

World Mineral Production



2006–2010



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

BRITISH GEOLOGICAL SURVEY

**WORLD MINERAL PRODUCTION
2006–10**

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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, which includes the preceding titles *World Mineral Statistics* and *Statistical Summary of the Minerals Industry*.

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 2006 to 2010. 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 reported statistics for 2010 reveal a mixed picture, with many commodities showing a clear recovery from the global recession while others do not. For example the world's production of potash, lithium and bromine in 2010 was similar to the output levels from 2008 despite sharp falls in 2009. In contrast global production of bismuth, bentonite and graphite fell by a further five per cent each in 2010 compared to 2009, in addition to reductions of 20 per cent, nine per cent and eight per cent respectively in the previous year. For other commodities production increases in 2010 are much greater than the corresponding falls in output in 2009 resulting in overall production levels that are significantly higher than 2008. For example, the world's production of chromium ores and manganese ores rose by 28 per cent and 26 per cent respectively, more than reversing the falls of one per cent and 11 per cent experienced in 2009.

The security of supply of many minerals remained a concern during the year. The European Union issued an update to their

Raw Materials Initiative in February 2011 which attempts to move from identifying the critical minerals to proposing a series of actions intended to address the identified supply issues. In May 2011, the United Kingdom Government's Science & Technology Committee published its report into *Strategically Important Metals* and concluded that although these metals are unlikely to run out over the coming decades there remain geopolitical risks surrounding the availability of supplies which may affect UK businesses. In December 2011 the United States' Department of Energy updated their *Critical Materials Strategy* which identifies the risk of supply disruption for certain materials used in clean energy technologies.

The interest generated by these documents has created many opportunities for new research, collaboration between agencies and co-ordination networks to underpin strategies to improve security of supply. These strategies are based on three main themes: the diversification of supply sources; substitution and improvements in resource efficiency; and recycling. The availability of data, such as provided by this volume, is a vital part of this ongoing work.

In an attempt to improve data coverage for some of the rarer metals, which are so important for the latest technologies, this volume includes, for the first time, production data relating to indium and rhenium. We have also added some information relating to gallium. Accurate data for these metals are difficult to obtain and as a consequence many figures are estimated. We intend to seek opportunities to improve the accuracy of these data in future years. In addition to our regular publications, we are continuing to add to our *Mineral Profile* series with the addition of *Tungsten* and *Tantalum and Niobium* in 2011, together with updates to *Fluorspar* and *Rare Earth Elements*.

I would welcome any criticisms 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 2012

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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*. Many 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.

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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 Non-Ferrous 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 UN agencies.

In addition, information has been obtained from the websites of the following organisations, companies, statistical offices and government departments: United Nations; 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; Break Water Resources; Inmet Mining; Stillwater Mining; Aluminium de Greece; New Boliden; Eurozinc Mining Corporation; Norilsk Nickel; Qatar Steel Company; Iamgold Corp, Lundin Mining; Norlisk Nickel; Xstrata; Anglo American; Rio Tinto; Aura Minerals Inc; Breakwater Resources; 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 Osterreichischen Zementindustrie, Austria; Energy Bangla, Bangladesh; Petrobangla, Bangladesh; Central Bank of Barbados; Federation de l'Industrie Cimentiere Belge, Belgium; Statistics Belgium; Instituto Nacional de Estadística 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 Estadísticas, 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 Professionnel de Petrole, France; Ministère 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; Geological Survey of Norway; Ministry of National Economy, Oman; Direccion de Estadística y Censo, Panama; Chamber of Mines and Petroleum, Papua New Guinea; PeruPetro; Ministerio de Energia y Minas, Peru; Sociedad Nacional de Minería Petroleo y Energia, Peru; Mines and Geosciences Bureau, Philippines; Instituto Nacional de Estadística, Portugal; 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 \times 0.9842 = long tons
 tonnes \times 1.1023 = short tons
 kilograms \times 2.2046 = pounds
 kilograms \times 32.1507 = troy ounces
 cubic metres \times 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	2006	2007	2008	2009	2010
Bosnia & Herzegovina	854 047	866 933	1 018 333	555 820	827 909
France	160 000	160 000	—	—	—
Greece	2 162 900	2 125 900	2 174 000	1 935 000	1 902 000
Hungary	538 258	546 310	511 337	317 000	365 000
Montenegro	659 370	667 053	671 811	45 779	61 205
Russia	6 399 200	6 053 900	5 675 000	5 300 000	5 000 000
Turkey	771 227	863 404	818 928	406 700	855 000
Ghana	841 775	1 033 368	796 000	440 000	512 208
Guinea	18 783 928	18 519 010	17 682 330	14 774 240	16 427 300
Mozambique	11 069	8 650	5 443	3 600	* 3 600
Sierra Leone	1 071 140	1 169 036	954 370	742 820	1 089 131
Tanzania	5 373	5 003	20 601	122 920	* 130 000
Jamaica	14 865 351	14 567 738	14 636 102	7 817 500	8 539 853
Mexico	...	...	...	20 000	21 250
USA (a)	361 047	141 914	98 796	30 240	59 143
Brazil (b)	23 236 300	25 460 700	28 097 500	26 074 400	32 028 000
Guyana	1 478 670	2 242 928	2 092 237	1 484 935	1 082 512
Suriname	4 945 353	5 273 195	5 333 031	3 388 419	3 096 650
Venezuela	5 928 000	5 593 308	4 192 014	3 610 859	3 126 242
China	18 981 600	20 446 000	25 176 900	29 213 100	* 30 000 000
India (c)	15 732 535	22 624 960	15 460 202	13 952 002	* 12 064 000
Indonesia	* 9 000 000	* 16 000 000	* 18 000 000	* 15 000 000	* 27 000 000
Iran (d)	* 500 000	520 800	* 520 000	522 018	* 525 000
Iraq	—	—	4 928	250	3 350
Kazakhstan	4 883 800	4 962 600	5 160 100	5 131 000	5 310 200
Malaysia	91 806	156 785	295 176	263 432	124 274
Pakistan (e)	7 831	18 082	35 635	13 618	9 031
Vietnam	* 60 000	* 80 000	* 80 000	* 80 000	* 80 000
Australia	61 781 000	62 428 000	64 038 000	66 168 000	68 535 000
World Total	194 000 000	213 000 000	214 000 000	197 000 000	219 000 000

Note(s)

(1) This table includes production of refractory bauxite

(a) Data for Alabama only

(b) Including beneficiated and direct shipping ore

(c) Years ended 31 March following that stated

(d) Years ended 20 March following that stated

(e) Years ended 30 June of that stated

Production of alumina

tonnes (Al₂O₃ content)

Country	2006	2007	2008	2009	2010
Azerbaijan	362 665	184 500	164 879	9 590	—
Bosnia & Herzegovina	393 580	303 799	294 455	191 792	269 414
France	* 636 000	* 600 000	630 000	348 000	481 000
Germany	* 850 000	* 900 000	* 1 000 000	1 154 000	* 1 000 000
Greece	780 000	788 900	807 500	796 000	785 000
Hungary	* 301 000	* 301 000	* 299 000	* 185 000	214 000
Ireland, Republic of	1 800 000	1 800 000	1 890 000	1 240 000	1 864 000
Italy	1 090 000	1 327 000	1 045 000	92 000	—
Montenegro	236 740	240 186	220 426	58 528	—
Romania	622 083	22 830	344	44 000	414 000
Russia	3 265 216	3 332 308	3 112 000	2 794 000	2 857 000
Spain	* 1 400 000	1 300 000	1 300 000	1 300 000	* 1 300 000
Turkey	150 117	163 435	* 150 000	* 80 000	* 150 000
Ukraine	1 671 620	1 655 718	1 673 000	1 524 000	1 534 000
Guinea	529 200	542 100	593 000	530 000	597 000
Canada	1 476 959	1 454 390	1 491 523	1 232 604	1 416 600
Jamaica	4 099 548	3 940 589	3 995 358	1 773 600	1 590 658
USA	4 696 000	4 236 000	4 298 000	3 064 000	3 950 000
Brazil	6 735 000	7 077 600	7 822 300	8 708 800	9 431 000
Suriname	2 151 148	2 178 472	2 153 968	1 536 187	1 486 449
Venezuela	1 920 000	1 751 000	1 591 000	1 376 000	1 244 000
China	13 256 900	19 453 000	23 029 200	23 792 900	28 939 000
India	3 077 000	3 208 000	* 3 600 000	* 3 600 000	* 3 600 000
Iran (a)	167 783	220 000	* 220 000	* 200 000	* 300 000
Japan	* 780 000	* 650 000	* 600 000	* 550 000	* 550 000
Kazakhstan	1 514 509	1 544 462	1 607 829	1 608 000	1 639 000
Australia	18 312 000	18 844 000	19 446 000	19 939 000	19 957 000
World Total	72 300 000	78 000 000	83 000 000	77 700 000	85 600 000

Note(s)

(1) Where possible figures in this table show the alumina equivalent (Al₂O₃) of total hydrate produced, whether or not calcined

(a) Years ended 20 March following that stated

Production of primary aluminium

tonnes (metric)

Country	2006	2007	2008	2009	2010
Azerbaijan	31 852	39 241	61 604	10 145	—
Bosnia & Herzegovina	136 190	147 193	155 909	130 042	150 488
France	442 879	430 159	389 000	345 000	356 000
Germany	515 539	551 000	605 880	291 750	402 480
Greece	164 500	167 937	162 339	134 737	137 000
Hungary	300	—	—	—	—
Iceland	328 424	446 297	761 204	804 605	812 980
Italy	194 200	179 500	186 400	165 800	129 500
Montenegro	121 762	135 151	111 513	63 960	82 043
Netherlands	285 317	296 900	317 000	306 000	* 300 000
Norway	1 383 000	1 362 000	1 368 000	1 090 000	1 400 000
Poland	42 000	43 000	31 000	—	—
Romania	262 056	283 449	288 156	228 630	241 000
Russia	3 117 249	3 955 417	4 190 000	3 815 000	3 947 000
Slovakia	158 289	160 461	162 995	149 604	163 000
Slovenia	118 100	111 016	83 300	35 148	40 177
Spain	367 400	405 100	405 800	334 600	335 000
Sweden	101 668	99 842	81 913	69 708	93 000
Switzerland	12 000	—	—	—	—
Turkey	60 000	63 400	61 100	30 000	60 000
Ukraine	112 952	113 437	88 800	50 000	25 000
United Kingdom	360 325	364 595	326 900	252 000	186 000
Cameroon	88 400	87 000	89 700	73 000	76 000
Egypt	252 300	258 300	259 200	245 400	281 100
Ghana	75 800	12 900	9 300	—	—
Mozambique	564 000	564 000	536 000	545 000	557 000
Nigeria	—	—	10 600	12 900	21 200
South Africa	895 000	899 000	811 000	809 000	807 000
Canada	3 051 128	3 082 625	3 120 148	3 030 269	2 963 200
USA	2 283 800	2 553 900	2 658 300	1 727 200	1 727 300
Argentina	277 800	292 744	399 714	405 779	410 947
Brazil	1 604 500	1 654 800	1 661 000	1 535 900	1 536 200
Venezuela	617 100	615 000	607 000	569 000	353 658
Bahrain	872 393	865 883	871 658	850 000	860 000
China	9 358 400	12 558 600	13 178 200	12 890 500	16 194 500
India (a)	1 113 849	1 239 581	1 347 127	1 480 568	* 1 610 000
Indonesia	250 300	242 100	242 500	257 600	253 300
Iran (b)	205 462	215 981	241 300	281 300	* 320 000
Japan	6 500	6 600	6 600	5 100	4 700
Kazakhstan	—	12 000	106 000	128 000	227 000
Oman	—	—	49 000	351 000	367 000
Tajikistan	413 800	419 060	399 500	359 400	348 900
United Arab Emirates	789 341	889 548	891 723	1 009 800	* 1 400 000
Australia	1 929 000	1 957 000	1 974 000	1 943 000	1 928 000
New Zealand	335 300	351 100	315 500	271 000	344 000
World Total	33 300 000	38 100 000	39 600 000	37 100 000	41 500 000

Note(s)

(a) Years ended 31 March following that stated

(b) Years ended 20 March following that stated

Mine production of antimony

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Russia	* 3 000	* 3 000	* 3 000	* 3 000	* 3 000
Turkey	* 1 100	* 1 200	* 1 300	* 1 300	* 1 300
South Africa	4 443	3 436	3 674	2 090	* 2 250
Canada	269	193	132	64	69
Guatemala	—	365	—	—	—
Mexico	778	414	380	74	71
Bolivia	5 460	3 881	3 905	2 990	4 980
Peru (a)	691	590	531	145	—
China	156 200	163 000	100 230	112 000	129 831
Kyrgyzstan	* 250	* 250	* 250	918	* 900
Pakistan (b)	91	119	245	75	25
Tajikistan	3 480	3 500	3 400	2 447	3 341
Thailand	544	271	422	555	705
Australia (b)	230	767	1 688	1 794	675
World Total	177 000	181 000	119 000	127 000	147 000

Note(s)

(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	2006	2007	2008	2009	2010
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	2 106	677	—	—	—
Bolivia	90	* 80	74	115	* 155
Chile (a)	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Peru	4 399	4 321	4 822	300	—
China	* 30 000	* 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

Note(s)

(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	2006	2007	2008	2009	2010
Russia	* 925 000	1 030 000	1 020 000	* 1 000 000	* 1 000 000
Serbia	4 500	—	—	—	—
Slovakia	1 000	400	200	—	—
Zimbabwe					
Chrysotile	96 956	84 520	11 489	4 971	2 437
Canada					
Chrysotile	* 200 000	* 180 000	* 160 000	* 150 000	* 100 000
Argentina	299	282	298	322	* 320
Brazil	227 304	254 204	305 000	288 400	312 000
China	* 360 000	* 390 000	* 380 000	* 440 000	* 400 000
India					
Amphibole (a)	390	269	315	233	* 280
Kazakhstan	314 700	292 600	230 100	230 000	214 100
World Total	2 100 000	2 200 000	2 100 000	2 100 000	2 000 000

Note(s)

(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	2006	2007	2008	2009	2010
Bosnia & Herzegovina	190	37	54	30	57
Bulgaria	74 500	50 900	40 100	14 300	500
France	* 40 000	—	—	—	—
Germany	85 524	88 265	78 941	45 606	55 887
Italy	* 7 000	* 5 000	* 5 000	* 3 500	* 3 500
Poland	2 034	2 000	308	300	300
Portugal	24	25	171	1 078	15
Russia	* 63 000	* 64 000	* 64 000	* 64 000	* 64 000
Slovakia	57 000	58 000	20 000	30 000	17 000
Spain	45 001	26 770	11 100	5 212	2 050
Turkey	160 000	150 000	150 000	213 187	225 000
United Kingdom	48 000	53 000	43 000	36 000	33 000
Algeria	64 787	63 098	60 088	37 981	42 254
Egypt	...	50	1 080	1 100	6 100
Morocco	628 400	664 708	725 060	586 937	572 429
Nigeria	30 011	18 047	* 16 000	14 314	10 749
Canada	21 000	9 000	12 300	15 000	22 000
Guatemala	—	—	—	13	11
Mexico	199 605	185 921	140 066	152 791	143 225
USA (a)	598 000	455 000	648 000	383 000	* 670 000
Argentina	6 276	3 798	3 170	3 416	3 200
Bolivia	8 943	8 245	10 900	1 900	7 800
Brazil (b)	47 611	37 000	42 000	38 550	* 40 000
Chile	375	77	—	—	—
Colombia	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Peru	1 899	27 369	45 199	27 881	49 396
Afghanistan	* 1 500	* 1 500	* 1 500	* 1 000	* 1 000
Burma (c)	4 023	5 918	7 000	7 120	14 346
China	4 600 000	4 300 000	5 000 000	2 900 000	3 900 000
India (c)	1 680 695	1 076 290	1 686 148	2 138 456	* 2 000 000
Iran (d)	226 032	249 495	226 590	361 217	* 200 000
Kazakhstan	120 000	130 000	170 000	170 000	200 000
Laos	29 000	29 000	29 000	29 000	29 000
Malaysia	910	—	4 372	22 390	1 000
Pakistan (e)	49 221	46 759	49 933	62 997	47 019
Saudi Arabia	31 000	30 000	30 000	30 000	* 30 000
Thailand	4 549	8 631	9 180	51 895	33 465
Vietnam	90 000	90 000	80 000	70 000	90 000
Australia	* 18 000	12 576	22 189	16 634	16 529
World Total	9 000 000	8 000 000	9 400 000	7 500 000	8 500 000

Note(s)

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

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

Production of bentonite and fuller's earth

tonnes (metric)

Country	2006	2007	2008	2009	2010
Armenia					
Bentonite	720	1 129	50	238	1 397
Azerbaijan					
Bentonite	40 600	50 459	40 683	10 581	18 100
Bosnia & Herzegovina					
Bentonite (a)	24 645	32 912	30 504	16 042	314
Bulgaria					
Bentonite	134 500	99 000	178 700	108 400	99 700
Croatia					
Bentonite	16 410	19 578	19 759	* 20 000	* 20 000
Cyprus					
Bentonite	150 620	154 655	155 125	152 722	162 969
Czech Republic					
Bentonite	267 000	335 000	235 000	177 000	183 000
Denmark					
Bentonite	19 211	20 093	22 458	24 040	23 832
France					
Bentonite	...	...	...	25 000	25 000
Georgia					
Bentonite	4 487	—	—	—	—
Germany					
Bentonite	363 998	384 709	414 336	326 461	362 623
Greece					
Bentonite	1 166 000	1 342 000	1 580 000	1 500 000	844 804
Hungary					
Bentonite	6 635	54 231	7 464	2 839	3 000
Italy					
Bentonite	469 654	599 735	281 119	292 318	* 150 000
Kosovo					
Bentonite	—	—	20 800	49 000	20 200
Macedonia					
Bentonite	20 353	22 509	13 689	9 033	* 9 000
Poland					
Bentonite	—	1 300	3 000	2 800	2 200
Romania					
Bentonite	21 165	16 911	16 638	13 756	21 963
Russia					
Bentonite	456 000	* 460 000	* 460 000	* 460 000	* 460 000
Slovakia					
Bentonite	136 000	149 000	145 000	109 000	153 000
Slovenia					
Bentonite	130	130	160	104	135
Spain					
Bentonite	154 746	147 253	154 534	147 090	157 001
Attapulgitite	20 933	24 615	27 348	21 110	27 841
Sepiolite	806 345	717 728	737 659	573 937	557 862
Turkey					
Bentonite	* 600 000	748 170	683 253	753 155	718 260
Sepiolite	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Ukraine					
Bentonite	* 200 000	314 000	200 000	195 000	185 000
Algeria					
Bentonite	27 110	32 600	30 595	31 612	34 126
Egypt					
Bentonite (b)	* 19 000	19 200	28 320	35 384	27 000
Malawi					
Bentonite	—	2 080	7 023	8 050	1 020
Morocco					
Bentonite	21 100	136 097	50 125	84 097	110 703
Fuller's earth (c)	29 400	121 737	140 875	132 110	82 570
Mozambique					
Bentonite	692	762	614	577	* 600
Senegal					
Attapulgitite	140 000	* 150 000	166 900	180 900	204 300
South Africa					
Bentonite	32 878	45 778	44 067	40 340	54 311
Attapulgitite	49 225	65 402	69 876	52 103	85 336

Production of bentonite and fuller's earth

tonnes (metric)

Country	2006	2007	2008	2009	2010
Canada					
Bentonite (d)	3 984	3 744	3 906	3 947	4 542
Cuba					
Bentonite	355	401	382	670	228
Guatemala					
Bentonite	20 034	259 799	62 749	14 287	22 423
Mexico					
Bentonite	435 273	613 895	374 933	511 430	590 998
Fuller's earth	102 400	34 175	66 123	108 139	170 350
USA					
Bentonite (e)	4 940 000	4 820 000	4 900 000	* 3 650 000	* 4 000 000
Fuller's earth (e)	2 540 000	2 660 000	2 510 000	2 010 000	* 2 300 000
Argentina					
Bentonite	256 165	250 260	265 782	148 099	* 145 000
Fuller's earth	* 1 500	* 1 500	* 1 500	* 1 500	* 1 500
Brazil					
Bentonite	419 214	329 647	340 141	264 243	* 300 000
Chile					
Bentonite	—	533	—	—	—
Colombia					
Bentonite	* 8 500	* 8 500	* 8 500	* 8 500	* 8 500
Peru					
Bentonite	14 590	21 451	31 557	119 452	44 266
Uruguay					
Bentonite	510	530	310	210	* 150
Burma					
Bentonite (f)	904	971	* 1 000	* 1 000	* 1 000
China					
Bentonite	3 200 000	* 3 300 000	* 3 300 000	* 3 400 000	* 3 400 000
India					
Bentonite (f)	* 601 000	* 563 000	* 662 000	* 538 000	* 214 000
Fuller's earth (f)	* 42 000	* 89 000	* 29 000	...	...
Indonesia					
Bentonite	* 5 500	* 5 500	* 6 000	* 6 000	* 6 000
Iran					
Bentonite (g)	186 323	254 084	375 898	387 437	* 390 000
Iraq					
Bentonite	...	570	1 605	3 959	6 127
Japan					
Bentonite	* 425 000	* 430 000	* 435 000	* 432 000	* 432 000
Fuller's earth	* 110 000	* 110 000	* 110 000	* 110 000	* 110 000
Korea (Rep. of)					
Bentonite	61 137	56 429	71 052	84 963	88 255
Fuller's earth	46 314	65 136	70 711	99 802	83 476
Pakistan					
Bentonite (b)	20 088	33 177	31 247	32 032	34 596
Fuller's earth (b)	16 209	11 378	10 998	10 213	11 219
Philippines					
Bentonite	1 000	1 148	1 422	1 413	1 475
Thailand					
Bentonite	1 200	650	210	110	130
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	2006	2007	2008	2009	2010
Australia					
Bentonite (b)	* 125 600	* 116 300	* 85 800	* 124 400	* 131 300
Fuller's earth	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
New Zealand					
Bentonite	3 028	6 154	753	880	1 216
World Total Bentonite	15 100 000	16 300 000	15 800 000	14 400 000	13 700 000
World Total Fuller's Earth (a)	3 900 000	4 100 000	4 000 000	3 300 000	3 700 000

Note(s)

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

Production of beryl

tonnes (metric)

Country	2006	2007	2008	2009	2010
Madagascar (a)	* 1	* 1	* 1	* 1	* 1
Mozambique	16	31	8	45	* 40
Uganda	2	2	—	—	—
Zambia	* 5	* 5	* 4	* 6	* 6
USA	3 830	3 810	4 410	3 030	* 3 000
China	* 500	* 500	* 500	* 500	* 500

Note(s)

- (a) Includes ornamental and industrial products

Mine production of bismuth

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Bulgaria	* 45	* 45	* 45	* 45	* 45
Romania	* 40	* 40	* 40	* 40	* 40
Russia	* 55	* 55	* 70	* 70	* 70
Canada	214	145	71	86	92
Mexico	1 186	1 170	1 132	854	982
Bolivia	155	147	28	54	87
Peru (a)	1 081	1 114	1 061	423	—
China	1 515	1 363	1 453	1 460	1 465
Japan (a)	425	408	480	423	454
Kazakhstan	* 140	* 145	* 150	* 140	* 140
Australia	* 100	* 100	* 100	* 100	* 100
World Total	5 000	4 700	4 600	3 700	3 500

Note(s)

- (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	2006	2007	2008	2009	2010
Russia	* 400 000	* 400 000	* 400 000	* 400 000	* 400 000
Turkey	2 373 345	1 997 163	2 139 224	1 687 102	1 910 000
USA (a)	* 1 150 000	* 1 150 000	* 1 150 000	* 1 200 000	* 1 200 000
Argentina	533 535	669 578	789 954	500 433	* 500 500
Bolivia	50 727	79 531	66 249	93 829	* 94 000
Chile	459 645	535 071	590 999	613 135	503 609
Peru	—	233 991	349 891	187 221	292 855
China	* 290 000	* 290 000	* 280 000	* 290 000	* 300 000
Iran (b)	1 974	1 603	1 020	388	* 500
Kazakhstan	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000

Note(s)

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

Production of bromine

kilograms

Country	2006	2007	2008	2009	2010
Russia	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Spain	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Ukraine	* 700 000	* 1 800 000	* 400 000	* 400 000	* 400 000
USA (a)	243 000 000	* 235 000 000	* 230 000 000	* 230 000 000	* 230 000 000
China	* 124 000 000	* 137 000 000	* 135 000 000	* 140 000 000	* 150 000 000
India (b)	2 138 000	1 664 640	2 118 740	1 862 580	1 587 000
Israel	179 493 000	159 395 000	164 042 000	127 689 000	184 696 000
Japan	* 20 000 000	* 20 000 000	* 20 000 000	* 20 000 000	* 20 000 000
Jordan	94 500 000	85 105 000	105 600 000	69 000 000	* 70 000 000
World Total	664 000 000	640 000 000	657 000 000	589 000 000	657 000 000

Note(s)

(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	2006	2007	2008	2009	2010
Bulgaria	320	318	376	413	* 440
France	90	50	—	—	—
Germany	* 490	* 475	* 420	* 250	* 300
Netherlands	524	495	530	* 490	* 580
Norway	125	269	178	249	300
Poland	373	421	603	534	451
Russia	690	810	* 800	* 700	* 700
Canada (a)	2 090	1 388	1 409	1 299	1 357
Mexico	1 399	1 605	1 550	1 510	1 464
USA (a)	723	735	777	633	637
Argentina	6	35	38	36	35
Brazil	* 200	* 200	* 200	* 200	* 200
Peru	416	347	371	289	357
China	3 791	4 215	6 964	* 7 000	* 7 200
India (b)	481	589	507	553	* 550
Japan	2 286	1 939	2 126	1 824	2 053
Kazakhstan	1 140	* 1 000	* 1 000	* 1 000	* 1 000
Korea (Rep. of)	3 320	2 846	3 090	2 500	4 166
Korea, Dem. P.R. of	* 200	* 200	* 200	* 200	* 200
Australia	329	351	* 350	* 370	* 350
World Total	19 000	18 300	21 500	20 100	22 300

Note(s)

(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	2006	2007	2008	2009	2010
Albania	187 070	194 760	220 536	288 759	289 687
Finland	549 000	556 000	614 000	247 000	598 000
Kosovo	—	—	—	2 000	...
Russia	966 095	776 681	913 000	416 194	...
Turkey	1 059 901	1 678 932	1 885 712	1 770 029	1 904 460
Madagascar	116 290	77 700	112 600	131 800	134 500
South Africa	7 418 326	9 646 958	9 682 640	6 864 938	10 871 095
Sudan	24 200	37 656	27 094	14 087	56 823
Zimbabwe	700 001	614 559	442 584	193 674	510 424
Cuba	5 047	—	—	—	—
Brazil	562 739	627 772	705 726	* 700 000	* 700 000
Afghanistan	7 273	6 491	6 491	6 000	* 6 000
China	220 000	220 000	220 000	* 220 000	* 220 000
India (a)	5 295 551	4 872 847	4 073 479	3 412 867	4 262 207
Iran (b)(c)	236 397	139 114	268 586	274 511	* 275 000
Kazakhstan	3 366 078	3 687 200	3 551 700	8 059 000	8 594 000
Oman	276 300	407 800	784 100	636 500	* 640 000
Pakistan (d)	64 572	104 141	114 884	89 739	257 148
Philippines (b)	46 728	31 593	15 268	14 322	14 807
United Arab Emirates	—	19 000	34 350	23 770	...
Vietnam	3 400	2 800	* 1 300	* 400	...
Australia	107 103	118 093	56 881	72 813	73 618
World Total	21 200 000	23 800 000	23 700 000	23 400 000	30 000 000

Note(s)

(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
- (d) Years ended 30 June of that stated

Production of coal

tonnes (metric)

Country	2006	2007	2008	2009	2010
Albania					
Lignite	3 800	2 700	1 500	2 000	3 000
Austria					
Brown coal & lignite (a)	7 854	—	—	—	—
Bosnia & Herzegovina					
Brown coal & lignite	9 958 024	9 762 800	11 221 305	11 515 138	10 976 163
Bulgaria					
Lignite	22 749 500	25 325 000	26 007 800	25 014 800	27 148 300
Brown coal	2 556 900	2 833 500	2 643 200	2 243 800	2 321 200
Czech Republic					
Bituminous	13 017 000	12 462 000	12 197 000	10 621 000	11 193 000
Lignite	459 000	437 000	416 000	262 000	—
Brown coal	48 915 000	49 134 000	47 456 000	45 354 000	43 931 000
Georgia					
Coal	8 284	18 891	12 000	...	...
Germany					
Anthracite & Bituminous	23 762 000	24 185 000	19 143 000	14 971 000	14 110 000
Brown coal	176 324 117	180 409 054	175 313 020	169 857 142	169 402 544
Greece					
Lignite	64 800 000	66 100 000	64 521 000	61 800 000	53 600 000
Hungary					
Lignite	8 467 220	8 351 563	8 041 168	8 026 587	8 203 000
Brown coal	1 431 700	1 450 400	1 386 140	952 000	911 000
Kosovo					
Lignite	—	—	7 842 000	7 839 173	7 958 090
Macedonia					
Lignite	6 650 182	6 569 220	7 669 103	7 395 915	* 7 000 000
Montenegro					
Lignite	1 502 334	1 195 515	1 740 076	957 164	1 937 847
Norway					
Bituminous (b)	2 359 000	3 223 000	3 429 000	2 437 000	1 685 000
Poland					
Bituminous	95 222 512	88 313 369	84 345 443	78 064 462	76 727 800
Lignite	60 844 278	57 537 727	59 668 166	57 108 304	56 510 100
Romania					
Lignite	32 753 526	35 671 000	34 529 000	28 460 152	28 774 244
Brown coal	* 58 000	97 000	205 000	63 458	62 448
Russia	310 000 000	314 000 000	326 000 000	298 000 000	317 000 000
Serbia					
Bituminous	65 000	58 000	66 000	69 000	108 000
Lignite	36 404 000	36 803 000	(c)(d) 31 332 000	(c)(d) 38 828 000	(c)(d) 38 490 000
Brown coal	316 000	204 000	...	...	...
Slovakia					
Lignite	6 000	20 000	87 000	155 000	176 000
Brown coal	2 016 000	1 839 000	2 075 000	2 221 000	2 026 000
Slovenia					
Lignite	3 932 842	4 037 766	4 008 440	3 921 746	4 010 930
Brown coal	587 912	483 417	488 828	510 769	419 466
Spain					
Anthracite	3 775 504	3 485 083	3 152 550	4 306 033	3 211 659
Bituminous	4 572 350	4 387 416	4 085 652	2 898 340	2 776 918
Sub-bituminous	3 221 083	3 128 081	2 890 230	2 493 577	2 428 877
Lignite	6 859 641	6 112 946	—	—	—
Turkey					
Anthracite	3 070 793	3 230 787	3 343 409	3 773 603	3 666 675
Lignite	61 010 000	74 316 728	86 074 626	82 263 104	74 437 425
Ukraine					
Bituminous	80 200 000	75 538 400	77 802 200	54 977 000	54 952 000
Lignite	231 000	182 000	163 000	175 000	* 175 000
United Kingdom					
Bituminous (e)	18 517 000	17 070 000	18 053 000	17 874 000	18 417 000

Production of coal

tonnes (metric)

Country	2006	2007	2008	2009	2010
Botswana	962 427	828 164	909 511	737 798	894 720
Congo, Democratic Republic					
Bituminous	124 000	128 000	116 000	* 120 000	* 120 000
Egypt	* 300 000	* 360 000	* 360 000	* 300 000	* 300 000
Malawi	60 408	58 550	57 477	59 201	79 186
Mozambique					
Bituminous	40 953	23 602	37 700	25 924	* 25 000
Niger	176 320	171 296	182 912	225 072	246 558
Nigeria					
Sub-bituminous	* 20 000	* 20 000	* 30 000	* 40 000	44 148
South Africa					
Anthracite	1 584 424	2 348 955	2 207 304	1 657 860	2 073 889
Bituminous	243 197 975	245 251 281	250 006 054	248 923 814	252 448 056
Swaziland					
Anthracite	310 570	241 283	174 807	129 647	145 903
Tanzania					
Bituminous	17 940	27 198	15 242	16 500	* 16 000
Zambia					
Bituminous	64 849	14 058	* 14 000	* 14 000	* 14 000
Zimbabwe					
Bituminous	2 107 115	2 080 221	1 509 080	1 667 346	2 488 856
Canada					
Bituminous	29 301 000	32 325 000	32 839 000	27 959 000	33 704 000
Sub-bituminous	26 153 000	26 118 000	24 988 000	24 425 000	23 927 000
Lignite	10 440 000	10 541 000	9 921 000	10 550 000	10 264 000
Mexico					
Bituminous	10 882 685	11 886 757	15 894 060	12 955 055	16 015 216
USA					
Anthracite (f)	1 395 000	1 413 000	1 555 000	1 743 000	1 696 429
Bituminous (f)	509 512 000	482 428 000	507 488 000	450 089 285	454 464 285
Sub-bituminous	467 510 000	475 101 000	487 801 000	443 214 286	447 500 000
Lignite	76 430 000	71 305 900	68 675 000	65 751 000	65 357 143
Argentina					
Bituminous	295 333	250 000	207 983	181 474	* 150 000
Brazil					
Bituminous & lignite (g)	6 215 258	5 998 354	6 518 733	5 947 364	5 611 467
Chile					
Bituminous	98 673	184 122	212 375	118 305	106 018
Lignite	575 071	103 871	321 417	517 769	512 775
Colombia					
Bituminous	66 192 000	69 902 000	73 502 075	72 807 412	74 350 133
Peru					
Anthracite & Bituminous	107 091	100 594	136 435	156 372	91 960
Venezuela					
Bituminous	7 458 873	6 855 341	5 053 700	3 258 146	2 630 820
Afghanistan					
Bituminous	...	...	314 702	453 592	657 618
Bangladesh (h)	303 016	388 376	677 098	857 648	730 866
Bhutan	97 965	105 261	123 704	48 545	87 814
Burma (i)	351 559	282 655	245 172	233 983	240 527
China	2 529 000 000	2 692 000 000	2 802 000 000	2 973 000 000	3 240 000 000
India					
Bituminous (i)	430 832 000	457 082 000	492 757 000	532 062 000	* 498 727 000
Lignite (i)	31 285 000	33 980 000	32 421 000	34 080 000	* 35 181 000
Indonesia					
Anthracite & Bituminous	193 761 311	216 946 699	240 249 968	255 000 000	275 000 000
Iran					
Bituminous (j)	2 432 000	2 525 000	2 520 000	2 180 810	* 2 500 000
Japan					
Bituminous	1 341 000	* 1 340 000	* 1 300 000	* 1 100 000	* 1 100 000

Production of coal

tonnes (metric)

Country	2006	2007	2008	2009	2010
Kazakhstan					
Bituminous	* 91 500 000	94 013 800	106 295 600	86 881 082	90 069 836
Lignite	4 655 100	4 370 100	4 776 700	4 612 000	6 607 026
Korea (Rep. of)					
Anthracite	2 823 990	2 886 000	2 772 544	2 518 940	2 083 972
Korea, Dem. P.R. of (a)	23 000 000	24 100 000	25 060 000	25 000 000	* 25 000 000
Kyrgyzstan	300 000	400 000	436 678	546 971	* 550 000
Laos	319 200	681 700	379 200	466 100	* 500 000
Malaysia	901 801	1 063 078	1 166 525	2 138 390	2 397 340
Mongolia					
Anthracite & semi-bituminous	...	4 664 900	5 228 000	...	...
Brown coal & lignite	(a) 8 074 100	4 572 700	4 843 900	(a) 14 365 500	(a) 25 596 530
Nepal					
Sub-bituminous (k)	11 963	16 374	13 845	14 819	* 16 000
Pakistan (h)(l)	3 880 604	3 702 162	4 066 409	3 679 185	3 523 272
Philippines					
Bituminous	2 300 341	3 401 136	3 609 316	4 687 277	6 650 357
Tajikistan	218 000	181 400	198 500	178 300	199 700
Thailand					
Lignite	19 070 608	18 239 176	18 095 335	16 360 261	17 906 894
Uzbekistan					
Bituminous	99 200	* 100 000	* 100 000	* 100 000	* 100 000
Lignite	2 720 000	* 2 700 000	* 3 000 000	* 3 000 000	* 3 000 000
Vietnam					
Anthracite	38 778 000	42 483 000	39 777 000	43 715 000	44 010 700
Australia					
Bituminous (m)	315 000 000	325 000 000	333 000 000	350 000 000	356 000 000
Brown coal (h)	67 737 000	65 613 000	66 033 000	68 252 000	68 751 000
New Zealand					
Bituminous	2 863 029	2 019 430	2 476 848	2 085 486	2 597 400
Sub-bituminous	2 653 516	2 555 830	2 179 081	2 218 143	2 438 200
Lignite	251 366	260 148	253 492	259 704	294 900
World Total	6 345 000 000	6 572 000 000	6 815 000 000	6 849 000 000	7 153 000 000

Note(s)

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

Mine production of cobalt

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Finland	* 100	* 120	* 100	* 27	* 30
Russia (a)	4 759	3 587	2 502	2 352	2 460
Botswana	303	242	337	342	295
Congo, Democratic Republic	27 100	25 400	32 300	35 500	* 70 000
Madagascar	—	—	—	—	700
Morocco (a)	1 405	1 573	1 791	1 600	1 582
South Africa (a)	267	307	244	238	840
Uganda (a)	674	698	663	673	624
Zambia (a)	4 665	4 335	3 841	1 535	5 134
Zimbabwe	26	29	28	39	57
Canada	7 115	8 692	8 953	3 919	4 568
Cuba	5 602	4 540	3 175	* 3 500	3 721
Brazil	1 100	1 311	1 215	* 1 200	* 1 200
China	1 840	6 100	6 630	6 000	6 500
Indonesia	* 650	* 650	* 650	* 650	* 650
Australia (b)	5 736	5 325	5 770	5 365	4 819
New Caledonia	1 629	1 620	869	913	1 656
World Total	63 000	65 000	69 000	64 000	105 000

Note(s)

- (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	2006	2007	2008	2009	2010
Belgium (a)	2 840	2 825	3 020	2 150	2 600
Finland	8 582	9 173	9 645	8 962	9 413
France	256	305	311	368	302
Norway	4 927	3 939	3 719	3 510	3 208
Russia	4 759	3 587	2 502	2 352	2 460
Congo, Democratic Republic (b)	550	606	1 049	2 950	4 182
Morocco	1 405	1 591	1 711	1 600	1 545
South Africa (c)	267	307	244	238	836
Uganda	689	636	662	389	568
Zambia	4 665	4 435	3 841	1 535	5 134
Canada (d)	5 198	5 620	5 637	4 918	4 249
Brazil	902	1 148	994	1 012	1 369
China (a)	* 12 700	13 245	18 239	23 138	32 930
India	1 184	980	858	1 001	1 187
Japan	920	1 085	1 071	1 332	1 935
Australia	3 696	3 684	3 617	4 050	4 117
World Total	53 500	53 200	57 100	59 500	76 000

Note(s)

(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) Some metal production in China is recorded in Belgium

(b) Excludes white alloy and matte which are believed to be further processed in Belgium and elsewhere

(c) Includes metal and metal contained in sulphate

(d) Including oxides

Mine production of copper

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Albania	1 140	2 980	2 980	2 788	3 359
Armenia	17 800	17 400	18 540	22 968	30 707
Bulgaria	123 571	116 157	107 195	110 652	112 904
Cyprus	900	2 900	3 000	2 500	2 600
Finland	13 000	13 600	13 300	14 600	14 700
Georgia	14 600	11 000	18 700	16 600	11 300
Macedonia	7 054	7 029	8 051	7 440	7 900
Poland	497 200	451 900	429 687	439 365	425 725
Portugal	78 576	90 182	89 026	86 462	74 011
Romania	12 535	2 213	308	3 129	5 127
Russia	675 000	690 000	705 000	675 700	702 700
Serbia	11 100	16 500	17 600	19 400	22 500
Spain	8 700	6 281	7 071	17 663	54 329
Sweden	86 746	62 905	57 688	55 414	76 514
Turkey	46 400	81 000	83 000	87 070	81 500
Botswana	24 255	19 996	23 146	24 382	25 000
Congo, Democratic Republic	142 300	148 400	242 900	293 000	377 900
Mauritania	5 031	28 755	33 073	36 608	36 969
Morocco	4 600	5 600	5 900	11 800	15 000
Namibia	6 262	5 800	8 800	—	—
South Africa	89 500	97 000	108 700	107 600	102 600
Tanzania	3 285	3 276	2 852	3 079	6 400
Zambia	497 169	510 917	600 033	697 860	819 159
Zimbabwe	2 581	2 681	2 827	3 572	4 676
Canada	603 295	596 249	607 957	484 605	525 129
Mexico	334 129	337 527	246 593	240 648	270 136
USA	1 197 000	1 169 000	1 307 900	1 204 000	1 129 300
Argentina	180 144	180 223	156 900	143 084	140 300
Bolivia	218	606	567	620	2 100
Brazil	147 836	205 728	222 000	217 000	213 000
Chile	5 360 800	5 557 000	5 327 600	5 394 400	5 418 900
Colombia	600	840	1 050	1 140	783
Peru	1 048 472	1 190 274	1 267 867	1 276 249	1 247 126
Burma	19 500	15 100	6 900	9 800	* 12 000
China	889 000	946 200	1 092 700	1 062 000	1 191 200
India (a)	30 051	32 726	30 189	27 072	* 29 200
Indonesia	817 796	796 899	655 046	988 530	878 376
Iran	216 200	244 200	248 100	262 500	* 275 000
Japan	* 300	—	—	—	—
Kazakhstan	446 300	406 500	421 700	406 000	381 000
Korea, Dem. P.R. of	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
Laos	60 803	62 541	89 004	121 581	132 047
Malaysia	—	—	—	240	—
Mongolia	129 675	130 165	126 980	129 800	125 000
Oman	—	9 100	16 800	15 000	15 300
Pakistan	18 700	18 800	18 700	19 600	19 400
Philippines	17 161	22 862	21 235	49 060	58 412
Saudi Arabia	730	737	1 465	1 719	1 600
Uzbekistan	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Vietnam	11 400	12 500	11 000	* 11 300	* 11 300
Australia	878 000	871 000	886 000	856 000	870 000
Papua New Guinea	194 355	169 184	159 650	166 669	159 821
World Total	15 100 000	15 500 000	15 600 000	15 900 000	16 200 000

Note(s)

(a) Years ended 31 March following that stated

Smelter production of copper

tonnes (metric)

Country	2006	2007	2008	2009	2010
Armenia	(a) 8 791	6 954	6 480	6 858	7 644
Bulgaria	217 000	217 600	257 100	256 200	265 000
Finland	164 306	118 911	142 154	110 479	112 687
Germany	273 800	270 200	295 000	251 000	378 700
Norway	39 700	34 200	37 000	33 900	36 200
Poland	555 907	518 303	492 942	457 510	469 656
Russia	635 000	650 000	627 000	579 600	590 000
Serbia	40 000	30 200	31 900	32 000	27 100
Spain	263 662	257 348	259 897	264 971	259 119
Sweden	129 951	148 835	136 409	125 398	135 125
Turkey	26 300	17 900	38 000	—	—
Botswana	29 700	27 000	25 000	24 700	23 400
Congo, Democratic Republic (a)	10 000	1 800	—	—	—
Namibia	21 918	20 600	16 600	21 500	29 900
South Africa	98 900	111 900	94 800	86 900	75 700
Zambia (a)	289 700	224 000	232 000	334 000	487 000
Canada	484 675	470 713	443 710	316 510	318 006
Mexico	298 526	294 746	230 056	178 672	168 861
USA	501 300	617 000	573 800	597 400	601 200
Brazil	219 684	218 000	227 800	204 500	208 800
Chile	1 565 400	1 514 300	1 369 200	1 522 300	1 559 800
Peru	322 188	236 809	306 583	325 788	312 968
China	1 917 500	2 111 500	2 453 400	2 648 300	2 772 200
India	609 600	699 900	651 000	705 100	653 900
Indonesia	201 200	277 000	253 300	295 900	276 800
Iran	177 500	180 300	179 800	192 700	188 200
Japan	1 361 771	1 383 372	1 335 846	1 302 120	1 356 289
Kazakhstan	424 784	392 834	392 575	369 000	370 900
Korea (Rep. of)	449 200	470 000	502 000	455 400	475 900
Korea, Dem. P.R. of	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Oman	20 710	13 940	11 906	11 830	8 815
Pakistan	23 600	18 200	17 800	18 300	18 900
Philippines	239 600	219 900	239 700	230 100	216 200
Thailand	1 000	5 600	—	—	—
Uzbekistan	93 000	90 200	90 100	90 000	90 000
Vietnam	—	—	2 200	6 000	8 000
Australia	377 000	399 000	449 000	422 000	410 000
World Total	12 100 000	12 300 000	12 400 000	12 500 000	12 900 000

Note(s)

(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	2006	2007	2008	2009	2010
Austria	72 600	81 400	106 700	96 200	113 700
Belgium	378 600	394 000	395 800	373 700	389 000
Bulgaria	65 500	69 900	126 700	196 900	215 100
Cyprus	880	3 012	2 986	2 380	2 595
Finland	137 961	109 870	131 249	105 549	124 000
Germany	662 338	665 517	689 763	668 945	704 300
Italy	36 400	28 600	24 200	6 500	1 800
Norway	39 700	34 200	37 000	33 900	36 200
Poland	556 625	532 975	526 808	502 462	547 074
Romania	21 583	18 589	15 300	4 600	—
Russia	951 400	949 000	862 000	874 000	910 000
Serbia	41 400	31 600	33 800	27 400	22 200
Spain	299 146	308 372	319 050	329 356	347 518
Sweden	229 241	213 894	227 774	205 759	190 497
Turkey	105 800	99 600	88 000	33 500	47 300
Ukraine	17 300	19 500	21 700	20 000	23 400
Congo, Democratic Republic	24 200	36 000	61 200	158 400	243 900
Egypt (a)	* 1 500	1 719	2 664	2 842	* 3 000
South Africa	100 300	110 700	92 700	88 600	76 200
Zambia	497 200	523 400	575 000	697 900	681 600
Zimbabwe	6 700	6 800	3 100	* 3 000	* 5 000
Canada	500 463	453 453	442 050	335 052	319 200
Mexico	303 626	329 746	265 056	213 672	168 861
USA	1 250 300	1 310 800	1 280 300	1 161 200	1 093 400
Argentina	* 16 000	* 16 000	* 16 000	* 16 000	* 16 000
Brazil	219 700	219 300	233 800	231 400	261 600
Chile	2 811 300	2 936 500	3 057 600	3 276 600	3 243 900
Peru	507 710	413 907	463 933	423 393	393 638
Burma	19 500	15 100	6 900	9 800	* 12 000
China	3 002 100	3 499 400	3 794 600	4 051 300	4 573 500
India (b)	510 623	501 485	513 640	532 865	* 480 000
Indonesia	217 600	256 900	253 400	284 800	277 500
Iran	200 900	204 300	210 000	210 000	221 100
Japan	1 532 055	1 576 818	1 539 957	1 439 843	1 548 688
Kazakhstan	429 729	408 026	400 270	346 000	323 400
Korea (Rep. of)	561 500	566 400	537 925	531 701	564 600
Korea, Dem. P.R. of	* 15 000	* 15 000	* 12 000	* 12 000	* 12 000
Laos	60 803	62 541	64 075	67 562	64 241
Mongolia	2 618	3 007	2 587	2 470	2 746
Oman	20 710	13 940	11 906	11 830	8 815
Philippines	181 000	160 200	174 600	178 000	171 900
Thailand	27 050	12 714	438	490	529
Uzbekistan	92 800	89 600	70 400	82 500	* 82 500
Vietnam	—	—	2 200	6 000	8 000
Australia	429 000	442 000	503 000	446 000	424 000
World Total	17 200 000	17 700 000	18 200 000	18 300 000	19 000 000

Note(s)

(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	2006	2007	2008	2009	2010
Russia	38 360 810	38 291 200	36 925 150	34 759 400	34 856 600
Angola	9 175 061	9 701 709	8 906 974	13 827 609	8 362 139
Botswana	34 293 401	33 639 000	32 595 000	17 734 000	27 556 000
Cameroon (a)	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
Central African Republic	419 528	467 711	372 754	310 469	301 558
Congo	...	22 000	110 000	68 000	381 242
Congo, Democratic Republic	28 990 241	28 452 496	33 401 928	21 298 459	20 166 220
Ghana	959 405	839 235	598 042	354 443	308 679
Guinea	473 862	1 018 723	3 098 490	696 732	374 096
Ivory Coast	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Lesotho	231 325	229 077	253 054	91 816	108 827
Liberia	11 000	21 699	46 963	36 828	25 357
Namibia	2 356 285	2 266 100	2 435 195	939 916	1 475 610
Sierra Leone	582 324	603 698	371 290	400 480	437 552
South Africa	15 152 801	15 247 122	12 901 018	6 118 974	8 868 389
Tanzania	272 204	282 786	237 676	181 874	82 028
Togo	25 368	13 452	8 787	125	96
Zimbabwe	1 046 025	695 016	797 198	963 502	8 435 224
Canada	13 233 813	17 007 850	14 802 699	10 946 098	11 773 000
Brazil	181 350	182 031	80 226	21 153	25 394
Guyana	340 544	268 925	168 926	143 982	49 920
Venezuela	27 598	14 502	9 381	7 730	2 099
China	* 1 065 000	* 1 070 000	* 1 100 000	* 1 100 000	* 1 100 000
India (b)	2 180	586	536	16 810	* 26 400
Indonesia	46 856	22 980	27 688	—	—
Australia	29 308 000	19 231 000	15 670 000	10 795 000	9 998 000
World Total	176 900 000	169 900 000	165 200 000	121 100 000	135 000 000

Note(s)

- (1) This table does not show production of synthetic diamond
(2) So far as possible the amounts shown include estimates for illegal production

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

Production of diatomite

tonnes (metric)

Country	2006	2007	2008	2009	2010
Commonwealth of Independent States (a)	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Czech Republic	53 000	19 000	31 000	—	32 000
Denmark					
Moler (b)	196 000	201 000	210 000	168 000	166 000
France	* 75 000	* 75 000	* 75 000	75 000	75 000
Hungary	495	1 424	—	1 277	1 200
Poland	600	600	600	670	500
Romania	1 719	2 057	—	—	—
Spain (c)	52 123	45 480	46 192	29 194	64 346
Algeria	1 800	1 902	1 677	1 847	2 231
Ethiopia (d)	—	—	—	4 104	4 000
Kenya	185	201	72	231	* 200
Mozambique	...	651	379	380	* 400
Costa Rica	26 000	25 000	24 000	24 500	23 500
Mexico	62 948	82 519	128 536	80 807	91 710
USA (e)	799 000	687 000	764 000	575 000	595 000
Argentina	38 543	49 604	36 996	62 270	* 50 000
Brazil	8 968	9 600	12 100	7 500	* 7 500
Chile	19 104	25 405	25 497	23 027	30 925
Peru	* 35 000	21 603	12 200	9 946	18 886
China	* 420 000	* 420 000	* 440 000	* 440 000	* 400 000
Iran (f)	13 400	300	2 000	—	* —
Japan	* 130 000	* 120 000	* 115 000	* 110 000	* 110 000
Korea (Rep. of)	3 460	2 360	2 540	2 440	2 200
Saudi Arabia	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Thailand	1 344	1 260	4 075	5 600	7 100
Vietnam	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Australia (g)	* 34 300	* 33 600	* 21 200	* 13 900	* 13 600
New Zealand	—	—	—	10	95
World Total	2 064 000	1 917 000	2 044 000	1 727 000	1 787 000

Note(s)

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

(a) Diatomite is produced in Armenia, Georgia and Russia but information is not available to provide estimates for individual countries

(b) Moler is an impure diatomite containing a large proportion of clay

(c) Including Tripoli

(d) Years ended 7 July of that stated

(e) Sold or used by producers

(f) Years ended 20 March following that stated

(g) Years ended 30 June of that stated

Production of feldspar

tonnes (metric)

Country	2006	2007	2008	2009	2010
Bulgaria	93 091	* 90 000	* 90 000	* 80 000	* 80 000
Czech Republic	487 000	514 000	488 000	431 000	388 000
Finland	43 187	48 980	45 250	* 45 000	* 45 000
France	* 650 000	* 650 000	* 650 000	650 000	650 000
Germany	167 332	171 303	161 416	140 000	* 150 000
Greece	* 100 000	95 000	62 000	55 737	23 050
Italy	4 600 903	3 524 389	4 727 000	* 4 700 000	* 4 700 000
Macedonia	38 124	32 814	28 920	19 377	* 19 000
Norway	65 000	65 000	62 000	48 000	56 000

Production of feldspar

tonnes (metric)

Country	2006	2007	2008	2009	2010
Poland	431 300	497 900	599 100	445 500	391 900
Portugal	257 570	371 952	230 426	362 392	121 827
Romania	33 100	41 477	22 995	14 317	6 049
Russia	* 160 000	* 160 000	* 160 000	* 160 000	* 160 000
Serbia	* 3 500	* 3 500	* 3 500	* 3 500	* 3 500
Slovakia	3 000	—	10 000	13 000	—
Spain	696 912	683 134	690 256	597 496	691 894
Sweden	24 000	25 000	22 000	18 000	22 000
Turkey	5 500 000	6 000 000	6 500 000	4 000 000	5 200 000
Ukraine	67 313	76 305	83 420	84 757	146 016
United Kingdom (a)(b)	1 441	1 112	430	—	—
Algeria	65 615	83 208	115 938	131 046	163 939
Egypt	* 360 000	135 290	168 673	353 700	405 600
Ethiopia	500	566	523	199	* 200
Morocco	* 34 000	37 955	30 080	* 30 000	* 30 000
Nigeria	1 021	...	...	13 631	1 616
South Africa	76 722	90 312	105 815	101 394	95 434
Sudan	—	—	—	—	923 720
Cuba	5 500	5 600	4 300	4 700	2 800
Guatemala	17 176	10 480	45 854	5 672	15 720
Mexico	459 209	438 696	445 519	347 510	398 849
USA	760 000	730 000	680 000	550 000	* 570 000
Argentina	170 728	291 562	220 234	213 671	* 220 000
Brazil	166 418	166 000	122 000	115 000	* 120 000
Chile	5 847	6 704	17 834	9 079	7 723
Colombia	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Ecuador	67 844	14 307	* 14 000	* 10 000	* 10 000
Peru	9 287	15 450	13 333	5 154	5 088
Uruguay	2 470	2 050	1 920	910	* 900
Venezuela	* 200 000	222 000	96 783	100 451	57 760
China	* 2 350 000	* 2 400 000	* 2 400 000	* 2 400 000	* 2 400 000
India (c)	479 715	488 458	531 689	455 549	* 445 000
Indonesia	* 25 000	* 25 000	* 26 000	* 26 000	* 26 000
Iran (d)	411 807	512 261	501 821	634 503	* 635 000
Japan (b)	* 800 000	* 750 000	* 700 000	* 700 000	* 700 000
Jordan	11 054	9 800	2 950	—	—
Korea (Rep. of)	427 378	398 513	344 257	622 770	496 511
Malaysia	142 358	358 585	457 377	410 053	438 846
Pakistan (e)	22 435	26 120	18 737	37 881	54 198
Philippines	15 176	14 837	15 838	16 394	15 882
Saudi Arabia	46 700	73 000	55 000	55 000	* 55 000
Sri Lanka	56 864	46 583	55 212	73 365	75 405
Taiwan	—	—	4 379	—	20
Thailand	1 067 684	684 668	670 618	718 692	641 900
Uzbekistan	* 4 300	* 4 300	* 4 300	* 4 300	* 4 300
Vietnam	* 200 000	* 200 000	* 200 000	* 200 000	* 200 000
Australia (e)	* 100 000	* 105 000	* 102 000	* 100 000	* 103 000
World Total	22 086 000	21 499 000	22 910 000	20 415 000	22 275 000

Note(s)

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

(a) China stone

(b) Including weathered granite feldspar

(c) Years ended 31 March following that stated

(d) Years ended 20 March following that stated

(e) Years ended 30 June of that stated

Production of fluorspar

tonnes (metric)

Country	2006	2007	2008	2009	2010
Bulgaria	—	—	—	32	10
France	* 40 000	—	—	—	—
Germany	53 009	54 359	48 519	49 962	59 086
Italy	* 15 000	—	—	—	—
Russia	* 210 000	* 180 000	* 269 000	* 240 000	* 250 000
Spain	144 845	155 197	148 736	122 533	132 341
United Kingdom	49 676	44 936	36 801	18 536	26 420
Egypt	* 550	* 500	470	500	470
Kenya	83 428	82 000	98 248	15 667	—
Morocco	103 300	78 817	56 724	72 096	89 680
Namibia	132 249	118 766	118 263	80 857	104 494
South Africa	256 000	285 000	299 000	* 204 000	* 200 000
Mexico	936 433	933 361	1 057 649	1 045 940	1 067 386
Argentina	8 278	9 735	15 098	13 424	13 500
Brazil (a)	63 604	65 526	63 241	43 964	* 64 100
China	* 3 000 000	* 3 200 000	* 3 250 000	* 3 200 000	* 3 300 000
India (b)	2 053	7 764	9 990	13 782	* 9 500
Iran (c)	58 871	68 192	61 592	71 409	* 70 000
Kazakhstan	* 30 000	64 000	66 300	* 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	347 700	354 900	334 800	459 500	400 000
Pakistan (d)	1 966	1 505	2 612	1 261	290
Thailand	3 240	1 820	29 529	119 840	30 487
Vietnam	* 4 000	* 4 000	* 4 000	* 4 000	* 4 000
World Total	5 600 000	5 700 000	6 000 000	5 900 000	5 900 000

Note(s)

- (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): 2006: 79.6; 2007: 94.3; 2008: 111.0; 2009: 114.0; 2010: 128.0

- (a) Including beneficiated and directly shipped material
(b) Years ended 31 March following that stated
(c) Years ended 20 March following that stated
(d) Years ended 30 June of 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: 2006, 80 tonnes; 2007, 80 tonnes; 2008, 95 tonnes; 2009, 78 tonnes and 2010, 106 tonnes. However, 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.

Production of germanium metal

tonnes (metric)

Country	2006	2007	2008	2009	2010
USA (a)	5	5	5	5	* 5
China	* 100	* 100	* 100	* 100	* 100
Japan	2	1	...	...	...
Other countries	* 30	* 45	* 35	* 15	* 15

Note(s)

(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	2006	2007	2008	2009	2010
Armenia	867	565	* 565	682	1 033
Azerbaijan	—	—	—	333	2 093
Bulgaria	3 818	3 964	4 160	4 482	4 489
Finland	1 307	1 639	1 336	3 808	5 644
Georgia	2 400	3 100	* 3 100	* 3 100	* 3 100
Greenland	2 324	1 835	1 648	—	—
Poland (a)	1 700	883	902	814	784
Romania	* 500	* 500	* 500	* 500	* 500
Russia	159 340	156 912	184 488	205 236	201 300
Serbia (a)	* 330	* 330	* 330	* 450	722
Slovakia	84	92	198	346	534
Spain	1 565	—	—	—	—
Sweden	6 848	5 159	4 953	5 542	6 285
Turkey	8 040	9 920	11 120	14 450	16 400
United Kingdom	—	88	163	187	177
Algeria	377	236	647	998	723
Botswana	3 020	2 722	3 176	1 626	1 773
Burkina Faso	1 571	2 250	7 633	13 181	22 504
Burundi	4 313	2 423	2 170	972	* 900
Cameroon	* 600	* 600	* 600	* 600	* 600
Chad	* 150	* 150	* 100	* 100	* 100
Congo, Democratic Republic	10 300	5 100	3 300	2 000	3 000
Egypt	—	—	—	—	4 363
Equatorial Guinea	* 200	* 200	* 200	* 200	* 200
Ethiopia (b)	3 828	* 3 300	3 631	4 005	* 4 200
Gabon	* 300	* 300	* 300	* 300	* 300
Ghana	72 323	83 558	80 503	91 143	92 380
Guinea	16 364	15 303	17 981	21 402	24 836
Ivory Coast	1 323	1 243	4 205	6 947	5 316
Kenya (c)	432	3 023	340	1 055	* 2 000
Liberia	9	311	624	524	800
Mali	58 382	52 753	41 160	42 364	38 524
Mauritania	322	2 332	5 528	6 773	8 328
Morocco (a)	1 300	771	587	470	650
Mozambique	85	97	298	511	520
Namibia	2 790	2 488	2 115	2 057	2 683
Niger	2 615	3 427	2 314	2 067	1 929
Nigeria	40	180	2 890	1 350	3 718
Senegal	* 600	* 600	* 600	5 655	5 354
Sierra Leone	71	212	196	157	270
South Africa	272 128	252 345	212 744	197 628	188 701
Sudan	3 246	2 701	2 251	1 922	2 129
Tanzania	39 750	40 193	36 434	39 113	39 448
Togo	7 184	10 159	11 835	12 955	* 13 000
Uganda (c)	2 192	2 543	2 055	931	918
Zambia (d)	964	1 269	1 693	3 108	3 410
Zimbabwe	11 354	7 018	3 579	4 966	9 620
Canada	104 448	102 377	96 501	97 235	98 297
Costa Rica	1 850	1 221	* 154	* 205	* 300
Dominican Republic	—	—	44	375	473
Guatemala	5 036	7 100	7 448	8 484	9 213
Honduras	4 055	3 012	1 846	2 127	2 200
Mexico	35 899	39 355	50 365	62 439	79 376
Nicaragua	3 395	3 330	2 960	2 590	4 880
Panama	—	—	—	800	* 1 300
USA	251 853	238 136	233 327	223 323	228 000
Argentina	44 131	42 021	42 046	46 588	58 079
Bolivia	9 628	8 818	8 431	7 217	6 400
Brazil	40 075	49 600	54 000	56 100	57 900
Chile	42 100	41 528	39 162	40 834	39 494
Colombia	15 683	15 483	34 321	47 838	53 606
Ecuador	5 338	3 186	840	* 840	369
French Guiana	3 083	2 844	1 941	1 250	* 1 250
Guyana	6 405	7 412	8 131	9 326	8 744

Mine production of gold

kilograms

Country	2006	2007	2008	2009	2010
Peru	202 822	170 128	179 870	182 390	148 920
Suriname	10 426	8 585	10 290	12 800	12 933
Uruguay	* 2 800	3 172	2 429	2 010	1 704
Venezuela	11 600	11 809	10 815	12 232	6 991
Burma (a)	* 100	* 100	* 100	* 100	* 100
China (a)	247 500	275 000	285 000	313 980	340 880
India (e)	2 488	2 969	2 438	2 106	* 2 160
Indonesia	85 411	117 854	64 390	127 716	104 535
Iran (a)	850	850	* 850	* 850	* 850
Japan	8 904	8 869	6 868	7 708	8 544
Kazakhstan (a)	22 564	21 824	20 825	22 525	29 941
Korea (Rep. of)	277	162	175	274	235
Kyrgyzstan	10 301	10 559	18 132	17 130	18 464
Laos	6 068	4 161	4 333	5 021	5 138
Malaysia	3 496	2 913	2 490	2 794	3 765
Mongolia	21 267	17 473	15 184	9 803	6 037
Oman	358	248	118	93	82
Philippines	36 141	38 792	35 568	37 047	40 847
Saudi Arabia	5 182	4 438	4 527	4 857	4 477
Taiwan	2	3	4	34	111
Tajikistan	1 920	2 000	1 672	1 361	2 049
Thailand	3 470	3 401	2 721	5 400	5 300
Uzbekistan	76 620	72 850	* 73 000	* 73 000	* 73 000
Vietnam	* 3 000	* 3 000	* 3 000	* 3 000	* 3 000
Australia	247 000	247 000	215 000	223 000	260 000
Fiji	1 403	29	700	1 091	1 903
New Zealand	10 618	8 833	13 403	13 442	13 469
Papua New Guinea	58 349	57 549	67 466	68 173	66 901
Solomon Islands	20	93	141	130	130
World Total	2 360 000	2 350 000	2 290 000	2 464 000	2 540 000

Note(s)

- (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, Eritrea, Madagascar and Rwanda produce less than 100 kg gold per year
 - (3) Greece and Norway are believed to produce gold
- (a) Metal production
 - (b) Years ended 7 July of that stated
 - (c) Exports
 - (d) Contained in blister copper, refinery muds and electrolytic copper
 - (e) Years ended 31 March following that stated

Production of graphite

tonnes (metric)

Country	2006	2007	2008	2009	2010
Austria (a)	—	—	250	750	420
Bosnia & Herzegovina	...	...	272 084	133 819	45 079
Czech Republic	5 000	3 000	3 000	—	—
Norway	9 000	3 000	4 100	4 562	6 270
Romania	—	—	—	24 352	6 633
Russia	* 14 000	* 14 000	* 14 000	* 14 000	* 14 000
Turkey	—	—	3 236	2 400	* 2 000
Ukraine	5 800	* 8 000	* 8 000	* 8 000	* 8 000
Madagascar	5 500	5 400	4 900	3 400	3 800
Zimbabwe	6 588	5 418	5 134	2 463	988
Canada	15 000	15 000	20 000	* 7 000	* 20 000
Mexico	11 773	9 900	7 229	5 105	6 628
Brazil (b)	76 194	77 163	80 500	59 400	84 000
China (c)	1 730 000	1 800 000	* 1 800 000	* 1 800 000	* 1 800 000
India (a)(d)	162 293	170 813	117 767	108 606	* 98 800
Korea (Rep. of)	68	52	73	48	34
Korea, Dem. P.R. of	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Sri Lanka	5 756	9 593	6 615	3 171	3 437
World Total	2 100 000	2 200 000	2 400 000	2 200 000	2 100 000

Note(s)

- (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) Including flake graphite
(d) Years ended 31 March following that stated

Production of gypsum

tonnes (metric)

Country	2006	2007	2008	2009	2010
Armenia	43 700	54 600	45 900	40 100	* 40 000
Austria					
Gypsum	936 072	1 006 416	1 022 983	(a) 910 945	(a) 872 273
Anhydrite	135 380	57 428	64 276	...	...
Azerbaijan	35 034	22 037	27 898	44 413	48 887
Bosnia & Herzegovina (a)	131 936	154 294	150 039	74 302	64 570
Bulgaria	215 800	234 300	21 200	127 600	109 200
Croatia	170 351	170 721	* 250 000	318 139	248 675
Cyprus	270 000	330 000	412 000	317 000	333 000
Czech Republic	16 000	66 000	35 000	13 000	5 000
France (a)	* 4 800 000	* 4 800 000	2 339 380	3 351 339	4 500 000
Georgia	123	...	—	...	...
Germany (a)	1 771 000	1 898 000	2 112 000	1 898 000	1 822 000
Greece	900 000	836 967	(a) 1 000 000	(a) 730 000	(a)* 600 000
Hungary (a)	30 000	26 000	15 940	19 766	20 000
Ireland, Republic of	* 700 000	* 700 000	* 600 000	* 400 000	* 300 000
Italy	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000
Latvia (a)	330 000	346 000	349 000	175 870	176 510
Macedonia	267 760	255 500	242 400	154 550	* 150 000
Moldova (b)	725 900	* 800 000	* 700 000	* 200 000	* 300 000
Poland					
Gypsum	1 172 000	1 298 000	1 283 000	1 119 000	(a) 1 398 492
Anhydrite	181 000	194 000	198 000	158 000	...
Portugal	366 599	418 035	372 731	335 189	256 177
Romania	615 072	1 004 150	832 248	720 713	639 010
Russia	* 2 600 000	* 3 000 000	* 3 600 000	* 2 900 000	* 2 900 000
Serbia	* 42 000	* 42 000	* 42 000	* 42 000	* 42 000
Slovakia (a)	126 200	151 000	152 000	131 000	87 000
Spain	14 596 559	14 535 422	11 955 753	8 181 315	* 6 000 000
Switzerland	* 250 000	* 250 000	* 250 000	* 250 000	* 250 000
Turkey	4 369 771	3 241 177	7 338 127	4 369 589	* 4 400 000
Ukraine	375 900	741 580	1 160 910	711 490	678 610
United Kingdom	* 1 700 000	* 1 700 000	* 1 700 000	* 1 700 000	* 1 700 000
Algeria	1 033 107	1 198 303	1 671 651	1 756 781	1 609 605
Angola	—	—	—	120 000	200 000
Egypt (a)	* 3 300 000	3 085 000	2 400 000	1 035 300	84 000
Eritrea	634	874	* 800	* 800	* 800
Ethiopia (c)	38 809	29 886	32 989	* 30 000	* 30 000
Kenya	* 9 100	* 9 600	* 9 000	* 9 000	* 9 000
Libya	* 200 000	* 240 000	* 260 000	* 300 000	* 300 000
Madagascar	500	500	* 500	156	127
Mauritania	45 222	49 229	44 428	36 928	65 245
Morocco	* 600 000	* 600 000	* 600 000	* 600 000	* 600 000
Niger	13 043	4 615	8 661	19 737	7 559
Nigeria	169 370	579 000	* 380 000	* 160 000	—
Somalia	* 1 500	* 1 500	* 1 500	* 1 500	* 1 500
South Africa	554 020	643 630	571 343	597 571	513 310
Sudan	7 000	7 974	12 705	30 000	31 000
Tanzania	32 798	2 730	55 730	8 105	26 918
Tunisia	151 000	157 000	177 000	360 000	* 360 000
Uganda	121	168	84	* 100	* 100
Canada (a)	9 072 000	7 638 000	5 797 000	3 540 000	2 717 000
Cuba	72 500	80 200	110 000	77 800	111 300
Dominican Republic	354 241	320 683	369 592	77 201	* 77 000
El Salvador	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Guatemala	226 800	495 335	127 387	18 733	58 924
Honduras	* 5 500	* 5 500	* 5 500	* 5 500	* 5 500
Jamaica	364 432	227 697	238 274	156 877	147 143
Mexico	6 075 893	6 918 973	6 933 279	7 542 721	6 477 590
Nicaragua	42 191	43 300	49 900	37 400	20 300
USA	21 100 000	17 900 000	14 400 000	9 400 000	* 9 000 000

Production of gypsum

tonnes (metric)

Country	2006	2007	2008	2009	2010
Argentina	1 202 812	1 226 530	1 257 310	1 356 025	* 1 356 000
Brazil	1 711 671	1 923 119	3 100 000	3 500 000	4 000 000
Chile	845 331	773 119	773 749	723 928	758 011
Colombia	* 186 000	* 200 000	* 200 000	* 190 000	* 200 000
Ecuador	1 478	* —	* —	* —	* —
Paraguay	* 4 500	* 4 500	* 4 500	* 4 500	* 4 500
Peru	290 418	330 687	463 134	321 012	308 051
Afghanistan	...	...	44 180	42 120	57 243
Bhutan	204 198	189 198	248 445	299 735	306 867
Burma (d)	72 654	76 401	92 474	85 872	77 617
China	35 000 000	* 40 000 000	* 38 000 000	* 37 000 000	* 37 000 000
India (d)(e)	3 005 572	3 400 050	3 876 671	3 421 804	* 4 489 000
Indonesia	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Iran (f)	10 761 107	11 930 563	11 251 070	13 615 547	* 13 500 000
Iraq	...	1 285 000	1 279 000	5 026 495	8 276 733
Israel	110 754	82 974	9 975	9 152	99 730
Jordan	333 710	287 789	231 771	304 356	292 340
Kazakhstan	649 400	653 600	696 900	* 700 000	* 700 000
Laos	206 100	232 300	337 300	761 300	* 760 000
Mongolia	60 400	* 60 000	* 60 000	* 60 000	* 60 000
Oman	254 000	183 200	179 800	333 400	* 335 000
Pakistan (g)	601 027	624 120	660 473	800 084	853 590
Saudi Arabia	* 750 000	* 750 000	* 750 000	* 750 000	* 750 000
Sri Lanka	548	—	617	358	—
Syria	443 800	447 900	572 886	403 137	* 405 000
Tajikistan	...	51 000	45 000	26 400	14 600
Thailand					
Gypsum	8 354 901	8 643 391	8 500 401	8 631 797	10 172 629
Anhydrite	560 339	692 877	488 681	* 490 000	* 490 000
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	81 000	92 000	104 000	* 110 000	* 110 000
Australia (g)	4 264 900	3 896 100	3 615 188	3 302 006	* 3 268 000
World Total	153 000 000	158 300 000	151 100 000	139 300 000	140 700 000

Note(s)

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

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

Refinery production of indium

tonnes (metric)

Country	2006	2007	2008	2009	2010
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	* 10	* 4	* 4
United Kingdom	* 5	* 5	* 5	* 5	* 5
Canada	* 50	* 50	* 45	* 40	* 35
Brazil	...	...	...	* 5	* 5
Peru	* 6	* 5	6	* 25	* 25
China	* 400	* 370	* 340	* 280	* 300
Japan	* 55	* 60	* 65	* 67	* 70
Korea (Rep. of)	* 60	* 70	* 75	* 70	* 80

Production of iodine

kilograms

Country	2006	2007	2008	2009	2010
Azerbaijan	—	21 500	116 400	148 700	191 300
Russia	* 105 000	* 105 000	* 105 000	* 105 000	* 105 000
USA	* 1 220 000	* 1 200 000	* 1 200 000	* 1 250 000	* 1 250 000
Chile	16 494 000	15 473 000	15 503 000	17 399 000	15 793 000
China	* 560 000	* 570 000	* 570 000	* 580 000	* 590 000
Indonesia	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Japan	8 724 000	9 282 000	9 500 000	8 232 000	9 216 000
Turkmenistan	* 270 000	* 270 000	* 270 000	* 270 000	* 270 000
Uzbekistan	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
World Total	27 500 000	27 000 000	27 300 000	28 100 000	27 500 000

Production of iron ore

tonnes (metric)

Country	2006	2007	2008	2009	2010
Austria (a)	2 092 996	2 152 825	2 032 671	2 002 131	2 068 853
Azerbaijan	11 300	17 600	28 100	—	57 800
Bosnia & Herzegovina	3 439 587	2 943 963	2 667 359	2 727 452	1 401 000
Germany (b)(c)	416 000	421 711	455 100	363 699	390 353
Norway	620 000	630 000	746 000	896 000	3 105 000
Romania	122 684	8 157	—	—	—
Russia	102 000 000	105 000 000	99 900 000	92 000 000	95 500 000
Slovakia	583 000	570 000	392 000	—	—
Sweden	23 302 000	24 714 000	23 888 000	17 677 000	25 292 000
Turkey	3 251 969	4 549 556	3 990 110	4 169 972	5 188 197
Ukraine	74 000 000	77 930 000	72 688 000	66 452 000	78 541 000
United Kingdom	341	* 300	145	—	—
Algeria	2 339 637	1 982 101	2 077 000	1 307 000	1 474 279
Egypt	* 2 200 000	2 184 729	1 810 606	1 780 162	* 1 800 000
Mauritania	11 155 000	11 815 000	10 968 000	10 275 049	11 109 000
Morocco	35 500	47 958	22 878	30 523	44 665
Nigeria	88 180	57 900	62 000	99 424	50 000
South Africa (d)	41 326 036	42 100 887	48 982 537	55 313 053	58 709 330
Tunisia	217 300	180 600	108 300	151 200	162 300
Uganda	—	366	1 740	972	3 795
Zimbabwe	104 459	79 109	2 919	—	37
Canada (e)	34 094 000	33 158 000	32 102 000	31 699 000	37 001 000
Cuba	7 800	3 300	—	—	—
Guatemala	7 341	31 006	452	5 463	1 604
Mexico	14 568 000	16 540 000	17 709 000	17 693 000	21 210 000
USA	52 700 000	52 500 000	53 600 000	26 700 000	49 500 000
Brazil	317 800 229	354 674 378	351 200 000	331 000 000	372 300 000
Chile	8 629 000	8 817 700	9 315 580	8 242 300	9 129 500
Colombia	644 015	623 930	473 273	280 773	77 048
Peru	5 885 000	6 277 000	6 348 000	5 435 000	6 348 000
Venezuela	22 100 000	19 632 456	19 332 299	14 206 621	14 330 761
Bhutan	* 5 300	—	—	—	—
China	588 171 400	707 073 000	824 011 100	880 171 400	1 071 555 000
India (f)	187 696 000	213 246 000	212 960 000	218 639 000	208 111 000
Indonesia	5 489	—	—	—	—
Iran (g)	31 537 545	35 195 000	* 38 200 000	34 034 476	* 34 500 000
Iraq	...	40 000	3 000	—	* —
Kazakhstan	18 254 900	19 582 200	21 486 300	46 248 000	50 190 000
Korea (Rep. of)	227 437	290 802	365 883	455 405	512 642
Korea, Dem. P.R. of	5 041 000	5 126 000	5 316 000	4 955 000	* 5 000 000
Malaysia (g)	667 082	802 030	981 932	1 470 186	3 465 895
Mongolia	180 000	265 100	1 387 400	1 379 000	3 203 200
Pakistan (h)	131 259	125 879	286 255	320 214	402 224
Thailand	264 289	1 554 860	1 709 750	616 399	976 937
Vietnam	* 1 600 000	* 1 200 000	* 1 200 000	* 1 800 000	* 1 900 000
Australia	275 042 000	299 038 000	342 435 000	394 069 000	433 452 000
New Zealand	2 146 496	1 723 726	2 020 227	2 092 640	2 438 641
World Total	1 835 000 000	2 055 000 000	2 213 000 000	2 277 000 000	2 611 000 000

Note(s)

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

Production of pig iron

tonnes (metric)

Country	2006	2007	2008	2009	2010
Austria	5 547 000	5 908 000	5 795 000	4 353 000	5 621 000
Belgium	7 516 000	6 577 000	6 977 000	3 087 000	* 4 000 000
Bosnia & Herzegovina	—	—	243 000	482 469	620 935
Bulgaria	1 147 000	1 069 000	441 000	...	...
Czech Republic	5 192 000	5 287 000	4 737 000	3 483 000	3 987 000
Finland	3 157 894	2 915 130	2 942 946	2 042 000	2 564 000
France	12 873 900	12 425 703	11 371 879	8 104 318	10 136 827
Germany	30 940 000	31 700 000	29 105 000	20 104 000	28 560 000
Hungary	1 340 000	1 393 655	1 288 758	1 050 000	1 325 000
Italy	11 500 000	11 100 000	10 400 000	5 670 000	8 555 000
Netherlands	5 417 000	6 412 000	6 130 000	4 655 000	5 799 000
Norway	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Poland	5 332 632	5 804 418	4 933 781	2 983 500	3 637 995
Romania	3 945 975	3 923 244	2 957 715	1 576 679	1 723 418
Russia	55 022 000	51 500 000	48 300 000	43 900 000	48 200 000
Serbia	1 529 177	1 485 000	1 582 000	1 008 000	1 235 000
Slovakia	4 145 000	4 012 000	3 529 000	3 019 000	3 649 000
Spain	3 432 000	3 976 000	3 784 000	2 920 000	3 572 000
Sweden	3 701 000	3 947 000	3 708 000	1 966 000	3 447 000
Turkey	5 952 000	6 235 537	6 697 372	6 913 325	7 676 592
Ukraine	32 900 000	35 650 000	30 991 000	25 683 000	27 366 000
United Kingdom	10 695 700	10 959 800	10 136 800	7 671 100	7 233 000
Algeria	1 093 000	1 193 000	690 000	680 000	696 000
Egypt	4 200 000	3 786 000	3 543 000	3 851 000	3 565 000
Libya	1 633 000	1 660 000	1 569 000	1 077 000	1 270 000
South Africa	7 913 000	7 094 000	6 540 000	5 784 000	6 386 000
Zimbabwe	38 000	38 000	1 000	—	—
Canada	8 751 000	9 490 000	9 474 000	5 615 000	8 266 000
Mexico	9 956 777	10 343 007	10 461 858	8 065 305	9 948 195
Trinidad & Tobago	2 071 500	2 062 800	1 601 000	1 181 700	1 751 800
USA	37 903 000	36 337 000	33 729 000	19 018 000	26 843 000
Argentina	4 437 400	4 389 100	4 428 000	2 849 000	4 098 500
Brazil	32 452 000	35 571 000	34 871 000	25 135 000	30 898 000
Chile	1 115 000	1 147 000	1 109 000	923 000	635 000
Colombia	352 600	340 900	308 100	342 000	327 000
Paraguay	128 000	110 000	95 000	71 000	85 000
Peru	427 100	495 500	466 000	100 000	100 000
Venezuela	8 571 500	7 435 300	6 827 200	5 508 000	3 760 000
Burma	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
China	412 451 900	476 516 300	478 244 200	552 834 600	590 218 000
India	43 288 000	56 598 000	58 229 000	61 677 000	64 987 000
Indonesia	1 200 000	1 321 000	1 209 000	1 119 000	1 274 000
Iran	8 970 000	9 609 000	9 600 000	10 760 000	10 532 000
Japan	84 270 419	86 770 755	86 171 136	66 942 610	82 283 358
Kazakhstan	3 369 395	3 795 352	3 105 548	2 409 000	265 392
Korea (Rep. of)	27 559 407	29 436 783	31 042 782	27 474 604	31 228 209
Korea, Dem. P.R. of	* 250 000	* 250 000	* 250 000	* 250 000	* 250 000
Malaysia	1 277 000	1 872 000	1 958 000	2 388 000	2 390 000
Pakistan (a)	767 956	1 008 778	993 371	791 052	483 298
Qatar	876 885	1 296 000	1 637 778	2 096 282	2 156 993
Saudi Arabia	3 581 000	4 101 000	4 500 000	4 623 000	4 937 000
Taiwan	10 407 000	10 518 000	9 823 000	7 939 000	9 358 000
Vietnam	211 000	170 000	255 000	275 000	500 000
Australia	6 433 000	6 369 000	6 057 000	4 370 000	6 005 000
New Zealand	664 000	679 000	622 000	608 000	667 000
World Total	938 000 000	1 024 000 000	1 006 000 000	978 000 000	1 085 000 000

Note(s)

(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	2006	2007	2008	2009	2010
Albania	205 534	263 271	300 000	250 000	250 000
Austria	7 129 000	7 577 000	7 594 000	5 662 000	7 206 000
Azerbaijan	335 300	468 000	278 100	150 300	306 500
Belarus	2 135 651	2 214 019	2 478 131	2 329 694	2 530 829
Belgium	11 631 000	10 692 000	10 673 000	5 635 000	7 973 000
Bosnia & Herzegovina	469 122	513 867	587 878	495 150	590 757
Bulgaria	2 102 000	1 909 000	1 330 000	726 000	744 000
Croatia	80 516	76 252	121 759	54 266	103 429
Czech Republic	6 862 000	7 059 000	6 387 000	4 594 000	5 180 000
Finland	5 053 714	4 430 726	4 416 792	3 066 000	4 030 000
France	19 852 125	19 249 862	17 879 161	12 840 108	15 413 577
Germany	47 223 000	48 550 000	45 832 000	32 670 000	43 830 000
Greece	2 416 000	2 554 000	2 477 000	2 000 000	1 821 000
Hungary	2 084 000	2 227 000	2 097 000	1 403 000	1 678 000
Italy	31 624 000	31 506 000	30 590 000	19 848 000	25 750 000
Latvia	* 690 000	* 696 000	* 635 000	* 692 000	* 655 000
Luxembourg	2 802 000	2 858 000	2 582 000	2 141 000	2 548 000
Macedonia	326 484	370 317	344 866	299 332	291 000
Moldova (a)	784 000	965 000	885 000	380 000	240 000
Montenegro	193 165	173 849	201 623	90 404	48 272
Netherlands	6 372 000	7 368 000	6 853 000	5 193 000	6 651 000
Norway	684 000	708 000	560 000	595 000	520 000
Poland	9 991 638	10 630 716	9 727 325	7 128 482	7 993 025
Portugal	1 338 000	1 847 000	1 630 000	1 587 000	1 351 000
Romania	6 266 036	6 269 486	5 035 164	2 772 679	3 720 775
Russia	70 800 000	72 400 000	68 700 000	59 200 000	66 300 000
Serbia	1 630 000	1 478 000	1 662 000	1 061 000	1 254 000
Slovakia	5 093 000	5 082 000	4 489 000	3 747 000	4 580 000
Slovenia	628 000	638 000	642 000	430 000	606 000
Spain	18 391 000	18 998 000	18 640 000	14 358 000	16 343 000
Sweden	5 466 100	5 672 900	5 197 600	2 803 700	4 845 600
Switzerland	1 252 000	1 264 000	1 312 000	934 000	1 320 000
Turkey	23 307 523	25 760 889	26 809 050	25 303 741	29 029 789
Ukraine	40 892 000	43 646 655	38 136 117	30 301 844	33 345 586
United Kingdom	13 904 600	14 392 300	13 520 500	10 074 500	9 708 000
Algeria	1 158 000	1 278 000	646 000	543 000	688 000
Egypt	6 045 000	6 224 000	6 198 000	5 541 000	6 676 000
Libya	1 151 000	1 250 000	1 137 000	914 000	825 000
Morocco	314 000	512 000	478 000	479 000	455 000
Nigeria	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
South Africa	9 721 000	9 098 000	8 550 000	7 484 000	7 617 000
Tunisia	67 700	60 900	82 000	155 000	* 150 000
Zimbabwe	24 000	23 000	—	—	—
Canada	15 493 000	15 572 000	14 845 000	9 286 000	13 013 000
Cuba	258 206	263 568	275 584	267 752	279 040
Dominican Republic	* 81 000	* 75 000	* 68 000	* 67 000	* 66 000
El Salvador	72 000	73 000	71 000	56 000	51 000
Guatemala	292 000	349 000	250 000	224 000	272 000
Mexico	16 446 939	17 572 676	17 209 020	14 131 810	16 710 184
Trinidad & Tobago	673 000	694 600	489 600	417 000	571 600
USA	98 557 000	98 102 000	91 350 000	58 196 000	80 495 000
Argentina	5 532 700	5 387 600	5 541 400	4 013 000	5 138 500
Brazil	30 901 000	33 782 000	33 716 000	26 506 000	32 928 000
Chile	1 607 000	1 678 000	1 549 000	1 308 000	1 011 000
Colombia	1 211 000	1 245 000	1 053 000	1 053 000	1 213 000
Ecuador	86 400	87 100	128 000	259 000	372 000
Paraguay	115 000	95 000	82 800	54 000	59 000
Peru	896 000	881 000	1 001 000	718 000	880 000
Uruguay	56 700	71 100	85 700	57 000	65 000
Venezuela	4 692 800	5 005 300	4 224 500	3 808 000	2 207 000
Burma	* 25 000	* 25 000	* 25 000	* 25 000	* 25 000
China	419 148 500	489 288 000	503 057 500	572 182 300	626 959 000
India	49 450 000	53 468 000	57 791 000	63 527 000	68 321 000
Indonesia	3 759 000	4 160 000	3 915 000	3 501 000	3 664 000

Production of crude steel

tonnes (metric)

Country	2006	2007	2008	2009	2010
Iran	9 789 000	10 051 000	9 964 000	10 873 000	11 995 000
Israel	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Japan	116 226 201	120 202 937	118 739 328	87 534 137	109 598 507
Jordan	* 150 000	* 150 000	* 150 000	* 150 000	* 150 000
Kazakhstan	4 244 521	4 784 105	4 243 582	4 146 000	4 220 000
Korea (Rep. of)	48 455 454	51 517 309	53 322 000	48 572 000	58 912 000
Korea, Dem. P.R. of	* 300 000	* 300 000	* 300 000	* 250 000	* 250 000
Kuwait	* 500 000	* 500 000	* 500 000	* 500 000	* 500 000
Malaysia	5 834 000	6 895 000	6 423 000	5 354 000	5 694 000
Mongolia	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Pakistan	1 040 000	1 090 000	1 000 000	* 800 000	* 800 000
Philippines	558 000	718 000	711 000	824 000	825 000
Qatar	1 039 220	1 174 917	1 434 652	1 472 612	1 974 937
Saudi Arabia	3 974 000	4 644 000	4 667 000	4 690 000	5 015 000
Singapore	607 000	640 000	764 000	664 000	728 000
Syria	* 70 000	* 70 000	* 70 000	* 70 000	* 70 000
Taiwan	20 000 000	20 903 000	19 882 000	15 873 000	19 755 000
Thailand	4 914 000	5 565 000	5 211 000	3 646 000	4 145 000
United Arab Emirates	* 90 000	* 90 000	* 90 000	* 90 000	* 90 000
Uzbekistan	730 000	649 000	682 000	716 000	716 000
Vietnam	1 869 000	2 024 000	2 250 000	2 700 000	4 314 000
Australia	7 937 000	8 057 000	7 724 000	5 135 000	7 296 000
New Zealand	810 000	845 000	799 000	765 000	853 000
World Total	1 247 000 000	1 348 000 000	1 334 000 000	1 231 000 000	1 418 000 000

Note(s)

(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	2006	2007	2008	2009	2010
Albania					
Ferro-chrome	13 230	920	16 310	14 000	17 000
Armenia					
Ferro-molybdenum	* 4 900	5 977	5 323	5 154	5 126
Austria					
Ferro-molybdenum	5 000	5 000	4 500	4 000	4 000
Ferro-nickel	2 500	3 000	2 000	2 500	2 500
Ferro-vanadium	6 250	6 500	6 300	6 200	8 000
Bulgaria					
Ferro-silicon	* 10 000	* 10 000	6 260	* 2 600	* 2 000
Czech Republic					
Ferro-vanadium	* 2 800	* 1 700	* 2 800	* 1 900	* 3 400
Finland					
Ferro-chrome	243 350	241 760	233 550	123 310	238 000
France					
Ferro-manganese & spiegeleisen	139 533	98 066	* 100 000	* 100 000	* 100 000
Ferro-silico-manganese	63 300	* 65 400	* 60 200	* 54 100	* 54 000
Ferro-silicon	* 67 000	* 71 000	* 25 000	* 25 000	* 25 000
Silicon metal	* 85 000	* 85 000	* 85 000	* 51 000	* 51 000
Georgia					
Ferro-manganese	5 130	* 5 000	* 5 000	* 4 500	* 4 500
Ferro-silico-manganese	116 945	107 986	123 468	112 016	203 464
Germany					
Ferro-chrome	26 710	22 030	26 960	13 667	...
Other ferro-alloys	* 24 100	* 5 000	* 5 000	—	—
Silicon metal	29 865	29 379	29 092	27 620	30 105
Greece					
Ferro-nickel	* 89 000	93 300	83 200	41 300	* 40 000
Iceland					
Ferro-silicon	113 798	114 886	107 882	112 992	114 230
Italy					
Ferro-manganese	* 30 000	* 30 000	* 30 000	* 20 000	* 25 000
Ferro-silico-manganese	96 600	87 000	87 000	56 000	108 000
Macedonia					
Ferro-nickel	10 942	15 321	15 026	12 000	* 11 000
Ferro-silicon	59 023	78 892	97 605	7 657	...
Norway					
Ferro-manganese	* 130 000	* 130 000	* 130 000	* 130 000	* 130 000
Ferro-silico-manganese	325 708	293 699	273 485	* 250 000	* 250 000
Ferro-silicon	123 819	170 024	185 344	233 974	* 235 000
Other ferro-alloys	* 60 000	* 62 000	* 60 000	* 60 000	* 60 000
Silicon metal	* 150 000	* 140 000	* 155 000	* 150 000	* 150 000
Poland					
Ferro-manganese	4 089	2 093	8 475	1 736	762
Ferro-silico-manganese	3 310	15 590	25 061	72	112
Ferro-silicon	13 034	58 538	56 031	9 673	53 206
Other ferro-alloys	4 488	6 255	2 948	4 190	197
Romania					
Ferro-chrome	—	—	6 179	15 377	14 353
Ferro-manganese	3 777	—	—	—	—
Ferro-silico-manganese	66 476	26 868	9 979	—	20 605
Russia					
Pig iron & spiegeleisen	7 500	7 136	7 000	5 000	* 6 000
Spiegeleisen	* 7 000	* 7 000	* 7 000	* 7 000	* 7 000
Ferro-chrome	500 837	564 474	475 686	235 600	...
Ferro-silico-chrome	92 404	97 915	72 050	8 285	...
Ferro-manganese	* 130 000	* 120 000	* 110 000	* 110 000	* 110 000
Ferro-silico-manganese	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
Ferro-nickel	* 29 085	* 26 031	* 39 503	* 40 000	* 40 000
Ferro-silicon	882 300	896 100	* 850 000	* 850 000	* 850 000
Other ferro-alloys	* 33 000	* 34 000	* 34 000	* 34 000	* 34 000
Silicon metal	* 58 000	* 54 500	* 54 000	* 54 000	* 54 000
Slovakia					
Ferro-chrome	19	—	—	—	—
Ferro-silico-manganese	59 128	71 587	59 940	32 000	...
Ferro-silicon	16 155	8 583	10 844	4 600	...
Other ferro-alloys	65 498	74 065	61 194	22 250	...

Production of ferro-alloys

tonnes (metric)

Country	2006	2007	2008	2009	2010
Slovenia					
Ferro-silicon	12 550	* 6 000	* —	* —	* —
Spain					
Ferro-manganese	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Ferro-silico-manganese	* 100 000	* 100 000	* 30 000	* 30 000	* 30 000
Ferro-silicon	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Silicon metal	* 25 000	* 25 000	* 25 000	* 25 000	* 25 000
Sweden					
Ferro-chrome	136 400	124 400	118 700	31 100	64 400
Ferro-silicon	4 600	4 300	—	—	—
Turkey					
Ferro-chrome	67 975	69 730	75 840	41 028	...
Ferro-silico-chrome	7 310	6 624	6 094	2 903	...
Ukraine					
Spiegeleisen	* 5 000	—	—	—	—
Pig iron & spiegeleisen	35 000	35 000	35 000	35 000	35 000
Ferro-manganese	373 000	368 321	361 501	135 339	285 643
Ferro-silico-manganese	1 168 000	1 281 073	958 667	771 950	1 000 329
Ferro-nickel	* 90 000	95 619	97 848	76 487	102 940
Ferro-silicon	169 000	218 485	201 706	193 034	253 801
Other ferro-alloys	133 402	53 174	43 127	23 882	28 546
Egypt					
Ferro-silicon (a)	50 000	48 464	59 192	78 355	* 70 000
Other ferro-alloys (a)	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Gambia					
Pig iron & spiegeleisen	410	355	—	—	—
Madagascar					
Pig iron & spiegeleisen	—	—	—	* 8 000	* 8 000
Mozambique					
Pig iron & spiegeleisen	...	26 347	32 985	21 100	37 100
South Africa					
Pig iron & spiegeleisen	414 400	388 800	404 000	392 000	381 000
Ferro-chrome	2 893 400	3 551 983	3 268 659	2 341 754	2 346 132
Ferro-manganese	* 600 000	* 672 000	* 498 000	* 265 000	* 517 000
Ferro-silico-manganese	* 350 000	* 355 000	* 263 000	* 140 000	* 273 000
Ferro-silicon	* 140 000	* 140 000	* 137 000	* 110 000	* 128 000
Ferro-vanadium	* 18 000	* 19 000	* 19 000	* 13 000	* 19 000
Silicon metal	* 50 000	* 50 108	* 49 146	* 39 000	* 46 000
Zimbabwe					
Ferro-chrome	200 673	187 327	145 430	72 223	146 378
Ferro-silicon	1 024	3 097	1 612	603	—
Canada					
Ferro-niobium	6 298	6 571	6 644	* 6 000	* 6 000
Ferro-silicon	* 70 000	* 70 000	* 70 000	* 70 000	* 70 000
Silicon metal	* 30 000	* 30 000	* 30 000	* 53 000	* 59 000
Dominican Republic					
Ferro-nickel	76 659	75 069	47 408	—	* —
Mexico					
Ferro-manganese	64 318	74 578	97 366	42 492	81 019
Ferro-silico-manganese	97 457	109 286	114 320	85 065	134 470
USA					
Pig iron & spiegeleisen	143 000	121 000	122 000	100 000	110 000
Ferro-silicon	253 000	271 000	287 000	245 000	280 000
Silicon metal	* 148 000	* 150 000	* 150 000	* 150 000	* 150 000

Production of ferro-alloys

tonnes (metric)

Country	2006	2007	2008	2009	2010
Argentina					
Ferro-silico-manganese	9 268	8 917	9 172	6 644	* 6 600
Ferro-silicon	* 24 400	* 15 000	* 10 400	* 11 300	* 11 300
Brazil					
Pig iron & spiegeleisen	25 120	26 739	25 300	34 200	* 37 000
Ferro-chrome	158 585	177 656	209 273	108 893	...
Ferro-silico-chrome	8 221	12 943	13 674	1 750	13 100
Ferro-silico-magnesium	31 314	30 221	30 800	18 300	33 600
Ferro-manganese	61 434	135 757	149 900	44 600	87 150
Ferro-silico-manganese	198 753	225 373	238 000	109 500	218 650
Ferro-nickel	27 600	28 900	26 300	31 600	23 850
Ferro-niobium	60 826	71 676	81 600	48 900	77 250
Ferro-silicon	196 814	196 403	183 000	175 000	247 300
Other ferro-alloys	44 280	45 330	47 800	21 200	36 650
Silicon metal	226 380	225 120	219 600	154 000	184 150
Colombia					
Ferro-nickel	154 420	145 282	126 638	153 628	145 239
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	75 313	68 506	42 300	40 113	* 39 000
Ferro-silicon	* 92 000	* 92 000	* 92 000	* 83 000	* 83 000
Bhutan					
Ferro-silicon	* 20 000	* 21 000	* 36 600	* 34 000	* 34 000
China					
Pig iron & spiegeleisen	135 000	140 000	140 000	130 000	140 000
Ferro-chrome	1 042 500	1 296 000	1 505 800	1 813 000	...
Ferro-silico-chrome	35 000	38 700	72 300	116 000	...
Other ferro-alloys	13 223 000	16 165 000	16 722 000	20 171 000	...
Silicon metal	* 900 000	* 950 000	* 980 000	* 950 000	* 950 000
India					
Pig iron & spiegeleisen	20 535	35 977	29 158	* 29 000	* 29 000
Ferro-aluminium (b)	9 947	9 377	8 170	7 017	7 600
Ferro-chrome (b)	801 368	948 601	817 239	892 923	1 032 000
Ferro-silico-magnesium (b)	11 387	13 525	13 400	17 132	18 500
Ferro-manganese (b)	296 726	391 210	384 577	356 123	404 000
Ferro-silico-manganese (b)	782 962	911 402	891 458	1 116 047	1 299 000
Ferro-molybdenum (b)	3 120	2 899	2 162	2 822	3 050
Ferro-silicon (b)	92 632	83 716	99 595	97 682	117 000
Ferro-titanium (b)	1 761	1 937	1 661	1 929	2 100
Ferro-vanadium (b)	1 139	1 585	1 501	1 389	1 500
Other ferro-alloys (b)	409	362	541	569	610
Indonesia					
Pig iron & spiegeleisen	65 000	111 000	65 000	63 000	50 000
Ferro-manganese	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
Ferro-silico-manganese	* 5 000	* 6 000	* 7 000	* 7 000	* 7 000
Ferro-nickel	14 774	18 532	17 566	12 550	18 688
Iran					
Ferro-chrome (c)	* 8 000	* 8 000	* 8 000	* 8 000	* 8 000
Ferro-silicon (c)	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Japan					
Ferro-chrome	13 056	12 016	13 888	7 698	16 208
Ferro-manganese	406 162	420 151	431 181	361 375	453 265
Ferro-silico-manganese	59 424	52 901	58 884	49 205	49 865
Ferro-molybdenum	4 229	4 573	4 554	3 598	4 615
Ferro-nickel	335 884	351 503	301 361	284 884	348 420
Ferro-vanadium	2 042	3 205	3 477	2 560	4 190
Other ferro-alloys	13 123	13 982	14 478	12 957	16 374
Kazakhstan					
Ferro-chrome	1 190 673	1 307 536	1 220 315	977 235	1 189 593
Ferro-silico-chrome	117 607	145 685	133 828	51 576	144 936
Ferro-silico-manganese	218 323	188 445	179 939	181 776	203 778
Ferro-silicon	85 924	59 886	54 964	30 028	4 456
Other ferro-alloys	1 787	1 222	1 473	1 205	1 283
Korea (Rep. of)					
Ferro-manganese	169 202	209 321	251 125	...	...
Ferro-silico-manganese	94 119	105 607	76 184	...	...

Production of ferro-alloys

tonnes (metric)

Country	2006	2007	2008	2009	2010
Korea, Dem. P.R. of					
Ferro-alloys	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Malaysia					
Pig iron & spiegeleisen	1 690	7 393	984	1 145	1 261
Sri Lanka					
Pig iron & spiegeleisen	8 321	381	1 447	10 267	9 200
Thailand					
Pig iron & spiegeleisen	—	1 023	—	—	—
Vietnam					
Pig iron & spiegeleisen	* 27 000	* 22 000	* 24 000	* 8 000	* 8 000
Australia					
Pig iron & spiegeleisen	491 000	600 000	528 000	431 000	540 000
Ferro-manganese (a)	114 715	133 816	128 000	...	...
Ferro-silico-manganese (a)	103 207	105 800	126 000	...	...
Ferro-manganese & ferro-silico-manganese (a)	..	...	...	212 000	219 000
Silicon metal	* 33 000	* 33 000	* 33 000	* 33 000	* 33 000
New Caledonia					
Ferro-nickel	180 724	170 870	148 960	156 553	165 506

Note(s)

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

Production of kaolin

tonnes (metric)

Country	2006	2007	2008	2009	2010
Albania	579 200	1 097 000	648 760	796 241	730 900
Austria	17 431	16 929	16 460	18 148	18 914
Belgium	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Bosnia & Herzegovina	69 643	188 033	259 325	148 384	41 808
Bulgaria	* 240 000	* 240 000	* 220 000	* 140 000	* 190 000
Czech Republic (a)	673 000	682 000	664 000	488 000	636 000
France	* 300 000	307 253	335 520	350 000	350 000
Germany (b)	3 815 173	3 842 514	3 622 159	4 513 753	4 578 097
Greece	* 40 000	30 000	4 360	—	—
Hungary	1 350	2 136	—	—	—
Italy	* 180 000	* 180 000	* 180 000	* 180 000	* 180 000
Poland (c)	148 579	153 670	165 615	136 561	126 810
Portugal	167 792	183 598	217 434	274 925	284 715
Romania	11 063	7 576	3 060	651	326
Russia	* 45 000	* 45 000	* 45 000	* 45 000	* 45 000
Serbia	214 735	97 432	398 917	163 616	156 672
Slovakia	58 000	46 000	44 000	10 000	—
Spain (c)	476 327	489 428	355 739	270 298	250 820
Turkey	* 600 000	456 238	232 746	234 614	711 493
Ukraine (a)	251 000	244 000	240 000	* 100 000	* 100 000
United Kingdom	1 762 328	1 671 426	1 355 365	1 059 848	* 1 000 000
Algeria	32 523	106 567	50 788	87 766	71 065
Egypt	* 400 000	331 671	523 327	523 300	304 200
Eritrea	129	183	* 200	* 175	* 175
Ethiopia (d)	1 641	4 000	1 300	1 613	* 1 500
Kenya	810	910	940	* 1 000	* 1 000
Madagascar	...	...	...	90	259
Nigeria	96 590	* 100 000	* 100 000	* 100 000	* 100 000

Production of kaolin

tonnes (metric)

Country	2006	2007	2008	2009	2010
South Africa	51 602	51 218	39 506	31 048	29 929
Sudan	11 641	27 846	87 151	36 799	32 696
Tanzania	—	1 020	13 926	18 624	42 649
Uganda	—	8 152	3 738	4 721	27 237
Cuba	1 700	2 000	—	—	100
Guatemala	4 395	28 225	2 803	1 879	2 143
Mexico	961 800	970 598	690 366	406 421	516 850
USA (e)	7 470 000	7 110 000	6 750 000	5 290 000	* 5 700 000
Argentina	49 619	69 354	73 838	78 792	* 80 000
Brazil (a)	2 455 000	2 480 000	2 667 000	1 987 000	* 2 400 000
Chile	44 642	87 901	63 526	48 354	62 226
Ecuador	11 504	18 618	13 000	* 13 000	* 13 000
Paraguay	* 66 000	* 66 000	* 66 000	* 66 000	* 66 000
Peru	5 049	4 772	13 215	9 655	16 446
Venezuela	...	238	1 896	300	9 444
Bangladesh (f)	19 766	* 20 000	* 20 000	* 20 000	* 20 000
China	3 270 000	2 781 000	* 3 000 000	* 3 000 000	* 3 000 000
India (g) (h)	273 262	115 139	96 344	81 885	* 72 700
Indonesia	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Iran (i)	803 270	947 884	1 274 092	907 487	* 1 000 000
Iraq	...	3 545	1 524	1 980	2 606
Japan	* 12 000	* 12 000	* 12 000	* 12 000	* 12 000
Jordan	112 787	100 584	181 018	177 471	114 931
Korea (Rep. of)	958 836	1 053 576	1 182 199	890 157	962 275
Malaysia	341 223	587 508	506 462	487 632	530 331
Pakistan (f)	53 051	30 979	31 512	17 169	22 769
Philippines	2 232	2 200	2 391	2 389	2 490
Saudi Arabia	3 957	4 415	5 560	4 166	* 4 200
Sri Lanka	10 914	11 178	10 039	9 538	8 207
Taiwan	4 107	5 060	33 745	18 413	18 097
Thailand (a)	157 900	159 186	162 215	* 280 000	* 250 000
Uzbekistan (g)	* 150 000	* 150 000	* 150 000	* 150 000	* 150 000
Vietnam	* 650 000	* 650 000	* 650 000	* 650 000	* 650 000
Australia (f)	182 304	213 605	181 655	109 400	104 708
New Zealand	14 864	14 130	12 761	9 016	107 761
World Total	28 700 000	28 700 000	28 000 000	24 700 000	26 200 000

Note(s)

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

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

Mine production of lead

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Bosnia & Herzegovina	1 152	4 633	6 029	3 781	5 811
Bulgaria (a)	19 571	17 768	14 577	12 981	12 705
Greece	11 400	13 400	14 000	10 000	12 200
Ireland, Republic of	61 800	56 800	50 200	* 49 500	39 100
Italy	6 000	3 000	3 000	2 000	3 000
Kosovo (a)	—	—	6 076	6 737	7 657
Macedonia	11 531	36 039	49 877	46 788	41 300
Poland	77 450	61 330	67 070	62 910	44 200
Romania	6 269	784	—	—	—
Russia	34 000	48 000	60 000	72 000	97 000
Serbia	1 400	1 600	1 600	1 800	1 800
Spain	—	—	—	1 000	300
Sweden	55 644	63 224	63 489	69 293	67 697
Turkey	11 000	20 800	31 800	21 600	39 000
United Kingdom	* 400	* 300	* 300	243	251
Morocco	41 300	42 200	33 477	34 500	32 700
Namibia	11 830	10 543	14 062	10 129	10 140
Nigeria	1 300	4 500	6 000	5 200	3 300
South Africa	48 273	41 857	46 440	49 149	50 625
Canada	83 096	75 135	99 810	68 839	64 859
Guatemala	28	363	—	—	—
Honduras	11 775	10 215	12 545	14 471	16 954
Mexico	135 025	137 133	141 173	143 838	192 062
USA	429 300	444 300	410 100	405 800	369 000
Argentina	12 064	17 045	20 788	24 753	22 600
Bolivia	11 955	22 798	81 602	84 538	72 803
Brazil	16 007	15 522	15 000	9 000	* 10 000
Chile	672	1 305	3 985	1 511	695
Peru	313 332	329 154	345 109	302 459	261 978
Burma	* 2 000	* 1 000	* 1 000	* 5 000	* 6 000
China	1 331 000	1 402 000	1 402 700	1 604 100	1 851 000
India (b)	67 363	77 717	80 756	84 025	* 83 900
Iran (c)	30 000	31 864	26 905	39 254	* 40 000
Japan	800	—	—	—	—
Kazakhstan	48 100	40 200	38 800	34 000	35 000
Korea (Rep. of)	17	12	225	1 032	584
Korea, Dem. P.R. of	* 25 000	* 35 000	* 33 000	* 25 000	* 26 000
Saudi Arabia	...	123	347	685	500
Thailand	—	—	* 5 000	* 3 000	—
Vietnam	* 9 500	* 4 400	* —	6 000	3 700
Australia	668 000	641 000	650 000	566 000	712 000
World Total	3 600 000	3 700 000	3 800 000	3 900 000	4 200 000

Note(s)

(a) Metal content of ore

(b) Years ended 31 March following that stated

(c) Years ended 20 March following that stated

Production of refined lead

tonnes (metric)

Country	2006	2007	2008	2009	2010
Austria	* 22 000	* 22 000	* 22 000	* 22 000	* 22 000
Belgium	101 000	117 000	104 000	109 000	121 000
Bulgaria	76 000	87 000	90 900	83 100	80 600
Czech Republic	29 000	34 000	36 000	29 000	30 000
Estonia	9 000	10 000	10 000	10 000	* 10 000
France	88 000	* 88 000	82 100	62 000	71 000
Germany	379 000	355 000	415 100	781 200	405 400
Greece	6 000	11 000	11 000	* 11 000	* 11 000
Ireland, Republic of	21 700	22 500	20 000	19 000	19 000
Italy	190 500	211 800	199 900	149 000	150 000
Kosovo	—	—	—	4 250	4 300
Netherlands	* 16 000	* 16 000	* 16 000	* 17 000	* 16 000
Poland	82 200	104 200	108 300	100 400	120 300
Portugal	3 000	5 000	5 000	4 000	4 000
Romania	34 133	39 369	39 596	8 687	11 263
Russia	80 000	103 000	112 000	90 000	89 000
Slovenia	15 000	15 000	15 000	14 000	14 000
Spain	129 000	128 000	145 000	138 000	163 000
Sweden	70 239	69 730	56 812	51 574	59 179
Switzerland	* 9 000	* 9 000	* 8 000	800	—
Turkey	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Ukraine	56 300	62 100	54 700	60 600	71 500
United Kingdom	318 703	263 391	283 000	301 865	297 453
Algeria	5 000	6 000	6 000	6 000	9 000
Kenya	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Morocco	45 000	45 000	37 400	20 100	38 200
Nigeria	* 5 000	* 8 000	* 8 000	* 8 000	* 8 000
South Africa	67 000	59 000	62 000	58 000	58 000
Zambia	500	500	500	500	500
Canada	250 464	236 688	259 074	258 854	272 878
El Salvador	10 000	10 000	11 000	12 000	11 000
Mexico	232 300	198 293	206 364	200 410	225 980
USA (a)	1 303 000	1 303 000	1 280 500	1 214 100	1 256 000
Argentina	49 064	60 600	62 500	83 000	89 700
Brazil (b)	142 653	142 450	95 704	104 000	112 000
Colombia	10 000	10 000	10 000	10 000	10 000
Peru	120 311	116 774	114 259	26 082	* —
Venezuela	* 36 000	* 36 000	* 37 000	* 36 000	* 36 000
Burma	500	200	200	* 200	* 200
China	2 714 900	2 788 300	3 451 800	3 772 900	4 199 400
India	114 000	239 000	274 000	307 000	325 000
Indonesia	18 000	18 000	18 000	18 000	18 000
Iran	74 000	78 000	75 000	72 000	75 000
Israel	25 000	25 000	27 000	26 000	27 000
Japan	280 000	276 300	279 500	247 700	267 200
Kazakhstan	115 974	117 641	105 766	73 480	93 800
Korea (Rep. of)	240 000	260 000	273 000	297 000	321 000
Korea, Dem. P.R. of	8 000	7 000	6 000	5 000	5 000
Malaysia	44 000	17 000	39 000	54 000	26 000
Pakistan	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Philippines	* 30 000	* 34 000	* 34 000	* 32 000	* 30 000
Saudi Arabia	38 000	37 000	38 000	37 000	38 000
Taiwan	42 000	36 000	38 000	36 000	35 000
Thailand	61 160	73 159	73 303	55 504	71 020
United Arab Emirates	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000

Production of refined lead

tonnes (metric)

Country	2006	2007	2008	2009	2010
Australia	241 000	239 000	260 000	234 000	210 000
New Zealand	* 11 000	* 11 000	* 11 000	* 11 000	* 11 000
World Total	8 100 000	8 300 000	9 000 000	9 400 000	9 700 000

Note(s)

(1) Figures relate to both primary and secondary refined lead and include the lead content of antimonial lead. Metal recovered from materials by remelting alone is excluded

(a) Excluding lead content of primary antimonial lead

(b) Including scrap for direct use

Production of lithium minerals

tonnes (metric)

Country	2006	2007	2008	2009	2010
Portugal					
Lepidolite	28 497	34 755	34 888	37 359	40 609
Spain					
Lepidolite	8 339	10 326	9 342	4 270	* 5 000
Canada	* 22 500	* 23 000	* 22 000	* 10 000	* 10 000
USA (a)	* 1 500	* 1 500	* 1 500	* 1 500	* 1 600
Argentina (b)(c)	16 564	17 691	17 784	12 500	* 15 500
Brazil					
Spodumene	8 585	7 991	14 460	15 929	* 17 000
Chile (b)	50 035	59 637	56 881	30 538	52 851
China	* 37 000	* 38 000	* 40 000	* 41 000	* 43 000
Australia					
Spodumene	222 101	245 279	239 528	197 482	303 729
World Total (Li content)	18 300	20 700	20 300	13 800	20 100

Note(s)

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

(a) Li content

(b) Carbonate

(c) Chloride

Production of magnesite

tonnes (metric)

Country	2006	2007	2008	2009	2010
Austria	769 188	811 556	837 476	544 716	757 063
Greece	463 277	351 414	361 165	380 834	396 497
Netherlands (a)	293 006	* 245 000	316 264	183 256	236 053
Poland	62 500	65 000	60 000	47 000	63 000
Russia	* 2 600 000	* 2 600 000	* 2 600 000	* 2 600 000	* 2 600 000
Slovakia	941 100	957 000	806 500	477 600	650 100
Spain	520 646	463 850	* 440 700	* 434 000	* 460 000
Turkey	2 088 033	1 984 908	2 143 047	861 180	* 1 000 000
South Africa	73 300	80 700	83 900	* 80 000	* 80 000
Zimbabwe	939	1 814	2 549	449	—
Canada (b)	* 140 000	* 140 000	* 140 000	* 140 000	* 150 000
Guatemala	1 084	7 612	11 757	17 247	—
Brazil (c)	382 718	399 314	421 300	410 000	439 500
Colombia	40 000	42 000	38 000	* —	* —
China	13 640 000	* 14 000 000	* 15 600 000	* 13 000 000	* 14 000 000
India (d)	238 981	252 849	252 880	286 383	* 239 000
Iran (e)	187 764	112 229	115 987	130 575	* 130 000
Israel	...	(g) 103 023	(g) 108 852	(g) 132 636	(g) 135 930
Korea, Dem. P.R. of	* 60 000	* 55 000	* 150 000	* 150 000	* 150 000
Pakistan (f)	2 446	3 445	3 940	2 639	4 409
Philippines	3 630	3 600	3 976	3 872	4 186
Australia (f)	482 027	343 424	147 698	366 188	* 295 000
World Total	23 100 000	23 000 000	24 600 000	20 000 000	21 800 000

Note(s)

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

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

Production of primary magnesium metal

tonnes (metric)

Country	2006	2007	2008	2009	2010
Russia	* 35 000	* 33 000	* 30 000	* 30 000	* 30 000
Ukraine	2 000	2 000	* 2 000	* 2 000	* 2 000
Canada	* 45 000	* 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	525 600	659 300	630 700	501 800	653 800
India	* 200	* 200	* 200	* 200	* 200
Israel	24 581	29 168	32 051	19 405	23 309
Kazakhstan (a)	21 000	* 21 000	* 21 000	* 21 000	* 21 000

Note(s)

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

Production of manganese ore

tonnes (metric)

Country	2006	2007	2008	2009	2010
Bulgaria	20 500	27 900	39 100	28 300	106 000
Georgia (a)	328 643	368 394	...	...	...
Hungary	50 000	51 000	49 579	43 000	55 000
Romania	60 107	49 350	43 590	20 304	13 120
Ukraine (a)	1 606 000	1 720 000	1 447 000	* 1 000 000	* 1 450 000
Egypt	16 500	13 000	7 320	3 300	11 490
Gabon	2 978 972	3 333 800	3 250 000	2 000 000	3 200 000
Ghana	1 658 701	1 167 339	1 089 025	1 012 941	1 194 074
Ivory Coast	56 829	80 402	148 120	* 150 000	* 150 000
Morocco	2 500	41 628	102 285	51 788	75 614
Namibia	18 918	47 620	28 237	51 471	35 728
South Africa					
Metallurgical	5 201 162	5 982 190	6 798 187	4 564 855	7 156 338
Chemical	12 176	12 950	9 327	10 911	15 407
Sudan	—	400	—	500	378 990
Mexico	344 662	418 342	477 147	330 328	466 649
Brazil	3 128 000	1 866 000	2 400 000	2 300 000	2 600 000
Chile	37 169	26 808	5 096	1 642	—
China	* 8 000 000	* 10 000 000	* 11 000 000	* 12 000 000	* 14 000 000
India (b)	2 115 507	2 696 980	2 789 025	2 439 899	2 890 753
Iran (c)	70 471	103 441	115 199	125 506	* 125 000
Kazakhstan	2 531 100	2 482 000	2 485 000	2 457 400	1 094 000
Malaysia	6 500	56 500	536 675	468 963	899 703
Thailand	1 000	9 500	111 000	64 930	50 450
Australia	4 567 000	5 289 000	4 819 000	4 444 000	6 470 000
World Total	32 800 000	35 800 000	38 100 000	33 900 000	42 800 000

Note(s)

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

(a) Marketable

(b) Years ended 31 March following that stated

(c) Years ended 20 March following that stated

Production of mercury

kilograms

Country	2006	2007	2008	2009	2010
Finland	22 820	45 195	33 120	6 210	9 000
Russia	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Morocco	18 800	17 900	17 400	* 18 000	* 20 000
Mexico	* 8 000	21 355	58 482	36 696	25 519
USA	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Argentina	—	3 483	1 027	9 468	* 1 000
Chile (a)	* 50 000	* 50 000	* 50 000	* 88 000	* 176 000
China	759 000	798 000	1 333 000	1 424 000	1 585 000
Kyrgyzstan	* 250 000	* 250 000	* 250 000	* 250 000	* 250 000
Tajikistan	* 30 000	* 30 000	* 30 000	19 100	* 15 000
World Total	1 200 000	1 300 000	1 800 000	1 900 000	2 100 000

Note(s)

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

(a) From copper solvent extraction and electrowinning processes

Production of mica

tonnes (metric)

Country	2006	2007	2008	2009	2010
Finland	8 097	11 449	10 706	* 10 000	* 10 000
France (a)	* 20 000	* 20 000	* 20 000	8 000	8 000
Russia	* 11 000	* 12 000	* 10 000	* 9 000	* 9 000
Serbia	* 140	* 140	* 140	* 140	* 140
Spain (a)	4 496	5 569	4 254	* 3 655	* 6 800
Turkey	—	3 313	8 392	4 172	...
Egypt	...	200	50	* 50	* 50
Madagascar	1 071	1 349	1 233	358	* 400
South Africa	828	419	393	299	904
Sudan	...	...	66	100	10
Canada	* 17 500	* 18 000	* 17 000	* 15 000	* 15 500
Mexico	150	9 600	5 000	5 000	160
USA (a)(b)	110 000	97 000	84 000	* 90 000	* 90 000
Argentina	6 223	10 171	8 790	8 668	* 8 500
Brazil	4 000	4 000	4 000	4 200	* 4 200
China (c)	* 94 000	* 93 000	* 139 000	* 91 000	* 126 000
India (d)	1 411	1 242	1 462	1 213	* 1 220
Iran (e)	4 440	1 800	1 510	6 797	* 7 000
Korea (Rep. of) (f)	30 356	42 385	49 474	27 078	36 486
Malaysia (g)	5 152	6 118	5 593	4 324	4 415
Sri Lanka	2 600	3 224	2 364	2 347	2 095
Taiwan	4 841	3 387	3 179	557	—
World Total	330 000	340 000	380 000	290 000	330 000

Note(s)

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

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

Mine production of molybdenum

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Armenia	4 090	4 385	4 472	4 365	4 377
Russia	* 4 800	* 4 800	* 4 800	* 4 800	* 4 800
Canada	7 723	6 681	8 602	8 721	8 261
Mexico	2 519	6 491	7 812	10 167	10 849
USA	59 800	57 000	55 900	47 800	* 56 000
Argentina	—	—	228	1 148	468
Chile	43 158	44 775	33 639	34 786	37 044
Peru	17 209	16 787	16 721	12 297	16 963
China	* 43 900	* 67 700	* 81 000	* 93 500	* 100 000
Iran (a)	3 574	8 933	6 597	7 058	* 7 000
Kazakhstan	400	800	* 800	* 800	* 800
Kyrgyzstan	* 250	* 250	* 250	* 250	* 250
Mongolia	1 404	1 978	1 900	2 410	2 198
Uzbekistan	* 600	* 600	* 500	* 550	* 550
World Total	189 000	221 000	223 000	229 000	250 000

Note(s)

(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	2006	2007	2008	2009	2010
Norway	312 000	312 000	346 000	270 000	327 000
Russia (a)	* 1 000 000	* 1 000 000	* 1 000 000	4 400 000	4 900 000
Canada	719 000	690 000	646 000	513 000	581 000
Iran	4 000	75 000	...	...	...

Note(s)

(a) Nepheline concentrates

Mine production of nickel

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Albania	90	2 197	1 349	550	1 700
Finland	3 000	3 600	6 200	1 600	12 100
Greece	21 700	21 200	18 600	9 600	16 100
Kosovo	—	—	3 655	10 565	12 764
Macedonia	10 900	15 000	15 000	12 000	14 000
Norway	320	378	377	336	332
Russia	277 000	279 800	266 800	261 900	270 000
Spain	6 398	6 630	8 136	8 029	6 296
Turkey	* 10 100	* 19 900	* 14 700	11 992	* 19 500
Ukraine	* 12 000	* 12 000	* 8 000	—	—
Botswana	26 762	22 844	28 940	29 616	22 100
South Africa (a)	41 599	37 877	31 700	34 610	39 960
Zambia	—	—	800	1 500	2 809
Zimbabwe	8 825	8 582	6 354	4 858	6 100
Canada	232 948	254 915	259 651	135 037	158 376
Cuba	73 400	73 900	67 300	60 000	66 000
Dominican Republic	29 675	29 100	18 800	—	—
Brazil	82 492	58 317	67 116	41 059	* 50 000
Colombia	94 100	100 500	77 000	72 000	72 000
Venezuela	16 600	15 666	10 886	13 749	12 063
China	82 100	66 400	79 500	81 800	79 600
Indonesia	185 600	243 500	223 000	183 900	217 300
Kazakhstan	* 1 000	* 1 200	* 1 600	—	—
Philippines	64 705	91 367	80 645	137 350	172 991
Australia	185 000	184 000	200 000	166 000	170 000
New Caledonia	102 986	125 364	102 583	95 649	129 778
World Total	1 569 000	1 674 000	1 599 000	1 374 000	1 552 000

Note(s)

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

Smelter/refinery production of nickel

tonnes (metric)

Country	2006	2007	2008	2009	2010
Austria	900	900	500	700	* 700
Finland	47 469	55 000	51 963	40 800	49 200
France	13 700	14 800	13 700	13 900	14 400
Greece	17 700	18 668	16 640	8 269	13 960
Kosovo	—	—	5 777	6 365	7 000
Macedonia	10 942	15 300	15 000	12 000	* 14 000
Norway	82 257	87 600	88 700	88 577	92 185
Russia	280 200	273 500	266 400	260 700	* 265 000
Serbia	—	1 000	—	—	—
Ukraine	15 900	20 600	24 700	15 800	21 900
United Kingdom	36 750	34 050	40 800	17 800	28 900
South Africa	41 600	37 900	31 700	34 400	39 960
Zimbabwe	13 200	14 000	11 300	9 200	4 400
Canada	146 899	153 647	167 732	116 909	105 413
Cuba	* 42 000	* 41 500	35 600	33 000	33 000
Dominican Republic	29 675	29 130	18 742	—	—
Brazil	36 569	34 954	36 000	32 800	41 900
Colombia	51 137	49 312	41 638	51 802	49 443
Venezuela	18 200	17 200	11 900	11 400	12 800
China	136 600	199 300	200 300	253 800	332 300
Indonesia	14 474	18 532	17 566	12 550	18 688
Japan	149 954	161 200	156 500	143 500	166 100
Korea (Rep. of)	—	—	2 500	20 042	23 440
Australia	116 000	114 000	108 000	131 000	102 000
New Caledonia	48 723	44 954	37 467	38 230	39 802
World Total	1 351 000	1 437 000	1 401 000	1 354 000	1 476 000

Note(s)

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

Production of perlite

tonnes (metric)

Country	2006	2007	2008	2009	2010
Armenia	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Bulgaria	4 500	13 900	7 400	14 800	—
Georgia	* 5 000	—	—	—	—
Greece	1 049 000	1 100 000	1 000 000	862 935	760 000
Hungary	71 019	67 542	132 000	82 058	80 000
Italy	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Russia	* 45 000	* 45 000	* 45 000	* 45 000	* 45 000
Slovakia	10 560	20 000	25 000	25 000	23 000
Turkey	* 160 000	* 160 000	* 160 000	* 160 000	* 160 000
Ukraine	36 400	* 36 000	* 36 000	* 36 000	* 36 000
South Africa	* 400	* 400	* 400	* 400	* 400
Mexico	81 719	54 405	43 180	51 395	31 779
USA	454 000	409 000	434 000	348 000	* 375 000
Argentina	25 146	35 838	26 545	21 802	* 15 000
China	* 700 000	* 700 000	* 700 000	* 700 000	* 700 000
India (a)	68	—	—	—	—
Iran (b)	30 050	47 422	* 47 000	753 183	* 750 000
Japan	* 240 000	* 230 000	* 230 000	* 220 000	* 210 000
Philippines	9 600	9 900	10 100	10 100	10 500
Thailand	22 000	6 400	7 000	13 500	14 700
Australia (c)	12 057	8 546	6 942	7 649	6 616
New Zealand	3 552	7 873	—	8 848	5 088

Note(s)

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

(a) Years ended 31 March following that stated

(b) Years ended 20 March following that stated

(c) Years ended 30 June of that stated

Production of crude petroleum

tonnes (metric)

Country	2006	2007	2008	2009	2010
Albania	518 686	563 189	577 301	576 739	742 002
Austria	856 270	853 548	861 639	905 031	875 369
Azerbaijan	32 185 900	42 523 200	42 074 700	48 353 700	48 580 900
Belarus	1 780 040	1 760 020	1 740 020	1 720 010	1 700 140
Bulgaria	27 500	25 700	23 000	23 800	22 400
Croatia	950 859	911 207	867 027	807 424	748 791
Czech Republic	259 000	240 000	236 000	217 000	173 000
Denmark	17 068 000	15 552 000	14 338 000	13 045 000	12 090 000
Estonia (a)	1 624 000	1 901 600	1 869 500	1 733 000	2 080 000
France	1 100 000	1 013 000	975 000	899 000	* 800 000
Georgia	63 506	63 850	51 660	52 731	51 050
Germany	3 515 401	3 415 374	3 053 998	2 800 063	2 511 174
Greece	93 000	80 000	66 000	87 000	86 000
Hungary	886 000	838 672	811 000	796 000	790 000
Italy	5 800 000	5 800 000	5 200 000	4 600 000	5 100 000
Lithuania	180 894	154 449	127 658	114 956	114 464
Netherlands	2 022 475	2 576 222	2 163 000	1 312 000	1 020 000
Norway	136 695 000	125 763 000	121 101 700	115 000 000	104 881 356
Poland	795 742	720 603	754 907	686 992	686 487
Romania	4 777 000	4 837 000	4 528 000	4 388 940	4 172 411
Russia	481 000 000	491 000 000	488 000 000	494 000 000	505 000 000
Serbia	654 288	639 089	636 383	663 005	865 499
Slovakia	30 520	23 000	21 000	19 000	16 000
Slovenia	284	344	174	138	233
Spain	143 432	142 879	127 542	106 817	11 528
Turkey	2 175 353	2 131 288	2 222 594	2 489 914	2 602 114
Ukraine	4 506 000	4 459 000	4 328 000	3 960 000	3 549 000
United Kingdom	69 665 000	70 357 000	66 745 000	64 001 000	58 988 000
Algeria	85 036 000	86 100 000	85 600 000	77 900 000	77 700 000
Angola	69 700 000	84 300 000	92 200 000	87 400 000	90 700 000
Cameroon	4 400 000	4 200 000	4 300 000	3 700 000	3 200 000
Chad	8 000 000	7 500 000	6 700 000	6 200 000	6 400 000
Congo	13 402 300	11 091 800	11 768 000	13 900 000	15 400 000
Congo, Democratic Republic	1 230 000	1 105 000	995 000	1 100 000	1 050 000
Egypt	33 700 000	34 100 000	34 600 000	35 300 000	35 000 000
Equatorial Guinea	17 700 000	18 200 000	17 400 000	15 200 000	13 600 000
Gabon	11 700 000	11 500 000	11 800 000	11 500 000	12 200 000
Ghana	301 000	301 000	301 000	301 000	360 200
Ivory Coast	3 106 000	2 423 000	2 965 000	2 897 000	2 196 000
Libya	84 900 000	85 000 000	85 300 000	77 100 000	77 500 000
Mauritania	1 523 000	739 507	592 679	550 143	412 465
Morocco	11 200	11 100	9 000	9 300	7 400
Nigeria	120 000 000	114 200 000	103 100 000	99 100 000	115 200 000
Senegal	52 400	42 900	13 400	33 600	53 800
South Africa	721 000	502 000	403 000	270 000	316 000
Sudan	16 300 000	23 100 000	23 700 000	23 600 000	23 900 000
Tunisia	3 261 300	4 546 000	4 146 000	3 902 000	3 731 400
Barbados	47 133	40 253	39 760	38 030	42 069
Canada	131 400 000	137 300 000	135 700 000	134 300 000	141 200 000
Cuba	2 900 000	2 905 000	3 003 100	2 731 300	3 024 800
Guatemala	816 000	774 500	715 400	523 700	605 100
Mexico	190 410 000	179 450 000	163 220 000	153 600 000	152 670 000
Trinidad & Tobago	7 355 280	6 183 900	5 904 500	5 056 600	5 061 410
USA	315 576 700	314 746 780	309 706 456	334 637 399	345 381 255
Argentina	33 806 223	32 959 940	32 365 564	31 930 560	31 170 941
Bolivia	1 888 000	1 907 000	1 806 400	1 565 000	* 1 500 000
Brazil	93 600 000	94 800 000	98 500 000	105 000 000	110 600 000
Chile	150 000	132 000	137 000	192 000	217 750
Colombia	26 180 600	26 357 800	29 236 400	33 288 500	38 990 438
Ecuador	27 291 000	26 021 000	25 767 000	24 747 000	25 200 000
Peru	5 696 000	5 612 000	5 916 000	7 169 000	7 746 000
Suriname	774 000	877 500	951 000	945 300	951 770
Venezuela	144 200 000	133 900 000	131 600 000	124 800 000	126 600 000

Production of crude petroleum

tonnes (metric)

Country	2006	2007	2008	2009	2010
Afghanistan	...	* 3 000	* 3 000	* 3 000	* 3 000
Bahrain	1 790 000	1 721 000	1 636 000	1 603 000	1 646 984
Brunei	10 903 000	9 639 000	8 680 000	8 291 000	8 400 000
Burma (b)	1 088 000	1 076 000	973 000	984 000	959 000
China (c)	184 765 700	186 318 200	190 430 600	189 489 600	203 000 000
East Timor	(f) 3 492 000	(f) 3 001 000	(g)* 3 000 000	(g) 3 066 000	(g) 2 760 000
India (b)	33 988 000	34 118 000	33 506 000	33 691 000	* 37 559 000
Indonesia	50 281 000	47 719 000	48 973 000	47 440 000	46 744 000
Iran	208 000 000	209 700 000	209 800 000	202 400 000	203 200 000
Iraq	98 100 000	102 688 000	115 411 000	117 533 000	120 400 000
Israel	3 500	11 700	2 200	2 010	1 791
Japan	818 000	876 000	899 000	840 000	796 000
Jordan	1 400	1 200	2 200	1 300	1 300
Kazakhstan	65 003 100	67 125 300	70 671 000	76 482 000	79 684 000
Kuwait (d)	132 700 000	129 900 000	137 300 000	121 300 000	122 500 000
Kyrgyzstan	100 000	100 000	71 000	77 300	50 000
Malaysia	31 900 000	32 600 000	32 900 000	31 500 000	30 400 000
Mongolia	52 000	117 000	162 000	257 000	300 000
Oman	36 750 000	35 350 000	37 700 000	40 500 000	43 100 000
Pakistan (e)	3 191 000	3 282 000	3 414 000	3 204 400	3 160 800
Philippines	728 000	815 000	902 000	1 150 000	1 092 000
Qatar	50 900 000	53 600 000	60 800 000	57 900 000	65 700 000
Saudi Arabia (d)	514 300 000	494 200 000	515 300 000	459 500 000	467 800 000
Syria	19 427 500	18 600 000	18 900 559	18 853 258	19 100 000
Taiwan	23 564	17 778	16 134	15 995	14 477
Tajikistan	23 700	25 900	25 800	26 200	27 000
Thailand	11 300 000	11 500 000	12 400 000	12 900 000	13 000 000
Turkmenistan	9 200 000	9 800 000	10 200 000	10 200 000	10 700 000
United Arab Emirates	145 500 000	140 700 000	142 900 000	126 300 000	130 800 000
Uzbekistan	5 400 000	4 900 000	4 800 000	4 500 000	3 700 000
Vietnam	16 800 000	15 920 000	14 904 000	16 300 300	14 967 000
Yemen, Republic of	17 429 000	15 300 000	14 100 000	13 104 442	12 500 000
Australia	20 605 000	21 567 000	21 569 000	22 527 000	24 844 000
New Zealand (f)	835 400	1 890 500	2 724 600	2 522 200	2 421 800
Papua New Guinea	2 290 000	2 153 000	1 950 000	1 813 000	1 685 000
World Total	3 904 000 000	3 888 000 000	3 911 000 000	3 810 000 000	3 901 000 000

Note(s)

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

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

Production of natural gas

million cubic metres

Country	2006	2007	2008	2009	2010
Albania	11	10	12	9	2
Austria	1 765	1 835	1 544	1 559	1 713
Azerbaijan	6 080	10 832	16 337	16 325	16 673
Belarus	219	201	203	205	213
Bulgaria	519	295	218	15	74
Croatia	2 714	2 892	2 729	2 591	2 727
Czech Republic	148	148	168	180	201
Denmark	9 862	8 757	9 562	7 980	7 792
France	1 167	1 023	925	813	* 800
Georgia	21	18	14	12	8
Germany	19 798	18 075	16 547	15 554	13 666
Greece	* 16	21	14	11	* 10
Hungary	3 254	2 653	2 703	2 748	2 600
Ireland, Republic of (a)	500	519	506	414	402
Italy	11 000	9 700	9 300	7 900	7 600
Netherlands	73 300	72 431	79 325	74 659	83 944
Norway	87 600	89 700	99 200	103 500	106 430
Poland	5 651	5 653	5 382	5 537	5 671
Romania	12 422	11 981	11 520	11 273	11 138
Russia	656 000	653 000	664 000	584 000	649 000
Serbia	280	274	282	283	427
Slovakia	135	195	111	114	100
Slovenia	4	3	3	3	7
Spain	118	42	46	19	58
Turkey	307	839	894	660	626
Ukraine	21 094	21 104	21 444	24 189	20 382
United Kingdom	84 748	76 970	74 937	63 022	59 674
Algeria	88 209	84 827	86 505	79 600	80 400
Angola	680	830	680	690	733
Congo	7 512	7 276	7 351	* 7 000	* 7 000
Egypt	54 700	55 700	58 900	62 700	61 300
Equatorial Guinea	1 300	2 920	6 670	5 900	6 136
Gabon	155	167	* 160	* 160	* 160
Ivory Coast	2 200	1 574	1 300	1 300	1 352
Libya	14 800	15 300	15 900	15 900	15 800
Morocco	56	61	50	41	50
Mozambique	2 700	2 800	3 100	3 600	3 744
Nigeria	28 400	35 000	35 000	24 800	33 600
South Africa	1 700	1 600	1 500	1 200	1 600
Tunisia	2 394	2 285	2 970	2 970	3 293
Barbados	23	* 21	* 21	* 21	* 21
Canada	176 808	174 334	167 515	156 046	151 023
Cuba	1 091	1 218	1 161	1 155	1 073
Mexico	51 500	53 600	54 200	54 900	55 300
Trinidad & Tobago	40 082	42 259	41 842	43 221	44 624
USA (b)	524 000	545 000	571 000	583 000	611 000
Argentina	51 778	51 007	50 509	48 416	47 097
Bolivia	13 433	14 301	14 895	12 786	* 14 900
Brazil	12 700	12 710	15 510	13 370	15 948
Chile	2 199	2 015	1 828	1 889	1 792
Colombia	7 000	7 500	9 100	10 378	10 599
Ecuador	283	310	255	* 300	* 300
Peru	1 772	2 671	3 386	3 470	7 149
Venezuela	31 500	29 500	30 000	28 700	28 500
Afghanistan	* 50	* 50	155	142	142
Bahrain	13 436	11 433	12 320	12 475	12 785
Bangladesh (c)	14 921	15 920	17 015	18 511	19 919
Brunei	12 135	11 718	11 665	10 733	12 200
Burma (d)	13 032	13 385	11 304	12 120	12 509
China	58 553	69 240	80 299	85 269	96 800
East Timor	4 132	4 826	5 986	5 063	4 717
India (d)	31 747	32 417	32 849	47 510	* 51 900
Indonesia	80 501	76 703	74 128	86 699	93 255
Iran	108 600	111 900	116 300	131 200	138 500

Production of natural gas

million cubic metres

Country	2006	2007	2008	2009	2010
Iraq	13 390	13 596	14 681	16 577	16 885
Israel	2 313	2 758	3 436	2 825	3 234
Japan	3 302	3 708	3 735	3 539	3 396
Jordan	251	220	250	220	185
Kazakhstan	26 382	29 562	32 889	35 942	37 406
Kuwait (e)	12 410	12 060	12 700	11 200	11 600
Kyrgyzstan	20	10	17	15	* 15
Malaysia	59 640	60 780	60 820	59 970	62 650
Oman	25 657	26 107	25 968	24 800	29 279
Pakistan (c)	39 645	40 028	41 178	41 362	41 990
Philippines	3 077	3 689	3 883	3 910	3 683
Qatar	50 700	63 200	76 600	89 300	85 430
Saudi Arabia (e)	73 461	74 420	80 440	77 500	83 900
Syria	8 272	7 825	7 574	7 948	7 800
Taiwan	463	417	357	351	290
Tajikistan	18	17	16	20	23
Thailand	24 302	25 812	27 559	26 347	29 565
Turkmenistan	60 400	65 400	66 100	36 400	42 400
United Arab Emirates	48 790	50 290	50 240	59 100	60 500
Uzbekistan	55 400	59 100	63 800	61 400	60 111
Vietnam	7 000	7 080	7 499	8 010	9 240
Australia	38 885	39 955	38 256	42 813	44 986
New Zealand	3 983	4 310	3 995	4 113	4 434
Papua New Guinea	145	136	151	156	151
World Total	3 013 000	3 074 000	3 183 000	3 111 000	3 278 000

Note(s)

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

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

Production of phosphate rock

tonnes (metric)

Country	2006	2007	2008	2009	2010
Finland	857 922	830 989	780 000	660 405	* 820 000
Russia	10 812 800	10 936 500	9 810 200	9 537 800	10 843 500
Algeria	1 510 233	1 800 025	1 805 000	1 017 000	1 525 234
Burkina Faso	* 2 400	* 2 400	* 2 400	* 2 400	* 2 400
Egypt	2 176 900	2 504 000	3 178 900	3 708 200	3 434 500
Morocco	27 097 000	27 834 000	24 861 000	18 307 000	26 603 000
Senegal	584 000	691 300	645 000	948 600	976 200
South Africa	2 628 714	2 555 723	2 286 794	2 237 128	2 493 904
Tanzania	2 881	8 261	28 684	18 000	17 000
Togo	1 156 500	750 100	842 508	725 547	726 200
Tunisia	7 838 000	8 002 000	7 691 700	7 409 000	8 148 500
Zimbabwe	65 838	46 106	21 051	32 100	62 928
Canada	530 000	682 000	983 000	901 388	907 600
Mexico	7 500	47 721	969 094	1 421 823	1 507 402
USA	30 100 000	29 700 000	30 200 000	26 400 000	* 26 100 000
Brazil (a)	5 932 000	6 185 000	6 730 000	6 100 000	6 300 000
Chile	13 836	25 073	41 186	13 292	50 528
Colombia	* 43 000	* 24 000	* 48 000	* 48 000	* 50 000
Venezuela	400 000	371 000	213 981	362 753	85 240
China	38 959 500	45 417 000	50 740 600	60 208 900	68 070 000
Christmas Island (b)(c)(d)	724 278	703 719	* 700 000	563 000	566 645
India (e)	1 586 843	1 849 188	1 803 954	1 546 742	* 1 976 000
Iran	351 656	252 903	* 250 000	61 231	* 62 000
Iraq	—	—	—	45 000	55 000
Israel	2 949 000	3 069 000	3 088 000	2 697 000	2 777 200
Jordan	5 804 991	5 552 000	6 266 000	5 280 693	6 528 708
Kazakhstan	1 059 300	1 044 900	2 470 600	1 204 700	1 755 000
Korea, Dem. P.R. of	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Pakistan (d)	2 996	3 350	* 3 000	* 3 000	* 3 000
Philippines					
Phosphate rock	1 963	1 961	2 271	2 257	2 308
Guano	213	209	254	251	272
Sri Lanka	42 159	40 128	41 947	36 347	47 778
Syria	3 664 000	3 678 000	3 221 379	2 466 150	3 764 900
Thailand	900	3 550	3 675	658	35 783
Uzbekistan	573 000	599 500	700 000	700 000	700 000
Vietnam	1 232 400	1 522 700	2 100 700	2 047 400	2 267 600
Australia	2 083 454	2 131 045	2 156 848	1 962 893	2 135 801
Nauru (b)	* 84 000	* 200 000	497 469	146 816	407 654
World Total	151 000 000	159 000 000	165 000 000	159 000 000	182 000 000

Note(s)

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

(a) Including beneficiated and directly shipped material

(b) Exports

(c) Including phosphate dust

(d) Years ended 30 June of that stated

(e) Years ended 31 March following that stated

Mine production of platinum group metals

kilograms (metal content)

Country	2006	2007	2008	2009	2010
Poland					
Platinum	30	30	30	30	* 30
Palladium	20	20	20	20	* 20
Russia					
Platinum (a)	28 600	28 500	25 000	24 400	26 500
Palladium (a)	121 900	141 200	113 800	113 100	115 700
Other platinum metals (a)	3 100	2 800	2 600	2 200	2 200
Serbia					
Platinum	2	2	2	2	2
Palladium	15	15	15	15	15
Botswana					
Platinum	* 300	529	591	746	560
Palladium	* 2 000	3 110	2 955	4 728	3 328
Ethiopia					
Platinum (b)	4	3	10	8	* 8
South Africa					
Platinum	168 125	165 835	146 141	140 819	147 790
Palladium	86 265	86 461	75 537	75 118	82 222
Other platinum metals	53 138	58 623	54 089	55 456	57 292
Zimbabwe					
Platinum	4 998	5 086	5 495	6 849	8 703
Palladium	4 022	3 999	4 274	5 354	6 968
Other platinum metals	875	881	928	1 190	1 550
Canada					
Platinum	* 8 500	* 8 100	* 8 500	* 4 000	* 3 600
Palladium	* 14 900	* 14 100	* 14 700	* 6 900	* 6 200
Other platinum metals	* 1 000	* 900	* 1 000	* 500	* 400
USA					
Platinum	4 292	3 857	3 577	3 826	3 450
Palladium	14 401	13 312	11 944	12 659	11 600
Colombia	1 438	1 526	1 370	929	997
China					
Platinum	* 1 100	* 1 300	* 1 400	* 1 400	* 1 400
Palladium	* 550	* 650	* 700	* 700	* 700
Australia (c)	959	742	710	1 034	781
World Total	521 000	542 000	475 000	462 000	482 000

Note(s)

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

Production of potash

tonnes (K₂O content)

Country	2006	2007	2008	2009	2010
Belarus	4 605 300	4 971 600	4 967 000	2 485 400	5 222 600
Germany					
Potassic salts	3 624 977	3 636 504	3 280 467	1 825 139	3 023 941
Russia	5 274 100	6 373 100	5 935 400	3 690 900	6 128 100
Spain					
Chloride	493 189	531 739	472 952	481 455	418 778
Ukraine	8 000	12 000	11 000	12 000	* 12 000
United Kingdom					
Chloride	427 000	430 000	403 800	* 403 800	* 403 800
Canada					
Chloride	8 528 000	11 426 000	10 379 000	4 318 000	9 788 000
USA					
Potassic salts	1 100 000	1 100 000	1 100 000	700 000	* 900 000
Brazil					
Chloride	403 080	471 333	383 000	453 000	417 000
Chile					
Chloride	515 000	533 000	578 000	594 000	* 759 000
China	1 571 900	1 822 600	1 980 000	2 062 000	2 345 000
Israel					
Chloride	2 187 000	2 146 000	2 134 000	2 446 200	2 041 342
Jordan	1 020 000	1 090 000	1 200 000	1 199 400	2 141 319
World Total	29 800 000	34 500 000	32 800 000	20 700 000	33 600 000

Production of rare earth oxides

tonnes (metric)

Country	2006	2007	2008	2009	2010
Russia	2 935	2 711	2 470	* 2 500	* 2 500
Brazil	620	760	540	200	* 200
China (a)	* 133 000	* 120 800	* 124 500	* 129 400	* 118 900
India (b)(c)	45	35	22	* 20	* 20
Malaysia	580	440	150	20	480

Note(s)

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

Production of rhenium

tonnes (metric)

Country	2006	2007	2008	2009	2010
Armenia	* 1	* 0	* 0	* 0	* 0
Poland	2	4	5	4	6
Russia	* 1	* 2	* 2	* 2	* 2
Canada	* 1	* 1	* 2	* 2	* 2
USA	8	7	8	6	* 6
Chile	* 28	* 28	* 28	* 25	* 25
Peru	* 5	* 5	* 5	* 5	* 5
China	* 2	* 1	* 1	* 1	* 1
Kazakhstan	* 8	* 6	* 6	* 3	* 3
Uzbekistan	* 1	* 1	* 1	* 0	* 0

Production of salt

tonnes (metric)

Country	2006	2007	2008	2009	2010
Albania (a)	* 47 000	* 47 000	* 47 000	* 47 000	* 47 000
Armenia	37 000	34 800	37 334	29 402	29 440
Austria					
Rock salt	1 336	1 172	503	50	95
Salt in brine	764 103	735 724	866 674	1 035 044	1 071 842
Azerbaijan	12 000	7 126	7 527	5 466	4 449
Belarus	2 075 693	1 665 350	1 866 499	2 089 282	2 411 683
Bosnia & Herzegovina	416 305	502 487	538 357	556 089	662 631
Bulgaria	2 000 000	2 000 000	2 100 000	1 300 000	1 900 000
Croatia	29 589	32 536	54 937	57 186	66 835
Denmark	608 282	557 917	496 593	511 063	601 046
France (b)	9 371 000	6 139 840	* 6 000 000	6 100 000	* 6 000 000
Germany					
Rock salt	9 280 000	4 826 000	5 545 438	7 709 844	9 992 156
Brine salt	1 001 000	1 010 000	989 208	1 862 630	2 118 484
Salt in brine	7 189 000	7 558 000	7 306 745	* 7 300 000	* 4 500 000
Greece	* 200 000	212 000	* 220 000	* 189 000	* 190 000
Italy					
Rock salt & brine salt	2 823 960	2 214 133	2 334 315	3 471 206	4 973 533
Montenegro (a)	5 000	20 000	25 200	17 000	11 200
Netherlands	6 056 000	6 177 000	6 200 000	5 967 000	5 982 000
Poland					
Rock salt	1 129 875	591 240	618 111	988 545	1 235 533
Brine salt	2 899 076	2 930 726	2 783 198	2 533 413	2 464 363
Other salt	808 247	785 694	706 618	763 385	763 515
Portugal					
Rock salt	586 190	590 588	606 545	594 578	618 961
Sea salt	76 858	64 048	69 249	72 325	44 574
Romania	2 621 129	2 475 349	2 526 774	2 072 744	2 388 357
Russia	2 800 000	2 200 000	1 800 000	1 600 000	* 2 000 000
Serbia	29 847	30 023	30 115	28 783	30 816
Slovakia	122 500	117 000	109 510	41 000	—
Slovenia	1 624	3 029	535	2 924	59
Spain					
Rock salt	2 809 046	2 709 545	2 909 907	2 763 081	2 650 940
Sea salt	1 506 343	1 332 360	1 290 672	1 338 789	1 242 718
Other salt	115 826	102 524	102 149	99 853	92 644
Switzerland	525 000	353 000	368 000	554 000	643 000
Turkey					
Sea salt	* 500 000	* 500 000	* 500 000	* 500 000	* 500 000
Other salt	* 1 200 000	1 385 822	1 367 981	* 1 300 000	* 1 300 000

Production of salt

tonnes (metric)

Country	2006	2007	2008	2009	2010
Ukraine	5 996 000	5 547 852	4 425 317	5 394 512	4 908 186
United Kingdom					
Rock salt	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000
Brine salt	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000
Salt in brine (c)	* 2 800 000	* 2 800 000	* 2 800 000	* 2 800 000	* 2 800 000
Algeria					
Brine salt & sea salt	259 596	183 189	201 603	269 255	187 160
Angola	35 000	* 35 000	* 35 000	* 35 000	* 35 000
Benin (a)	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Botswana	151 595	165 710	170 994	241 114	* 250 000
Burkina Faso	* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
Cape Verde	* 1 600	* 1 600	—	—	—
Egypt (d)	* 1 000 000	1 213 643	1 879 351	2 951 636	* 3 000 000
Eritrea	9 737	7 448	26 071	* 26 000	* 26 000
Ethiopia					
Rock salt (e)	19 271	12 899	30 414	41 847	* 40 000
Other salt (f)	...	...	31 971	70 541	* 70 000
Ghana	250 000	* 250 000	238 727	* 250 000	* 250 000
Guinea	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Kenya (f)	35 024	11 596	24 345	24 125	* 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	310	420	570	455	391
Mauritius (a)	7 408	6 650	5 042	2 301	* 2 000
Morocco	319 900	215 754	219 187	310 376	503 351
Mozambique (a)	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Namibia	590 556	810 942	732 000	807 348	783 036
Niger	* 1 300	* 1 300	* 1 300	* 1 300	* 1 300
Senegal	198 600	212 300	240 600	222 500	231 400
Somalia	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
South Africa	464 909	407 079	415 996	408 422	394 493
Sudan	11 638	22 922	10 581	35 793	141 840
Tanzania	34 798	35 224	25 897	27 393	34 455
Tunisia (a)	1 127 000	933 000	1 063 500	1 260 100	1 692 800
Bahamas	1 143 000	578 000	10 244	10 430	11 833
Canada					
Rock salt	11 504 207	* 10 175 000	* 12 090 000	* 12 381 000	* 9 197 000
Other salt (g)	1 901 453	* 1 796 000	* 2 134 000	* 2 185 000	* 1 623 000
Costa Rica	* 20 000	* 20 000	—	—	—
Cuba	266 000	141 300	157 300	265 700	271 800
Dominican Republic (a)	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
El Salvador (a)	* 31 000	* 31 000	* 31 000	* 31 000	—
Guatemala (a)	* 60 000	* 60 000	* 60 000	* 50 000	* 50 000
Honduras	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
Mexico	8 371 353	8 032 273	8 808 714	7 445 025	8 634 098
Netherlands Antilles	343 110	403 961	343 457	303 565	337 321
Nicaragua (a)	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Panama (a)	19 080	20 315	21 053	19 548	27 587
USA					
Rock salt (h)	16 500 000	16 800 000	19 800 000	20 700 000	* 19 800 000
Salt in brine (h)	19 900 000	19 700 000	18 900 000	17 480 000	* 17 100 000
Evaporated salt (h)	8 090 000	7 990 000	8 580 000	8 280 000	* 8 100 000
Argentina	1 917 656	2 357 674	1 681 313	1 477 532	* 1 500 000
Brazil					
Rock salt	1 622 000	1 621 000	1 528 000	1 443 000	* 1 300 000
Sea salt	5 122 197	5 365 091	5 200 000	4 462 000	5 000 000
Chile	4 580 471	4 403 743	6 431 029	8 382 215	7 694 879
Colombia					
Rock salt	248 245	266 941	245 170	255 332	288 676
Sea salt	389 630	309 557	386 461	356 797	139 810
Ecuador	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Peru	971 710	1 185 273	1 276 274	1 567 279	1 228 900
Venezuela (a)	* 350 000	* 350 000	* 350 000	* 350 000	* 350 000

Production of salt

tonnes (metric)

Country	2006	2007	2008	2009	2010
Afghanistan	...	...	145 532	163 641	168 827
Bangladesh (d)	* 880 000	* 1 100 000	1 349 000	1 368 000	1 389 000
Burma (i)(j)	83 276	61 475	101 083	127 169	79 187
Cambodia (k)	59 000	76 651	* 78 000	* 30 000	* 170 000
China	56 631 300	61 669 700	66 644 300	66 627 900	62 748 000
India					
Rock salt (j)	1 753	1 200	2 100	2 300	1 200
Sea salt (j)	13 268 500	12 328 000	13 970 500	17 478 600	14 202 300
Other salt (j)	4 628 100	5 516 000	5 178 600	6 470 400	4 406 600
Indonesia	* 700 000	* 700 000	* 700 000	* 720 000	* 720 000
Iran (l)	2 617 902	2 534 871	2 158 280	2 816 235	* 2 800 000
Iraq	...	153 140	108 870	113 130	102 000
Israel (a)	* 640 000	399 904	420 809	356 889	420 749
Japan (j)	1 166 000	1 138 000	1 132 000	1 095 000	1 122 000
Jordan	28 800	17 000	25 400	2 500	32 542
Kazakhstan	416 680	227 643	504 100	222 942	276 131
Korea (Rep. of)	285 568	249 515	384 304	382 270	222 509
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	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Lebanon	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
Mongolia	167	4	115	5	...
Oman	26 300	10 400	10 400	30 600	* 31 000
Pakistan					
Rock salt (d)	1 858 931	1 872 664	1 849 199	1 917 486	1 943 527
Sea salt (d)	15 249	10 616	* 11 000	* 11 000	* 11 000
Philippines (a)	418 210	437 689	510 059	516 066	557 644
Saudi Arabia					
Rock salt & brine salt	1 611 992	1 507 000	1 600 000	1 600 000	* 1 600 000
Sri Lanka	87 560	70 208	65 972	102 500	104 000
Syria	133 000	81 000	88 600	78 263	* 80 000
Taiwan	107 713	107 720	118 046	171 583	262 594
Tajikistan	51 956	47 462	47 446	49 772	50 365
Thailand					
Rock salt	1 008 251	1 134 931	1 211 581	* 1 200 000	* 1 200 000
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	842 000	857 000	717 000	718 000	* 718 000
Yemen, Republic of	53 000	61 000	69 000	* 80 000	* 80 000
Australia (m)	11 364 000	10 801 000	11 160 000	10 316 000	11 968 000
New Zealand	83 000	102 000	67 000	67 000	60 000
World Total	259 800 000	252 100 000	265 900 000	275 400 000	266 500 000

Note(s)

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

Production of selenium metal

tonnes (metric)

Country	2006	2007	2008	2009	2010
Belgium	* 200	* 200	* 200	* 200	* 200
Finland	70	52	65	66	* 66
Germany	* 250	* 250	* 250	* 230	* 250
Poland	87	85	82	80	80
Russia	* 145	* 130	* 170	* 160	* 170
Sweden	135	126	139	129	* 130
Canada	117	144	191	173	* 79
Peru	75	59	60	61	59
China	* 65	* 65	* 65	* 65	* 65
Japan	730	806	754	709	754
Kazakhstan	* 70	155	* 130	* 120	* 130
Philippines	* 65	* 65	* 65	* 65	* 65
Uzbekistan	* 20	* 20	* 20	* 20	* 20

Note(s)

(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	2006	2007	2008	2009	2010
France					
Andalusite	* 65 000	* 65 000	* 65 000	* 65 000	* 65 000
South Africa					
Andalusite	230 000	264 645	216 667	* 245 000	* 245 000
USA					
Kyanite (a)	102 000	118 000	97 200	71 000	93 000
Brazil					
Kyanite (b)	* 200	* 200	* 200	* 200	* 200
India					
Kyanite (c)	8 059	5 102	4 620	5 553	* 5 650
Sillimanite (c)	26 366	40 537	33 702	30 690	* 30 000
Nepal					
Kyanite (d)	21	18	15	10	* 10

Note(s)

(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 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) Including related minerals

(b) Including beneficiated and directly shipped material

(c) Years ended 31 March following that stated

(d) Years ending 15 July of that stated

Mine production of silver

kilograms (metal content)

Country	2006	2007	2008	2009	2010
Armenia	* 4 000	6 900	9 200	9 000	16 400
Bulgaria	* 65 000	* 55 000	* 55 000	* 55 000	* 55 000
Finland	50 843	44 895	69 906	69 600	69 600
Greece	24 700	38 300	33 500	27 500	29 000
Ireland, Republic of	12 900	9 650	7 172	5 267	4 061
Macedonia	* 10 000	* 30 000	* 40 000	* 35 000	* 32 000
Poland	1 265 100	1 199 500	1 161 000	1 150 000	1 175 000
Portugal	20 078	26 514	26 273	20 483	20 561
Romania	* 18 000	* 18 000	* 18 000	* 18 000	* 18 000
Russia (a)	973 500	911 300	1 132 200	1 312 600	1 144 600
Serbia (a)	* 2 200	* 2 300	* 2 300	* 2 500	* 4 800
Slovakia	74	50	198	201	320
Spain	2 369	—	—	2 200	20 800
Sweden	292 255	323 171	293 068	288 590	302 145
Turkey	* 266 000	* 315 000	* 294 000	351 600	348 000
United Kingdom	—	212	398	514	506
Algeria	500	500	114	200	147
Congo, Democratic Republic	67 600	76 200	34 100	—	* 6 500
Ethiopia (b)	902	900	2 714	771	* 1 000
Ghana	3 142	3 300	3 200	3 928	* 3 900
Morocco	202 300	177 712	201 195	210 000	243 000
Namibia (a)	31 307	7 902	7 700	700	—
Niger	* 100	139	289	256	326
South Africa	86 951	70 089	75 199	77 780	79 315
Sudan	2 437	2 405	—	413	631
Tanzania	14 906	12 381	10 388	8 231	12 040
Zimbabwe	* 1 000	* 1 100	500	—	—
Canada	995 024	860 449	755 103	617 777	596 061
Costa Rica	486	331	—	—	—
Dominican Republic	—	—	—	18 973	20 300
Guatemala	49 780	88 247	99 131	127 836	190 973
Honduras	55 036	53 894	58 936	57 698	58 158
Mexico	3 028 395	3 135 430	3 236 312	3 553 841	4 410 749
Nicaragua	2 929	3 420	3 720	4 491	6 995
USA	1 155 300	1 281 000	1 250 000	1 245 000	1 280 000
Argentina	245 124	255 567	355 596	415 235	693 600
Bolivia	472 210	525 000	1 114 000	1 325 730	1 259 000
Brazil	10 000	18 620	17 000	15 000	* 15 000
Chile	1 607 164	1 936 465	1 405 020	1 301 018	1 286 688
Colombia	8 399	9 766	9 162	10 827	15 300
Peru	3 470 661	3 493 090	3 685 931	3 922 708	3 637 396
Burma (a)(c)	* 700	* 200	—	—	—
China	* 2 600 000	* 2 700 000	* 2 800 000	* 2 900 000	* 3 500 000
India (c)	53 271	80 697	105 284	138 768	* 99 500
Indonesia	261 398	268 967	226 051	326 773	271 534
Iran	* 30 000	* 40 000	* 40 000	* 40 000	* 40 000
Japan	11 500	—	—	—	—
Kazakhstan (a)	806 083	722 927	645 627	613 544	548 990
Korea (Rep. of)	1 500	1 400	1 500	1 700	2 187
Korea, Dem. P.R. of	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Laos	6 331	4 499	6 706	14 726	17 234
Malaysia	410	296	349	366	353
Mongolia	20 378	20 455	19 954	20 397	19 641
Oman	4 404	3 863	2 140	2 162	1 290
Philippines	23 502	27 754	14 224	33 808	41 004
Saudi Arabia	9 103	9 028	8 233	8 527	* 8 500
Thailand	11 240	7 727	5 465	15 300	15 500
Uzbekistan	62 200	77 800	74 600	52 900	59 100

Mine production of silver

kilograms (metal content)

Country	2006	2007	2008	2009	2010
Australia	1 727 000	1 880 000	1 926 000	1 631 000	1 880 000
Fiji	494	—	265	313	328
New Zealand	27 221	8 553	18 269	14 264	16 095
Papua New Guinea	51 098	48 677	48 062	55 082	83 957
World Total	20 277 000	20 948 000	21 460 000	22 186 000	23 713 000

Note(s)

- (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	2006	2007	2008	2009	2010
Botswana	255 677	279 625	263 566	215 188	240 898
Ethiopia (a)	2 389	* 3 000	3 707	4 046	* 4 000
Kenya	374 210	386 578	502 846	404 904	473 689
USA	11 000 000	11 000 000	11 300 000	9 310 000	10 600 000

Note(s)

- (a) Years ended 7 July of that stated

Production of strontium minerals

tonnes (metric)

Country	2006	2007	2008	2009	2010
Spain	280 195	142 512	138 590	57 466	83 035
Turkey	* 6 300	* 4 200	* 1 600	—	—
Morocco	* 2 700	* 2 700	* 2 700	* 2 700	* 2 700
Mexico	128 321	96 902	29 621	36 127	31 429
Argentina (a)	19 822	4 904	14 910	8 169	* 7 000
China	* 700 000	* 700 000	* 700 000	* 700 000	* 700 000
Iran	17 170	—	—	15 396	* 15 500
Pakistan (b)	1 290	1 641	1 310	470	160

Note(s)

- (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	2006	2007	2008	2009	2010
Austria					
Recovered (a)	50 097	50 501	48 024	48 624	40 512
Belarus					
Recovered (a)	38 567	41 031	44 016	47 188	41 606
Denmark					
Recovered (a)	4 142	3 896	3 467	4 200	3 246
Finland					
Pyrites	199 700	194 400	226 000	153 600	250 000
Recovered (b)	325 793	* 326 000	331 000	273 600	272 000
Recovered (a)	70 000	125 000	117 000	127 000	122 000
France					
Recovered (a)	616 234	605 820	* 590 000	590 000	570 000
Recovered (c)	75 000	62 000	64 000	65 000	78 000
Germany					
Recovered (a)	1 706 200	1 650 100	1 578 000	1 504 000	1 455 000
Recovered (c)	42 500	35 900	39 000	565 000	513 000
Lithuania					
Recovered (a)	61 135	42 618	73 870	69 722	73 470
Norway					
Recovered (b)	* 110 000	* 95 000	* 95 000	* 90 000	69 000
Recovered (a)	20 000	18 000	28 000	25 000	22 000
Poland					
Frasch	800 200	833 583	762 119	262 769	516 742
Recovered (b)	308 000	304 000	294 000	257 000	* 264 000
Recovered (a)	203 100	211 900	222 800	214 382	250 075
Russia					
Pyrites	198 000	210 000	161 000	71 000	* 71 000
Recovered (a)	6 346 000	6 372 000	6 513 000	5 514 000	6 406 000
Recovered (c)	738 000	790 000	752 000	703 000	948 000
Sulphur ore	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Spain					
Recovered (b)	547 000	543 000	551 000	533 000	547 000
Recovered (a)	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Sweden					
Recovered (b)	180 000	177 000	199 600	186 100	179 833
Recovered (a)	68 391	66 569	84 456	83 646	83 947
Other Europe (d)	3 713 000	3 700 000	3 628 000	3 605 000	3 565 000
South Africa					
Pyrites	68 443	70 891	61 278	60 244	30 309
Recovered (b)	231 000	236 000	187 000	* 176 000	* 180 000
Recovered (a)	343 000	335 000	323 000	* 320 000	* 320 000
Zimbabwe					
Pyrites	39 777	19 812	30 308	—	—
Other Africa (d)	224 000	348 000	381 000	436 000	475 000
Canada					
Recovered (b)	1 176 429	1 167 118	1 147 732	890 899	979 232
Recovered (a)	7 905 870	7 621 863	7 007 706	6 570 503	6 492 699
Mexico					
Recovered (b)	621 000	556 000	441 000	412 000	425 000
Recovered (a)	1 077 000	1 027 000	1 036 000	1 114 028	991 802
USA					
Recovered (b)	674 000	817 000	753 000	750 000	* 800 000
Recovered (a)	8 390 000	8 280 000	8 690 000	9 030 000	* 9 100 000
Other North and Central America (d)	65 000	86 000	75 000	73 000	49 000
Brazil					
Pyrites	20 954	22 336	18 200	25 110	* 25 500
Recovered (b)	297 539	321 707	359 586	275 593	* 277 000
Recovered (a)	117 203	135 623	135 354	143 599	* 145 000
Chile					
Recovered (b)	1 574 000	1 533 000	1 541 000	1 601 000	1 601 000
Colombia					
Recovered (a)	5 860	5 085	6 277	7 311	7 013
Sulphur ore	47 438	48 999	56 892	54 367	59 556
Other South America (d)	1 180 000	1 211 000	1 205 000	1 047 000	868 000

Production of sulphur and pyrites

tonnes (sulphur content)

Country	2006	2007	2008	2009	2010
Abu Dhabi					
Recovered (a)	2 045 000	2 183 000	1 900 000	1 760 000	1 800 000
Bahrain					
Recovered (a)	64 565	71 771	80 000	108 439	138 477
China					
Pyrites	4 663 000	6 082 000	6 022 000	4 946 000	5 643 000
Recovered	3 588 000	4 485 000	5 268 000	5 843 000	6 569 000
Sulphur ore	1 000 000	1 200 000	1 537 000	1 700 000	3 120 000
India					
Recovered (b)	801 000	955 000	1 103 000	1 078 000	1 144 000
Recovered (a)(c)	801 000	951 000	1 101 000	1 451 000	1 600 000
Iran					
Recovered (a)	1 440 000	1 456 000	1 629 000	1 429 000	1 454 000
Japan					
Recovered (b)(e)	1 679 000	1 747 000	1 797 000	1 675 000	1 819 000
Recovered (a)	1 950 000	1 967 000	2 034 000	1 863 596	1 891 875
Jordan					
Recovered (a)	357 000	334 000	* 310 000	* 310 000	* 310 000
Kazakhstan					
Recovered (b)	* 235 000	* 235 000	392 000	490 000	670 000
Recovered (a)	1 586 600	1 660 700	1 732 600	2 250 000	2 350 000
Korea (Rep. of)					
Recovered (b)	899 000	912 000	990 000	899 000	1 029 000
Recovered (a)	660 000	* 670 000	* 660 000	* 660 000	* 660 000
Oman					
Recovered (a)	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Pakistan					
Recovered (f)	24 730	27 710	29 485	25 784	26 641
Qatar					
Recovered (a)	395 000	503 000	526 666	702 193	1 181 809
Saudi Arabia					
Recovered (a)	2 900 000	3 100 000	3 100 000	3 214 000	3 200 000
Syria					
Recovered (a)	43 000	40 650	40 491	40 000	40 000
Taiwan					
Recovered	245 789	249 156	211 869	252 392	231 700
Other Asia (d)	2 420 000	2 533 000	2 576 000	2 495 000	2 628 000
Australasia (d)	1 004 000	1 007 000	964 000	1 024 000	1 026 000
World Total					
Pyrites	5 300 000	6 700 000	6 600 000	5 400 000	6 100 000
Frasch	800 000	800 000	800 000	300 000	500 000
Recovered	61 500 000	63 200 000	64 200 000	64 200 000	67 300 000
Sulphur ore	1 200 000	1 400 000	1 800 000	1 900 000	3 300 000

Note(s)

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

Production of talc

tonnes (metric)

Country	2006	2007	2008	2009	2010
Austria	159 447	153 409	154 577	111 388	138 367
Finland	547 146	535 882	527 686	* 500 000	* 500 000
France	* 420 000	* 420 000	* 420 000	* 420 000	* 420 000
Greece	* 250	200	* 200	* 200	* 200
Italy	130 714	117 643	* 110 000	* 110 000	* 110 000
Macedonia	1 025	1 775	977	—	—
Norway	* 34 000	* 34 000	* 30 000	23 350	6 392
Portugal	5 517	12 367	11 657	11 567	11 951
Romania	2 967	1 513	1 843	570	296
Russia	* 150 000	* 150 000	* 150 000	* 150 000	* 150 000
Slovakia	—	—	—	—	7 000
Spain	83 502	78 042	59 299	47 218	51 897
Sweden	6 000	7 000	4 000	4 000	4 000
United Kingdom	4 325	2 850	2 410	2 861	* 2 800
Egypt	* 40 000	40 572	43 990	44 000	48 400
Morocco					
Talc	1 400	944	220	—	—
Pyrophyllite	12 900	26 072	25 782	33 442	27 066
South Africa					
Talc	10 966	14 281	5 145	4 718	3 150
Pyrophyllite	74 886	123 666	80 704	114 666	122 511
Sudan	216	2 620	4 667	1 167	—
Canada	68 000	67 000	64 000	44 000	96 000
Guatemala	526	6 456	1 030	6 355	2 175
Mexico	40 535	32 410	16 405	33 421	870
USA	895 000	769 000	706 000	511 000	* 530 000
Argentina					
Talc	13 773	14 956	21 222	18 267	* 18 000
Pyrophyllite	9 340	9 880	9 230	* 10 000	* 10 000
Brazil (a)	389 391	485 641	513 433	577 935	* 600 000
Chile	704	764	961	790	238
Peru					
Talc	14 618	23 096	17 984	13 359	19 767
Pyrophyllite	14 500	—	—	19 379	19 185
Uruguay	1 544	848	890	1 070	* 1 100
Bhutan	54 208	62 015	56 077	64 948	26 302
China	2 500 000	* 2 000 000	* 2 200 000	* 2 300 000	* 2 000 000
India					
Pyrophyllite (b)	147 807	203 707	255 699	242 397	* 204 000
Steatite (b)	739 849	922 505	888 470	835 119	* 829 000
Iran (c)	69 050	90 889	89 110	66 383	* 67 000
Japan					
Talc	* 25 500	* 26 000	* 26 000	* 25 000	* 24 000
Pyrophyllite	* 350 000	* 345 000	* 350 000	* 340 000	* 340 000
Korea (Rep. of)					
Talc	64 118	9 557	6 438	5 997	5 729
Pyrophyllite	677 465	798 054	892 625	617 411	673 936
Korea, Dem. P.R. of	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Nepal (d)	6 648	9 043	7 996	6 601	* 9 000
Pakistan (e)	21 065	44 886	37 999	13 923	53 991
Thailand					
Talc	4 373	3 508	3 264	504	672
Pyrophyllite	131 843	415 420	106 600	* 100 000	* 100 000
Vietnam					
Pyrophyllite	* 14 000	* 16 000	* 16 000	* 16 000	* 16 000

Production of talc

tonnes (metric)

Country	2006	2007	2008	2009	2010
Australia (e)	* 147 000	* 121 000	* 130 000	* 92 000	* 80 000
World Total	8 100 000	8 300 000	8 100 000	7 600 000	7 400 000

Note(s)

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

Production of tantalum and niobium minerals

tonnes (metric)

Country	2006	2007	2008	2009	2010
Burundi					
Columbite-tantalite	16	52	121	24	* 20
Congo, Democratic Republic					
Columbite-tantalite	52	267	509	490	230
Ethiopia					
Tantalite (a)	109	117	183	206	* 200
Mozambique					
Tantalite	95	196	396	405	* 400
Nigeria					
Tantalite	25	...	...	83	...
Columbite	387	180	335	* 300	128
Rwanda					
Columbite-tantalite	996	546	921	950	749
Canada					
Pyrochlore	* 9 200	* 9 500	* 9 700	* 9 600	4 419
Tantalite	204	167	161	266	* 250
Brazil					
Pyrochlore	* 175 000	* 215 000	* 241 000	* 251 000	* 250 000
Columbite-tantalite	* 380	* 420	* 440	* 390	* 400
China					
Columbite-tantalite	* 350	* 350	* 350	* 350	* 350
Malaysia					
Struverite	93	52	216	176	84
Australia					
Tantalite	* 1 400	* 890	* 940	* 140	* —
World Total concentrates	188 000	228 000	255 000	264 000	257 000
Nb content	* 77 800	* 94 800	* 105 900	* 110 000	* 107 500
Ta content	* 1 300	* 1 000	* 1 300	* 900	* 700

Note(s)

- (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 supplied

- (a) Years ended 7 July of that stated

Production of tellerium metal

tonnes (metric)

Country	2006	2007	2008	2009	2010
Canada	11	14	20	16	8
USA	50	50	50	50	50
Peru	37	35	28	7	—
Japan	24	41	* 47	* 49	* 51

Note(s)

(1) In addition to the countries listed, Germany is believed to produce tellurium metal

Mine production of tin

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Portugal	25	41	29	34	22
Russia (a)	2 600	2 500	1 500	1 200	* 1 000
Burundi	44	28	21	12	10
Congo, Democratic Republic	5 485	9 551	12 817	10 083	6 203
Niger	13	11	* 10	6	6
Nigeria	1 400	2 500	1 800	1 800	1 300
Rwanda	3 013	2 685	2 135	3 202	2 906
Uganda	—	24	40	—	24
Bolivia	17 669	15 972	17 320	19 575	20 190
Brazil	9 528	12 596	13 899	9 500	9 600
Peru (b)	38 470	39 019	39 037	37 503	33 848
Burma	* 900	* 500	* 500	* 600	* 400
China	126 300	145 900	121 200	* 128 000	129 700
Indonesia	80 933	66 137	53 228	46 078	43 258
Laos	* 600	* 700	551	490	800
Malaysia	2 398	2 263	2 605	2 410	2 668
Mongolia	—	14	45	8	7
Thailand	225	149	235	166	291
Vietnam	* 5 400	* 5 400	* 5 400	* 5 400	* 5 400
Australia	2 783	2 071	1 783	13 269	18 646
World Total	298 000	308 000	274 000	279 000	276 000

Note(s)

(a) Metal

(b) Recoverable

Smelter production of tin

tonnes (metric)

Country	2006	2007	2008	2009	2010
Belgium	8 000	8 400	9 200	8 700	9 900
Russia	3 700	3 300	1 700	1 300	* 1 800
Bolivia (a)	14 089	12 251	12 666	14 715	15 000
Brazil	8 780	9 987	11 020	8 311	10 500
Peru	40 495	36 004	38 865	34 388	36 451
China	132 100	148 800	139 900	140 400	149 400
Indonesia	65 357	64 127	53 471	51 418	43 832
Japan	854	879	956	757	841
Malaysia	22 850	25 563	31 691	35 443	38 771
Thailand	27 540	23 104	21 860	19 423	23 551
Vietnam	2 665	3 369	3 583	3 046	* 3 000
Australia	572	118	—	—	—
World Total	327 000	336 000	325 000	318 000	333 000

Note(s)

(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	2006	2007	2008	2009	2010
Norway					
Ilmenite	850 000	882 000	915 000	671 000	864 000
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	* 120 000	108 000	88 000	88 000	11 000
Gambia					
Ilmenite	—	672	—	54 655	69 940
Madagascar					
Ilmenite	—	—	—	* 240 000	* 240 000
Rutile	—	—	—	* 5 000	* 5 000
Mozambique					
Ilmenite	—	140 515	328 875	471 524	678 400
Rutile	—	8 782	6 552	1 800	4 700
Sierra Leone					
Ilmenite	13 819	15 750	17 260	15 200	18 206
Rutile	73 600	82 805	78 910	63 860	68 198
South Africa					
Ilmenite (a)	* 1 330 500	* 1 402 500	* 1 360 000	* 1 445 000	* 1 200 000
Rutile	125 200	111 500	132 000	134 000	135 000
Canada					
Ilmenite (a)(b)	* 2 400 000	* 2 500 000	* 2 600 000	* 2 000 000	* 2 400 000
USA	* 300 000	* 300 000	* 200 000	* 200 000	* 200 000
Brazil					
Ilmenite	* 130 000	130 000	110 000	39 000	* 50 000
Rutile	* 3 000	3 000	3 000	3 000	* 3 000

Production of titanium minerals

tonnes (metric)

Country	2006	2007	2008	2009	2010
China					
Ilmenite	* 1 260 000	* 1 260 000	* 1 080 000	* 900 000	* 1 000 000
India					
Ilmenite (c)	692 906	678 772	676 003	* 680 000	* 680 000
Rutile (c)	16 157	20 518	19 498	* 20 000	* 20 000
Kazakhstan	13 500	15 700	* 16 000	* 17 000	* 17 000
Korea (Rep. of)					
Ilmenite	179 982	193 953	226 069	120 236	...
Malaysia					
Ilmenite	45 649	59 310	36 779	15 983	19 064
Rutile	16 921	1 450	1 834	1 502	7 567
Sri Lanka					
Ilmenite	57 033	70 728	56 824	122 424	52 637
Rutile	2 280	4 607	3 405	2 276	2 568
Vietnam					
Ilmenite (d)	* 605 000	* 653 000	* 710 000	* 700 000	* 881 000
Rutile	437	574	681	620	* 620
Australia					
Ilmenite	2 378 000	2 339 000	2 060 000	1 626 000	1 313 000
Rutile	232 000	312 000	318 000	302 000	430 000
Leucoxene	135 000	164 000	126 000	137 000	160 000
World Total					
Ilmenite (wt of concs)	11 000 000	11 300 000	11 100 000	10 000 000	10 300 000
Rutile (wt of concs)	600 000	600 000	700 000	600 000	800 000
All forms (TiO ₂ content)	* 5 800 000	* 6 100 000	* 5 900 000	* 5 400 000	* 5 700 000

Note(s)

- (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 2010 South Africa produced an estimated 1 400 000 tonnes of slag (85% TiO₂) and Canada produced an estimated 1 000 000 tonnes of slag (80-95% TiO₂)
 - (a) It is believed that the majority of this is processed into slag
 - (b) Canada produces some ilmenite which is sold as such and not processed into slag, but tonnages are small
 - (c) Years ended 31 March following that stated
 - (d) BGS estimates, based on known imports into certain countries

Mine production of tungsten

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Austria	1 153	1 117	1 122	887	975
Portugal (a)	780	846	981	823	799
Russia	* 4 800	* 4 700	* 4 000	* 5 500	* 3 000
Spain	—	—	194	284	303
Burundi	238	163	230	100	* 100
Congo, Democratic Republic	500	580	380	360	* 360
Rwanda	1 559	1 412	1 037	693	669
Uganda	75	86	48	7	44
Canada	2 561	2 700	2 795	2 501	—
Bolivia	1 094	2 501	1 448	1 290	* 1 300
Brazil (b)	533	537	408	208	* 300
Peru	50	366	456	634	716
Burma (c)	197	183	136	87	* 60
China	45 000	41 000	50 000	51 000	52 000
Kazakhstan	50	100	...	...	...
Korea, Dem. P.R. of	* 900	* 250	* 350	* 350	* 350
Kyrgyzstan	* 100	* 100	* 100	* 100	* 100
Mongolia	124	166	97	27	14
Thailand (a)	546	823	582	200	326
Uzbekistan	* 300	* 300	* 300	* 300	* 300
Australia (d)(e)	13	30	11	17	11
World Total	60 600	58 000	64 700	65 400	61 700

Note(s)

(a) Wolframite and scheelite

(b) Mainly scheelite

(c) Including tungsten content of tin-wolframite concentrates

(d) Scheelite

(e) Years ended 30 June of that stated

Mine production of uranium

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Czech Republic	383	322	290	286	259
Germany	65	41	—	—	* 8
Romania	* 90	* 77	* 77	* 75	* 77
Russia	3 262	3 413	3 521	3 564	3 562
Ukraine	* 800	846	* 800	840	850
Malawi	—	—	—	90	671
Namibia	2 782	3 680	5 074	5 080	4 965
Niger	3 431	3 153	2 993	3 241	4 198
South Africa	542	525	654	629	583
Canada	9 862	9 475	9 001	10 176	9 684
USA	1 581	1 746	1 503	1 428	1 628
Brazil	190	299	330	345	148
China	* 750	* 712	* 769	* 750	* 827
India	* 230	* 270	* 271	* 290	* 400
Kazakhstan	5 279	6 637	8 521	13 900	17 803
Pakistan	* 45	* 45	* 45	* 50	* 45
Uzbekistan	2 270	2 320	2 338	2 429	2 400
Australia	7 606	8 603	8 471	7 942	6 085
World Total	39 200	42 200	44 700	51 100	54 200
World Total (U ₃ O ₈ equivalent)	46 300	49 800	52 700	60 300	63 900

Note(s)

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

Mine production of vanadium

tonnes (metal content)

Country	2006	2007	2008	2009	2010
Russia	* 24 000	* 23 000	* 23 000	* 22 000	* 21 000
South Africa	23 800	23 486	20 295	14 353	22 606
China	* 17 000	* 18 000	* 18 500	* 20 800	* 22 000
Kazakhstan	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
World Total	66 000	65 000	63 000	58 000	67 000

Note(s)

(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	2006	2007	2008	2009	2010
Russia	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Egypt	* 6 700	5 770	7 560	4 650	—
South Africa	197 765	199 664	199 764	193 334	199 285
Uganda	3 512	3 269	—	—	1 121
Zimbabwe	13 421	17 395	16 123	3 211	—
USA (a)	* 100 000	* 100 000	* 100 000	* 110 000	* 100 000
Argentina	1 585	1 726	1 813	2 150	2 200
Brazil	19 279	18 952	29 000	22 700	* 23 000
China	* 110 000	* 110 000	* 120 000	* 120 000	* 130 000
India (b)	11 827	8 910	12 647	12 847	* 20 300
Japan	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Australia (c)	9 392	8 900	8 319	6 548	7 922

Note(s)

(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	2006	2007	2008	2009	2010
Finland	16 200	16 364	15 600	* 16 000	* 16 000
Spain	...	10 918	10 100	7 000	6 000
Namibia	55	* 55	* 55	—	—
Mexico	44 280	50 809	46 844	29 728	46 548
USA	* 125 000	* 125 000	* 90 000	* 65 000	* 67 000
China	350 000	* 350 000	* 325 000	* 300 000	* 300 000
India (a)	131 572	118 666	111 581	132 385	* 171 000

Note(s)

(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	2006	2007	2008	2009	2010
Armenia	2 270	2 560	3 880	3 564	7 468
Bosnia & Herzegovina	902	4 799	8 595	6 228	10 025
Bulgaria (a)	16 108	14 453	12 819	9 339	9 904
Finland	35 700	38 900	27 800	30 233	55 562
Greece	16 000	20 700	24 200	17 800	18 400
Ireland, Republic of	425 800	400 900	398 200	* 385 700	342 500
Kosovo	—	—	(a) 4 902	(a) 5 582	(a) 6 449
Macedonia	10 836	30 957	38 737	38 648	32 900
Poland	126 600	129 600	132 400	115 500	107 700
Portugal	7 505	24 380	37 900	501	6 422
Romania	8 052	849	14	—	—
Russia	178 000	177 000	204 000	225 000	269 000
Serbia	2 100	1 200	2 400	2 700	2 600
Spain	—	—	—	5 900	17 600
Sweden	210 029	214 576	187 987	192 502	198 687
Turkey	122 300	140 500	126 800	135 800	195 500
Algeria	303	—	—	—	—
Congo, Democratic Republic	16 800	18 500	15 465	19 696	9 223
Morocco	74 400	54 353	80 747	44 800	44 300
Namibia	208 000	196 000	204 000	244 400	236 500
South Africa	34 444	31 062	29 002	28 200	36 142
Canada	637 956	630 485	750 502	699 145	648 905
Honduras	37 646	29 211	28 462	36 370	33 839
Mexico	479 400	452 012	453 588	489 766	570 004
USA	727 100	803 300	778 100	735 700	748 000
Argentina	29 808	27 025	30 349	31 869	32 600
Bolivia	172 747	214 053	383 618	430 879	411 409
Brazil	185 211	193 899	173 933	172 688	* 192 000
Chile	36 238	36 453	40 519	27 801	27 662
Peru	1 203 364	1 444 354	1 602 597	1 512 931	1 470 510
Burma	* 8 000	* 10 000	* 7 000	* 6 000	* 8 600
China	2 844 200	3 047 700	3 342 600	3 324 400	3 699 600
India (b)	504 863	551 268	647 659	679 534	* 737 000
Iran	166 000	75 000	86 000	72 048	* 72 000
Japan	7 200	—	—	—	—
Kazakhstan	404 600	386 000	387 400	398 400	405 300
Korea (Rep. of)	16	2 034	1 836	2 221	355
Korea, Dem. P.R. of	* 75 000	* 78 000	* 48 000	* 29 000	* 36 000
Laos	4 000	3 000	2 200	3 400	3 000
Mongolia	54 950	77 350	71 800	70 750	56 300
Pakistan	—	—	—	1 000	10 000
Philippines	3 000	7 400	1 619	10 035	9 268
Saudi Arabia	983	716	3 663	4 952	5 000
Thailand	32 103	26 406	17 811	27 493	21 971
Vietnam	45 000	45 000	42 000	38 000	36 000
Australia	1 362 000	1 514 000	1 519 000	1 290 000	1 480 000
World Total	10 500 000	11 200 000	12 000 000	11 600 000	12 300 000

Note(s)

(a) Metal content of ore

(b) Years ended 31 March following that stated

Production of slab zinc

tonnes (metric)

Country	2006	2007	2008	2009	2010
Belgium	238 000	254 000	251 000	137 000	281 000
Bulgaria	85 900	98 100	101 700	92 700	92 300
Finland	282 238	305 543	297 722	295 049	307 144
France	120 000	129 000	118 000	161 000	162 000
Germany	342 566	294 735	292 284	* 153 000	165 000
Italy	109 200	102 100	107 100	103 400	104 700
Kosovo	—	—	—	5 487	* 5 500
Netherlands	238 274	234 000	250 000	224 000	264 000
Norway	160 670	157 027	145 469	138 973	148 862
Poland	133 900	141 900	142 500	139 100	135 100
Romania	43 705	58 342	61 978	1 000	—
Russia	248 000	263 000	263 000	208 000	264 000
Serbia	15 000	2 000	—	—	—
Spain	507 300	509 000	466 000	515 000	517 100
Ukraine	1 700	2 600	3 800	8 800	7 600
Algeria	32 854	27 249	30 752	33 000	36 000
Namibia	129 897	150 100	145 400	153 815	151 688
South Africa	90 000	101 000	82 000	87 000	90 000
Zambia	—	1 000	2 000	—	—
Canada	824 464	802 103	764 310	685 504	691 222
Mexico	279 734	321 932	305 188	313 044	322 508
USA	268 900	278 000	286 000	203 500	248 000
Argentina	45 991	46 300	42 600	35 600	* 41 000
Brazil	279 000	265 126	248 874	242 000	288 100
Peru	175 250	162 575	190 324	149 494	223 112
China	3 162 700	3 742 600	4 042 300	4 286 300	5 164 200
India	415 000	441 000	589 000	640 000	735 000
Iran (a)	139 000	125 000	* 110 000	115 200	112 000
Japan	614 331	597 650	615 533	540 604	574 008
Kazakhstan	364 821	358 226	365 572	327 900	318 800
Korea (Rep. of)	667 000	691 000	739 000	722 000	750 000
Korea, Dem. P.R. of	* 51 000	* 36 000	* 41 000	* 26 000	* 42 000
Thailand	94 779	99 337	107 753	104 695	95 219
Uzbekistan	46 000	71 800	70 400	19 000	* 56 000
Vietnam	* 10 000	* 10 000	* 16 000	* 17 000	* 16 000
Australia	464 000	502 000	500 000	525 000	498 000
World Total	10 700 000	11 400 000	11 800 000	11 400 000	12 900 000

Note(s)

(a) Years ended 20 March following that stated

Production of zirconium minerals

tonnes (metric)

Country	2006	2007	2008	2009	2010
Russia (a)	* 7 500	7 136	* 7 000	* 5 000	* 6 000
Ukraine	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Gambia	410	355	—	—	—
Madagascar	—	—	—	* 8 000	* 8 000
Mozambique	...	26 347	32 985	21 100	37 100
South Africa	414 400	388 800	404 000	392 000	381 000
USA	143 000	121 000	122 000	* 100 000	* 110 000
Brazil (a)	25 120	26 739	25 300	34 200	* 37 000
China	* 135 000	* 140 000	* 140 000	* 130 000	* 140 000
India	20 535	35 977	29 158	* 29 000	* 29 000
Indonesia	* 65 000	* 111 000	* 65 000	* 63 000	* 50 000
Malaysia	1 690	7 393	984	1 145	1 261
Sri Lanka	8 321	381	1 447	10 267	9 200
Thailand	—	1 023	—	—	—
Vietnam (b)	* 27 000	* 22 000	* 24 000	* 8 000	* 8 000
Australia	491 000	600 000	528 000	431 000	540 000
World Total	1 374 000	1 523 000	1 415 000	1 268 000	1 392 000

Note(s)

(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



Price £30

