115 987	130 575	126 702	* 130 000
Israel (g)	103 023	108 852	132 636	135 930	126 988
Korea, Dem. P.R. of	* 55 000	* 150 000	* 150 000	* 150 000	* 150 000
Pakistan (d)	3 445	3 940	2 639	5 159	4 908
Philippines	3 600	3 976	3 872	4 186	4 784
Australia (d)	343 424	147 698	366 188	* 295 000	* 663 000
World Total	23 000 000	24 600 000	20 200 000	22 300 000	23 100 000

Notes
(1) In addition to the countries listed, Bulgaria is believed to produce magnesite

(a) Years ended 20 March following that stated
(b) Officially described as magnesitic dolomite and brucite
(c) Including beneficiated and directly shipped material
(d) Years ended 30 June of that stated
(e) Years ended 31 March following that stated
(f) Chloride produced from solution mining
(g) Magnesium chloride

Production of primary magnesium metal

tonnes (metric)

Country	2007	2008	2009	2010	2011
Russia	* 33 000	* 30 000	* 30 000	* 30 000	* 30 000
Ukraine	2 000	* 2 000	* 2 000	* 2 000	* 2 000
Canada	* 8 000	—	—	—	—
USA	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
Brazil	* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
China	659 300	630 700	501 800	653 800	660 600
India	* 200	* 200	* 200	* 200	* 200
Israel	29 168	32 051	19 405	23 309	26 284
Kazakhstan (a)	* 21 000	* 21 000	* 21 000	* 21 000	* 21 000

Note
(a) Not marketed as metal but used in titanium production

Production of manganese ore

tonnes (metric)

Country	2007	2008	2009	2010	2011
Bulgaria	27 900	39 100	28 300	106 000	85 600
Georgia (a)	368 394	*370 000	* 370 000	*370 000	* 370 000
Hungary	51 000	49 579	43 000	55 000	58 000
Romania	49 350	43 590	20 304	13 120	3 180
Ukraine (a)	1 720 000	1 447 000	932 000	1 589 000	* 1 590 000
Burkina Faso	—	—	—	40 000	* 60 000
Egypt (b)	20 584	16 912	* 12 500	6 508	37 194
Gabon	3 333 800	3 250 000	1 992 060	3 200 570	3 562 330
Ghana	1 167 339	1 089 025	1 012 941	1 194 074	1 827 692
Ivory Coast	80 402	148 120	* 100 000	* 80 000	* 60 000
Morocco	41 628	102 285	51 788	75 614	58 000
Namibia	47 620	28 237	51 471	35 728	* 36 000
South Africa					
Metallurgical	5 982 190	6 798 187	4 564 855	7 156 338	8 635 863
Chemical	12 950	9 327	10 911	15 407	15 979
Sudan	400	—	500	378 990	* 400 000
Mexico	418 342	477 147	330 328	466 649	437 264
Brazil	1 866 000	2 400 000	2 300 000	2 600 000	3 100 000
Chile	26 808	5 096	1 642	—	—
China	* 10 000 000	* 11 000 000	* 12 000 000	* 13 000 000	* 14 000 000
India (c)	2 696 980	2 789 025	2 491 950	2 881 080	2 387 000
Iran (d)	103 441	115 199	125 506	131 561	* 135 000
Kazakhstan	2 482 000	2 485 000	2 457 400	1 094 000	2 930 000
Malaysia	56 500	536 675	567 963	899 703	576 835
Thailand	9 500	111 000	64 930	50 450	398
Australia	5 289 000	4 819 000	4 444 000	6 474 000	6 961 000
World Total	35 900 000	38 100 000	34 000 000	41 900 000	47 300 000

Notes
(1) In addition to the countries listed, Colombia, Cuba and Vietnam are believed to produce manganese ore

(a) Marketable
(b) Fiscal years ending 30 June of that stated
(c) Years ended 31 March following that stated
(d) Years ended 20 March following that stated

Production of mercury

kilograms

Country	2007	2008	2009	2010	2011
Finland	45 195	33 120	6 210	9 000	5 000
Russia	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Morocco	17 900	17 400	* 18 000	* 20 000	* 20 000
Mexico (a)	* 17 300	* 43 100	* 10 600	* 11 000	* 120 300
USA	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Argentina	3 483	1 027	9 468	* 10 000	* 10 000
Chile (b)	* 50 000	* 50 000	* 88 000	* 176 000	* 100 000
China	798 000	1 333 000	1 424 000	1 585 000	1 493 000
Kyrgyzstan	* 250 000	* 250 000	* 250 000	* 250 000	* 250 000
Tajikistan	* 30 000	* 30 000	19 100	15 000	* 15 000
World Total	1 300 000	1 800 000	1 900 000	2 100 000	2 100 000

Notes
(1) Several countries are believed to have unrecorded production of mercury from copper electrowinning processes and by recovery from effluents

(a) BGS estimates based on net exports
(b) From copper solvent extraction and electrowinning processes

Production of mica

tonnes (metric)

Country	2007	2008	2009	2010	2011
Finland	11 449	10 706	7 855	13 809	12 896
France (b)	* 20 000	* 20 000	* 18 000	* 19 000	* 19 000
Russia	* 12 000	* 10 000	* 9 000	* 9 000	* 9 000
Spain (b)	5 569	4 254	3 655	4 034	3 775
Turkey	3 313	8 392	4 172	* 4 500	* 4 500
Egypt	200	50	* 50	* 50	* 50
Madagascar	1 349	1 233	358	947	1 165
South Africa	419	393	299	904	633
Sudan	...	66	100	10	* 200
Canada	* 18 000	* 17 000	* 15 000	* 15 500	* 15 000
Mexico	9 600	5 000	5 000	160	—
USA (d)(b)	97 000	85 000	51 000	53 000	50 000
Argentina	10 171	8 790	8 668	9 638	* 10 000
Brazil	4 000	4 000	4 000	4 000	* 4 000
China (c)	* 93 000	* 139 000	* 91 000	* 126 000	* 132 000
India (e)	1 242	1 462	1 061	1 293	1 736
Iran (f)	1 800	1 510	6 797	2 860	* 2 900
Korea (Rep. of) (a)	42 385	49 474	27 078	36 486	31 260
Malaysia (g)	6 118	5 593	4 324	4 515	4 244
Sri Lanka	3 224	2 364	2 347	2 095	2 927
Taiwan	3 387	3 179	557	—	1 455
World Total	340 000	380 000	260 000	308 000	307 000

Notes
(1) In addition to the countries listed, Romania is believed to produce mica

(a) Mainly sericite
(b) Including mica recovered from mica schists and/or kaolin beneficiation
(c) Conservative BGS estimates, based on exports
(d) Sold or used by producers
(e) Years ended 31 March following that stated
(f) Years ended 20 March following that stated
(g) Sericite

Mine production of molybdenum

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Armenia	4 385	4 472	4 365	4 377	4 817
Russia	* 4 800	* 4 800	* 4 800	* 4 800	* 4 800
Canada	6 681	8 602	8 721	8 648	8 326
Mexico	6 491	7 812	10 167	10 849	10 787
USA	57 000	55 900	47 800	59 400	64 000
Argentina	—	228	1 148	468	1 708
Chile	44 775	33 639	34 786	37 044	40 698
Peru	16 787	16 721	12 297	16 963	19 141
China	* 67 700	* 81 000	* 93 500	* 93 600	* 94 000
Iran (a)	3 205	3 628	3 882	3 676	3 513
Kazakhstan	500	400	—	—	—
Mongolia	1 978	1 900	2 410	2 198	1 957
World Total	214 000	219 000	224 000	242 000	254 000

Notes
(1) In addition to the countries listed, Australia, Georgia, India, Democratic P.R. of Korea, Romania and Tajikistan are believed to produce molybdenum

(a) Years ended 20 March following that stated

Production of nepheline syenite

tonnes (metric)

Country	2007	2008	2009	2010	2011
Norway	312 000	346 000	270 000	327 000	330 000
Russia (a)	* 1 000 000	* 1 000 000	4 400 000	4 900 000	4 608 000
Canada	690 000	646 000	513 000	581 000	610 000
Iran	75 000	...	...	...	...

Note
(a) Nepheline concentrates

Mine production of nickel

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Albania	2 197	3 500	550	1 954	914
Finland	3 600	6 200	1 600	12 100	19 100
Greece	21 200	18 600	9 600	16 100	21 700
Kosovo	—	3 655	10 565	9 100	7 728
Macedonia	15 000	15 000	12 000	14 200	25 600
Norway	378	377	336	348	339
Russia	279 800	266 800	261 900	270 000	270 000
Spain	6 630	8 136	8 029	6 296	—
Turkey	* 2 000	* 1 500	1 199	* 1 900	* 4 300
Ukraine	* 12 000	* 8 000	—	—	* —
Botswana	22 844	28 940	29 616	24 931	15 675
Morocco	100	100	733	317	217
South Africa (a)	37 877	31 700	34 610	39 960	43 321
Zambia	—	800	1 500	2 809	2 869
Zimbabwe	8 582	6 354	4 858	6 133	7 992
Canada	254 915	259 651	135 037	158 376	219 612
Cuba	73 900	67 300	60 000	66 000	66 000
Dominican Republic	29 128	18 742	—	—	13 498
Brazil	38 400	67 116	56 950	66 200	74 000
Colombia	49 312	41 638	51 802	49 433	37 800
Venezuela	15 666	10 886	13 749	12 063	13 400
China	66 400	79 500	81 800	79 800	89 800
Indonesia	243 500	223 000	183 900	217 300	226 300
Kazakhstan	* 1 200	* 1 600	—	—	* —
Philippines	91 367	80 645	137 350	184 330	319 354
Australia	184 000	200 000	166 000	169 000	215 000
New Caledonia	125 364	105 883	95 649	131 309	131 050
World Total	1 585 000	1 556 000	1 359 000	1 540 000	1 826 000

Notes
(a) Includes metal and metal content of sulphate and concentrates

Smelter/refinery production of nickel

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria	900	500	700	1 000	1 000
Finland	55 000	51 963	41 556	49 772	49 823
France	14 800	13 700	13 900	14 400	13 700
Greece	18 668	16 640	8 269	13 960	18 530
Kosovo	—	5 777	6 365	7 000	15 700
Macedonia	15 300	15 000	12 000	14 400	17 292
Norway	87 600	88 700	88 577	92 185	92 000
Russia	272 000	257 700	244 800	262 300	265 700
Serbia	1 000	—	—	—	—
Ukraine	20 600	24 700	15 800	21 900	17 100
United Kingdom	34 050	40 800	17 800	28 900	36 300
South Africa	39 500	32 800	37 300	39 960	43 321
Zimbabwe	14 000	11 300	9 200	4 400	* 3 500
Canada	153 647	167 732	116 909	105 413	142 445
Cuba	34 000	35 600	33 000	33 000	33 600
Dominican Republic	29 128	18 742	—	—	13 498
Brazil	34 954	36 000	32 800	41 900	43 100
Colombia	49 312	41 638	51 802	49 443	37 817
Venezuela	15 666	10 886	10 400	11 700	13 400
China	199 300	200 300	253 800	332 300	411 200
Indonesia	18 532	17 566	12 550	18 688	19 690
Japan	161 200	156 500	143 500	166 100	156 900
Korea (Rep. of)	—	7 113	19 333	21 461	18 580
Australia	114 000	108 000	131 000	102 000	110 000
New Caledonia	44 954	37 467	38 230	39 802	40 513
World Total	1 428 000	1 397 000	1 340 000	1 472 000	1 615 000

Note
(1) Data relate to refined nickel plus the nickel content of ferro-nickel, nickel oxide and nickel salts

Production of perlite

tonnes (metric)

Country	2007	2008	2009	2010	2011
Armenia	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Bulgaria	13 900	7 400	14 800	—	—
Greece	1 100 000	1 000 000	862 935	760 000	720 000
Hungary	67 542	132 000	82 058	70 990	70 108
Italy	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Russia	* 45 000	* 45 000	* 45 000	* 45 000	* 45 000
Slovakia	20 000	25 000	25 000	23 000	23 000
Turkey	478 579	551 266	522 832	737 077	429 776
Ukraine	* 36 000	* 36 000	* 36 000	* 36 000	* 36 000
South Africa	* 400	* 400	* 400	* 400	* 400
Mexico	54 405	43 180	51 395	31 779	30 750
USA	409 000	434 000	348 000	414 000	400 000
Argentina	35 838	26 545	21 802	27 182	* 27 000
China	* 700 000	* 700 000	* 700 000	* 700 000	* 700 000
Iran (a)	47 422	* 47 000	753 183	547 617	* 550 000
Japan	* 230 000	* 230 000	* 220 000	* 210 000	* 300 000
Philippines	9 900	10 100	10 100	10 500	13 800
Thailand	6 400	7 000	13 500	14 700	26 500
Australia (b)	8 546	6 942	7 649	6 616	2 362
New Zealand	7 873	—	8 848	5 088	—

Notes
(1) In addition to the countries listed, Algeria, Canada, Djibuti, Iceland, Mozambique and former Yugoslavia are believed to produce perlite

(a) Years ended 20 March following that stated
(b) Years ended 30 June of that stated

Production of crude petroleum

tonnes (metric)

Country	2007	2008	2009	2010	2011
Albania	563 189	577 301	576 739	742 012	894 530
Austria	853 548	861 639	905 031	875 969	838 052
Azerbaijan	42 523 200	42 074 700	48 353 700	48 580 900	43 195 200
Belarus	1 760 020	1 740 020	1 720 010	1 700 140	1 681 470
Bulgaria	25 700	23 000	23 800	22 400	21 400
Croatia	911 207	867 027	807 424	748 791	691 197
Czech Republic	240 000	236 000	217 000	173 000	163 000
Denmark	15 552 000	14 338 000	13 045 000	12 090 000	10 908 900
Estonia (g)	1 901 600	1 869 500	1 733 000	2 080 000	2 173 132
France	1 013 000	975 000	899 000	* 800 000	* 800 000
Georgia	63 850	51 660	52 731	50 413	50 033
Germany	3 415 374	3 053 998	2 800 063	2 511 174	2 677 136
Greece	80 000	66 000	87 000	86 000	87 126
Hungary	838 672	811 000	796 000	790 000	696 453
Italy	5 800 000	5 200 000	4 600 000	5 100 000	5 280 000
Lithuania	154 449	127 658	114 956	114 464	113 895
Netherlands	2 576 222	2 163 000	1 704 000	1 414 000	1 464 000
Norway	125 763 000	121 101 700	115 000 000	105 042 000	100 289 000
Poland	720 603	754 907	686 992	686 487	614 704
Romania	4 837 000	4 528 000	4 388 940	4 172 411	4 081 979
Russia	491 000 000	488 000 000	494 000 000	505 000 000	509 000 000
Serbia	639 089	636 383	663 005	865 499	1 020 490
Slovakia	23 000	21 000	19 000	16 000	18 000
Slovenia	344	174	138	233	263
Spain	142 879	127 542	106 817	121 528	99 926
Turkey	2 131 288	2 222 594	2 489 914	2 602 114	2 383 000
Ukraine	4 459 000	4 328 000	3 960 000	3 549 000	3 363 000
United Kingdom	70 357 000	66 745 000	64 001 000	58 988 000	63 498 000
Algeria	86 500 000	85 600 000	77 800 000	75 500 000	74 300 000
Angola	82 500 000	93 500 000	89 100 000	92 000 000	85 200 000
Cameroon	4 343 360	4 300 000	3 700 000	3 200 000	2 966 000
Chad	7 500 000	6 700 000	6 200 000	6 400 000	6 000 000
Congo	11 091 800	11 768 000	14 200 000	15 100 000	15 200 000
Congo, Democratic Republic	1 105 000	995 000	1 100 000	1 050 000	1 010 000
Egypt	34 100 000	34 600 000	35 300 000	35 000 000	35 200 000
Equatorial Guinea	17 300 000	17 200 000	15 200 000	13 600 000	12 500 000
Gabon	12 100 000	11 800 000	11 829 000	12 431 000	12 170 000
Ghana	301 000	301 000	301 000	360 000	364 000
Ivory Coast	2 423 000	2 964 000	2 897 000	2 197 000	1 984 000
Libya	85 000 000	85 300 000	77 100 000	77 500 000	22 400 000
Mauritania	739 507	592 679	550 143	412 465	385 234
Morocco	11 100	9 000	9 300	10 400	9 600
Nigeria	114 100 000	105 300 000	101 500 000	117 200 000	117 400 000
Senegal	42 900	13 400	33 600	53 800	* 54 000
South Africa	502 000	403 000	270 000	316 000	179 000
Sudan	23 100 000	23 700 000	23 400 000	22 900 000	22 300 000
Tunisia	4 546 000	4 146 000	3 902 000	3 731 400	3 700 000
Barbados	40 253	39 760	38 030	42 069	40 179
Canada	137 300 000	135 700 000	134 300 000	141 200 000	145 000 000
Cuba	2 905 000	3 003 100	2 731 300	3 024 800	* 3 110 000
Guatemala	774 500	715 400	523 700	605 100	554 100
Mexico	179 450 000	163 220 000	153 600 000	152 670 000	151 687 000
Trinidad & Tobago	6 183 900	5 904 500	5 056 600	5 061 410	4 736 250
USA	314 746 780	309 706 456	334 637 399	346 213 286	360 155 048
Argentina	32 959 940	32 365 564	31 930 560	31 170 941	29 356 595
Bolivia	1 907 000	1 806 400	1 565 000	1 599 700	* 1 500 000
Brazil	94 800 000	98 500 000	105 000 000	110 600 000	113 400 000
Chile	132 000	137 000	192 000	217 750	246 810
Colombia	26 357 800	29 236 400	33 288 500	38 990 438	45 433 683
Ecuador	26 021 000	25 767 000	24 747 000	24 720 000	25 405 000
Peru	5 617 000	5 921 000	7 175 000	7 753 000	7 533 000
Suriname	877 500	952 000	945 300	953 300	966 300
Venezuela	152 100 000	15 100 000	149 900 000	142 500 000	139 600 000

Production of crude petroleum

tonnes (metric)

Country	2007	2008	2009	2010	2011
Afghanistan	* 3 000	* 3 000	* 3 000	* 3 000	* 3 000
Bahrain	1 721 000	1 636 000	1 603 000	1 646 984	2 393 357
Brunei	9 639 000	8 680 000	8 291 000	8 448 000	8 248 000
Burma (f)	1 076 000	973 000	983 000	958 000	935 000
China (a)	186 318 200	190 430 600	189 489 600	203 014 000	203 646 000
East Timor	(e) 3 001 000	(d)* 3 000 000	(d) 3 066 000	(d) 2 760 000	(e) 3 095 000
India (f)	34 118 000	33 506 000	33 691 000	37 705 000	37 887 000
Indonesia	47 719 000	48 973 000	47 440 000	47 238 000	45 150 000
Iran	209 700 000	209 800 000	202 400 000	207 100 000	205 800 000
Iraq	102 688 000	115 411 000	117 533 000	120 400 000	136 900 000
Israel	11 700	2 200	2 010	1 791	4 638
Japan	876 000	899 000	840 000	796 000	759 000
Jordan	1 200	2 200	1 300	1 300	* 1 300
Kazakhstan	67 125 300	70 671 000	76 482 000	79 684 000	80 060 900
Kuwait (c)	129 900 000	137 300 000	121 300 000	122 500 000	140 000 000
Kyrgyzstan	100 000	71 000	77 300	82 800	90 300
Malaysia	32 600 000	32 900 000	31 500 000	30 500 000	27 200 000
Mongolia	117 000	162 000	257 000	300 000	351 000
Oman	35 350 000	37 700 000	40 500 000	43 100 000	44 100 000
Pakistan (b)	3 282 000	3 413 700	3 204 400	3 160 800	3 205 500
Philippines	815 000	902 000	1 150 000	1 092 000	1 016 000
Qatar	53 600 000	60 800 000	57 900 000	65 700 000	71 100 000
Saudi Arabia (c)	494 200 000	515 300 000	459 500 000	466 600 000	525 800 000
Syria	18 600 000	18 900 559	18 853 258	19 100 000	16 500 000
Taiwan	17 778	16 134	15 995	14 477	11 344
Tajikistan	25 900	25 800	26 200	27 000	* 30 000
Thailand	11 500 000	12 400 000	12 900 000	13 000 000	12 100 000
Turkmenistan	9 800 000	10 200 000	10 200 000	10 700 000	10 700 000
United Arab Emirates	140 700 000	142 900 000	126 300 000	130 800 000	150 100 000
Uzbekistan	4 900 000	4 800 000	4 500 000	3 600 000	3 600 000
Vietnam	15 920 000	14 904 000	16 360 000	14 967 000	15 180 700
Yemen, Republic of	15 300 000	14 100 000	13 104 442	14 200 000	10 800 000
Australia	21 567 000	21 569 000	22 527 000	24 796 000	21 285 000
New Zealand (e)	1 890 500	2 724 600	2 522 200	2 421 800	2 232 200
Papua New Guinea	2 153 000	1 950 000	1 813 000	1 683 000	1 424 000
World Total	3 904 000 000	3 798 000 000	3 840 000 000	3 923 000 000	3 980 000 000

Notes
(1) The figures shown in this table include natural gas liquids

(a) Including oil from shale and coal
(b) Years ended 30 June of that stated
(c) Including shares of production from the Neutral Zone
(d) Entirely natural gas liquids
(e) including natural gas liquids
(f) Years ended 31 March following that stated
(g) From oil shale

Production of natural gas

million cubic metres

Country	2007	2008	2009	2010	2011
Albania	10	12	9	2	2
Austria	1 835	1 544	1 559	1 713	1 591
Azerbaijan	10 832	16 337	16 325	16 673	16 361
Belarus	201	203	205	213	222
Bulgaria	295	218	15	74	443
Croatia	2 892	2 729	2 591	2 727	2 471
Czech Republic	148	168	180	201	187
Denmark	8 757	9 562	7 980	7 792	6 263
France	1 023	925	813	* 800	* 800
Georgia	18	14	12	8	7
Germany	18 075	16 547	15 554	13 666	12 952
Greece	21	14	11	* 10	* 10
Hungary	2 653	2 703	2 748	2 600	2 315
Ireland, Republic of (b)	519	506	414	402	361
Italy	9 700	9 300	7 900	7 600	8 340
Netherlands	72 431	79 325	74 659	83 944	76 431
Norway	89 700	99 200	103 500	107 250	101 376
Poland	5 653	5 382	5 537	5 666	5 825
Romania	11 981	11 520	11 273	11 138	11 164
Russia	653 000	664 000	584 000	649 000	669 000
Serbia	274	282	279	423	448
Slovakia	195	111	114	106	106
Slovenia	3	3	3	7	2
Spain	42	46	19	58	44
Turkey	839	894	660	626	756
Ukraine	21 104	21 444	24 189	20 382	20 646
United Kingdom	76 970	74 937	63 022	59 674	47 790
Algeria	84 800	85 800	79 600	80 400	78 000
Angola	830	680	690	733	752
Congo	7 276	7 351	7 980	8 438	9 458
Egypt	55 700	59 000	62 700	61 300	61 300
Equatorial Guinea	2 920	6 670	5 900	6 136	6 235
Gabon	167	* 170	* 170	* 170	* 180
Ivory Coast	1 574	1 300	1 300	1 352	1 317
Libya	15 300	15 900	15 900	16 800	4 100
Morocco	61	50	41	50	53
Mozambique	2 800	3 100	3 600	3 744	3 548
Nigeria	35 000	35 000	24 800	36 600	39 900
South Africa	1 600	1 500	1 200	1 600	1 400
Tunisia	2 285	2 596	3 056	3 402	2 940
Barbados	21	21	19	20	20
Canada	174 334	167 515	156 046	151 023	145 285
Cuba	1 218	1 161	1 155	1 073	1 020
Mexico	53 600	54 200	54 900	55 100	52 500
Trinidad & Tobago	42 259	41 842	43 221	44 624	42 809
USA (e)	545 000	571 000	583 000	604 066	651 292
Argentina	51 007	50 509	48 416	47 097	45 524
Bolivia	14 301	14 895	12 786	14 923	* 15 900
Brazil	12 710	15 510	13 370	16 152	18 280
Chile	2 015	1 828	1 889	1 792	1 440
Colombia	7 500	9 100	10 378	10 599	10 810
Ecuador	310	255	296	340	* 350
Peru	2 671	3 386	3 470	7 149	12 034
Venezuela	29 500	30 000	28 700	30 200	31 200
Afghanistan	* 50	155	142	142	* 142
Bahrain	11 433	12 320	12 475	12 785	19 638
Bangladesh (d)	15 920	17 015	18 511	19 919	20 075
Brunei	11 718	11 665	10 733	12 283	12 797
Burma (c)	13 385	11 476	12 441	12 746	12 888
China	69 240	80 299	85 269	94 848	102 500
East Timor	4 826	5 986	5 063	4 710	4 982

Production of natural gas

million cubic metres

Country	2007	2008	2009	2010	2011
India (c)	32 417	32 849	47 510	51 203	46 386
Indonesia	72 530	74 129	77 427	86 342	75 555
Iran	111 900	116 300	131 200	146 200	151 800
Iraq	13 596	14 681	16 577	16 885	18 692
Israel	2 758	3 436	2 825	3 234	4 320
Japan	3 708	3 735	3 539	3 396	3 298
Jordan	220	250	220	185	* 185
Kazakhstan	29 562	32 889	35 942	37 406	39 531
Kuwait (a)	12 060	12 700	11 200	11 600	13 000
Kyrgyzstan	10	17	15	23	27
Malaysia	60 780	60 820	59 970	61 250	61 260
Oman	26 107	25 968	24 800	29 279	30 848
Pakistan (d)	40 028	41 178	41 367	41 995	41 676
Philippines	3 689	3 883	3 910	3 683	3 976
Qatar	63 200	77 000	89 300	116 700	146 800
Saudi Arabia (a)	74 420	80 440	77 500	87 700	99 200
Syria	7 825	7 574	7 948	7 700	8 300
Taiwan	417	357	351	290	330
Tajikistan	17	16	20	23	19
Thailand	25 812	27 559	26 347	29 565	29 041
Turkmenistan	65 400	66 100	36 400	42 400	59 500
United Arab Emirates	50 290	50 240	59 100	60 500	51 700
Uzbekistan	59 100	62 200	60 000	59 600	57 000
Vietnam	7 080	7 499	8 010	9 402	8 480
Australia	39 955	38 256	42 813	52 081	51 268
New Zealand	4 310	3 995	4 113	4 434	4 033
Papua New Guinea	136	151	156	151	158
World Total	3 070 000	3 181 000	3 101 000	3 318 000	3 403 000

Notes
(1) So far as possible the figures in this table exclude flared or reinjected gas

(a) Including one-half of the output of the Neutral Zone
(b) Sales
(c) Years ended 31 March following that stated
(d) Years ended 30 June of that stated
(e) Dry gas

Production of phosphate rock

tonnes (metric)

Country	2007	2008	2009	2010	2011
Finland	830 989	780 000	658 347	817 289	869 694
Russia	10 936 500	9 810 200	9 537 800	10 843 500	* 10 850 000
Algeria	1 800 025	1 805 000	1 017 000	1 525 234	1 281 100
Burkina Faso	* 2 400	* 2 400	* 2 400	* 2 400	* 2 400
Egypt (e)	2 290 295	2 356 523	6 227 424	3 021 335	1 392 990
Morocco	27 834 000	24 861 000	18 307 000	26 603 000	28 052 000
Senegal	691 300	645 000	948 600	976 200	1 500 000
South Africa	2 555 723	2 286 794	2 237 128	2 493 904	2 564 820
Tanzania	8 261	28 684	18 000	17 180	20 000
Togo	750 100	842 508	725 547	695 123	865 616
Tunisia	8 002 000	7 691 700	7 409 000	8 148 500	2 479 400
Zimbabwe	46 106	21 051	32 100	56 656	46 047
Canada	682 000	983 000	901 388	826 858	851 308
Mexico	47 721	969 094	1 421 823	1 507 402	1 690 606
USA	29 700 000	30 200 000	26 400 000	25 800 000	28 400 000
Brazil (d)	6 185 000	6 730 000	6 100 000	6 300 000	6 634 500
Chile	25 073	41 186	13 292	50 528	15 929
Colombia	* 24 000	* 48 000	* 48 000	* 50 000	* 50 000
Peru	—	—	—	1 134 086	8 889 295
Venezuela	371 000	213 981	362 753	85 240	81 500
China	45 417 000	50 740 600	60 208 900	68 070 000	81 223 000
Christmas Island (b)(c)(e)	703 719	* 700 000	563 000	566 645	616 000
India (a)	1 849 188	1 803 954	1 605 489	2 152 215	2 297 000
Iran	252 903	* 250 000	61 231	* 62 000	* 62 000
Iraq	—	—	45 000	55 000	52 720
Israel	3 069 000	3 088 000	2 697 000	2 777 200	3 021 955
Jordan	5 552 000	6 266 000	5 280 693	6 528 708	7 643 228
Kazakhstan	1 044 900	2 470 600	1 204 700	1 755 000	2 213 800
Korea, Dem. P.R. of	* 300 000	* 300 000	* 100 000	* 100 000	* 100 000
Pakistan (e)	3 350	6 580	17 625	47 385	30 950
Philippines					
Phosphate rock	1 961	2 271	2 257	2 308	2 778
Guano	209	254	251	272	310
Sri Lanka	40 128	41 947	36 347	47 778	58 254
Syria	3 678 000	3 221 379	2 466 150	3 764 900	3 541 900
Thailand	3 550	3 675	658	35 783	3 300
Uzbekistan	599 500	700 000	700 000	700 000	652 600
Vietnam	1 522 700	2 100 700	2 047 400	2 324 500	2 563 200
Australia (e)	2 131 045	2 156 848	1 962 893	2 135 801	2 388 038
Nauru (b)	* 200 000	497 469	146 816	407 654	436 563
World Total	159 000 000	165 000 000	162 000 000	182 000 000	203 000 000

Notes
(1) In addition to the countries listed, Indonesia and Nigeria are believed to produce phosphate rock

(a) Years ended 31 March following that stated
(b) Exports
(c) Including phosphate dust
(d) Including beneficiated and directly shipped material
(e) Years ended 30 June of that stated

Mine production of platinum group metals

kilograms (metal content)

Country	2007	2008	2009	2010	2011
Poland					
Platinum	30	30	30	30	* 30
Palladium	20	20	20	20	* 20
Russia					
Platinum (c)	28 500	25 000	24 400	26 500	26 500
Palladium (c)	141 200	113 800	113 100	115 700	107 500
Other platinum metals (c)	2 800	2 600	2 200	2 200	2 100
Serbia					
Platinum	2	—	12	—	* —
Palladium	15	70	38	22	25
Botswana					
Platinum	529	591	746	498	373
Palladium	3 110	2 955	4 728	2 830	2 115
Ethiopia					
Platinum (a)	3	10	10	8	—
South Africa					
Platinum	165 835	146 141	140 819	147 790	148 008
Palladium	86 461	75 537	75 118	82 222	82 731
Other platinum metals	58 623	54 089	55 456	57 292	58 111
Zimbabwe					
Platinum	5 086	5 495	6 849	8 639	10 827
Palladium	3 999	4 274	5 354	6 916	8 422
Other platinum metals	881	928	1 190	1 536	2 162
Canada					
Platinum	* 8 100	* 8 500	* 4 000	* 3 600	* 8 000
Palladium	* 14 100	* 14 700	* 6 900	* 6 200	* 14 000
Other platinum metals	* 900	* 1 000	* 500	* 400	* 900
USA					
Platinum	3 857	3 577	3 826	3 450	3 700
Palladium	13 312	11 944	12 659	11 600	12 500
Colombia	1 526	1 370	929	997	1 231
China					
Platinum	* 1 300	* 1 400	* 1 400	* 1 400	* 1 400
Palladium	* 650	* 700	* 700	* 700	* 700
Australia					
Palladium (b)	742	710	1 034	781	445
World Total	542 000	475 000	462 000	481 000	492 000

Notes
(1) Wherever possible, figures relate to quantities of platinum group metals thought to be recovered from ores originating in the country stated
(2) Figures for metal production are only given for countries where recovery is thought to be based predominantly on domestic materials or on imported materials which have not been recorded as mine production elsewhere in the table
(3) In addition to the production listed, concentrates produced in Spain, and possibly other countries, are believed to be processed in China to recover platinum group metals

(a) Years ending 7 July of that stated
(b) Platinum group metals; all forms
(c) Sales from mine production and stocks

Production of potash

tonnes (K_2O content)

Country	2007	2008	2009	2010	2011
Belarus	4 971 600	4 967 000	2 485 400	5 222 600	5 332 100
Germany					
Potassic salts	3 636 504	3 280 467	1 825 139	3 023 941	3 214 696
Russia	6 373 100	5 935 400	3 690 900	6 128 100	6 500 000
Spain					
Chloride	531 739	472 952	481 455	418 778	436 026
United Kingdom					
Chloride	430 000	403 800	* 403 800	* 403 800	* 462 000
Canada					
Chloride	11 426 000	10 379 000	4 318 000	9 788 000	11 005 000
USA					
Potassic salts	1 100 000	1 100 000	700 000	930 000	1 100 000
Brazil					
Chloride	471 333	383 000	453 000	417 000	395 000
Chile					
Chloride	533 000	578 000	713 000	961 000	864 000
China	1 822 600	1 980 000	2 062 000	2 344 500	2 598 800
Israel					
Chloride	2 146 000	2 134 000	2 446 200	2 041 342	1 789 721
Jordan	1 090 000	1 200 000	1 199 400	1 284 791	1 355 160
World Total	34 500 000	32 800 000	20 800 000	33 000 000	35 100 000

Production of rare earth oxides

tonnes (metric)

Country	2007	2008	2009	2010	2011
Russia	2 711	2 470	* 2 500	* 2 500	* 2 500
Brazil	760	540	200	160	* 200
China (b)	* 120 800	* 124 500	* 129 400	* 118 900	* 120 000
India (a)(c)	35	22	16	—	—
Malaysia	440	150	20	471	498
Australia	—	—	—	—	2 188

Notes
(1) All the figures in this table are either reported as rare earth oxides or are calculated to rare earth oxide equivalent
(2) Prior to the 2005–2009 edition of this book, a table for the production of 'rare earth minerals' was included rather than the current 'rare earth oxides'. Users should exercise caution when comparing statistics over longer time periods
(3) Although rare earth minerals are believed to be extracted in other countries, there is insufficient evidence to suggest that rare earth oxides are produced in those countries
(4) In addition to the countries listed, the USA are known to be producing rare earth oxides from existing stockpiles. Best available estimates suggest this is in the order of 2000 tonnes per year

(a) Years ending 31 March following that stated
(b) Includes production from iron ore extraction, bastnasite concentrates and ion absorption clays
(c) May include small quantities of other rare earth compounds

Production of rhenium

tonnes (metric)

Country	2007	2008	2009	2010	2011
Armenia	* 0	* 0	* 0	* 0	* 1
Poland	4	5	4	4	* 5
Russia	* 2	* 2	* 2	* 2	* 1
Canada	* 1	* 2	* 2	* 1	* 1
USA	7	8	6	6	6
Chile	* 28	* 28	* 25	* 25	* 26
Peru	* 5	* 5	* 5	* 5	* 5
China	* 1	* 1	* 1	* 1	* 1
Kazakhstan	* 6	* 6	* 3	* 2	* 3
Uzbekistan	* 1	* 1	* 0	* 0	* 0

Production of salt

tonnes (metric)

Country	2007	2008	2009	2010	2011
Albania					
Sea salt	* 47 000	* 47 000	* 47 000	* 47 000	* 47 000
Armenia	34 800	37 334	29 402	29 440	35 570
Austria					
Rock salt	1 172	503	50	95	169
Salt in brine	735 724	866 674	1 035 044	1 071 842	1 150 474
Azerbaijan	7 126	7 527	5 466	4 449	18 848
Belarus	1 665 350	1 866 499	2 089 282	2 411 683	2 576 330
Bosnia & Herzegovina	502 487	538 357	556 089	566 101	721 046
Bulgaria	2 000 000	2 100 000	1 300 000	1 900 000	2 200 000
Croatia	32 536	54 937	57 186	66 835	53 963
Denmark	557 917	496 593	511 063	601 046	* 600 000
France					
Salt in brine (k)	6 139 840	* 6 000 000	6 100 000	* 6 100 000	* 6 000 000
Germany					
Rock salt	4 826 000	5 545 438	7 709 844	9 992 156	8 765 168
Brine salt	1 010 000	989 208	1 862 630	2 118 484	2 217 205
Salt in brine	7 558 000	7 306 745	* 7 300 000	* 4 500 000	* 6 458 628
Greece	212 000	* 220 000	* 189 000	* 190 000	* 190 000
Italy					
Rock salt & brine salt	4 383 560	5 412 449	3 678 234	4 006 882	2 912 128
Montenegro					
Sea salt	20 000	25 200	17 000	11 200	10 000
Netherlands	6 177 000	6 200 000	5 967 000	5 982 000	6 866 000
Poland					
Rock salt	591 240	618 111	988 545	1 221 700	1 233 800
Brine salt	2 930 726	2 783 198	2 533 413	2 646 000	2 633 000
Other salt	785 694	706 618	763 385	763 515	547 700
Portugal					
Rock salt	590 588	606 545	594 578	618 961	631 295
Sea salt	64 048	69 249	72 325	44 574	48 048
Romania	2 475 349	2 526 774	2 072 744	2 388 357	2 248 940
Russia	2 200 000	1 800 000	1 600 000	* 2 000 000	* 2 000 000
Serbia	30 023	30 115	28 782	30 816	23 334
Slovakia	117 000	109 510	41 000	—	—
Slovenia	3 029	535	2 924	59	4 291
Spain					
Rock salt	2 709 545	2 909 907	2 763 081	3 115 940	* 3 200 000
Sea salt	1 332 360	1 290 672	1 338 789	1 242 718	1 171 435
Other salt	102 524	102 149	99 853	92 644	91 735
Switzerland	353 000	368 000	554 000	643 000	478 324

Production of salt

tonnes (metric)

Country	2007	2008	2009	2010	2011
Turkey					
Sea salt	* 500 000	* 500 000	* 500 000	* 500 000	* 500 000
Other salt	2 366 000	2 472 000	3 765 564	* 4 100 000	* 4 100 000
Ukraine	5 547 852	4 425 317	5 394 512	4 908 186	5 938 000
United Kingdom	5 600 000	5 565 000	6 166 000	6 666 000	* 6 700 000
Algeria					
Brine salt & sea salt	183 189	201 603	269 255	187 160	* 190 000
Angola	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Botswana	165 710	170 994	241 114	364 761	446 525
Burkina Faso	* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
Cape Verde	* 1 600	—	—	—	—
Djibouti	—	—	—	30 000	30 000
Egypt (j)	1 213 643	1 879 351	2 951 636	2 665 850	2 460 462
Eritrea	7 448	26 071	* 26 000	* 26 000	* 26 000
Ethiopia (d)(i)					
Rock salt	...	31 971	70 541	* 70 000	* 70 000
Other salt	12 899	30 414	41 847	* 40 000	* 40 000
Ghana	* 250 000	238 727	* 250 000	* 250 000	* 250 000
Guinea	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Kenya (i)	11 596	24 345	24 125	* 24 000	* 24 000
Libya	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
Madagascar	70 000	* 70 000	* 70 000	* 70 000	* 70 000
Mali	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Mauritania	420	570	455	391	690
Mauritius (c)	6 650	5 042	2 301	3 000	4 000
Morocco	215 754	219 187	310 376	503 351	720 814
Mozambique (c)	* 110 000	* 110 000	* 110 000	* 110 000	* 110 000
Namibia	810 942	732 000	807 348	783 036	* 780 000
Niger	* 1 300	* 1 300	* 1 300	* 1 300	* 1 300
Senegal	212 300	240 600	222 500	231 400	258 200
Somalia	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
South Africa	407 079	415 996	408 422	394 493	381 177
Sudan	22 922	10 581	35 793	141 840	...
Tanzania	35 224	25 897	27 393	34 455	36 352
Tunisia (c)	933 000	1 063 500	1 260 100	1 804 000	1 180 500
Bahamas	578 000	10 244	10 430	11 833	8 430
Bonaire	—	—	—	—	* 300 000
Canada					
Rock salt	10 679 498	13 323 350	13 644 520	9 536 288	11 629 830
Other salt (e)	1 182 968	1 086 787	1 006 375	1 001 200	994 718
Costa Rica	* 20 000	* —	* —	* —	* —
Cuba	141 300	157 300	265 700	271 800	280 800
Dominican Republic					
Sea salt	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
El Salvador (c)	* 90 000	88 650	87 300	114 100	98 200
Guatemala (c)	* 60 000	* 60 000	* 50 000	* 50 000	* 50 000
Honduras	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
Mexico	8 032 273	8 808 714	7 445 025	8 634 098	9 361 454
Netherlands Antilles	403 961	343 457	303 565	337 321	—
Nicaragua (c)	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Panama (c)	20 315	21 053	19 548	27 587	16 577
USA					
Rock salt (f)	16 800 000	19 800 000	20 700 000	19 052 000	19 360 000
Salt in brine (f)	19 700 000	18 900 000	17 480 000	16 454 000	16 720 000
Evaporated salt (f)	7 990 000	8 580 000	8 280 000	7 794 000	7 920 000
Argentina	2 357 674	1 681 313	1 477 532	1 526 659	* 1 500 000
Brazil					
Rock salt	1 621 000	1 528 000	1 443 000	1 415 373	* 1 400 000
Sea salt	5 365 091	5 200 000	4 462 000	5 614 959	* 5 600 000
Chile	4 403 743	6 431 029	8 382 215	7 694 879	9 966 038
Colombia					
Rock salt	266 941	245 170	255 332	288 676	305 706
Sea salt	309 557	386 461	356 797	139 810	116 265

Production of salt

tonnes (metric)

Country	2007	2008	2009	2010	2011
Ecuador	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Peru	1 185 273	1 276 274	1 567 279	1 228 900	1 468 266
Venezuela (c)	* 350 000	* 350 000	* 350 000	* 350 000	* 350 000
Afghanistan	...	145 532	163 641	168 827	* 169 000
Bangladesh (j)	* 1 100 000	1 349 000	1 368 323	1 388 557	1 409 239
Burma (h)	(b) 61 475	(k) 242 088	(k) 408 767	(k) 125 218	(k) 162 319
Cambodia (a)	76 651	* 78 000	* 30 000	* 170 000	* 95 000
China	61 669 700	66 644 300	66 627 900	70 377 600	64 294 000
India					
Rock salt (h)	1 200	2 100	2 300	1 200	—
Sea salt (h)	12 328 000	13 970 500	17 478 600	14 202 300	18 188 300
Other salt (h)	5 516 000	5 178 600	6 470 400	4 406 600	3 990 800
Indonesia	* 700 000	* 700 000	* 720 000	* 720 000	* 720 000
Iran (g)	2 534 871	2 158 280	2 816 235	3 291 063	* 3 300 000
Iraq	153 140	108 870	113 130	102 000	136 007
Israel (c)	399 904	420 809	356 889	420 749	399 649
Japan (h)	1 138 000	1 132 000	1 095 000	1 122 000	978 000
Jordan	17 000	25 400	2 500	32 542	—
Kazakhstan	227 643	504 100	222 942	276 131	364 222
Korea (Rep. of)	249 515	384 304	382 270	222 509	372 230
Korea, Dem. P.R. of	* 500 000	* 500 000	* 500 000	* 500 000	* 500 000
Kuwait	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Laos	24 900	25 100	27 700	32 240	35 100
Lebanon	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Mongolia	4	115	5	—	—
Oman	10 400	10 400	30 600	12 300	12 400
Pakistan					
Rock salt (j)	1 872 664	1 849 199	1 917 486	1 943 527	1 953 711
Sea salt (j)	10 616	240 269	31 293	174 786	186 697
Philippines (c)	437 689	510 059	516 066	557 644	720 146
Saudi Arabia					
Rock salt & brine salt	1 507 000	1 600 000	1 600 000	1 800 000	* 1 800 000
Sri Lanka	70 208	65 972	102 500	104 000	87 256
Syria	81 000	88 600	78 263	* 80 000	* 80 000
Taiwan	107 720	118 046	171 583	262 594	104 854
Tajikistan	47 462	47 446	49 772	50 365	26 994
Thailand					
Rock salt	1 134 931	1 211 581	1 376 037	1 405 406	1 545 900
Other salt	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Turkmenistan	* 215 000	* 215 000	* 215 000	* 215 000	* 215 000
Uzbekistan	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Vietnam	856 900	717 500	679 000	975 300	928 900
Yemen, Republic of	61 000	69 000	* 80 000	* 80 000	* 80 000
Australia (l)	10 801 000	11 160 000	10 316 000	12 054 000	11 403 000
New Zealand	102 000	67 000	67 000	60 000	70 000
World Total	255 000 000	270 400 000	279 000 000	277 700 000	281 800 000

Notes
(1) This table does not include production of refined salt
(2) Salt is known to be produced in many countries for which statistics are not available

(a) Seasons beginning in November and ending in May of the year stated
(b) Brine salt
(c) Sea salt
(d) Years ended 7 July of that stated
(e) Including salt in brine
(f) Sold or used by producers
(g) Years ended 20 March following that stated
(h) Years ended 31 March following that stated
(i) Lake salt
(j) Years ended 30 June of that stated
(k) Salt; all forms
(l) Excluding Victoria and the Northern Territory

Production of selenium metal

tonnes (metric)

Country	2007	2008	2009	2010	2011
Belgium	* 200	* 200	* 200	* 200	* 200
Finland	52	65	59	73	86
Germany	* 250	* 250	* 230	* 250	* 250
Poland	85	82	80	79	85
Russia	* 130	* 170	* 160	* 170	* 265
Sweden	126	139	129	72	* 70
Canada	144	191	173	97	35
Mexico	—	—	—	62	95
Peru	59	60	61	59	54
China	* 65	* 65	* 65	* 65	* 65
Japan	806	754	709	754	630
Kazakhstan	155	* 130	* 120	* 130	* 130
Philippines	* 65	* 65	* 65	* 65	* 65
Uzbekistan	* 20	* 20	* 20	* 20	* 20

Note
(1) In addition to the countries listed, Australia, Chile, the Republic of Korea and Zimbabwe are believed to produce selenium metal

Production of sillimanite minerals

tonnes (metric)

Country	2007	2008	2009	2010	2011
France					
Andalusite	* 65 000	* 65 000	* 65 000	* 65 000	* 65 000
South Africa					
Andalusite	264 645	216 667	* 245 000	* 245 000	* 295 000
USA					
Kyanite (b)	118 000	97 200	71 000	93 000	95 000
Brazil					
Kyanite (d)	* 200	* 200	* 200	* 200	* 200
India					
Kyanite (c)	5 102	4 620	5 495	5 569	4 064
Sillimanite (c)	40 537	33 702	33 687	47 671	58 579
Nepal					
Kyanite (a)	18	15	10	* 10	* 10

Notes
(1) A number of other countries produce sillimanite minerals but details of output are not reported
(2) In addition to the countries listed above as producing sillimanite minerals, synthetic mullite is believed to be produced in Brazil, Germany and Hungary
(3) Production capacity for synthetic mullite also exists in China, India, Japan, USA and United Kingdom but output is believed to be zero

(a) Years ending 15 July of that stated
(b) Including related minerals
(c) Years ended 31 March following that stated
(d) Including beneficiated and directly shipped material

Mine production of silver

kilograms (metal content)

Country	2007	2008	2009	2010	2011
Armenia	6 900	9 200	9 000	16 400	16 100
Azerbaijan	—	—	—	1 400	3 805
Bulgaria	* 55 000	* 55 000	* 55 000	* 55 000	* 55 000
Finland	44 895	69 906	70 062	64 596	73 081
Greece	38 300	33 500	27 500	29 000	* 29 000
Greenland	—	—	—	—	9
Ireland, Republic of	9 650	7 172	5 267	3 818	6 109
Macedonia	* 30 000	* 40 000	* 35 000	* 32 000	* 30 000
Poland	1 199 500	1 161 000	1 206 000	1 183 000	1 167 000
Portugal	26 514	26 273	20 483	20 561	25 545
Romania	* 18 000	* 18 000	* 18 000	* 18 000	* 18 000
Russia (a)	911 300	1 132 200	1 312 600	1 144 600	1 134 000
Serbia (a)	2 300	2 300	4 424	4 384	7 380
Slovakia	50	198	201	320	330
Spain	—	—	2 200	20 800	29 900
Sweden	323 171	293 068	288 590	302 145	301 959
Turkey	* 315 000	* 294 000	351 600	348 000	292 400
United Kingdom	212	398	514	506	531
Algeria	500	114	200	147	100
Congo, Democratic Republic	76 200	34 100	—	5 875	9 187
Ethiopia (b)	700	2 714	771	* 2 400	* 2 400
Ghana	3 300	3 200	3 928	* 3 900	* 3 900
Morocco	177 712	201 195	210 000	243 000	186 000
Namibia	(a) 7 902	(a) 1 215	(a) 700	—	1 841
Niger	139	289	256	326	* 300
South Africa	70 089	75 199	77 780	79 315	73 180
Sudan	2 405	—	413	631	* 3 500
Tanzania	12 381	10 388	8 231	12 040	13 524
Zimbabwe	* 1 100	500	—	—	—
Canada	860 449	755 103	617 777	591 482	572 333
Costa Rica	331	—	—	—	* —
Dominican Republic	—	—	23 120	22 816	18 554
Guatemala	88 247	99 131	127 836	190 973	272 771
Honduras	53 894	58 936	57 698	58 158	48 365
Mexico	3 135 430	3 236 312	3 553 841	4 410 749	4 777 710
Nicaragua	3 420	3 720	4 491	6 995	7 928
USA	1 281 000	1 250 000	1 245 000	1 270 000	1 120 000
Argentina	255 567	355 596	415 235	693 600	702 000
Bolivia	525 000	1 114 000	1 325 730	1 259 000	1 215 586
Brazil	18 620	17 412	14 590	14 630	14 600
Chile	1 936 465	1 405 020	1 301 018	1 286 688	1 291 272
Colombia	9 766	9 162	10 827	15 300	24 045
Ecuador	0	0	0	1	2
Peru	3 493 090	3 685 931	3 922 708	3 640 444	3 414 010
Burma (a)(c)	* 200	—	—	—	—
China	* 2 700 000	* 2 800 000	* 2 900 000	3 085 441	3 231 626
India (c)	80 697	105 284	138 780	148 288	162 000
Indonesia	268 967	226 051	359 451	335 040	199 578
Iran	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
Kazakhstan (a)	722 927	645 627	613 544	548 990	646 685
Korea (Rep. of)	1 400	1 500	1 700	2 025	2 649
Korea, Dem. P.R. of	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Laos	4 499	6 706	14 726	17 234	17 976
Malaysia	296	349	367	436	459
Mongolia	20 455	19 954	20 397	19 641	19 107
Oman	3 863	2 140	2 162	1 290	* 1 300
Philippines	27 754	14 224	33 808	41 004	45 530
Saudi Arabia	9 028	8 233	8 527	7 600	7 500
Thailand	7 727	5 465	15 300	15 300	16 423
Uzbekistan	77 800	74 600	52 900	59 100	* 60 000

Mine production of silver

kilograms (metal content)

Country	2007	2008	2009	2010	2011
Australia	1 880 000	1 926 000	1 631 000	1 880 000	1 725 000
Fiji	—	265	313	328	418
New Zealand	8 553	18 269	14 264	17 136	14 324
Papua New Guinea	48 677	48 062	55 082	83 957	90 055
Solomon Islands	—	—	—	—	592
World Total	20 947 000	21 454 000	22 281 000	23 406 000	23 294 000

Notes
(a) Smelter and/or refinery production
(b) Years ended 7 July of that stated
(c) Years ended 31 March following that stated

Production of natural sodium carbonate

tonnes (metric)

Country	2007	2008	2009	2010	2011
Botswana	279 625	263 566	215 188	240 898	257 851
Ethiopia (a)	* 3 000	3 707	4 046	* 4 000	* 4 000
Kenya	386 578	502 846	404 904	473 689	499 100
USA	11 000 000	11 300 000	9 310 000	10 600 000	10 700 000

Note
(a) Years ended 7 July of that stated

Production of strontium minerals

tonnes (metric)

Country	2007	2008	2009	2010	2011
Spain	142 512	138 590	57 466	83 035	97 102
Turkey	* 4 200	* 1 600	—	—	—
Morocco	* 2 700	* 2 700	* 2 600	* 2 500	* 2 500
Mexico	96 902	29 621	36 127	31 429	40 669
Argentina (a)	4 904	14 910	8 169	8 512	* 8 000
China	* 700 000	* 700 000	* 700 000	* 700 000	* 700 000
Iran	—	—	15 396	* 15 500	* 15 000
Pakistan (b)	1 530	1 310	470	160	—

Notes
(1) In addition to the countries listed, Germany and Poland are believed to produce strontium minerals

(a) May contain unbeneficiated material
(b) Years ended 30 June of that stated

Production of sulphur and pyrites

tonnes (sulphur content)

Country	2007	2008	2009	2010	2011
Austria					
Recovered (d)	50 501	48 024	48 624	40 512	48 612
Belarus					
Recovered (d)	41 031	44 016	47 188	41 606	45 625
Denmark					
Recovered (d)	3 896	3 467	4 200	3 246	3 045
Finland					
Pyrites	194 400	226 000	153 600	250 000	338 000
Recovered (c)	* 326 000	331 000	273 600	270 000	320 000
Recovered (d)	125 000	117 000	127 000	122 000	133 300
Germany					
Recovered (d)	1 650 100	1 578 000	1 504 000	1 455 000	1 465 000
Recovered (e)	35 900	39 000	565 000	513 000	542 210
Lithuania					
Recovered (d)	42 618	73 870	69 722	73 470	76 699
Norway					
Recovered (c)	* 95 000	* 95 000	* 90 000	* 96 000	* 96 000
Recovered (d)	18 000	28 000	25 000	22 000	19 000
Poland					
Frasch	833 583	762 119	262 769	517 000	657 000
Recovered (c)	304 000	294 000	257 000	253 000	310 500
Recovered (d)	211 900	222 800	214 382	250 000	* 171 000
Russia					
Pyrites	210 000	161 000	71 000	* 71 000	* 71 000
Recovered (d)	6 372 000	6 513 000	5 514 000	6 406 000	6 557 000
Recovered (e)	790 000	752 000	703 000	898 700	915 000
Sulphur ore	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Spain					
Recovered (c)	543 000	551 000	533 000	547 000	490 000
Recovered (d)	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Sweden					
Recovered (c)	177 000	199 600	186 100	179 833	202 289
Recovered (d)	66 569	84 456	83 646	83 947	92 973
Other Europe (b)	3 706 000	3 628 000	3 605 000	3 569 000	3 670 000
South Africa					
Pyrites	70 891	61 278	60 244	30 309	—
Recovered (c)	236 000	187 000	185 000	165 000	* 170 000
Recovered (d)	335 000	323 000	291 000	262 000	* 260 000
Zimbabwe					
Pyrites	19 812	30 308	—	—	—
Other Africa (b)	348 000	381 000	436 000	475 000	358 000
Canada					
Recovered (c)	1 167 118	1 147 732	890 899	979 232	609 000
Recovered (d)	7 621 863	7 007 706	6 570 503	6 492 699	5 914 000
Mexico					
Recovered (c)	556 000	441 000	412 000	425 000	523 000
Recovered (d)	1 027 000	1 040 546	1 114 028	991 802	959 463
USA					
Recovered (c)	817 000	753 000	749 000	791 000	* 710 000
Recovered (d)	8 280 000	8 550 000	8 190 000	8 280 000	* 8 100 000
Other North and Central America (b)	86 000	156 000	79 000	39 000	87 000
Brazil					
Pyrites	22 336	18 200	25 110	24 803	* 25 000
Recovered (c)	321 707	359 586	275 593	286 875	* 310 000
Recovered (d)	135 623	135 354	143 599	143 147	* 160 000
Chile					
Recovered (c)	1 533 000	1 541 000	1 601 000	1 601 000	1 650 000
Colombia					
Recovered (d)	5 085	6 277	7 311	7 013	6 375
Sulphur ore	48 999	56 892	54 367	59 556	58 073
Other South America (b)	1 211 000	1 205 000	1 047 000	868 000	947 000

Production of sulphur and pyrites

tonnes (sulphur content)

Country	2007	2008	2009	2010	2011
Abu Dhabi					
Recovered (d)	2 183 000	1 900 000	1 760 000	1 800 000	1 875 000
Bahrain					
Recovered (d)	71 771	80 000	108 439	138 477	125 648
China					
Pyrites	6 082 000	6 022 000	4 946 000	6 342 900	6 964 300
Recovered	4 485 000	5 268 000	5 843 000	6 403 900	7 026 100
Sulphur ore	1 200 000	1 537 000	1 700 000	3 200 000	4 000 000
India					
Recovered (c)	955 000	1 103 000	1 078 000	1 143 800	1 209 100
Recovered (d)(e)	951 000	1 101 000	1 451 000	1 600 000	1 600 000
Iran					
Recovered (d)	1 456 000	1 629 000	1 429 000	1 500 000	1 575 000
Japan					
Recovered (c)(f)	1 747 000	1 797 000	1 675 000	1 818 600	1 626 500
Recovered (d)	1 967 000	2 034 000	1 863 596	1 891 875	1 755 329
Jordan					
Recovered (d)	334 000	* 310 000	* 310 000	* 310 000	* 310 000
Kazakhstan					
Recovered (c)	* 235 000	392 000	490 000	522 900	549 000
Recovered (d)	1 660 700	1 732 600	2 250 000	2 350 000	2 450 000
Korea (Rep. of)					
Recovered (c)	912 000	990 000	899 000	1 029 400	1 078 400
Recovered (d)	* 670 000	* 660 000	* 660 000	* 660 000	* 660 000
Oman					
Recovered (d)	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Pakistan					
Recovered (a)	27 710	29 485	25 784	26 641	27 645
Qatar					
Recovered (d)	503 000	526 666	657 954	1 124 210	1 655 937
Saudi Arabia					
Recovered (d)	3 100 000	3 100 000	3 214 000	3 200 000	3 250 000
Syria					
Recovered (d)	40 650	40 491	40 000	50 000	60 000
Taiwan					
Recovered	249 156	211 869	252 392	231 700	219 975
Other Asia (b)	2 533 000	2 576 000	2 495 000	2 530 000	2 640 000
Australasia (b)	1 007 000	964 000	1 024 000	1 026 000	1 026 000
World Total					
Pyrites	6 700 000	6 600 000	5 400 000	6 800 000	7 500 000
Frasch	800 000	800 000	300 000	500 000	700 000
Recovered	63 200 000	64 200 000	63 300 000	65 900 000	66 600 000
Sulphur ore	1 400 000	1 800 000	1 900 000	3 400 000	4 200 000

Notes
(1) Other Europe includes: Belgium, Bulgaria, Croatia, Czech Republic, France, Greece, Hungary, Italy, Netherlands, Portugal, Romania, Serbia, Slovakia, Turkey, Ukraine and the United Kingdom
(2) Other Africa includes: Algeria, Egypt, Libya and Zambia
(3) Other North and Central America includes: Aruba, Cuba, Curacao, Netherlands Antilles and Trinidad and Tobago
(4) Other South America includes: Argentina, Ecuador, Peru and Venezuela
(5) Other Asia includes: Indonesia, Iraq, Israel, Korea (Dem. P.R. of), Kuwait, Philippines, Singapore, Thailand and Uzbekistan
(6) Australasia includes: Australia and New Zealand

(a) Years ended 30 June of that stated
(b) Sulphur; all forms
(c) From metal sulphide processing
(d) From petroleum refining and/or natural gas
(e) Other
(f) Including S content of sulphur ore

Production of talc

tonnes (metric)

Country	2007	2008	2009	2010	2011
Austria	153 409	154 577	111 388	138 367	132 018
Finland	535 882	527 686	375 302	419 345	429 494
France	* 420 000	* 420 000	* 420 000	* 420 000	* 420 000
Greece	200	* 200	* 200	* 200	* 200
Italy	117 643	* 110 000	* 110 000	* 110 000	* 110 000
Macedonia	1 775	977	682	1 292	547
Norway	* 34 000	* 30 000	23 350	6 392	8 191
Portugal	12 367	11 657	11 567	11 981	15 462
Romania	1 513	1 843	570	296	131
Russia	* 150 000	* 150 000	* 150 000	* 150 000	* 150 000
Slovakia	—	—	—	7 000	7 000
Spain	78 042	59 299	47 218	51 897	11 957
Sweden	7 000	4 000	4 000	4 000	3 000
United Kingdom	2 850	2 410	2 861	2 633	3 709
Egypt (d)	66 854	68 806	72 090	35 474	12 934
Morocco					
Talc	944	220	—	—	516
Pyrophyllite	26 072	25 782	33 442	27 066	4 613
South Africa					
Talc	14 281	5 145	4 718	3 150	4 453
Pyrophyllite	123 666	80 704	114 666	122 511	121 368
Sudan	2 620	4 667	1 167	—	* —
Canada	67 000	64 000	44 000	100 000	147 000
Guatemala	6 456	1 030	6 355	2 175	3 273
Mexico	32 410	16 405	33 421	870	51 221
USA	769 000	706 000	511 000	604 000	615 000
Argentina (b)	24 836	22 218	22 762	24 820	* 25 000
Brazil (b)	485 641	513 433	577 935	655 000	* 650 000
Chile	764	961	790	238	—
Peru	23 096	18 003	13 359	19 767	28 296
Uruguay	848	890	1 070	830	54 880
Bhutan	62 015	56 077	64 948	26 302	8 562
China	* 2 000 000	* 2 200 000	* 2 300 000	* 2 000 000	* 2 200 000
India					
Pyrophyllite (e)	203 707	255 699	240 747	234 487	387 068
Steatite (e)	922 505	888 470	876 548	895 817	938 983
Iran (a)	90 889	89 110	66 383	95 767	* 95 000
Japan					
Talc	* 26 000	* 26 000	* 25 000	* 24 000	* 24 000
Pyrophyllite	* 345 000	* 350 000	* 340 000	* 340 000	* 350 000
Korea (Rep. of)					
Talc	9 557	6 438	5 997	5 729	15 068
Pyrophyllite	798 054	892 625	617 411	673 936	510 708
Korea, Dem. P.R. of	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Nepal (c)	9 043	7 996	6 601	* 9 000	* 9 000
Pakistan (d)	44 886	37 999	13 923	53 991	47 561
Taiwan	—	—	—	360	659
Thailand					
Talc	3 508	3 264	504	672	2 304
Pyrophyllite	415 420	106 600	124 384	2 205	5 300
Vietnam					
Pyrophyllite	* 16 000	* 16 000	* 16 000	* 16 000	* 16 000
Australia (d)	* 121 000	* 130 000	* 92 000	* 80 000	* 99 000
World Total	8 300 000	8 100 000	7 500 000	7 400 000	7 800 000

Notes
(a) Years ended 20 March following that stated
(b) Including talc, agalmatolite and pyrophyllite
(c) Years ended 15 July of that stated
(d) Years ended 30 June of that stated
(e) Years ended 31 March following that stated

Production of tantalum and niobium minerals

tonnes (metric)

Country	2007	2008	2009	2010	2011
Burundi					
Columbite-tantalite	52	121	24	* 20	* 20
Congo, Democratic Republic					
Columbite-tantalite	267	509	490	279	260
Ethiopia					
Tantalite (a)	117	183	206	202	187
Madagascar					
Columbite	—	—	—	21	8
Mozambique					
Tantalite	196	396	405	* 430	* 450
Nigeria					
Tantalite	...	...	83	...	...
Columbite	180	335	* 300	128	* 128
Rwanda					
Columbite-tantalite	547	922	952	560	829
Canada					
Pyrochlore	* 10 000	* 10 200	* 9 500	* 10 100	* 10 800
Tantalite	167	161	266	* 250	—
Brazil					
Pyrochlore	* 215 000	* 241 000	* 276 000	* 276 000	* 280 000
Columbite-tantalite	* 420	* 440	* 250	* 310	* 300
China					
Columbite-tantalite	* 350	* 350	* 350	* 350	* 350
Malaysia					
Struverite	52	216	176	84	110
Australia					
Tantalite	* 890	* 940	* 140	—	* 240
World Total concentrates	228 000	256 000	289 000	289 000	294 000
Nb content	* 95 000	* 106 000	* 120 500	* 120 600	* 120 900
Ta content	* 1 000	* 1 300	* 900	* 700	* 700

Notes
(1) Niobium and tantalum minerals are believed to be produced in Namibia, Russia and South Africa
(2) The figures in this table refer to gross tonnage of tantalum and niobium concentrates
(3) Tantalum is also recovered from tin slags and is believed to have accounted for approximately 20% of raw material

(a) Years ended 7 July of that stated

Production of tellurium metal

tonnes (metric)

Country	2007	2008	2009	2010	2011
Canada	14	20	16	8	6
USA	50	50	50	50	50
Peru	35	28	7	—	—
Japan	41	* 47	* 49	* 47	* 40

Mine production of tin

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Portugal	41	29	34	22	39
Russia (a)	2 500	1 500	1 200	1 000	600
Burundi	51	96	20	29	52
Congo, Democratic Republic	9 551	12 817	10 083	8 720	3 549
Niger	11	* 10	6	6	—
Nigeria	2 500	1 800	1 800	1 300	1 800
Rwanda	2 685	2 135	3 154	3 970	4 508
Uganda	24	40	—	24	0
Bolivia	15 972	17 320	19 575	20 190	20 373
Brazil	12 596	13 899	9 500	9 600	9 546
Peru (b)	39 019	39 037	37 503	33 848	28 882
Burma	* 500	* 500	* 600	* 400	* 500
China	145 900	121 200	* 128 000	129 600	127 400
Indonesia	* 102 000	* 96 000	* 84 000	* 84 000	* 78 000
Laos	721	358	389	723	434
Malaysia	2 263	2 605	2 410	2 668	3 346
Mongolia	14	45	8	7	42
Thailand	149	235	166	291	282
Vietnam	* 5 400	* 5 400	* 5 400	* 5 400	* 5 400
Australia	2 071	1 783	13 269	18 646	15 400
World Total	344 000	317 000	317 000	320 000	300 000

Notes
(a) Metal
(b) Recoverable

Smelter production of tin

tonnes (metric)

Country	2007	2008	2009	2010	2011
Belgium	8 400	9 200	8 700	9 900	10 000
Russia	3 300	1 700	1 300	400	400
Bolivia (a)	12 251	12 666	14 715	15 000	14 500
Brazil	9 987	11 020	8 311	10 500	7 300
Peru	36 004	38 865	34 388	36 451	32 290
China	148 800	139 900	140 400	149 400	156 100
Indonesia	64 127	53 471	51 418	43 832	* 43 000
Japan	879	956	757	841	947
Malaysia	25 563	31 691	35 443	38 771	40 281
Thailand	23 104	21 860	19 423	23 551	20 670
Vietnam	3 369	3 583	2 747	3 042	3 900
Australia	118	—	—	—	—
World Total	336 000	325 000	318 000	332 000	329 000

Notes
(1) Figures relate to both primary and secondary metal
(2) In addition to the countries listed, many countries produce small amounts of secondary metal

(a) Refined, including alloys

Production of titanium minerals

tonnes (metric)

Country	2007	2008	2009	2010	2011
Norway					
Ilmenite	882 000	915 000	671 000	864 000	870 000
Ukraine					
Ilmenite	* 600 000	* 600 000	* 600 000	* 600 000	* 600 000
Rutile	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Egypt					
Ilmenite	108 000	88 000	88 000	11 000	* —
Gambia					
Ilmenite	672	—	54 655	69 940	* 70 000
Madagascar					
Ilmenite	—	—	160 000	* 273 000	* 511 000
Rutile	—	—	3 200	* 5 000	* 10 000
Mozambique					
Ilmenite	140 515	328 875	471 524	678 400	636 800
Rutile	8 782	6 552	1 800	4 700	6 500
Sierra Leone					
Ilmenite	15 750	17 260	15 200	18 206	14 576
Rutile	82 805	78 910	63 860	68 198	67 970
South Africa					
Ilmenite (b)	* 1 402 500	* 1 360 000	* 1 445 000	* 1 200 000	* 1 369 000
Rutile	111 500	132 000	134 000	135 000	129 000
Canada					
Ilmenite (a)(b)	* 2 500 000	* 2 600 000	* 2 000 000	* 2 400 000	* 2 500 000
USA	* 300 000	* 200 000	* 200 000	* 200 000	* 300 000
Brazil					
Ilmenite	130 000	110 000	39 000	123 000	* 120 000
Rutile	3 000	3 000	3 000	3 000	* 3 000
China					
Ilmenite	* 1 260 000	* 1 080 000	* 900 000	* 1 000 000	* 1 000 000
India					
Ilmenite (d)	675 967	676 003	767 355	663 217	* 700 000
Rutile (d)	20 518	19 098	18 573	26 593	* 27 000
Kazakhstan	15 700	* 16 000	* 17 000	* 17 000	* 17 000
Korea (Rep. of)					
Ilmenite	193 953	226 069	120 236	—	—
Malaysia					
Ilmenite	59 310	36 779	15 983	19 036	28 782
Rutile	1 450	1 834	1 502	7 567	10 810
Sri Lanka					
Ilmenite	70 728	56 824	122 424	52 637	62 955
Rutile	4 607	3 405	2 276	2 568	1 970
Vietnam					
Ilmenite (c)	* 653 000	* 710 000	* 700 000	* 881 000	* 870 000
Rutile	574	681	631	592	* 600
Australia					
Ilmenite	2 339 000	2 060 000	1 626 000	1 339 000	1 277 000
Rutile	312 000	318 000	302 000	438 000	474 000
Leucoxene	164 000	126 000	137 000	160 000	225 000
World Total					
Ilmenite (wt of concs)	11 300 000	11 100 000	10 000 000	10 400 000	10 900 000
Rutile (wt of concs)	600 000	700 000	600 000	800 000	800 000
All forms (TiO_2 content)	*6 100 000	* 5 900 000	* 5 400 000	* 5 700 000	* 6 100 000

See notes on next page

Notes
(1) The figures in this table refer to gross tonnage of titanium concentrates
(2) Some ilmenite is converted to synthetic rutile in Australia, India, Japan, Taiwan and USA
(3) In 2011 South Africa produced an estimated 800 000 tonnes of slag (85% TiO_2) and Canada produced an estimated 1 000 000 tonnes of slag (80-95% TiO_2)

(a) Canada produces some ilmenite which is sold as such and not processed into slag, but tonnages are small
(b) It is believed that the majority of this is processed into slag.
(c) BGS estimates, based on known imports into certain countries
(d) Years ended 31 March following that stated

Mine production of tungsten

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Austria	1 117	1 122	887	975	861
Portugal (c)	846	981	823	799	818
Russia	* 4 700	* 4 000	* 5 500	* 3 000	* 4 200
Spain	—	194	284	303	425
Burundi	163	230	100	* 100	* 100
Congo, Democratic Republic	621	372	190	40	19
Rwanda	1 412	1 037	690	630	950
Uganda	86	48	7	44	8
Canada	2 700	2 795	2 501	364	2 368
Bolivia	1 107	1 148	1 023	1 203	1 418
Brazil (a)	537	408	192	166	* 250
Peru	366	456	634	716	546
Burma (b)	183	136	87	163	* 150
China	* 41 000	* 50 000	* 51 000	* 59 100	* 60 000
Kazakhstan	* 100	...	...	...	...
Korea, Dem. P.R. of	* 230	* 270	* 100	* 100	* 100
Kyrgyzstan	* 100	* 100	* 100	* 100	* 100
Mongolia	166	97	27	13	8
Thailand (c)	687	718	274	481	229
Uzbekistan	* 300	* 300	* 300	* 300	* 300
Australia (d)(e)	30	11	17	11	40
World Total	56 500	64 400	64 700	68 600	72 900

Notes
(a) Mainly scheelite
(b) Including tungsten content of tin-wolframite concentrates
(c) Wolframite and scheelite
(d) Scheelite
(e) Years ended 30 June of that stated

Mine production of uranium

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Czech Republic	322	290	286	259	252
Germany	41	—	—	* 8	51
Romania	* 77	* 77	* 75	* 77	* 77
Russia	3 413	3 521	3 564	3 562	2 993
Ukraine	846	* 800	840	850	890
Malawi	—	—	90	671	998
Namibia	2 888	4 371	4 631	4 500	3 262
Niger	3 153	2 993	3 241	4 198	4 159
South Africa	525	654	629	583	656
Canada	9 475	9 001	10 176	9 518	8 923
USA	1 746	1 503	1 428	1 628	1 537
Brazil	299	330	345	148	265
China	* 712	* 769	* 750	* 827	* 1 500
India	* 270	* 271	* 290	* 400	* 400
Kazakhstan	6 637	8 521	13 900	17 803	19 451
Pakistan	* 45	* 45	* 50	* 45	* 45
Uzbekistan	2 320	2 338	2 429	2 400	3 000
Australia	8 603	8 471	7 942	5 971	5 886
World Total	41 400	44 000	50 700	53 400	54 300
World Total (U_3O_8 equivalent)	48 800	51 900	59 800	63 000	64 100

Note
(1) Excluding uranium production from decommissioning operations in France, Germany and Spain

Mine production of vanadium

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Russia	* 23 000	* 23 000	* 22 000	* 21 000	* 21 000
South Africa	23 486	20 295	14 353	22 606	21 651
China	* 18 000	* 18 500	* 20 800	* 22 000	* 23 000
Kazakhstan	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
World Total	65 000	63 000	58 000	67 000	67 000

Note
(1) This table includes vanadium in slag products but excludes vanadium recovered as a by-product of the refining and burning of heavy oils

Production of vermiculite

tonnes (metric)

Country	2007	2008	2009	2010	2011
Russia	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Egypt	5 770	7 560	4 650	—	2 865
South Africa	199 664	199 764	193 334	199 285	170 571
Uganda	3 269	—	—	1 121	7 960
Zimbabwe	17 395	16 123	3 211	—	—
Mexico	102	132	291	98	241
USA (a)	* 100 000	* 100 000	* 110 000	* 100 000	* 100 000
Argentina	1 726	1 813	2 150	2 500	* 2 500
Brazil	18 952	32 503	50 438	49 976	* 50 000
China	* 110 000	* 120 000	* 120 000	* 120 000	* 130 000
India (b)	8 910	12 647	11 662	22 038	10 536
Japan	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Australia (c)	8 900	8 319	6 548	7 922	* 10 500

Notes
(1) In addition to the countries listed Malawi is believed to produce vermiculite

(a) Sold or used by producers
(b) Years ended 31 March following that stated
(c) Years ended 30 June of that stated

Production of wollastonite

tonnes (metric)

Country	2007	2008	2009	2010	2011
Finland	16 364	15 600	9 200	12 100	11 500
Spain	10 918	10 100	7 000	6 000	7 417
Namibia	* 55	* 55	—	—	—
Mexico	50 809	46 844	29 728	46 548	47 523
USA	* 125 000	* 90 000	* 65 000	* 67 000	* 70 000
China	* 350 000	* 325 000	* 300 000	* 300 000	* 300 000
India (a)	118 666	111 581	132 385	182 600	180 774

Notes
(1) In addition to the countries listed, Turkey is believed to produce wollastonite

(a) Years ended 31 March following that stated

Mine production of zinc

tonnes (metal content)

Country	2007	2008	2009	2010	2011
Armenia	2 560	3 880	3 564	7 468	8 106
Bosnia & Herzegovina	4 799	8 595	6 228	10 025	12 477
Bulgaria (c)	14 453	12 819	9 339	9 904	10 977
Finland	38 900	27 800	30 233	55 562	64 115
Greece	20 700	24 200	17 800	18 400	21 200
Ireland, Republic of	400 900	398 200	385 700	342 500	344 000
Kosovo	—	(c) 4 902	(c) 5 582	(c) 6 449	(c) 6 597
Macedonia	30 957	38 737	38 648	32 900	28 100
Poland	129 600	132 400	115 500	92 800	87 800
Portugal	24 380	37 900	501	6 422	4 227
Romania	849	14	* 3 000	* 5 000	* 5 000
Russia	177 000	204 000	214 000	235 000	252 000
Serbia	1 200	2 400	2 700	2 600	3 100
Spain	—	—	5 900	17 323	33 197
Sweden	214 576	187 987	192 502	198 687	194 021
Turkey	140 500	126 800	136 300	196 400	158 300
Congo, Democratic Republic	16 905	7 733	9 848	4 612	9 518
Morocco	54 353	80 747	44 800	43 680	45 065
Namibia	196 000	204 000	208 000	209 000	197 000
South Africa	31 062	29 002	28 200	36 142	36 629
Canada	630 485	750 502	699 145	648 905	611 577
Honduras	29 211	28 462	36 370	33 839	26 000
Mexico	452 012	453 588	489 766	570 004	631 859
USA	803 300	778 100	735 700	748 000	769 000
Argentina	27 025	30 349	31 869	32 600	45 800
Bolivia	214 053	383 618	430 879	411 409	427 129
Brazil	193 899	173 933	172 688	211 203	186 000
Chile	36 453	40 519	27 801	27 662	36 602
Peru	1 444 354	1 602 597	1 512 931	1 470 450	1 255 899
Burma	* 10 000	* 7 000	* 6 000	* 7 000	* 8 000
China	3 047 700	3 342 600	3 324 400	3 842 200	4 308 300
India (b)	551 268	647 537	677 824	726 526	713 416
Iran	75 000	86 000	72 048	* 72 000	* 72 000
Kazakhstan	445 000	446 000	442 000	459 000	465 000
Korea (Rep. of)	2 034	1 836	2 221	355	743
Korea, Dem. P.R. of	* 78 000	* 48 000	* 29 000	* 38 000	* 40 000
Laos	893	1 121	760	1 140	1 642
Mongolia	77 350	71 800	70 750	56 300	52 350
Pakistan (a)	—	—	1 000	10 000	11 123
Philippines	7 400	1 619	10 035	9 268	18 170
Saudi Arabia	716	3 663	4 952	4 879	4 900
Thailand	26 406	17 811	27 493	21 971	22 259
Vietnam	* 45 000	* 42 000	* 38 000	* 36 000	* 38 000
Australia	1 514 000	1 519 000	1 290 000	1 480 000	1 516 000
World	11 200 000	12 000 000	11 600 000	12 400 000	12 800 000

Notes
(a) Years ended 30 June of that stated
(b) Years ended 31 March following that stated
(c) Metal content of ore

Production of slab zinc

tonnes (metric)

Country	2007	2008	2009	2010	2011
Belgium	254 000	251 000	137 000	281 000	282 000
Bulgaria	98 100	101 700	92 700	92 300	83 300
Finland	305 543	297 722	295 049	307 144	307 352
France	129 000	118 000	161 000	162 000	164 000
Germany	294 735	292 284	* 153 000	165 000	170 000
Italy	102 100	107 100	103 400	104 700	110 200
Netherlands	234 000	250 000	224 000	264 000	261 000
Norway	157 027	145 469	138 973	148 862	153 200
Poland	141 900	142 500	139 100	135 000	94 100
Romania	58 342	61 978	1 000	—	—
Russia	263 000	263 000	208 000	241 000	245 000
Serbia	2 000	—	—	—	—
Spain	509 000	466 000	515 000	517 100	527 100
Ukraine	2 600	3 800	8 800	7 600	6 600
Algeria	27 249	30 752	28 000	31 000	27 000
Namibia	150 100	145 400	153 815	151 688	145 600
South Africa	101 000	82 000	87 000	90 000	73 000
Zambia	1 000	2 000	—	—	—
Canada	802 103	764 310	685 504	691 222	662 151
Mexico	321 932	305 188	313 044	322 508	321 000
USA	278 000	286 000	203 500	248 000	240 500
Argentina	46 300	42 600	35 600	41 000	45 600
Brazil	265 126	248 874	242 000	288 100	285 000
Peru	162 575	190 324	149 494	223 112	313 714
China	3 742 600	4 042 300	4 286 300	5 208 900	5 221 900
India	441 000	589 000	640 000	735 000	790 000
Iran	125 000	120 000	115 200	115 000	102 000
Japan	597 650	615 533	540 604	574 008	544 674
Kazakhstan	358 226	365 572	327 873	318 858	319 847
Korea (Rep. of)	691 000	738 000	722 000	750 000	828 735
Korea, Dem. P.R. of	* 36 000	* 41 000	* 26 000	* 43 000	* 42 000
Thailand	99 337	107 753	104 695	95 219	98 370
Uzbekistan	71 800	70 400	19 000	50 000	* 55 000
Vietnam	* 10 000	* 16 000	* 17 000	* 16 000	* 16 000
Australia	502 000	500 000	525 000	498 000	507 000
World Total	11 400 000	11 800 000	11 400 000	12 900 000	13 000 000

Production of zirconium minerals

tonnes (metric)

Country	2007	2008	2009	2010	2011
Russia (a)	7 136	* 7 000	* 5 000	* 8 000	* 10 000
Ukraine	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Gambia	355	—	—	—	* —
Madagascar	—	—	(b)* 3 300	(b)* 15 600	(b)* 18 900
Mozambique	26 347	32 985	21 100	37 100	43 600
South Africa	388 800	404 000	392 000	381 000	383 000
USA	121 000	122 000	* 100 000	* 110 000	* 115 000
Brazil (a)	26 739	25 300	34 200	23 200	* 25 000
China	* 25 000	* 38 000	* 31 500	* 33 500	* 33 500
India	35 977	29 158	28 049	33 209	* 33 000
Indonesia	* 111 000	* 65 000	* 63 000	* 50 000	* 127 000
Malaysia	7 393	984	1 145	1 267	1 685
Sri Lanka	381	1 447	10 267	9 200	641
Thailand	1 023	—	—	—	—
Vietnam	* 24 300	25 303	19 368	23 730	24 020
Australia	600 000	528 000	431 000	549 000	762 000
World Total	1 410 000	1 314 000	1 175 000	1 310 000	1 612 000

Notes
(1) In this table the term 'zirconium minerals' is understood to mean zircon, unless otherwise stated

(a) Including caldasite rock containing zircon and baddeleyite
(b) Conservative BGS estimates, based on exports

ISBN 978-085272758-4

9 780852 727584

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