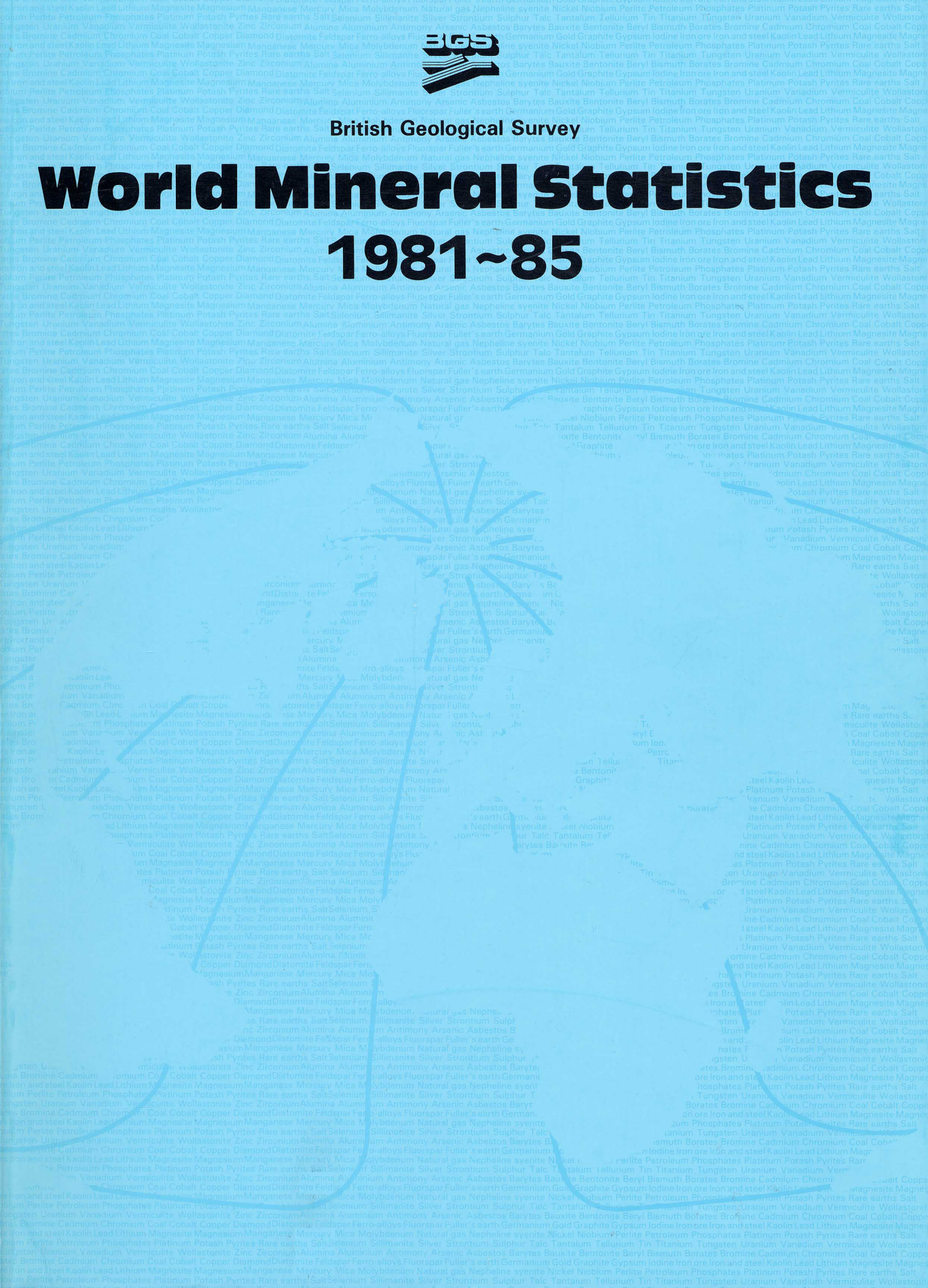




British Geological Survey

World Mineral Statistics 1981~85



BRITISH GEOLOGICAL SURVEY

Natural Environment Research Council

WORLD MINERAL STATISTICS 1981–85

Production: Exports: Imports

Compiled by G. J. Lofty, N. E. Sharp, J. A. Hillier, and P. H. G. Joseph
Research and Graphics by C. D. G. Black

First published 1987

BRITISH GEOLOGICAL SURVEY

Sole Selling Agents

Mining Journal Books Ltd,
60 Worship Street, London EC2A 2HD
England
Telephone 01-377 2020
Telex 8952809 MINING G

BRITISH GEOLOGICAL SURVEY

Keyworth, Nottinghamshire NG12 5GG
Murchison House, West Mains Road, Edinburgh EH9 3LA

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

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

ISBN 0 85272 094 7

All communications regarding the content of this publication should be addressed to the Group Manager, Mineral Resources and Applied Geochemistry, British Geological Survey, 64 Gray's Inn Road, London WC1X 8NG.

The compilations presented in this book are © Crown copyright and may not be reproduced in any form without the permission of the Director, British Geological Survey.

Bibliographical reference

BRITISH GEOLOGICAL SURVEY. 1987. *World mineral statistics 1981–85: production: exports: imports.* (Keyworth, Nottinghamshire: British Geological Survey.)

Compilers

Staff of Mineral Intelligence, Statistics and Economics
British Geological Survey, London

PREFACE

This is the tenth volume of *World Mineral Statistics*. The first was published in 1978 but publication of similar statistical information by the British Geological Survey and its precursors dates back to 1913 in, for example, *Statistical Summary of the Mineral Industry*. In this issue we continue to feature special graphs and tables which we introduced in 1986.

The paucity of data available from some major trading countries creates major problems in the compilation of accurate figures for their trade in mineral materials. Where appropriate, therefore, a reconstruction of either their imports or exports is carried out by searching the official publications of their world-wide trading partners. In this way a high proportion of trade data in particular commodities can generally be traced without breaching confidentiality. This year's trade reconstruction is devoted to the People's Republic of China in view of the increasing public interest in the region. Approximately forty mineral commodities are covered, and although necessarily incomplete, the tables should serve as a reasonable guide to the mineral resource and trade potential of China. The Appendix is printed on a coloured background to remind the reader that figures are derived indirectly from a number of sources.

The tables of mine and refined metal production are basic indicators of the level of activity in the world mineral industry. Many show a perceptible recovery over the last three or four years, illustrated clearly in the corresponding production graphs. The almost unbroken rising trend in coal production over the last thirty-six years is perhaps worthy of comment.

Twenty-one price-production graphs, including a new one for tungsten, appear in this edition. With regard to the 36-year trend analyses of nine of the commodities, it should be noted that computed growth rates, with the exception of those for coal and silver, exceed the actual growth rates experienced towards the end of the period. Whether or not recovery towards the historical trend will be sustained is a matter for conjecture.

In previous editions the data for petroleum and sulphur were shown in thousands of tonnes in the production table and in tonnes in the trade tables. This anomaly has now been rectified.

In each new volume account is taken of revisions and information received after the publication of the previous issue, so that data for every year are as up-to-date as is practicable. The objective remains to present the latest official information from primary sources, that is, from the individual producing and trading countries, rather than to reproduce data from compilations made by other organisations working in the same field of world mineral statistics. However, such secondary sources have been fully consulted and the co-operation afforded to the British Geological Survey by numerous national and international organisations is gratefully acknowledged.

It is the hope of the compilers that this volume will once again provide comprehensive statistical and economic information for those who monitor and analyse the performance of the mineral industry, the importance of which to our material well-being is ever more apparent. Criticisms and suggestions that might help us to meet the changing needs of the reader would be welcomed.

G. Innes Lumsden, FRSE
Director

British Geological Survey
Keyworth
Nottinghamshire NG12 5GG
March 1987

INDEX

Alumina 3	Magnesium 295
Aluminium 2	Manganese 166
Antimony 16	Mercury 172
Arsenic 22	Mica 176
Asbestos 26	Molybdenum 180
Barytes 30	Natural gas 195
Bauxite 2	Nepheline syenite 295
Bentonite 33	Nickel 184
Beryl 294	Niobium 255
Bismuth 39	Perlite 295
Borates 294	Petroleum 192
Bromine 42	Phosphates 200
Cadmium 44	Platinum 204
Chromium 48	Potash 210
Coal 52	Pyrites 241
Cobalt 62	Rare earths 219
Copper 67	Salt 224
Diamond 80	Selenium 296
Diatomite 86	Sillimanite 231
Feldspar 90	Silver 234
Ferro-alloys 123	Strontium 296
Fluorspar 93	Sulphur 241
Fuller's earth 33	Talc 251
Germanium 294	Tantalum 255
Gold 96	Tellurium 296
Graphite 103	Tin 258
Gypsum 105	Titanium 266
Iodine 112	Tungsten 272
Iron ore 114	Uranium 297
Iron and steel 119	Vanadium 278
Kaolin 146	Vermiculite 297
Lead 150	Wollastonite 297
Lithium 159	Zinc 282
Magnesite 162	Zirconium 292

PRODUCTION-PRICE GRAPHS

Figure

1	Aluminium	Facing Primary Aluminium production table
2	Antimony	Facing Antimony production table
3	Cadmium	Facing Cadmium production table
4	Coal	Facing Coal production table
5	Cobalt	Facing Cobalt mine production table
6	Copper	Facing Copper mine production table
7	Gold	Facing Gold production table
8	Iron	Facing Iron Ore production table
9	Steel	Facing Steel Ingots and Castings production table
10	Lead	Facing Lead mine production table
11	Manganese	Facing Manganese Ore production table
12	Mercury	Facing Mercury production table
13	Nickel	Facing Nickel mine production table
14	Petroleum	Facing Crude Petroleum production table
15	Phosphate	Facing Phosphate Rock production table
16	Potash	Facing Potash production table
17	Silver	Facing Silver production table
18	Sulphur	Facing Sulphur and Pyrites production table
19	Tin	Facing Tin mine production table
20	Tungsten	Facing Tungsten mine production table
21	Zinc	Facing Zinc mine production table

EXPLANATORY NOTES

Coverage

World Mineral Statistics covers the majority of economically important, and internationally traded, mineral commodities; with few exceptions its range is the same as that in the *Statistical Summary of the Mineral Industry*, the predecessor of this series, which was discontinued in 1971. For each commodity constant efforts are made to ensure that as many producing and trading countries as possible are reported and that trade data cover all major traded forms. For some commodities, where statistics on production and trade 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 in the Mineral Intelligence, Statistics and Economics files and is available for consultation.

Arrangement of countries

After the United Kingdom, if listed, countries are ordered alphabetically in geographical groupings as follows:

- European Economic Community (EEC)
- Europe other than EEC; including the Soviet Union
- 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 and United Nations usage.

Production

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 or imported materials, whether primary or secondary, but excludes remelted material.

Canada Production of Canadian minerals is shown throughout by the official figures for 'sales and shipments'.

Trade

Federal Republic of Germany Data include shipments to, and purchases from, the German Democratic Republic.

South Africa Import data are taken from the trade statistics of the common customs area, which includes Botswana, Lesotho, South Africa, Namibia and Swaziland, and relate to this area as a whole. Where separate data are available for any of these countries they have also been shown even though this may result in some double counting.

Export data are taken from returns furnished by producers to the Department of Mineral and Energy Affairs, and may be shipments rather than actual exports.

Estimates for other South African exports, based on reconstruction from importing countries, may include material originating in any of the countries of the common customs area and so involve some double counting on tables where these are listed separately.

USA US trade statistics show trade between the US customs territory and foreign countries, but exclude trade between the US and Puerto Rico, and between the US and Guam, American Samoa and other US possessions. Also excluded is trade between any of these outlying areas, shipments from US possessions to foreign countries, and shipments for the use of the US Government in foreign countries.

United Kingdom Export data for 1981 are estimates obtained by adding together the figures for the months when exports were fully processed (January and February, and September to December) and those from sampling (March to August). The figures may therefore be unreliable and should be used and interpreted with considerable caution.

General Although every effort has been made to provide comprehensive coverage of trade statistics the resulting trade compilations depend on the nature of the data available. The fact that a country is not shown as trading in a particular commodity does not necessarily imply that there is no trade in that item. The commodity may not be separately identified in the available trade statistics or may not be traded in significant quantities.

Where an estimate for a trade statistic has been reconstructed from the imports/exports of other countries, the resulting figure may be conservative, as complete coverage of world trade is seldom available.

In general, export statistics include re-exports. The distinction is only made when re-exports are recorded separately in the relevant national trade account and are deemed to be significant.

Tables showing trade in metals covered by Standard International Trade Classification (Revision 2) 688.0, 689.1 & 9, and 699.9 (Antimony, Bismuth, Cadmium, Chromium, Cobalt, Manganese, Molybdenum, Tantalum–Niobium, Titanium, Tungsten, Vanadium and Zirconium) include under the term 'metal', unwrought and wrought forms, powder, alloys, waste and scrap, unless these are separately shown. Trade tables of other metals include only unwrought forms under the term 'metal'.

Commodity Production—Price Graphs

These have been inserted adjacent to the relevant production tables. They are computer-generated plots of total annual world production against time. On the same horizontal time axis a specific price for the commodity has been plotted with reference to the right-hand vertical axis. Details of the price used are annotated below each plot. The production data have been taken from the current series of *World Mineral Statistics* and, pre-1970, from its predecessor, the *Statistical Summary of the Mineral Industry*. It should be noted that although mine production and commodity prices are shown on the same plot, any inference about the relationship between the two curves is a matter for the reader.

Most of the constant commodity prices are taken from *Commodity Trade and Price Trends*, published by the Johns Hopkins University Press for the World Bank, however use has also been made of other sources which are attributed on the relevant graphs. Permission to use these data is gratefully acknowledged.

The initial graphical analysis of the data was carried out using the MINITAB package, but the final plots were generated by an in-house program developed by Allan Burt of the NERC Computer Services and run on the NCS VAX 8600 computer at BGS, Keyworth.

Trade Reconstruction: Appendix

In the course of compilation of this publication it has been found necessary to reconstruct data for nations which do not publish trade statistics on all the mineral commodities covered. By extracting the information on imports or exports which is published by trading partners it is possible to reconstruct fairly comprehensive, though possibly conservative, trade data for most of these commodities. These reconstructions are maintained in the files of the Mineral Statistics section. Initially only one country will be published each year.

Acknowledgements

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

Among the numerous overseas government agencies which have provided valuable information, particular acknowledgement is made to the United States Bureau of Mines; the Department of Energy, Mines and Resources of Canada; the Bureau of Mineral Resources, Geology and Geophysics of Australia; the Department of Mines of South Africa; the Indian Bureau of Mines; and the Mines Departments of other countries whose regular statements, yearbooks and other reports are worthy of direct consultation by readers in search of detail.

Specialist commodity organisations which have kindly allowed information to be reproduced include the British Sulphur Corporation, the International Lead and Zinc Study Group, the International Tin Council, the UK Iron and Steel Statistics Bureau, ISMA Ltd, Samuel Montagu & Company Ltd, the UN Food and Agriculture Organization, and the UNCTAD Committee on Tungsten. In a few instances, information on specific commodities has been obtained directly from company sources.

Supplementary information is also obtained from publications dealing with a wider range of commodities such as American Bureau of Metal Statistics, *Non-ferrous Metal Data*; Bureau de Documentation Minière, *Annales des Mines*; Engineering and Mining Journal, *Annual Review and Outlook*; Groupe IMETAL, *Annuaire Statistique Minemet*; Metallgesellschaft AG, *Metal Statistics*; Mining Journal, *Mining Annual Review*; Samim, *Metalli Non Ferrosi*; World Bureau of Metal Statistics, *World Metal Statistics*; and publications of the United Nations and its agencies.

Units

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

Tonnes × 0.9842 = long tons

Tonnes × 1.1023 = short tons

Kilograms × 2.2046 = pounds

Kilograms × 32.1507 = troy ounces

Cubic metres × 35.3147 = cubic feet

1 tonne of crude petroleum equals on average 7 barrels of crude petroleum.

1 metric-ton unit = 10 kilograms

1 flask mercury = 34.5 kilograms

Conversion of national currencies to pounds sterling has been made using the annual period average factors shown for each country in *International Financial Statistics* published by the International Monetary Fund.

Symbols

... Figures not available

0 Quantity less than half unit shown

— Nil

* Estimated

BGS British Geological Survey

STATISTICAL TABLES

Production of Bauxite

tonnes

Country	1981	1982	1983	1984	1985
France	1 865 000	1 687 000	1 661 000	1 607 000	1 504 000
Greece	3 248 822	2 887 855	2 435 246	2 296 225	2 453 798
Italy	19 000	23 810	13 118	—	—
Hungary	2 914 000	2 627 000	2 917 000	2 994 000	2 815 000
Romania	400 000	380 000	420 000	460 000	500 000
Soviet Union (a)	* 6 400 000	* 6 400 000	* 6 300 000	* 6 200 000	* 6 400 000
Spain	8 930	7 361	5 208	7 273	2 427
Turkey	589 727	508 391	306 350	131 573	213 752
Yugoslavia	3 249 000	3 668 000	3 500 367	3 347 000	* 3 538 000
Ghana	181 300	63 500	70 400	48 500	124 500
Guinea	12 822 000	11 827 400	12 986 000	14 738 000	14 329 000
Sierra Leone	609 625	632 000	785 200	1 042 000	1 144 700
Zimbabwe	5 139	7 533	23 145	22 726	20 877
Dominican Republic (b)	405 720	152 250	—	—	—
Haiti (c)	409 700	377 000	—	—	—
Jamaica	11 605 977	8 157 652	7 724 983	8 605 000	6 218 900
USA (b)	1 510 000	732 000	679 000	856 000	674 000
Brazil (d)	4 048 545	3 469 928	4 281 241	5 902 577	6 251 000
Guyana	2 395 900	1 783 100	1 087 300	2 484 700	2 206 400
Suriname	4 125 000	3 060 000	2 793 000	3 375 000	3 738 000
China	* 1 800 000	* 1 950 000	* 1 900 000	* 2 000 000	* 2 100 000
India	1 955 000	1 954 261	1 929 272	2 035 646	2 016 000
Indonesia	1 203 380	700 247	777 869	1 003 233	830 471
Malaysia	700 866	589 000	501 790	680 434	491 904
Australia	25 441 392	23 625 042	24 372 291	31 536 913	31 177 617
World total	87 900 000	77 300 000	77 500 000	91 400 000	88 800 000

Note: In addition to the countries listed, Pakistan produces small amounts of bauxite

- (a) Includes nepheline concentrates and alunite
- (b) Dried bauxite equivalent
- (c) Years ended 30 September of that stated
- (d) Includes beneficiated and direct shipping ore

Production of Alumina

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	90 361	88 103	93 100	105 000	109 700
France	1 235 921	1 086 700	1 009 600	1 035 500	877 100
Germany, Federal Republic of	1 650 636	1 509 866	1 580 223	1 700 622	1 656 579
Greece	490 168	403 634	410 000	482 410	380 060
Irish Republic	—	—	66 000	675 000	555 400
Italy	786 357	698 329	466 000	625 000	555 319
Czechoslovakia	149 283	151 219	152 456	* 150 000	* 150 000
German Democratic Republic	45 164	46 085	42 156	43 239	46 695
Hungary	792 000	743 000	835 512	811 000	801 000
Romania	558 000	514 000	512 000	552 000	* 530 000
Soviet Union	* 3 800 000	* 4 000 000	* 4 175 000	* 4 200 000	* 4 250 000
Spain	* 695 230	673 000	729 000	742 000	725 000
Turkey	131 400	84 204	57 420	75 120	113 304
Yugoslavia	1 037 227	1 018 334	1 009 895	1 135 000	1 124 000
Guinea	679 000	578 000	564 000	550 000	577 000
Canada	1 208 000	1 127 000	1 116 000	1 126 000	1 019 000
Jamaica	2 556 057	1 761 135	1 853 940	1 751 000	1 511 800
USA	* 5 960 000	* 4 130 000	* 4 000 000	* 4 545 000	* 3 465 000
Brazil	518 900	551 700	628 900	891 300	1 100 000
Guyana	170 000	73 135	—	—	—
Suriname	1 248 000	1 052 000	1 154 000	1 237 000	1 242 000
Venezuela	—	—	594 000	1 142 000	1 085 000
China	* 700 000	* 800 000	* 800 000	* 800 000	* 950 000
India	482 519	485 000	480 000	569 000	571 000
Japan	1 619 000	1 212 000	1 378 000	1 488 000	1 336 000
Taiwan	19 000	—	—	—	—
Australia	7 079 009	6 630 507	7 230 526	8 780 702	8 791 501
World total	33 700 000	29 400 000	30 900 000	35 200 000	33 500 000

Note: Where possible figures relate to the calcined equivalent weight (i.e. Al_2O_3) of alumina hydrate. In countries where all hydrate is destined for calcination, figures relate directly to calcined alumina

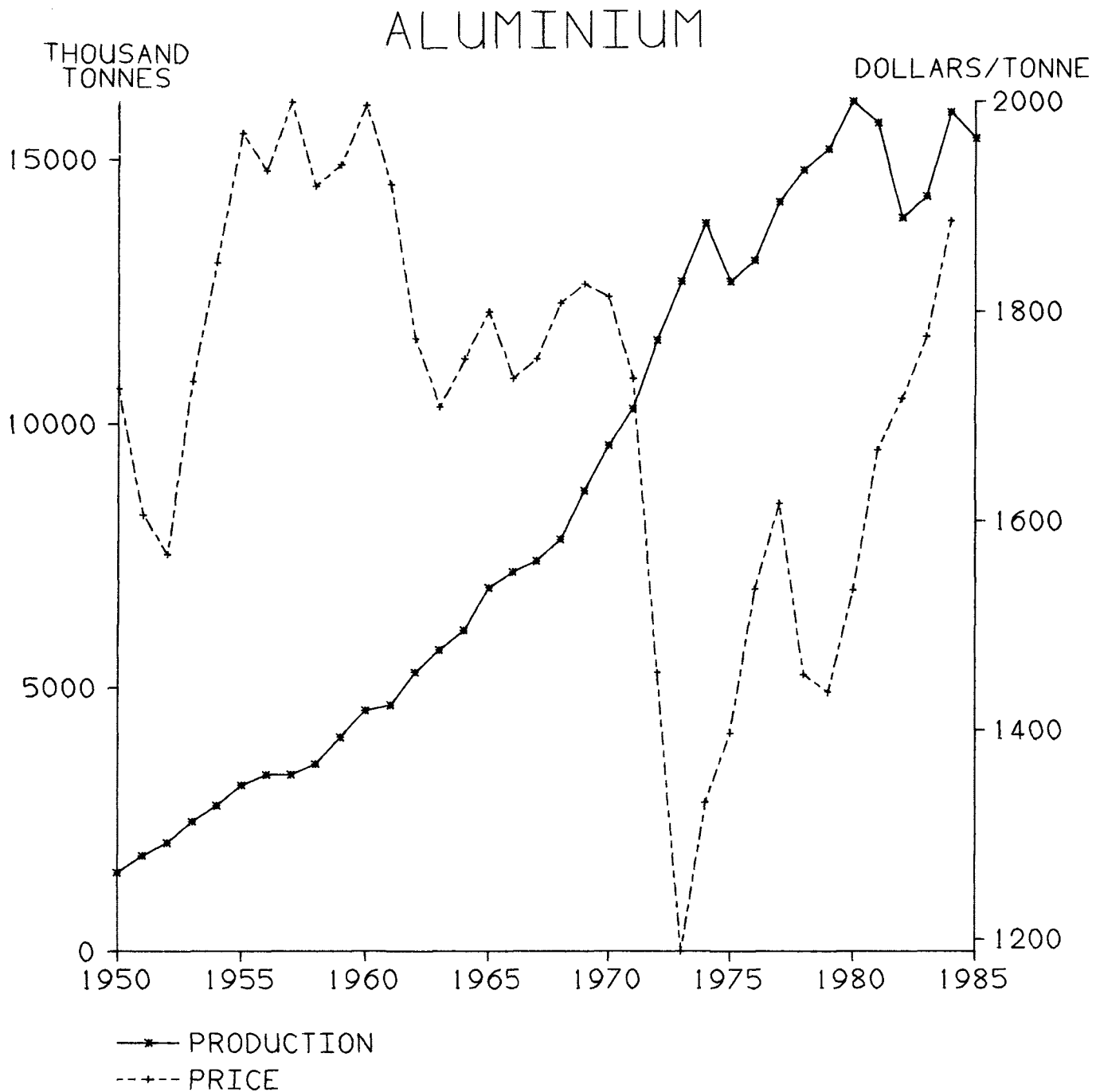


Figure 1 World production of primary aluminium from 1950 to 1985 compared with the yearly average producer price of unalloyed aluminium ingot on the New York Market expressed in constant 1980 US dollars (prior to 1960: primary pig). Trend line analysis of the production data indicates a growth rate of approximately 7% per annum over 36 years. *Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.*

Production of Primary Aluminium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	339 183	240 806	252 525	287 900	275 373
France	435 609	390 413	360 793	341 518	293 100
Germany, Federal Republic of	728 896	722 754	743 313	777 165	745 373
Greece	148 230	136 612	137 210	138 750	125 222
Italy	273 845	232 861	195 694	230 202	224 120
Netherlands	261 983	250 925	235 351	249 170	250 603
Austria	94 219	93 908	94 200	95 833	94 106
Czechoslovakia	32 684	33 830	36 156	31 635	31 725
German Democratic Republic	* 60 000	* 58 000	* 57 000	* 58 000	* 60 000
Hungary	74 253	74 221	74 039	74 202	73 832
Iceland	73 476	75 241	76 077	80 359	73 400
Norway	633 585	638 091	713 014	765 083	712 406
Poland	66 000	42 700	44 400	46 000	47 000
Romania	242 000	208 000	223 000	244 000	220 000
Soviet Union	* 2 400 000	* 2 400 000	* 2 400 000	* 2 300 000	* 2 300 000
Spain	396 600	366 500	357 500	380 800	370 100
Sweden	82 329	81 324	84 935	79 625	83 700
Switzerland	82 221	75 256	75 974	79 173	72 742
Turkey	40 400	36 300	31 045	36 839	54 150
Yugoslavia	172 683	217 338	258 174	267 500	* 270 000
Cameroon	65 400	78 900	77 400	74 154	81 600
Egypt	142 000	141 000	140 200	172 500	178 500
Ghana	190 500	174 200	42 500	—	48 500
South Africa	83 701	105 500	161 300	167 400	164 600
Canada	1 115 691	1 064 795	1 091 213	1 221 985	1 282 316
Mexico	43 237	41 180	39 706	43 988	42 744
USA	4 489 000	3 274 000	3 353 000	4 099 000	3 500 000
Argentina	133 900	140 500	136 400	137 800	139 900
Brazil	256 418	299 054	400 744	454 999	549 830
Suriname	40 520	42 500	33 600	22 992	28 785
Venezuela	314 105	273 632	335 304	386 000	403 501
Bahrain	141 300	171 000	171 700	177 300	174 800
China	* 350 000	* 370 000	* 400 000	* 425 000	* 425 000
Dubai	106 000	148 739	151 170	155 400	153 200
India	212 844	216 679	204 764	267 902	266 496
Indonesia	—	30 500	114 766	198 960	216 820
Iran	12 500	45 000	39 200	42 400	43 000
Japan	770 602	350 706	255 900	286 728	226 547
Korea, Dem. P.R. of	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Korea, Republic of	17 506	15 226	12 629	18 252	17 695
Taiwan	30 532	10 120	—	—	—
Australia	379 427	380 796	478 190	757 798	851 286
New Zealand	153 979	163 420	218 610	242 851	240 835
World total	15 700 000	13 900 000	14 300 000	15 900 000	15 400 000

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Bauxite	2 155	3 870	1 100	2 556	2 286
Alumina	8 850	8 595	8 272	11 756	7 546
Alumina hydrate	30 772	28 423	29 656	32 219	37 575
Unwrought	65 994	60 943	71 197	59 371	65 342
Unwrought alloys	102 544	58 573	61 189	68 189	63 782
Scrap	38 008	60 351	78 865	88 523	90 803
Belgium-Luxembourg					
Bauxite	654	1 216	1 699	1 702	1 992
Alumina	660	469	757	732	1 353
Unwrought	17 166	4 273	7 100	4 834	8 942
Unwrought alloys	12 500	9 480	9 909	5 443	14 094
Scrap	38 469	40 444	46 757	51 395	46 950
Denmark					
Bauxite	19 424	2 366	414	3 089	2 042
Unwrought	133	2	27	45	37
Unwrought alloys	7 511	8 283	8 958	9 688	12 092
Scrap	12 440	11 781	15 002	15 747	16 668
France					
Bauxite	6 620	92 369	68 651	245 208	200 733
Alumina	159 532	196 038	178 490	157 999	200 442
Alumina hydrate	79 376	84 994	91 241	73 794	99 663
Unwrought	89 456	95 359	67 557	68 008	38 836
Unwrought alloys	100 882	87 324	93 161	78 396	76 527
Scrap	48 988	60 757	90 365	88 858	90 938
Germany, Federal Republic of					
Bauxite	22 885	33 744	43 934	44 633	42 212
Alumina	402 156	253 697	331 964	443 836	435 349
Alumina hydrate	180 931	184 972	210 476	260 485	233 705
Unwrought	78 731	75 076	80 873	69 381	66 050
Unwrought alloys	174 240	180 344	240 272	224 808	215 644
Scrap	69 922	67 719	77 723	88 175	89 691
Greece					
Bauxite	1 587 713	1 441 203	1 410 510	1 238 428	1 332 536
Alumina	159 000	130 000	110 500	208 500	187 400
Unwrought	69 224	66 608	55 066	48 427	43 198
Scrap	427	93	653	1 150	1 114
Irish Republic					
Alumina	1 925	2 309	31 667	654 077	571 986
Unwrought (a)	2 173	1 876	2 537	1 099	585
Scrap	2 365	3 479	4 246	4 123	5 190
Italy					
Bauxite	18 229	8 240	5 053	12 287	7 273
Alumina	222 113	256 618	160 984	300 468	265 282
Alumina hydrate	9 087	13 410	13 246	24 657	18 139
Unwrought	20 758	30 624	10 495	8 379	17 013
Unwrought alloys	29 047	23 490	30 795	23 842	26 783
Scrap	3 168	3 346	5 721	3 871	5 816
Netherlands					
Bauxite	12 502	4 268	3 490	5 509	5 063
Alumina	40 318	46 957	51 825	64 974	59 124
Alumina hydrate	12	49	58	65	51
Unwrought	220 103	223 807	302 356	136 920	149 398
Unwrought alloys	131 893	126 995	130 925	142 100	147 369
Scrap	74 778	73 669	80 201	93 258	87 062
Austria					
Unwrought	24 968	27 635	30 153	28 817	31 072
Scrap	56 371	51 406	59 547	29 843	33 248
Bulgaria					
Unwrought (a)(f)	* 3 600	* 3 600	* 6 100	* 5 000	* 4 000
Czechoslovakia					
Unwrought (a)(f)	* 8 500	* 15 400	* 19 500	* 18 200	* 21 100
Finland					
Unwrought (a)	4 643	6 306	10 679	13 575	16 171
German Democratic Republic					
Unwrought (a)(f)	* 25 400	* 26 600	* 23 400	* 30 400	* 23 000
Scrap (f)	* 4 000	* 9 900	* 12 600	* 6 600	* 9 200

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
Hungary					
Bauxite	498 322	467 375	431 033	430 587	382 335
Alumina	626 404	542 286	658 672	643 993	593 758
Alumina hydrate	6 930	9 667	6 200	6 928	5 594
Unwrought	85 741	48 363	57 822	71 294	50 528
Scrap	8 709	8 740	6 498	8 226	6 928
Iceland					
Unwrought (a)	63 817	61 532	106 904	79 928	70 600
Norway					
Unwrought	338 668	332 013	330 131	322 038	307 311
Unwrought alloys	184 993	212 759	307 208	316 637	336 479
Scrap	20 677	21 858	27 517	27 138	28 725
Poland					
Unwrought (a)	5 119	2 317	2 812	3 166	2 980
Portugal					
Scrap	4 402	4 187	6 920	5 158	...
Romania					
Unwrought	98 200	76 100	121 600	...	...
Soviet Union					
Unwrought (a)(f)	* 363 500	* 433 900	* 494 800	* 488 600	* 450 500
Scrap (f)	* 53 800	* 50 400	* 11 600	* 15 900	* 21 500
Spain					
Alumina	23 907	7 377	2 611	20 725	16 527
Unwrought	111 129	98 962	101 284	152 772	135 624
Unwrought alloys	51 552	46 220	64 642	78 470	72 760
Sweden					
Bauxite	5	673	5	—	541
Alumina	621	740	632	310	513
Unwrought	2 958	2 317	2 392	1 901	1 452
Unwrought alloys	34 796	32 904	36 772	36 297	40 364
Scrap	2 345	2 446	5 053	3 171	8 699
Switzerland					
Alumina	301	320	239	288	1 445
Unwrought & scrap	44 982	52 981	56 825	53 895	49 570
Turkey					
Bauxite	109 417	31 686	57 332	46 845	22 675
Alumina	63 018	...	...	16 845	22 648
Yugoslavia					
Bauxite	266 055	599 695	552 051	651 893	803 675
Alumina	613 172	503 044	509 758	402 588	) 432 441
Alumina hydrate	19 955	7 342	9 209	17 048)
Unwrought	58 171	90 106	134 976	135 727	) 142 698
Unwrought alloys	300	939	8 658	6 311)
Scrap	177	508	1 674	295	265
Cameroon					
Unwrought	23 424	* 30 000	28 044	* 30 000	* 25 000
Egypt					
Unwrought & scrap	76 466	51 719	5 126	...	...
Ghana					
Bauxite	150 333	36 000	81 000	44 000	...
Unwrought (a)	253 976	174 200	82 300	44 200	20 600
Guinea					
Bauxite (f)	* 10 300 000	* 10 200 000	* 10 900 000	* 12 100 000	* 12 200 000
Alumina (f)	* 207 000	* 150 000	* 320 000	* 323 000	* 327 000
Sierra Leone					
Bauxite	631 145	606 000	950 300	1 044 800	1 086 000
South Africa					
Unwrought (a)	2 866	26 622	106 108	83 032	92 621
Canada					
Alumina (b)	44 100	28 367	46 001	51 360	52 794
Unwrought	726 073	896 462	925 449	833 026	1 051 006
Scrap	78 603	62 796	81 425	106 574	114 671
Cuba					
Scrap (g)	2 374	2 318	4 455	4 085	4 551
Dominican Republic					
Bauxite	389 516	140 555	—	—	—
Haiti (e)					
Bauxite	428 811	377 051	—	—	—

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
Jamaica					
Bauxite	5 370 601	4 079 504	3 120 123	4 559 013	2 325 359
Alumina	2 545 149	1 752 755	1 904 270	1 720 660	1 620 338
USA					
Bauxite	85 964	120 144	80 086	113 113	74 246
of which: Re-exports	45 043	71 429	5 980	30 879	18 152
Alumina	717 539	555 925	583 669	635 909	299 914
Alumina hydrate	19 288	11 629	12 426	20 244	25 890
Unwrought	248 991	309 811	333 112	225 523	306 897
Unwrought alloys	63 398	54 512	27 839	34 505	40 982
Scrap	219 042	194 443	262 592	258 725	376 139
Argentina					
Unwrought	82 180	83 065	53 831	53 052	70 800
Brazil					
Bauxite	4 126 328	2 991 302	3 988 633	4 246 914	3 317 341
Alumina	636	4 939	7 102	43 213	94 214
Unwrought (a)	2 159	3 676	116 326	147 923	179 130
Guyana					
Bauxite, dried	1 011 297	690 320	732 633	...	...
Bauxite, calcined	496 187	372 818	339 717	...	...
Alumina	152 041	65 074	13 492	...	...
Suriname					
Bauxite	1 270 000	497 000	449 000	...	...
Alumina	1 165 000	1 043 000	1 143 000	...	...
Unwrought	31 576	61 000	38 900	22 200	28 400
Venezuela					
Alumina	—	—	131 000	371 372	369 094
Unwrought	233 945	228 614	298 256	179 100	301 800
Bahrain					
Unwrought (a)	74 793	166 014	191 705	156 548	126 773
China					
Bauxite (f)	* 494 900	* 372 500	* 346 800	* 578 300	* 611 200
Alumina (f)	* 31 100	* 20 800	* 14 600	* 13 900	* 11 400
Unwrought (a)(f)	* 41 100	* 50 100	* 14 400	* 800	* 5 400
Dubai					
Unwrought (a)	20	...	...	140 403	148 650
Scrap	—	—	5 890	9 986	3 168
Hong Kong					
Bauxite (Re-exports)	11 538	8 120	18 110	17 748	16 566
Alumina (Re-exports)	90	9	105	500	61 572
Alumina hydrate (Re-exports)	2 152	3 106	2 418	113	2 589
Unwrought (Re-exports)	16 401	48 910	25 150	22 648	48 903
Scrap	14 533	16 810	19 179	19 447	18 423
India (c)					
Bauxite	132 818	387 683	...	...	...
Alumina	10 005	37 988	...	...	...
Unwrought (a)	18	35	...	...	...
Indonesia					
Bauxite	956 369	746 784	786 311	944 332	...
Unwrought	—	16 026	90 577	135 017	238 700
Japan					
Alumina	361 947	273 130	481 669	488 032	372 317
Alumina hydrate	50 152	66 589	87 530	85 040	109 219
Unwrought	8 319	4 223	500	646	528
Unwrought alloys	3 841	2 458	1 179	1 637	1 711
Scrap	453	630	637	2 259	2 317
Jordan					
Scrap	856	896	1 765	4 304	3 245
Malaysia					
Bauxite	642 450	418 050	489 931	522 049	362 100
Scrap	3 283	3 191	6 139	6 366	7 115
Singapore					
Alumina	2 421	691	1 476	1 216	17 665
of which: Re-exports	392	690	1 466	1 211	17 650
Unwrought	3 052	5 861	13 454	7 078	7 634
of which: Re-exports	3 013	5 675	12 048	5 300	6 274
Scrap	6 196	7 450	8 789	9 963	10 707

Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
Taiwan					
Alumina	1 366	4 498	3 427	3 564	4 734
Unwrought	11	583	2 638	3 128	5 830
Scrap	29	350	1 563	1 195	2 661
Australia					
Bauxite	* 4 800 000	* 4 650 000	* 4 100 000	* 4 900 000	* 4 800 000
Alumina	6 509 249	5 951 282	6 377 931	6 905 001	7 177 793
Unwrought (a)	79 174	156 068	234 562	419 063	559 518
Scrap	13 910	26 973	25 383	12 715	18 295
New Zealand (d)					
Unwrought (a)	135 283	115 066	162 613	211 191	228 044
Scrap	2 264	2 034	3 399	3 264	2 963

Notes:

- 1 Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
 - 2 In this table the term 'unwrought' aluminium corresponds to item 684.1 of the Standard International Trade Classification (Revision 2) and comprises ingots, blocks, unwrought bars, etc
 - 3 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys
 (b) Officially described as 'Aluminium ores and concentrates' but believed to be mostly alumina
 (c) Years ended 31 March following that stated
 (d) Years ended 30 June of that stated
 (e) Years ended 30 September of that stated
 (f) BGS estimates, based on known imports into certain countries
 (g) Imports into the Netherlands

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Bauxite, uncalcined	231 919	301 911	241 391	298 486	174 778
Bauxite, calcined	93 652	91 186	79 059	126 886	156 255
Alumina	630 422	449 340	481 114	653 026	563 359
Alumina hydrate	5 734	7 694	7 768	8 928	9 434
Unwrought	56 347	75 569	66 645	64 690	48 783
Unwrought alloys	67 000	79 264	96 992	107 453	98 332
Scrap	4 038	4 085	10 896	6 749	4 818
Belgium-Luxembourg					
Bauxite	33 050	26 574	34 802	40 536	36 650
Alumina	7 595	7 699	8 347	9 757	8 769
Alumina hydrate	16 040	15 188	18 251	18 432	19 129
Unwrought	184 525	197 133	205 986	220 564	223 568
Unwrought alloys	60 430	70 311	83 008	91 033	84 300
Scrap	39 095	51 240	53 086	57 981	62 708
Denmark					
Bauxite	68 507	16	18	18	723
Alumina	1 398	1 145	996	773	737
Alumina hydrate	3 656	2 377	3 004	3 512	3 666
Unwrought	1 384	1 274	1 189	610	982
Unwrought alloys	17 183	20 882	23 528	29 112	27 409
Scrap	2 623	2 904	3 294	4 302	8 886
France					
Bauxite	1 989 144	1 253 080	1 078 856	981 080	1 002 750
Alumina	15 635	62 912	75 660	30 957	118 012
Alumina hydrate	18 330	17 294	15 456	19 042	20 912
Unwrought	175 779	214 044	252 132	224 499	222 786
Unwrought alloys	124 596	137 946	142 509	140 458	173 119
Scrap	60 592	59 550	60 016	66 541	53 270
Germany, Federal Republic of					
Bauxite	3 910 619	3 532 830	3 156 141	4 055 547	4 033 965
Alumina	468 675	489 597	486 393	698 385	661 435
Alumina hydrate	1 854	2 599	2 084	3 482	3 303
Unwrought	315 287	372 252	345 497	447 685	460 651
Unwrought alloys	184 760	193 078	246 643	275 088	260 967
Scrap	160 984	173 592	192 452	208 892	202 881
Greece					
Bauxite	...	30	789	5 689	1 406
Alumina	134	186	261	360	149
Alumina hydrate	202	219	99	136	182
Unwrought (a)	2 840	3 971	2 119	6 448	3 644
Irish Republic					
Bauxite	24	111 673	562 997	1 126 985	1 322 262
Alumina	4 289	4 043	13 026	3 148	4 684
Unwrought (a)	2 522	2 757	2 002	3 065	2 597
Italy					
Bauxite	1 709 124	1 578 079	1 181 847	1 281 290	1 277 110
Alumina	152 665	48 782	253 675	199 595	224 977
Alumina hydrate	17 146	20 764	51 916	72 223	66 368
Unwrought	108 835	107 719	129 076	177 123	196 627
Unwrought alloys	99 996	103 434	125 456	114 697	123 249
Scrap	93 640	94 223	108 017	133 257	148 473
Netherlands					
Bauxite	145 039	126 673	135 623	130 784	162 384
Alumina	598 990	566 795	504 045	565 750	557 748
Alumina hydrate	23 570	25 448	27 344	32 355	31 368
Unwrought	132 576	164 876	244 837	93 184	98 604
Unwrought alloys	28 773	30 626	39 800	39 801	36 606
Scrap	39 589	41 782	48 280	57 473	67 179
Austria					
Bauxite	36 655	24 945	27 762	39 174	46 342
Alumina	266 526	212 331	210 953	242 993	295 374
Alumina hydrate	7 888	7 653	6 847	7 673	8 141
Unwrought	33 160	43 909	52 156	74 677	78 148
Scrap	68 023	67 352	68 354	47 516	53 109
Bulgaria					
Unwrought (a)(f)	* 15 700	* 7 000	* 14 800	* 17 900	* 20 800

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
Czechoslovakia					
Bauxite	454 000	474 000	469 000	349 000	356 000
Alumina (f)	* 32 300	* 20 400	* 23 300	* 28 100	* 24 800
Unwrought (a)	82 000	66 000	88 000	90 000	80 000
Finland					
Bauxite	3 925	5 588	4 152	2 564	3 368
Alumina	876	791	727	868	1 173
Alumina hydrate	30 522	26 933	19 888	26 500	28 244
Unwrought	26 080	24 241	23 642	18 307	16 814
Unwrought alloys	2 670	2 975	2 628	2 414	3 524
Scrap	6 100	8 668	22 608	16 289	33 317
German Democratic Republic					
Bauxite	67 200	109 900	103 700	170 600	208 400
Alumina (f)	* 101 800	* 101 200	* 101 200	* 103 800	* 97 400
Unwrought (a)(f)	* 53 800	* 44 600	* 51 100	* 55 000	* 42 600
Hungary					
Unwrought	154 499	137 087	163 000	163 320	165 294
Iceland					
Alumina	134 167	117 331	144 482	147 508	197 129
Norway					
Bauxite	0	3 297	4 480	5 420	5 590
Alumina	1 208 258	1 108 901	1 400 162	1 448 516	1 445 268
Alumina hydrate	34 630	28 082	33 447	43 055	33 788
Unwrought	8 202	7 819	1 570	4 162	6 902
Unwrought alloys	6 614	13 110	9 664	27 349	27 780
Scrap	148	1 164	1 724	2 874	2 127
Poland					
Bauxite	39 436	41 015	34 400	31 011	37 862
Alumina	240 400	206 716	210 434	226 221	206 591
Unwrought	64 533	83 826	83 465	91 481	86 391
Portugal					
Bauxite	1 080	1 730	3 411	1 400	...
Alumina	8 387	7 629	6 506	6 372	...
Unwrought	42 534	49 520	42 975	26 110	33 600
Romania					
Bauxite (f)	* 453 400	* 580 500	* 534 600	* 669 200	* 685 200
Alumina (f)	* 20 400	* 11 700	* 13 700	* 20 500	* 41 200
Soviet Union					
Bauxite (f)	* 2 835 700	* 3 470 200	* 3 689 800	* 4 433 600	* 4 835 800
Alumina (f)	* 1 007 100	* 898 000	* 879 600	* 757 200	* 705 200
Spain					
Bauxite	825 545	919 062	1 464 593	1 812 156	1 589 476
Alumina	228 724	37 281	21 181	23 037	25 235
Unwrought	8 744	14 493	8 194	8 710	7 139
Unwrought alloys	4 894	3 828	4 197	1 872	3 518
Scrap	5 768	8 534	10 142	6 036	9 146
Sweden					
Bauxite	40 967	49 838	45 459	61 749	52 073
Alumina	167 874	156 815	145 390	174 059	180 321
Alumina hydrate	47 624	47 761	57 345	77 114	62 409
Unwrought	21 994	30 101	31 274	24 553	26 557
Unwrought alloys	16 716	15 585	18 397	23 990	19 708
Scrap	2 960	2 654	2 807	2 081	1 507
Switzerland					
Bauxite	772	379	1 254	2 370	44
Alumina	171 709	135 364	149 241	162 234	146 751
Unwrought & scrap	37 574	48 076	57 751	63 189	78 745
Turkey					
Bauxite	—	—	1 025	7 676	19 408
Alumina	207	330	258	210	628
Unwrought	34 237	35 102	59 953	68 493	59 154
Yugoslavia					
Bauxite	394 180	175 645	158 762	185 797	162 967
Alumina	60 623	35 539	101 362	113 226	118 367
Unwrought	50 571	31 050	37 189	33 624	) 39 316
Unwrought alloys	1 262	340	349	434)

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
Algeria					
Alumina	457	135	1 233	789	...
Unwrought (a)	3 284	3 859	3 414	6 810	...
Cameroon					
Alumina	155 004	73 718	119 772	...	...
Ghana					
Alumina	330 450	...	...	...	...
Kenya					
Alumina	5 607	1 574	1 504	2 756	...
Morocco					
Bauxite	6 931	8 142	2 000	3 200	3 220
Alumina	2 044	2 378	2 793	2 036	2 149
Unwrought (a)	1 083	1 216	1 520	1 081	1 017
Nigeria					
Unwrought (a)	2 889	2 125	...	2 933	6 557
South Africa					
Bauxite	15 304	26 966	17 196	20 038	21 070
Alumina	180 066	277 232	357 892	313 863	350 616
Unwrought	2 417	661	443	169	37
Scrap	9 160	2 678	6 070	657	766
Tanzania					
Unwrought (a)	4 541	4 937	900	...	...
Tunisia					
Alumina	20 460	24 664	...	24 138	20 642
Canada					
Bauxite	2 734 711	2 574 762	2 329 910	2 451 542	2 074 205
Alumina	1 020 568	939 282	1 063 181	1 349 213	1 544 006
Unwrought	14 297	24 380	30 581	44 564	59 758
Scrap	33 414	36 756	54 666	61 782	53 377
Costa Rica					
Unwrought (a)	2 103	26	2 575	2 513	2 005
Mexico					
Bauxite	63 945	43 259	26 658	54 313	46 659
Alumina	104 796	90 012	121 148	155 295	90 393
Alumina hydrate	24 169	13 451	33 668	32 763	17 979
Unwrought & scrap (a)	67 542	39 758	24 960	66 769	76 700
Panama					
Unwrought (a)	816	1 340	500	934	1 308
USA					
Bauxite, crude dried	13 856 785	11 049 652	7 903 178	10 436 104	7 257 819
Bauxite, calcined	353 417	190 042	208 998	232 127	340 590
Alumina	3 977 846	3 053 700	3 904 559	4 295 151	3 834 490
Unwrought	359 246	340 570	396 895	453 315	432 690
Unwrought alloys	285 264	275 815	345 606	427 693	431 404
Scrap	74 384	67 434	88 473	137 673	127 473
Argentina					
Bauxite	6 138	24 555	23 791	25 187	...
Alumina	286 671	251 992	202 293	312 662	...
Alumina hydrate	9 200	9 709	12 200	9 930	...
Brazil					
Bauxite	14 970	8 598	5 020	11 159	...
Alumina	26 867	86 995	202 824	183 724	...
Unwrought	18 034	5 520	849	1 248	...
Unwrought alloys	10 207	5 247	2 109	3 335	) 2 600
Scrap	5 340	3 750	4 127	210	...
Colombia					
Bauxite	5 922	2 150	5 050	3 537	...
Alumina	867	2 413	2 947	4 957	...
Unwrought (a)	15 734	14 265	17 967	17 977	...
Ecuador					
Unwrought	1 918	2 413	...	...	...
Peru					
Bauxite	7 341	3 664	6 527	...	...
Alumina	1 260	750	571	...	...
Unwrought	4 761	3 852	3 304	...	...

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
Uruguay					
Bauxite	4 068	3 411	3 250	3 350	4 170
Alumina	638	290	505	1 291	617
Unwrought	1 979	628	937	1 494	1 614
Venezuela					
Bauxite	32 695	66 910	1 719 000	...	...
Alumina	) 696 667	592 664	...	...	...
Alumina hydrate	)	10 435	...	...	...
Unwrought	467	924	342	300	400
Abu Dhabi					
Scrap	340	1 117	2 863	2 533	2 099
Bahrain					
Alumina	248 974	1 030 695	298 246	363 599	335 006
China					
Alumina (f)	...	* 31 100	* 73 600	* 70 000	* 81 000
Unwrought (a)	57 772	169 566	283 756	252 736	487 862
Dubai					
Alumina	...	...	...	283 630	326 904
Hong Kong					
Bauxite	11 602	10 172	17 504	23 630	18 773
Alumina	86	321	10	167	31 022
Alumina hydrate	2 141	3 527	2 298	184	1 796
Unwrought	38 020	72 204	55 796	35 565	76 071
Scrap	580	672	1 083	1 107	888
India (c)					
Alumina	496	1 258	...	...	...
Unwrought (a)	31 325	6 724	13 500	12 300	18 200
Indonesia					
Alumina	39 859	66 109	182 416	398 823	...
Unwrought	21 161	33 677	20 067	17 183	...
Iran (e)					
Alumina	44 377	34 550	135 292	101 522	...
Unwrought	29 051	4 762	8 185	8 246	...
Israel (b)					
Alumina	1 769	...	(f)* 1 300	(f)* 1 500	(f)* 1 400
Unwrought	14 200	13 757	14 365	12 841	13 848
Japan					
Bauxite	4 352 440	3 439 361	3 579 739	3 861 875	3 518 991
Alumina	639 355	154 288	34 529	141 583	41 732
Alumina hydrate	1 139	1 518	680	1 268	2 273
Unwrought	943 623	1 220 404	1 309 192	1 058 938	1 273 187
Unwrought alloys	185 699	226 162	294 540	288 879	302 315
Scrap	204 863	181 667	302 025	243 250	361 053
Korea, Dem. P.R. of					
Alumina (f)	...	...	* 20 400	* 24 100	* 28 200
Unwrought (a)(f)	* 6 000	* 3 900	* 2 600	* 600	* 1 600
Korea, Republic of					
Bauxite	4 907	5 334	6 095	9 305	9 177
Alumina	39 240	29 010	26 254	37 273	34 923
Alumina hydrate	26 616	27 942	43 428	40 466	42 564
Unwrought	65 973	77 765	298 895	112 599	124 457
Unwrought alloys	32 610	224 502	34 902	30 629	75 932
Scrap	5 699	7 299	6 089	5 069	5 563
Malaysia					
Alumina	5 547	3 194	5 663	7 074	5 438
Unwrought	4 218	7 656	20 840	13 922	8 759
Unwrought alloys	10 713	15 422	21 070	17 773	12 994
Pakistan (d)					
Alumina	—	29 566	1 678	1 454	1 853
Unwrought	701	6 413	3 059	1 691	6 674
Scrap	13 483	11 525	14 426	14 276	13 388
Philippines					
Bauxite	12 592	3 762	3 119	3 953	5 005
Alumina	1 395	644	1 998	2 766	3 532
Unwrought (a)	10 407	18 471	14 843	6 614	4 881
Saudi Arabia					
Bauxite	39 509	114 856	142 686	163 647	244 096
Unwrought	7 852	6 318	14 447	13 818	9 316

Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1981	1982	1983	1984	1985
Singapore					
Alumina	6 625	10 792	9 605	9 339	48 702
Unwrought	8 432	11 085	18 829	10 767	14 435
Scrap	394	642	639	796	771
Syria					
Alumina	2 273	51	3 196	236	...
Unwrought & scrap	3 457	653	5 746	2 522	3 747
Taiwan					
Bauxite	106 754	30 373	36 805	55 241	19 518
Alumina	37 612	17 024	3 744	5 268	5 744
Alumina hydrate	1 711	1 569	1 308	1 921	1 936
Unwrought	47 752	88 569	139 145	99 923	147 204
Scrap	16 847	15 775	25 766	6 483	6 237
Thailand					
Bauxite	8 964	285	3 557	11 652	7 506
Alumina	1 325	1 078	1 762	1 473	2 051
Alumina hydrate	8 635	10 773	9 646	9 251	11 296
Unwrought	46 865	55 010	60 569	43 825	39 972
Unwrought alloys	4 909	3 840	4 337	5 415	4 666
Australia					
Alumina	3 619	4 435	3 824	4 730	5 050
Unwrought (a)	9 261	13 922	5 225	709	1 061
Scrap	3 008	2 433	2 711	2 646	2 997
New Zealand (d)					
Alumina	325 738	346 055	335 757	505 892	463 273
Unwrought (a)	622	7 436	6 000	5 202	719

Notes:

- 1 Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
 - 2 In this table the term 'unwrought' aluminium corresponds to item 684.1 of the Standard International Trade Classification (Revision 2) and comprises ingots, blocks, unwrought bars, etc
 - 3 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys
 (b) Figures may be incomplete as value only given in Israeli trade return for imports from some countries
 (c) Years ended 31 March following that stated
 (d) Years ended 30 June of that stated
 (e) Years ended 20 March following that stated
 (f) BGS estimates, based on known exports from certain countries

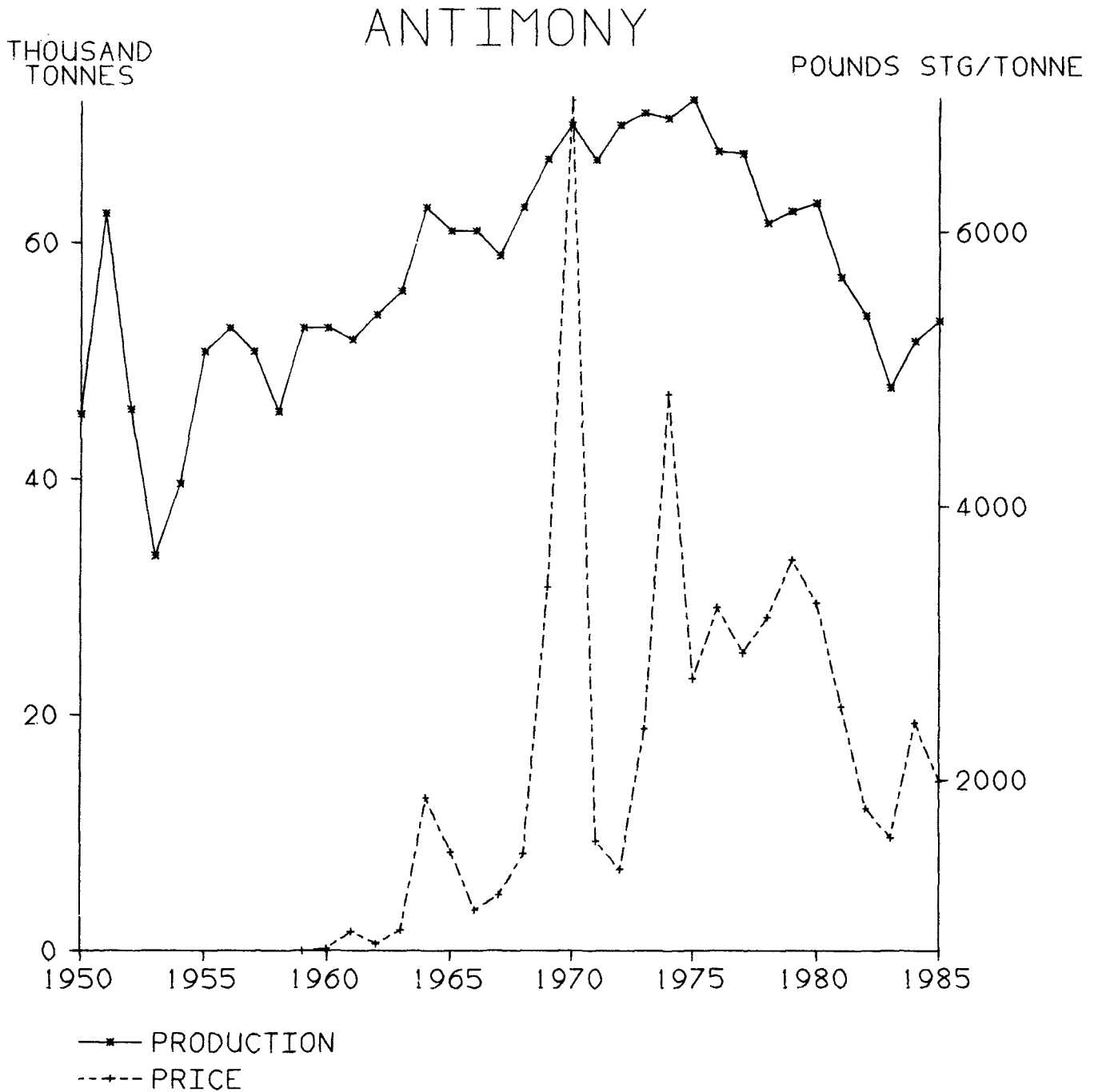


Figure 2 World mine production of antimony from 1950 to 1985 compared with the annual c.i.f. price of 99.6% European free market regulus expressed in constant 1980 pounds sterling from 1959.
Constant commodity prices have been derived from those quoted by Metal Bulletin, using the RPI for UK published in the Annual Abstract of Statistics (1987) published by HMSO.

Mine Production of Antimony

tonnes (metal content)

Country	1981	1982	1983	1984	1985
France	150	332	111	—	—
Italy	696	339	—	244	495
Austria	667	711	705	565	550
Czechoslovakia	739	* 700	* 900	* 1 000	782
Soviet Union	* 6 500	* 6 500	* 6 500	* 6 500	* 6 500
Spain	646	461	489	583	248
Turkey	838	1 237	1 170	1 729	1 760
Yugoslavia	1 455	1 517	950	945	1 088
Morocco	513	905	470	941	787
South Africa	9 810	9 127	6 310	7 440	7 390
Zimbabwe	137	195	74	256	194
Canada	1 714	454	385	554	1 075
Guatemala	487	498	* 500	96	1 167
Honduras	19	9	10	320	* 400
Mexico	1 800	1 565	2 519	3 064	4 266
USA	914	(c) 456	(c) 760	(c) 505	(c)* 500
Bolivia	15 301	13 978	9 951	9 281	8 925
Brazil	40	—	—	—	—
Peru (a)	685	738	713	673	* 650
China	* 11 000	* 12 000	* 13 000	* 13 500	* 13 500
Malaysia	191	128	134	17	26
Pakistan	51	—	—	6	5
Thailand	1 480	823	1 474	2 434	1 530
Australia (b)	1 126	1 146	538	920	1 437
World total	57 000	53 800	47 700	51 600	53 300

Notes:

- 1 This table includes antimony content of antimonial lead alloys
 - 2 In addition to the countries listed, Afghanistan, Hungary, Iran and Romania are also believed to produce antimony
- (a) Includes Sb content of antimonial lead plus Sb content of ores for export
(b) Includes Sb content of lead and zinc concentrates
(c) Excludes Sb content of antimonial lead

Antimony

Exports of Antimony

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	30	118	75	84	27
Oxide (a)	* 2 700	* 3 200	* 3 800	* 3 900	* 3 700
Belgium-Luxembourg					
Oxide (e)	426	208	280	536	551
France					
Ore	271	177	26	54	209
Metal	77	77	66	55	125
Oxide	6 309	4 914	5 233	5 931	5 359
Germany, Federal Republic of					
Metal	101	10	17	118	104
Oxide	481	422	571	755	592
Italy					
Ore	16	...	27	126	582
Metal	51	4	50	33	1
Oxide	240	220	617	650	362
Netherlands					
Metal	21	22	13	6	59
Oxide	213	331	226	134	243
Austria					
Ore	26	—	4	4	5
Sulphide (b)	91	74	49	14	46
Soviet Union					
Oxide (a)	* 400	* 500	* 500	* 700	* 400
Spain					
Metal	568	506	401	465	...
Turkey					
Ore	755	450	330	1 975	...
Metal	190	...	...	336	...
Yugoslavia					
Metal	1 220	675	110	—	...
Morocco					
Ore	1 260	1 796	1 105	2 152	1 766
South Africa					
Ore (c)	3 559	2 219	2 904	4 596	1 452
Oxide	(a)* 4 200	(a)* 2 900	(a)* 3 500	7 363	(a)* 3 200
Zimbabwe					
Ore	302	372	137	419	...
Guatemala					
Ores & concentrates	556	0	—	111	1 130
Mexico					
Ores & concentrates	830	2 253	2 624	3 805	3 291
Metal	78	58	183	115	185
USA					
Metal	317	784	289	484	328
Oxide	420	305	401	574	973
Bolivia					
Ore (c)	11 173	7 462	8 728	10 027	6 987
Metal	4 165	1 138	1 633	196	377
Oxide (c)	2 422	2 291	2 559	664	385
Peru					
Ores & concentrates (a)	* 270	* 630	* 570	* 650	...
Metal (a)	* 50	* 130	* 510	* 140	* 220
Burma (d)					
Ores & concentrates	300	—	...	...	...
China					
Ores & concentrates (a)	* 3 500	* 3 600	* 2 600	* 7 900	* 14 300
Metal	8 213	13 432	12 216	17 321	15 988
Oxide (a)	* 2 500	* 2 600	* 2 700	* 7 800	* 5 400
Sulphide (a)	* 70	* 80	* 70	* 130	* 20

Antimony

tonnes

Exports of Antimony

Country	1981	1982	1983	1984	1985
Japan					
Metal	29	21	3	6	6
Thailand					
Ore	5 268	2 796	3 037	5 491	5 417
Australia					
Ores & concentrates	1 159	1 557	1 695	3 158	...

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

(b) Believed to be crude liquated sulphide

(c) Sb content

(d) Years ended 31 March following that stated

(e) Imports into the USA

Antimony

Imports of Antimony

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ore (c)	* 12 000	* 8 100	* 10 000	* 5 800	* 5 800
Metal	365	297	617	296	559
Oxide	717	856	737	976	1 043
Belgium-Luxembourg					
Ore	5 147	3 962	4 265	6 097	5 851
Metal	8	198	541	201	215
Oxide	338	283	272	646	776
Denmark					
Metal	10	10	53	15	1
Oxide	36	39	36	45	32
France					
Ore	10 998	8 844	10 273	11 255	12 074
Metal	552	1 143	593	568	431
Oxide	373	357	437	504	661
Germany, Federal Republic of					
Ore	1 954	1 640	1 705	2 131	1 630
Metal	595	441	371	582	782
Oxide	3 567	3 899	5 167	5 536	4 806
Greece					
Metal	3	9	30	1	71
Italy					
Metal	79	252	177	223	247
Oxide	422	427	560	780	893
Netherlands					
Metal	48	75	34	35	99
Oxide	907	948	1 053	1 131	1 115
Austria					
Metal	52	48	32	31	80
Oxide	98	116	212	140	173
Bulgaria					
Metal (b)	* 400	* 50	...	* 130	* 50
Finland					
Metal	20	16	2	6	6
German Democratic Republic					
Oxide (b)	* 200	* 300	* 200	* 200	* 100
Norway					
Metal	20	30	13	71	22
Soviet Union					
Metal (b)	* 800	* 500	...	...	...
Spain					
Ore	480	433	348	436	...
Metal	47	29	30	23	...
Oxide	194	301	279	321	...
Sweden					
Metal	25	12	15	2	23
Switzerland					
Metal	55	45	60	34	27
Yugoslavia					
Ores & concentrates	3 550	2 849	717	1 345	...
Algeria					
Metal	80	6	0	104	...
Canada					
Oxide	936	780	1 001	1 144	1 188
USA					
Ore	9 810	5 086	5 719	8 973	13 046
Liquated	96	80	43	65	151
Metal	2 672	2 103	1 828	4 096	4 889
Oxide	11 040	9 465	9 620	16 224	9 666
Argentina					
Ore	91	150	438	...	...
Brazil					
Ore	443	588	494	34	...
Metal	107	331	650	260	...
Oxide	300	133	162	37	...
Sulphide	3	6	10	17	...

Imports of Antimony

Country	1981	1982	1983	1984	1985
Venezuela					
Metal	...	544	38	...	...
India (a)					
Metal	1 000	513	...	...	...
Oxide	134	98	...	...	...
Japan					
Ores & concentrates	6 531	3 993	6 272	6 987	5 091
Metal	2 366	2 493	3 487	5 118	4 269
Oxide	1 048	1 150	1 796	2 467	2 672
Sulphide	92	116	115	228	56
Korea, Republic of					
Ores & concentrates	547	391	956	1 250	883
Metal	—	32	149	251	58
Oxide	100	126	311	354	337
Malaysia					
Metal	22	26	16	36	60
Thailand					
Ores & concentrates	3	—	776	1 645	3 700
Australia					
Metal	50	29	26	41	...

(a) Years ended 31 March following that stated

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

(c) BGS estimates

Arsenic

Production of White Arsenic

tonnes

Country	1981	1982	1983	1984	1985
France	10 000	9 700	4 700	3 800	9 400
Germany, Federal Republic of	* 360	* 360	* 360	* 360	* 360
Portugal	196	157	163	144	210
Soviet Union	* 7 750	* 7 800	* 7 900	* 8 000	* 8 100
Sweden	* 6 900	* 7 200	* 5 300	* 5 900	* 6 000
Namibia (a)	1 370	1 895	1 126	2 504	2 500
Zimbabwe	21	—	—	—	—
Mexico (b)	6 516	4 739	4 557	5 496	6 312
Bolivia	127	295	123	151	311
Peru	2 164	1 663	1 110	887	* 800
Japan	95	* 100	* 300	* 500	* 500
Korea, Republic of	170	306	560	...	...

Notes:

- 1 This table includes calculated trioxide equivalents of arsenic metal produced except where this would involve double counting
- 2 In addition to the countries listed, Argentina, Austria, Belgium, China, Czechoslovakia, German Democratic Republic, Finland, Hungary, Spain, United Kingdom, USA and Yugoslavia are also believed to produce arsenic

(a) Output of Tsumeb Corp. only, trioxide equivalent of reported black arsenic

(b) Including trioxide equivalent of black arsenic

Exports of Arsenic

Country	1981	1982	1983	1984	1985
United Kingdom					
White arsenic	165	44	146	2	91
Metallic arsenic (a)	10	58	44	57	54
Belgium-Luxembourg					
Metallic arsenic (a)	10	7	46	92	53
France					
White arsenic	7 877	7 503	3 246	7 225	10 222
Metallic arsenic	87	90	27	128	80
Germany, Federal Republic of					
White arsenic	884	745	451	151	304
Metallic arsenic (a)	21	9	14	13	17
Italy					
White arsenic	75	106	3	2	24
Netherlands					
White arsenic	7	12	1	3	10
Metallic arsenic (a)	9	48	39	177	89
Mexico					
White arsenic	3 495	2 466	2 653	3 287	3 399
Bolivia					
White arsenic	127	156	56	125	311
China					
White arsenic (b)	* 1 400	* 2 700	* 500	* 400	* 300
Metallic arsenic (b)	* 40	* 50	* 130	* 100	* 140
Hong Kong					
White arsenic (Re-exports)	76	295	51	21	66
Korea, Republic of					
White arsenic	337	643	114	187	307

Note: This table does not purport to be comprehensive: data relating to arsenic are not fully recorded by many countries

(a) May include some tellurium

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

Arsenic

Imports of Arsenic

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
White arsenic	8 053	7 116	4 393	5 744	5 766
Metallic arsenic (a)	105	141	120	160	156
Belgium-Luxembourg					
White arsenic	32	52	20	7	3
Metallic arsenic (a)	90	86	100	123	83
Denmark					
White arsenic	10	10	5	15	15
Metallic arsenic (a)	18	11	1	12	0
France					
White arsenic	181	128	131	31	50
Metallic arsenic	143	117	99	135	91
Germany, Federal Republic of					
White arsenic	688	444	339	344	290
Metallic arsenic (a)	75	77	74	89	74
Greece					
White arsenic	111	97	33	78	74
Italy					
White arsenic	734	598	455	551	416
Metallic arsenic (a)	65	65	32	33	59
Netherlands					
White arsenic	31	13	2	—	2
Metallic arsenic (a)	68	117	63	164	96
Finland					
White arsenic (d)	1 644	1 555	1 165	1 183	1 022
Spain					
White arsenic	241	78	133	100	...
Metallic arsenic	35	11	18	28	...
Sweden					
Metallic arsenic	11	628	730	3 036	930
Switzerland					
White arsenic (d)	80	3	22	4	31
Turkey					
White arsenic	34	...	...	96	...
Yugoslavia					
White arsenic	101	57	73	115	...
Metallic arsenic	58	37	18	42	...
Morocco					
White arsenic	—	5	10	18	11
South Africa					
White arsenic (d)	141	1	90	0	—
Metallic arsenic	12	14	9	22	15
USA					
White arsenic	17 199	14 599	10 186	13 985	16 472
Metallic arsenic	293	136	244	304	407
Argentina					
White arsenic	83	169	5	...	...
Brazil					
White arsenic	116	392	376	246	...
Metallic arsenic	5	2	2	3	...
Colombia					
White arsenic	42	10	12	14	...
Uruguay					
White arsenic	7	24	38	40	21
Hong Kong					
White arsenic	75	157	61	238	99
India (b)					
White arsenic	388	511	...	...	...
Metallic arsenic	6	22	...	...	...
Indonesia					
White arsenic	64	62	29	44	...
Japan					
White arsenic	450	599	272	199	144

Arsenic

tonnes

Imports of Arsenic

Country	1981	1982	1983	1984	1985
Malaysia					
White arsenic	732	1 332	612	615	1 083
Philippines					
White arsenic (d)	162	218	157	118	14
Taiwan					
White arsenic	220	174	274	411	368
Thailand					
White arsenic (d)	75	289	139	97	61
Australia					
White arsenic	1 225	862	510	...	...
New Zealand (c)					
White arsenic (d)	2 574	3 146	1 568	1 938	2 091

Note: This table does not purport to be comprehensive: data relating to arsenic are not fully recorded by many countries

- (a) May include some tellurium
- (b) Years ended 31 March following that stated
- (c) Years ended 30 June of that stated
- (d) Includes pentoxide and/or arsenic acid

Asbestos

Production of Asbestos

tonnes

Country	1981	1982	1983	1984	1985
Greece	457	17 016	31 811	45 376	* 48 000
Italy	137 086	116 410	139 054	147 272	136 006
Bulgaria	400	600	700	500	400
Czechoslovakia	388	342	325	...	...
Soviet Union	* 2 105 000	* 2 180 000	* 2 250 000	* 2 300 000	* 2 400 000
Turkey	2 833	23 283	22 590	29 934	29 000
Yugoslavia	12 206	10 748	9 663	7 261	6 916
Egypt	325	424	245	* 325	* 325
Mozambique	1 425	852	—	146	55
South Africa					
Amosite	56 834	43 457	40 656	33 237	37 856
Crocidolite	102 337	87 263	87 439	88 884	34 073
Chrysotile	76 772	81 140	93 016	75 414	91 645
Swaziland					
Chrysotile	35 264	30 145	28 287	25 832	25 130
Zimbabwe					
Chrysotile	247 600	197 682	153 000	165 300	173 500
Canada					
Chrysotile	1 121 845	834 249	857 504	836 654	750 000
USA (a)	75 618	63 515	69 906	57 422	57 457
Argentina	1 280	1 218	1 240	* 1 250	* 1 200
Brazil	138 417	145 998	158 855	134 788	172 027
Colombia	* 5 400	* 5 400	* 5 400	9 982	* 10 000
China	* 106 000	* 110 000	* 160 000	* 135 000	* 140 000
Cyprus					
Chrysotile	25 568	18 952	17 288	7 429	16 360
India					
Amphibole	27 521	26 908	23 420	26 338	30 183
Japan					
Chrysotile	3 950	4 135	* 4 000	* 4 000	* 4 000
Korea, Republic of	14 084	15 933	12 506	8 062	4 703
Taiwan	2 317	2 392	2 819	1 355	625
Australia					
Chrysotile	45 494	18 587	3 909	—	—
World total	4 300 000	4 000 000	4 200 000	4 100 000	4 200 000

Note: In addition to the countries listed, Indonesia, Democratic P.R. of Korea and Romania are also believed to produce asbestos

(a) Sold or used by producers

Exports of Unmanufactured Asbestos

Country	1981	1982	1983	1984	1985
United Kingdom	1 758	1 860	1 282	964	308
Belgium-Luxembourg	222	1 084	568	349	254
France	1 331	1 586	3 195	921	979
Germany, Federal Republic of	43 034	47 239	34 260	14 927	3 064
Greece	—	992	9 376	34 639	29 387
Italy	51 438	48 624	61 164	57 660	66 244
Netherlands	269	88	243	217	50
Hungary	* 2 500	* 4 900	* 4 800	* 3 200	...
Soviet Union (a)	* 331 900	* 290 000	* 269 300	* 260 500	* 263 300
Sweden	1	—	135	—	—
Switzerland	164	348	389	35	5
Yugoslavia	2 938	2 588	2 147	2 214	2 019
South Africa	254 698	219 652	214 756	191 480	176 478
Swaziland	31 500	29 573	31 176	24 673	24 675
Zimbabwe	198 958	168 812	161 088	155 385	...
Canada					
Crude	10	555	931	45	44
Fibre	522 105	454 430	384 068	430 496	395 206
Shorts	542 432	425 779	368 912	366 207	326 314
USA	64 418	58 767	54 632	39 922	45 655
Brazil	464	7 022	11 750	19 716	23 248
China (a)	* 11 200	* 5 200	* 4 200	* 2 800	* 1 900
Cyprus	29 081	19 115	13 631	8 216	16 948
Hong Kong (Re-exports)	3 127	1 141	84	19	155
Japan	680	723	677	431	292
Singapore	11 603	8 939	8 692	6 715	7 117
Australia	38 576	15 578	4 460	22	...

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

Imports of Unmanufactured Asbestos

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	67 186	52 260	45 145	41 556	37 639
Belgium-Luxembourg	31 374	27 744	35 332	34 882	25 138
Denmark	5 886	9 701	16 585	13 536	10 362
France	102 318	83 639	76 265	70 170	63 872
Germany, Federal Republic of	171 708	148 845	188 857	74 432	63 172
Greece	14 666	7 102	7 515	3 712	4 652
Irish Republic	6 173	5 777	4 729	5 687	5 244
Italy	65 942	56 884	41 619	41 421	47 952
Netherlands	9 927	5 107	5 751	8 357	5 625
Albania (d)	* 3 000	* 2 600	* 1 700	* 1 600	* 1 500
Austria	26 643	27 082	26 076	22 654	21 595
Bulgaria (d)	* 450	* 350	* 1 700	* 3 600	* 3 100
Czechoslovakia	49 195	48 699	41 681	45 335	46 783
Finland	3 573	4 291	2 561	3 157	2 479
German Democratic Republic	50 200	61 200	47 000	53 800	54 600
Hungary	33 999	33 688	37 603	35 097	33 596
Poland	79 837	72 705	71 260	69 361	81 690
Portugal	19 168	14 815	14 047	8 126	...
Romania (d)	* 4 700	* 2 500	* 1 400	* 800	* 700
Spain	59 937	53 211	54 523	47 471	38 022
Sweden	1 101	1 037	1 000	1 000	1 042
Switzerland	16 886	5 455	12 211	4 772	5 058
Turkey	21 521	20 012	20 575	21 872	25 544
Yugoslavia	57 762	58 611	45 651	45 468	54 372
Algeria	25 644	3 079	27 181	23 503	...
Burundi	424	518	28	150	422
Egypt	26 828	2 367	13 998	...	...
Ethiopia	500	671	1 006	...	...
Ghana	2 149	...	...	...	...
Kenya	865	530	747	811	...
Libya	2 109	4 308	...	...	...
Morocco	6 630	8 086	6 590	4 702	1 110
Mozambique	779	1 543	1 632	767	...
Nigeria	125 084	77 812	...	37 439	10 778
Senegal	1 047	914	1 042	613	...
South Africa	29 231	12 878	12 781	20 913	11 529
Tunisia	8 397	6 361	...	6 075	5 852
Zaire	367	169	340	153	...
Canada	935	573	454	326	374
Costa Rica	762	1 192	382	326	3
El Salvador	2 865	3 286	3 955	1 989	...
Guatemala	1 257	376	681	679	1 101
Honduras	1 731	864	1 522	...	...
Jamaica	78	491	16	29	3
Mexico	75 263	55 732	32 862	53 567	54 790
Nicaragua	1 343	1 496	2 441	...	...
Panama	241	320	450	150	225
USA					
Amosite	680	389	609	715	121
Crocidolite	7 376	7 904	6 177	5 656	4 795
Chrysotile	314 213	211 901	177 016	194 949	130 212
Other unmanufactured	15 345	21 538	12 584	8 643	8 871
Argentina	12 531	15 462	14 153	15 022	...
Brazil	13 019	13 192	7 771	3 791	...
Chile (d)	* 5 600	* 3 500	* 4 900	* 6 700	* 7 200
Colombia	21 492	25 945	13 170	11 970	...
Ecuador	3 906	5 659	...	...	...
Peru	7 408	3 801	3 934	...	...
Uruguay	1 203	623	1 423	688	596
Venezuela	11 742	7 354	4 734	...	...

Imports of Unmanufactured Asbestos

tonnes

Country	1981	1982	1983	1984	1985
Burma (e)	2 776	7 152	...	...	...
China (d)	* 150	* 600	* 900	* 600	* 800
Cyprus	366	367	375	297	462
Dubai	10 359	9 217	5 342	912	6 624
Hong Kong	3 297	1 336	101	28	168
India (e)	72 502	50 041	...	...	...
Indonesia	27 062	18 765	15 095	10 964	...
Iran (a)	31 539	42 568	47 186	41 064	...
Israel (c)	6 282	4 467	6 316	3 932	3 621
Japan	237 963	229 125	237 413	239 747	261 648
Korea, Republic of	53 787	44 038	113 305	59 693	57 143
Kuwait	2 018	10 145	3 356	...	...
Malaysia	35 645	24 632	25 375	23 146	19 064
Pakistan (b)	5 690	4 462	3 468	3 172	2 028
Philippines	5 499	2 200	2 385	1 663	1 190
Saudi Arabia	10 102	15 882	8 801	6 660	4 548
Singapore	16 824	9 767	10 215	9 951	6 078
Sri Lanka	4 222	2 399	7 110	5 057	8 590
Syria	4 245	3 885	4 849	2 449	...
Taiwan	30 121	30 020	37 939	31 764	24 519
Thailand	57 193	54 333	55 967	66 545	71 516
Australia	20 960	20 853	10 113	14 432	12 195
New Zealand (b)	6 173	3 891	2 959	1 907	1 304

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

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

(e) Years ended 31 March following that stated

Production of Barytes

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	63 308	81 000	36 000	63 000	107 344
Belgium	* 39 900	* 39 900	* 39 900	* 39 000	* 39 900
France	172 000	143 000	153 000	148 200	* 150 000
Germany, Federal Republic of	165 189	165 661	163 965	166 568	171 269
Greece	116 773	119 747	90 187	* 95 000	* 50 000
Irish Republic	274 000	266 000	199 000	220 000	213 800
Italy	167 186	178 194	136 498	106 403	127 226
Czechoslovakia	* 61 000	* 61 000	* 61 000	* 60 000	* 60 000
Finland	—	—	3 400	8 700	8 700
German Democratic Republic	* 35 000	* 35 000	* 35 000	* 35 000	* 34 000
Poland	85 300	90 600	89 900	90 600	91 215
Portugal	1 350	600	637	318	1 094
Romania	* 79 000	* 78 000	* 78 000	* 73 000	* 73 000
Soviet Union	* 510 000	* 520 000	* 520 000	* 530 000	* 540 000
Spain	52 695	50 031	52 410	68 919	* 72 000
Turkey	185 555	114 928	78 974	198 031	166 212
Yugoslavia	44 179	32 014	35 025	41 098	35 488
Algeria	89 000	102 000	* 110 000	* 110 000	* 110 000
Egypt	2 108	3 101	3 185	3 206	2 010
Kenya	2 591	—	300	210	300
Morocco	465 660	515 672	288 414	561 321	* 500 000
South Africa	2 247	3 177	6 683	4 467	4 387
Tunisia	24 700	33 900	23 200	12 100	2 200
Zimbabwe	—	800	980	700	400
Canada	86 117	27 744	45 465	64 197	71 000
Guatemala	290	7 531	886	215	* 1 300
Mexico	317 738	323 753	357 043	426 095	467 693
USA (b)	2 585 000	1 674 000	684 000	703 000	670 000
Argentina	48 868	36 597	61 094	44 450	* 50 000
Brazil (d)	116 340	116 955	96 274	139 554	* 145 000
Chile	259 349	292 402	114 595	21 722	54 494
Colombia	3 160	3 500	3 839	* 4 000	* 4 000
Peru	409 000	375 000	163 000	* 163 000	* 163 000
Afghanistan (c)	900	1 800	* 1 800	* 1 800	* 1 800
Burma (a)	6 932	16 029	9 990	* 11 000	* 11 000
China	* 800 000	* 900 000	* 1 000 000	* 1 000 000	* 1 000 000
India	405 138	387 079	325 045	445 011	564 000
Iran (c)	* 75 000	* 80 000	* 85 000	* 90 000	* 90 000
Japan	59 584	58 568	69 242	66 225	76 997
Korea, Dem. P.R. of	* 100 000	—	—	—	—
Korea, Republic of	—	—	552	—	2 785
Malaysia	19 365	25 272	21 434	23 421	23 394
Pakistan	26 985	22 448	28 240	26 369	20 827
Philippines	2 135	8 697	1 201	—	—
Thailand	307 046	330 948	187 437	174 918	230 970
Australia	41 266	28 064	11 752	19 511	* 20 000
World total	8 300 000	7 400 000	5 500 000	6 100 000	6 200 000

Notes:

- 1 This table may include small quantities of witherite
- 2 In addition to the countries listed, Bulgaria and Cuba are believed to produce barytes

(a) Years ended 31 March following that stated

(b) Sold or used by producers

(c) Years ended 20 March following that stated

(d) Includes beneficiated and directly shipped material

Exports of Barytes

Country	1981	1982	1983	1984	1985
United Kingdom	4 226	11 427	10 462	14 997	17 108
Belgium-Luxembourg	19 278	13 099	30 948	33 912	86 620
France	102 439	94 558	109 752	131 394	95 170
Germany, Federal Republic of	54 627	39 886	37 839	46 028	55 989
Greece	822	36 758	5 400	16 000	14 000
Irish Republic	260 691	267 501	227 148	224 555	198 933
Italy	67 792	73 413	46 571	9 510	27 136
Netherlands	86 412	80 306	68 162	59 067	64 442
Czechoslovakia (b)	* 1 200	* 2 600	* 2 000	* 2 000	* 2 000
German Democratic Republic (b)	* 3 100	* 2 700	* 500	* 1 600	* 600
Norway	3 612	1 611	166	3 515	8 801
Portugal	—	589	—	—	...
Romania (b)	* 400	* 400	* 200	* 700	* 200
Spain	65 826	52 740	61 507	51 833	58 958
Turkey	187 931	171 483	162 408	215 981	191 934
Yugoslavia	16 200	20 452	17 680	20 256	19 787
Morocco	452 976	465 340	372 319	570 973	487 982
Tunisia	1 040	259	...	6 112	3 000
Canada	404	481	795	1 247	1 676
Mexico	123 183	123 672	160 621	54 043	34 675
Trinidad & Tobago	1	—	3 757	—	—
USA	56 913	44 171	20 743	1 398	5 414
Bolivia	2 130	607	516	984	1 282
Brazil	24 255	19 730	6 300	12 717	7 303
Peru	167 351	130 105	(b)* 118 000	(b)* 58 000	(b)* 26 000
China	914 310	1 091 218	792 285	951 432	946 976
Hong Kong (Re-exports)	192	759	886	262	16
India (a)	189 752	247 618	...	...	...
Indonesia	10 644	2 829	5 807	762	...
Japan	4 768	4	30	400	13
Malaysia	—	4 120	8 802	10 250	8 155
Singapore	22 203	10 204	15 821	11 303	32 431
of which: Re-exports	14 926	9 623	15 095	6 423	11 975
Thailand	234 091	287 889	205 443	205 557	213 870
Australia	1 903	608	820	1 683	...

Note: Trade in barytes is reported under item 278.92 of the Standard International Trade Classification (Revision 2) and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

(a) Years ended 31 March following that stated

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

Imports of Barytes

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	113 007	116 386	138 226	158 473	120 346
Belgium-Luxembourg	8 003	8 427	7 250	8 165	8 193
Denmark	16 951	18 269	23 726	11 096	1 914
France	12 936	18 884	18 543	30 855	43 660
Germany, Federal Republic of	166 066	177 686	141 022	209 420	221 614
Greece	3 430	6 039	3 400	15	2 589
Irish Republic	319	300	366	423	391
Italy	9 665	10 328	14 424	11 787	19 388
Netherlands	98 928	75 748	148 833	88 490	94 843
Austria	8 273	6 649	9 278	11 325	5 034
Finland	2 632	2 664	1 613	1 419	1 721
Hungary	16 215	19 129	17 459	13 179	11 663
Norway	100 991	87 836	90 574	107 994	124 048
Poland	...	* 5 000	22 814	...	...
Portugal	2 233	703	1 335	564	...
Romania (b)	* 13 600	* 3 800	* 1 000	* 2 000	* 4 000
Soviet Union (b)	* 113 100	* 123 900	* 34 700	* 75 300	* 79 900
Spain	566	1 429	514	392	261
Sweden	4 567	5 440	4 991	5 321	5 606
Switzerland	2 092	1 795	1 393	1 294	1 348
Yugoslavia	490	498	150	380	270
Algeria	10 587	—	4	150	...
Cameroon	41 889	11 645	...	...	...
Gabon	1 410	12 124	6 552	936	8 125
Ivory Coast	19 273	15 855	2 411	6 604	6 952
South Africa	3 693	1 789	2 384	3 495	1 465
Tunisia	103	484	...	139	154
Canada	16 277	23 456	29 952	17 686	26 589
Mexico	132 923	190 602	90 251	34	14
Trinidad & Tobago	82 944	22 543	35 811	12 147	19 809
USA	1 765 286	2 126 649	1 267 645	1 611 351	1 929 664
Argentina	2 331	677	708	1 043	...
Brazil	74	60	45	134	...
Colombia	6 164	6 497	7 903	47	...
Venezuela	158 863	146 025	62 266	...	...
Abu Dhabi	24 843	25 823	38 318	5 566	27 522
Dubai	4 888	8 267	22 294	25 126	2 722
Hong Kong	915	1 173	1 252	378	227
Indonesia	25 863	70 833	74 316	60 457	...
Japan	45 251	40 187	46 568	41 681	50 356
Korea, Republic of	200	350	469	949	1 113
Malaysia	22 939	16 651	9 409	12 429	12 725
Philippines	50	85	341	44	1 247
Saudi Arabia	26 597	46 699	73 459	4 124	12 632
Singapore	29 698	19 494	21 554	11 428	18 116
Syria	—	916	3 918	2 979	...
Taiwan	3 035	600	2 867	7 914	4 131
Australia	1 112	3 227	1 166	1 282	...
New Zealand (a)	4 545	1 385	1 898	4 623	6 014

Note: Trade in barytes is reported under item 278.92 of the Standard International Trade Classification (Revision 2) and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

(a) Years ended 30 June of that stated

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

Production of Bentonite and Fuller's Earth

Country	1981	1982	1983	1984	1985
United Kingdom					
Fuller's earth (a)	185 000	187 000	192 000	202 000	216 000
France					
Bentonite	2 511	3 290	3 088	12 200	* 10 000
Germany, Federal Republic of					
Bentonite	...	...	...	154 000	169 000
Fuller's earth	836 000	821 000	766 000	674 000	701 000
Greece					
Bentonite	297 286	404 755	406 917	778 722	1 054 234
Italy					
Bentonite	301 255	237 248	297 437	315 660	299 272
Fuller's earth	5 495	7 000	20 500	30 000	30 400
Hungary					
Bentonite	80 531	84 934	79 807	64 158	59 853
Poland					
Bentonite	77 491	79 500	71 300	75 500	85 200
Romania					
Bentonite	* 176 000	* 175 000	* 177 000	* 180 000	* 180 000
Spain					
Bentonite	117 727	112 326	82 550	72 582	90 239
Attapulгите	47 227	42 926	41 654	43 907	59 697
Sepiolite	288 499	329 240	306 630	283 985	267 393
Turkey					
Bentonite	30 687	* 31 000	21 916	21 970	* 22 000
Fuller's earth	119 813	127 179	...	...	...
Yugoslavia					
Bentonite	...	126 778	142 503	139 366	148 752
Algeria					
Bentonite	* 35 000	* 35 000	* 30 000	24 500	* 25 000
Fuller's earth	* 5 100	* 5 100	* 5 000	3 500	* 3 500
Egypt					
Bentonite	3 700	4 032	2 512	3 515	5 400
Morocco					
Bentonite	2 906	4 457	4 095	1 825	* 2 000
Fuller's earth (g)	19 750	24 604	27 385	34 358	* 33 500
Mozambique					
Bentonite	716	1 455	250	414	361
Senegal					
Attapulгите	30 057	94 189	98 950	115 498	* 116 000
South Africa					
Bentonite	44 372	30 827	39 600	41 849	43 472
Attapulгите	5 221	4 596	4 425	4 843	5 885
Fuller's earth	434	311	312	—	—
Guatemala					
Bentonite	4 255	9 018	5 885	680	* 3 000
Mexico					
Bentonite	220 454	184 918	226 140	267 348	267 695
Fuller's earth	65 378	42 488	41 574	45 697	58 000
USA					
Bentonite (c)	4 487 987	2 943 633	2 618 925	3 118 847	2 898 710
Fuller's earth (c)(f)	1 502 166	1 526 479	1 734 205	1 722 876	2 775 333
Argentina					
Bentonite	122 719	123 254	135 569	81 534	* 90 000
Fuller's earth	5 246	11 795	6 741	3 611	* 5 000
Brazil					
Bentonite	166 338	164 060	128 691	201 025	222 603
Peru					
Bentonite	30 500	* 31 000	* 31 000	* 32 000	* 32 000
Burma (d)					
Bentonite	2 097	985	812	710	* 700
Cyprus					
Bentonite	47 010	13 324	31 950	32 400	52 000
India					
Bentonite	143 872	142 088	95 069	127 413	...
Fuller's earth	19 758	26 295	35 047	20 435	...
Iran					
Bentonite	* 10 000	* 11 000	* 10 000	* 10 000	* 10 000

Production of Bentonite and Fuller's Earth

tonnes

Country	1981	1982	1983	1984	1985
Israel					
Bentonite (e)	12 581	12 000	6 838	5 898	* 12 000
Japan					
Bentonite	511 781	484 431	440 923	415 974	461 530
Pakistan					
Bentonite	1 048	1 024	1 069	1 740	2 011
Fuller's earth	17 571	17 342	17 483	19 139	14 620
Philippines					
Bentonite	5 527	4 671	670	37 843	1 608
Australia					
Bentonite	16 905	29 211	30 026	40 000	* 30 000
Fuller's earth	—	14 769	* 15 000	* 15 000	* 15 000
New Zealand					
Bentonite	1 885	6 220	1 958	6 418	7 400
World total Bentonite	7 190 000	5 490 000	5 120 000	6 270 000	6 420 000
World total Fuller's earth (b)	3 150 000	3 280 000	3 440 000	3 350 000	4 450 000

Notes:

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

2 In addition to the countries listed, Austria, Canada, China, Soviet Union and Tanzania are also believed to produce bentonite and France, Iran and Japan may produce fuller's earth

(a) BGS estimates of saleable production based on data from producing companies

(b) Including attapulgite and sepiolite

(c) Sold or used by producers

(d) Years ended 31 March following that stated

(e) A low grade form of bentonite, known as metabentonite

(f) Mostly attapulgite

(g) Smectite

Exports of Bentonite and Fuller's Earth

Country	1981	1982	1983	1984	1985
United Kingdom					
Bentonite	29 479	22 066	19 169	22 195	40 256
Fuller's earth	8 914	12 049	13 957	16 619	23 111
Belgium-Luxembourg					
Bentonite	6 247	4 804	6 192	1 488	2 041
Fuller's earth	58	232	953	659	482
France					
Bentonite	12 630	15 304	10 404	7 676	8 295
Fuller's earth	1 808	9 958	10 669	12 033	5 459
Germany, Federal Republic of					
Bentonite	23 956	21 122	31 488	33 552	34 444
Fuller's earth	4 485	3 865	6 361	3 348	4 854
Greece					
Bentonite	757 534	314 533	322 920	380 246	489 714
Italy					
Bentonite	36 297	21 261	40 982	38 144	28 063
Netherlands					
Bentonite	31 619	22 687	22 238	23 916	30 572
Fuller's earth	15 017	762	5 528	9 074	301
Hungary					
Bentonite	18 218	21 527	16 382	12 920	10 338
Spain					
Bentonite	29 689	30 554	32 346	24 236	...
Fuller's earth	2 485	2 877	2 646	2 670	...
Turkey					
Bentonite	8 833	...	...	7 051	...
Yugoslavia					
Bentonite	348	533	100	189	...
Morocco					
Fuller's earth (a)	17 143	18 350	20 737	38 640	32 720
Senegal					
Fuller's earth (b)	7 764	15 017	18 275	7 996	...
South Africa					
Bentonite	1 798	995	380	915	1 445
USA					
Bentonite	781 987	605 745	502 522	510 673	580 569
Fuller's earth	100 976	84 321	92 800	105 039	96 244
Argentina					
Bentonite	5 595	4 888	6 651	...	...
Colombia					
Bentonite	1 366	1 441	336	—	...

Exports of Bentonite and Fuller's Earth

tonnes

Country	1981	1982	1983	1984	1985
China					
Bentonite (c)	* 1 250	* 700	* 1 100	* 900	* 900
Fuller's earth (c)	* 1 000	* 2 100	* 1 900	* 1 200	* 500
India (d)					
Bentonite	16 428	11 243	...	...	...
Fuller's earth	1 321	877	...	...	...
Indonesia					
Bentonite	4 932	6 909	9 928	5 184	...
Kuwait					
Bentonite	34 486	18 118	1 254	...	...
Philippines	—	—	—	17 917	34 897
Singapore					
Bentonite	29 853	19 312	21 913	21 817	13 823
of which: Re-exports	12 252	14 228	19 710	19 524	11 463
Fuller's earth	9 266	11 239	11 813	7 923	6 335
of which: Re-exports	9 200	11 236	11 813	7 923	6 321
Taiwan					
Bentonite	65	104	36	45	10

Notes:

- 1 See note 1 to production table
- 2 The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Standard International Trade Classification (Revision 2) 278.21. Activated bentonite and fuller's earth, Standard International Trade Classification (Revision 2) 598.92(b) are excluded. However, some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Standard International Trade Classification (Revision 2) 598.92(b), e.g. Italy

- (a) Smectite
- (b) Attapulgite
- (c) BGS estimates, based on known imports into certain countries
- (d) Years ended 31 March following that stated

Imports of Bentonite and Fuller's Earth

Country	1981	1982	1983	1984	1985
United Kingdom					
Bentonite	55 153	46 328	45 751	81 051	83 982
Fuller's earth	1 809	1 381	3 976	5 672	2 013
Belgium-Luxembourg					
Bentonite	25 798	21 336	24 828	19 873	20 166
Fuller's earth	5 281	1 556	7 979	9 470	1 520
Denmark					
Bentonite	3 918	3 555	3 726	3 234	2 669
Fuller's earth	920	1 183	983	981	1 129
France					
Bentonite	89 112	99 081	89 298	95 069	98 366
Fuller's earth	1 425	4 510	1 909	1 898	1 922
Germany, Federal Republic of					
Bentonite	77 231	70 476	82 442	82 612	114 610
Fuller's earth	5 706	5 369	5 649	4 593	6 905
Greece					
Bentonite	351	1 250	616	1 657	358
Italy					
Bentonite	25 440	42 504	39 530	48 559	20 731
Fuller's earth	1 123	2 362	1 961	2 718	3 065
Netherlands					
Bentonite	60 382	84 738	70 786	90 934	74 619
Fuller's earth	2 794	2 762	3 144	2 615	3 455
Austria					
Bentonite	954	839	1 733	1 391	2 432
German Democratic Republic					
Bentonite (c)	* 11 400	* 10 400	* 10 500	* 8 000	* 5 300
Fuller's earth (c)	* 300	* 500	* 900	* 900	* 700
Norway					
Bentonite	48 315	36 955	31 374	38 128	40 600
Fuller's earth	416	341	278	412	4 131
Poland					
Bentonite	* 5 000	* 4 600	(c)* 5 200	(c)* 4 900	(c)* 5 000
Portugal					
Bentonite	25 672	26 497	24 281	19 131	...
Spain					
Bentonite	27 977	28 418	24 206	28 484	...
Sweden					
Bentonite	3 339	5 696	2 903	6 653	6 026
Algeria					
Bentonite (b)	164	206	37	14	...
Ivory Coast					
Bentonite	2 412	750	364	467	776
Morocco					
Bentonite	269	358	0	682	200
Fuller's earth	225	93	32	42	34
Senegal					
Bentonite	—	1 505	134	2 104	...
Tunisia					
Bentonite	...	6 928	...	4 844	3 032
Zimbabwe					
Fuller's earth	322	379	715	162	...
Canada					
Bentonite	311 255	238 031	187 228	337 054	346 092
Fuller's earth	784	1 081	536	4 152	4 966
Mexico					
Bentonite	9 890	5 459	406	496	685
USA					
Bentonite	72	140	693	5 322	7 352
Fuller's earth	196	38	—	7	3 460
Brazil					
Bentonite	13 691	8 057	10 279	14 098	...
Chile					
Bentonite (c)	* 6 200	* 4 900	* 7 300	* 3 600	* 1 000
Colombia					
Bentonite	6 608	10 138	2 325	6 736	...

Imports of Bentonite and Fuller's Earth

tonnes

Country	1981	1982	1983	1984	1985
Peru					
Bentonite	910	774	762	...	...
Uruguay					
Bentonite	209	99	164	108	142
Venezuela					
Bentonite	...	31 804	20 662	...	...
Indonesia					
Bentonite	19 529	30 679	24 185	25 542	...
Korea, Republic of					
Bentonite	1 651	1 549	2 860	3 816	5 062
Kuwait					
Bentonite	39 722	10 640	15 263	...	...
Malaysia					
Bentonite	5 466	4 385	7 507	20 797	50 833
Fuller's earth	27 227	25 734	12 298	5 474	1 814
Pakistan (a)	199	719	901	1 045	22 294
Philippines	15 211	8 455	4 382	2 048	3 374
Singapore					
Bentonite	68 208	45 614	51 043	35 468	30 132
Fuller's earth	6 280	8 878	11 640	12 531	9 946
Taiwan					
Bentonite	7 237	6 174	9 396	14 040	16 623
Thailand					
Bentonite	2 563	1 417	2 014	4 212	2 914
Australia					
Bentonite	43 034	32 571	17 767	24 418	...

Notes:

- 1 See note 1 to production table
- 2 The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Standard International Trade Classification (Revision 2) 278.21. Activated bentonite and fuller's earth, Standard International Trade Classification (Revision 2) 598.92(b) are excluded. However, some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Standard International Trade Classification (Revision 2) 598.92(b), e.g. Italy

(a) Years ended 30 June of that stated

(b) Including crude kaolin

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

Mine Production of Bismuth

tonnes (metal content)

Country	1981	1982	1983	1984	1985
France	64	78	97	79	78
Italy	15	28	22	26	54
Romania	* 80	* 80	* 80	* 80	* 80
Soviet Union	* 75	* 78	* 80	* 82	* 84
Yugoslavia	102	49	45	30	68
Canada (a)	168	189	253	166	201
Mexico	656	606	545	433	925
USA	* 400	* 400	* 400	* 400	* 400
Bolivia	11	5	6	3	159
Peru (a)	638	613	535	668	737
China	* 260	* 260	* 260	* 260	* 260
Japan	478	486	570	560	* 620
Korea, Republic of	100	95	100	126	135
Australia	* 1 180	* 1 500	* 1 400	* 1 350	* 1 400
World total	4 200	4 500	4 400	4 300	5 200

Notes:

- 1 The figures in this table are in some instances derived from reported bismuth content of refined and impure metal plus recoverable bismuth in ores and concentrates exported. 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
 - 2 In addition to the countries listed, Belgium, Brazil, Bulgaria, German Democratic Republic and Namibia are also believed to produce bismuth
- (a) Includes Bi content of bullion and concentrates exported

Bismuth

Exports of Bismuth

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Compounds	2	2	2	5	3
Metal	311	319	353	418	...
France					
Compounds	80	49	50	41	61
Metal	8	3	13	12	10
Germany, Federal Republic of					
Compounds	67	93	97	60	39
Metal	328	251	82	427	251
Italy					
Compounds	1	1	...	...	1
Metal	12	18	6	23	40
Netherlands					
Compounds	14	7	1	—	—
Metal	33	55	74	28	12
Mexico					
Metal	669	627	677	496	495
USA					
Metal	38	24	139	177	226
Peru					
Metal (a)	* 500	* 550	* 460	* 310	* 140
Japan					
Metal	252	242	249	158	230
Korea, Republic of					
Metal	91	83	92	136	139

Note: The compounds recorded in this table are bismuth carbonate and/or bismuth nitrate

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

Imports of Bismuth

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	292	351	337	503	402
Belgium-Luxembourg					
Compounds	22	2	4	2	1
France					
Compounds	2	2	25	1	1
Metal	288	197	274	232	207
Germany, Federal Republic of					
Compounds	11	5	10	4	9
Metal	185	331	418	350	385
Italy					
Compounds	24	24	58	65	18
Metal	40	39	40	69	88
Netherlands					
Compounds	112	6	3	2	48
Metal	36	18	25	34	46
Spain					
Metal	73	123	90	103	...
Turkey					
Compounds	6	...	...	4	...
Yugoslavia					
Compounds	3	0	...	4	...
Metal	0	0	...	5	...
Morocco					
Compounds	3	5	3	4	2
Mexico					
Metal	1	81	80	632	134
USA					
Metal	1 105	919	921	980	928
Argentina					
Metal	8	17	20	...	...
Brazil					
Compounds (a)	8	12	9	4	...
Metal	47	34	46	101	...
India					
Metal (b)	20	32	...	...	...
Australia					
Metal	14	11	7	14	...

Note: The compounds recorded in this table are bismuth carbonate and/or bismuth nitrate

(a) Also includes oxide and chloride

(b) Years ended 31 March following that stated

Bromine

Production of Bromine

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom	27 605 000	29 770 000	25 766 000	28 532 000	29 851 000
France	17 261 000	* 17 000 000	* 16 000 000	* 17 000 000	* 20 000 000
Germany, Federal Republic of	3 567 000	3 073 000	3 136 000	3 306 000	3 077 000
Italy	* 600 000	* 600 000	* 500 000	* 500 000	* 600 000
Soviet Union	* 68 000 000	* 68 000 000	* 68 000 000	* 70 000 000	* 70 000 000
Spain	* 400 000	* 350 000	* 330 000	* 300 000	* 360 000
USA (a)	171 048 000	* 181 900 000	* 168 000 000	* 175 000 000	* 145 000 000
India	1 011 000	494 000	544 000	246 000	1 089 300
Israel	44 019 000	* 70 000 000	* 70 000 000	* 90 700 000	* 100 000 000
Japan	* 12 000 000	* 12 000 000	* 12 000 000	* 12 000 000	* 12 000 000
World total	345 500 000	383 200 000	364 300 000	397 600 000	382 000 000

(a) Elemental bromine sold as such or used in the preparation of bromine compounds by primary producers

Exports of Bromine

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom	1 350 481	2 150 846	1 917 710	2 017 764	1 970 929
Belgium-Luxembourg	76 200	—	2 100	5 000	—
Germany, Federal Republic of	10 300	10 500	12 600	28 300	6 200
Italy	106	344	9 746	17 947	72 900
Netherlands	804 000	1 152 000	1 035 000	1 340 000	2 030 000
German Democratic Republic (a)	* 431 000	* 795 000	* 587 000	* 718 000	* 1 358 000
USA	* 4 000 000	...	2 040 000	30 935 000	2 836 000
Israel (a)	* 12 900 000	* 15 100 000	* 17 400 000	* 23 800 000	* 27 700 000

Note: In general, trade in bromine compounds is not separately distinguished from other halogen salts and has therefore not been included in this table

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

Imports of Bromine

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom	5 025 781	4 629 255	5 169 751	6 169 089	9 275 204
Belgium-Luxembourg	665 900	793 600	910 700	1 653 200	1 280 900
Denmark	86 100	77 200	51 800	74 100	130 000
France	2 348 000	4 209 000	4 479 000	5 173 000	6 782 000
Germany, Federal Republic of	2 908 400	3 361 500	4 307 400	5 865 200	7 443 600
Italy	1 276 393	2 484 763	1 273 481	1 736 768	1 614 300
Netherlands	3 192 000	3 296 000	4 053 000	6 933 000	8 007 000
Hungary	713 000	579 000	597 000	630 000	649 000
Portugal	700	1 100	300	600	...
Spain	275 000	290 000	512 000	284 000	...
Turkey	147	...	...	353	...
Yugoslavia	3 000	3 000	7 000	9 000	...
Algeria	93	196	143	419	...
Morocco	93	22	84	18	276
South Africa	94 500	55 000	15 900	18 200	72 700
USA	354	69	104	4 100	...
Argentina	10 713	9 015	14 285	...	...
Brazil	39 676	22 576	11 670	19 842	...
Colombia	148	1 823	110	848	...
Peru	1 435	337	503	...	...
Venezuela	...	2 920	...	...	...
India (a)	346 905	278 810	...	...	...
Korea, Republic of	100 398	154 270	162 356	319 040	356 117
Pakistan (b)	...	7 994	4 638	15 266	7 133
Taiwan	127	151	44 968	56 621	14 428
Thailand	23	37	24	10	92

Note: In general, trade in bromine compounds is not separately distinguished from other halogen salts and has therefore not been included in this table

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

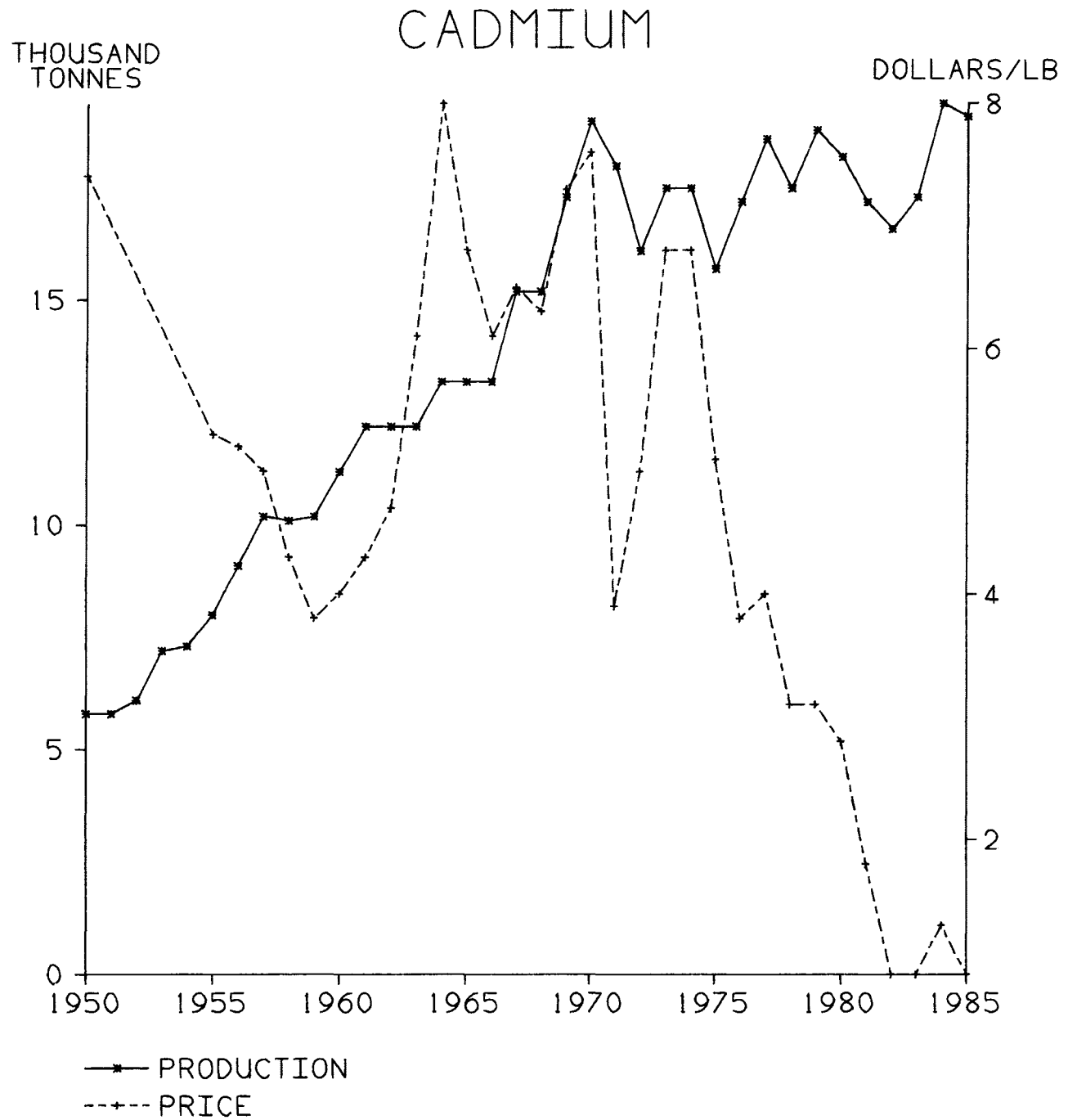


Figure 3 World production of cadmium from 1950 to 1985 compared with the annual average producer price expressed in constant 1980 US dollars.
Constant commodity prices have been derived from those quoted in Metals Week, using the CPI for the USA published in International Financial Statistics Yearbook (1986).

Production of Cadmium

Country	1981	1982	1983	1984	1985
United Kingdom	278	354	340	390	370
Belgium	1 176	1 001	1 264	1 472	1 252
France	664	803	513	563	482
Germany, Federal Republic of	1 192	1 030	1 094	1 110	1 095
Italy	489	475	386	520	360
Netherlands	518	497	513	636	594
Austria	55	48	46	49	52
Bulgaria	* 200	* 180	* 180	* 175	* 175
Finland	621	566	616	614	565
German Democratic Republic	* 16	* 16	* 15	* 15	* 15
Norway	117	103	117	150	159
Poland	* 580	* 500	* 600	* 600	* 610
Romania	* 80	* 75	* 60	* 60	* 55
Soviet Union	* 2 800	* 2 800	* 2 750	* 2 750	* 2 750
Spain	303	286	278	290	268
Turkey	* 10	* 10	* 10	* 12	* 16
Yugoslavia	208	174	48	270	279
Algeria	* 30	* 30	* 30	* 25	* 25
Namibia (a)	—	110	51	41	60
Zaire	230	281	308	318	295
Canada (b)	1 293	1 162	1 296	1 768	1 712
Mexico	590	607	642	571	734
USA (b)	1 603	1 007	1 052	1 686	1 603
Argentina	—	21	21	24	46
Brazil	28	73	189	224	224
Peru	312	425	443	384	427
China	* 270	* 300	* 350	* 360	* 380
India	113	131	133	143	194
Japan	1 977	2 021	2 215	2 400	2 555
Korea, Dem. P.R. of	* 130	* 220	* 220	* 260	* 360
Korea, Republic of	300	320	460	460	460
Australia	1 031	1 010	1 106	1 079	879
World total	17 200	16 600	17 300	19 400	19 100

(a) Thought to be a by-product of the smelting of zinc ores in South Africa

(b) Includes cadmium sponge and/or secondary metal

Cadmium

Exports of Cadmium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	37	144	194	136	104
Belgium-Luxembourg					
Metal	576	547	556	727	804
Sulphide	26	43	44	48	55
France					
Metal	251	361	344	490	273
Germany, Federal Republic of					
Metal (a)	604	617	633	405	296
Oxide	38	14	20	51	38
Italy	258	79	504	147	322
Netherlands	505	646	782	714	615
Austria	32	53	51	43	45
Bulgaria (b)	* 35	* 40	* 30	* 60	* 50
Finland	554	658	536	620	569
Norway	94	139	106	137	143
Soviet Union	* 450	* 450	* 450	* 400	* 400
Spain	204	209	232	184	...
Sweden	0	—	58	15	15
Yugoslavia	35	41	25	38	...
Zaire	200	310	169	196	...
Canada	1 453	771	1 365	1 388	1 477
Mexico	335	354	278	373	503
USA	240	12	173	135	160
Peru (b)	* 190	* 330	* 300	* 220	* 100
China (b)	* 400	* 400	* 400	* 100	* 100
Japan	938	1 145	910	446	382
Korea, Dem. P.R. of (b)	* 50	* 30	...	...	...
Korea, Republic of					
Metal	360	152	397	393	145
Oxide	—	—	—	159	179
Australia	988	684	942	899	...

(a) Including rhenium

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

Imports of Cadmium

Country	1981	1982	1983	1984	1985
United Kingdom	982	872	* 1 100	* 820	878
Belgium-Luxembourg					
Metal	1 131	1 199	1 663	1 189	1 174
Sulphide	11	21	17	29	27
Denmark	5	3	2	3	3
France					
Metal	598	618	744	921	891
Sulphide	44	54	51	61	42
Germany, Federal Republic of					
Metal	673	783	829	757	546
Oxide	417	487	635	571	532
Sulphide	12	8	17	9	9
Italy					
Metal	86	49	135	107	54
Sulphide	10	12	4	8	6
Netherlands					
Metal	118	155	286	112	129
Sulphide	12	4	27	4	2
Austria	3	3	3	5	1
Czechoslovakia	228	220	201	303	164
German Democratic Republic (a)	* 340	* 250	* 220	* 140	* 110
Sweden	186	224	218	241	260
Soviet Union (a)	* 70	* 600	* 200	* 300	* 300
USA	3 090	2 305	2 191	1 898	1 988
Brazil					
Metal	156	107	157	16	...
Oxide	88	92	94	39	...
India (b)	7	131	...	...	...

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

(b) Years ended 31 March following that stated

Chromium

Production of Chromium Ores and Concentrates

tonnes

Country	1981	1982	1983	1984	1985
Greece	20 856	23 238	20 517	50 364	58 948
Albania	* 710 000	* 675 000	* 685 000	* 720 000	* 825 000
Finland	202 400	180 251	160 475	150 400	179 200
Soviet Union	* 2 900 000	* 2 940 000	* 2 940 000	* 2 940 000	* 2 940 000
Turkey	401 112	452 445	345 610	487 405	500 000
Madagascar	99 689	44 223	42 920	59 765	126 697
South Africa	2 869 502	2 469 048	2 493 724	3 407 151	3 698 679
Sudan	18 615	10 018	18 557	25 000	16 000
Zimbabwe	536 052	431 600	431 400	476 400	526 500
Cuba	20 528	27 300	33 600	37 900	* 40 000
Brazil (a)	236 390	275 504	155 022	255 914	* 275 000
Cyprus	10 381	2 878	—	—	—
India	343 601	356 604	365 366	441 704	552 000
Iran	* 30 000	* 40 000	* 50 000	* 50 000	* 50 000
Japan	10 959	11 178	8 396	6 001	11 800
Pakistan	1 427	4 456	4 992	2 745	3 150
Philippines	439 256	321 866	266 909	259 183	257 583
Vietnam	* 15 000	* 16 000	* 16 000	* 16 000	* 14 000
New Caledonia	—	49 826	86 642	84 651	78 820
World total	8 900 000	8 300 000	8 100 000	9 500 000	10 200 000

Note: In addition to the countries listed, Bulgaria, China and Democratic P.R. of Korea are also believed to produce chromite

(a) Includes beneficiated and direct shipping ore

Exports of Chromium

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	1 192	980	112	27	171
Metal	2 275	1 945	3 038	3 889	4 071
Belgium-Luxembourg					
Ores & concentrates	—	—	8	51	36
Metal	398	280	65	111	301
France					
Ores & concentrates	2 033	1 554	1 316	1 069	3 124
Metal	774	590	740	1 630	1 614
Germany, Federal Republic of					
Ores & concentrates	3 459	12 959	8 694	8 877	8 909
Metal	164	101	106	252	197
Greece					
Ores & concentrates	15 885	12 175	12 030	8 625	8 830
Italy					
Ores & concentrates	3 046	437	680	678	1 544
Metal	5	2	30	45	139
Netherlands					
Ores & concentrates	16 577	21 130	18 603	21 377	27 379
Metal	31	5	58	117	2
Albania					
Ores & concentrates (b)	* 485 000	* 543 000	* 715 000	* 787 000	* 587 000
Austria					
Ores & concentrates	109	49	622	349	953
Finland					
Ores & concentrates	250 898	199 806	133 952	273 069	177 153
Soviet Union					
Ores & concentrates	567 000	561 000	496 000	442 000	471 000
Turkey					
Ores & concentrates	308 280	303 822	362 668	439 680	478 069
Yugoslavia					
Ores & concentrates	12 483	12 477	12 454	25 848	13 150
Madagascar					
Ores & concentrates	80 830	63 723	* 66 000	107 548	* 115 000
South Africa					
Ores & concentrates	1 171 608	1 112 198	1 244 982	1 096 856	1 739 336
Zimbabwe					
Ores & concentrates	4 279	—	—	—	...
Cuba					
Ores & concentrates	13 780	21 651	28 897	41 208	...
USA					
Ores & concentrates	124 502	60 994	14 145	53 327	94 789
of which: Re-exports	60 389	53 586	4 137	3 497	3 335
Metal	365	221	243	243	202
China					
Ores & concentrates (b)	* 7 900	* 1 150	* 3 300	...	...
Metal (b)	* 100	* 250	* 500	* 1 100	* 500
Cyprus					
Ores & concentrates	10 689	11 868	11 071	—	—
India (c)					
Ores & concentrates	148 216	123 048	...	...	...
Iran (a)					
Ores & concentrates	(b)* 5 000	(b)* 1 200	4 200	2 500	...
Japan					
Ores & concentrates	607	744	852	718	756
Philippines					
Ores & concentrates	397 382	279 017	146 826	244 028	159 435
New Caledonia					
Ores & concentrates	—	18 750	80 570	95 530	86 156

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Years ended 20 March following that stated

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

(c) Years ended 31 March following that stated

Chromium

Imports of Chromium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	76 495	64 547	100 475	129 786	137 675
Metal	(a)* 200	(a)* 200	162	185	356
Belgium-Luxembourg					
Ores & concentrates	1 832	2 108	3 848	4 223	5 231
Metal	219	298	284	233	457
Denmark					
Ores & concentrates	346	329	1 532	1 463	1 323
France					
Ores & concentrates	146 435	111 459	54 509	57 596	25 093
Metal	300	90	276	290	196
Germany, Federal Republic of					
Ores & concentrates	268 237	244 279	247 187	337 907	384 473
Metal	569	601	921	1 295	1 461
Greece					
Ores & concentrates	3 952	20	18 719	26 815	35 980
Irish Republic					
Ores & concentrates	5 623	—	3 275	3 803	11
Italy					
Ores & concentrates	91 806	159 431	192 212	220 529	229 118
Metal	175	126	122	244	193
Netherlands					
Ores & concentrates	18 189	31 355	20 554	23 802	40 239
Metal	46	64	132	414	120
Austria					
Ores & concentrates	42 334	49 906	40 390	56 814	46 607
Czechoslovakia					
Ores & concentrates	180 000	204 000	185 000	176 000	174 000
German Democratic Republic					
Ores & concentrates (b)	49 100	46 800	51 900	39 800	52 300
Hungary					
Ores & concentrates (c)	15 000	14 000	17 000	17 000	15 000
Norway					
Ores & concentrates	27 203	23 311	8 800	538	110
Poland					
Ores & concentrates	181 902	203 835	169 249	150 993	151 093
Portugal					
Ores & concentrates	392	577	753	859	...
Romania					
Ores & concentrates (a)	* 16 400	* 43 200	* 62 400	* 42 300	* 42 700
Spain					
Ores & concentrates	70 330	72 233	51 198	114 162	79 042
Sweden					
Ores & concentrates	406 697	305 050	341 154	553 733	387 240
Metal	193	155	187	282	248
Yugoslavia					
Ores & concentrates	325 185	189 699	202 819	273 679	281 066
South Africa					
Ores & concentrates	8 147	121	1	0	6
Canada					
Ores & concentrates (b)	69 607	11 770	12 577	18 836	17 547
Mexico					
Ores & concentrates	47 612	43 245	32 868	52 714	52 711
USA					
Ores & concentrates	814 949	459 754	172 990	276 310	375 991
Metal	3 221	1 725	2 707	4 254	3 587
Argentina					
Ores & concentrates	11 967	6 198	14 103	15 862	...
Brazil					
Ores & concentrates	21 966	4 381	5 897	20 674	...
Peru					
Ores & concentrates	3 382	5 540	129	...	...
Venezuela					
Ores & concentrates	1 954	11 000	3 914	...	...

Imports of Chromium

Chromium
tonnes

Country	1981	1982	1983	1984	1985
China					
Ores & concentrates	80 079	224 841	307 479	280 687	364 719
Japan					
Ores & concentrates	743 937	694 521	644 895	823 394	987 240
Korea, Dem P.R. of					
Ores & concentrates (a)	* 14 000	* 16 000	* 14 000	* 17 000	* 16 000
Korea, Republic of					
Ores & concentrates	3 501	4 846	3 853	5 027	3 875
Philippines					
Ores & concentrates	—	0	3 859	24 410	29 947
Taiwan					
Ores & concentrates	1 270	1 856	1 751	3 514	10 726
Australia					
Ores & concentrates	7 997	3 912	970	7 250	...

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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

(b) Cr₂O₃ content

(c) Exports from Soviet Union

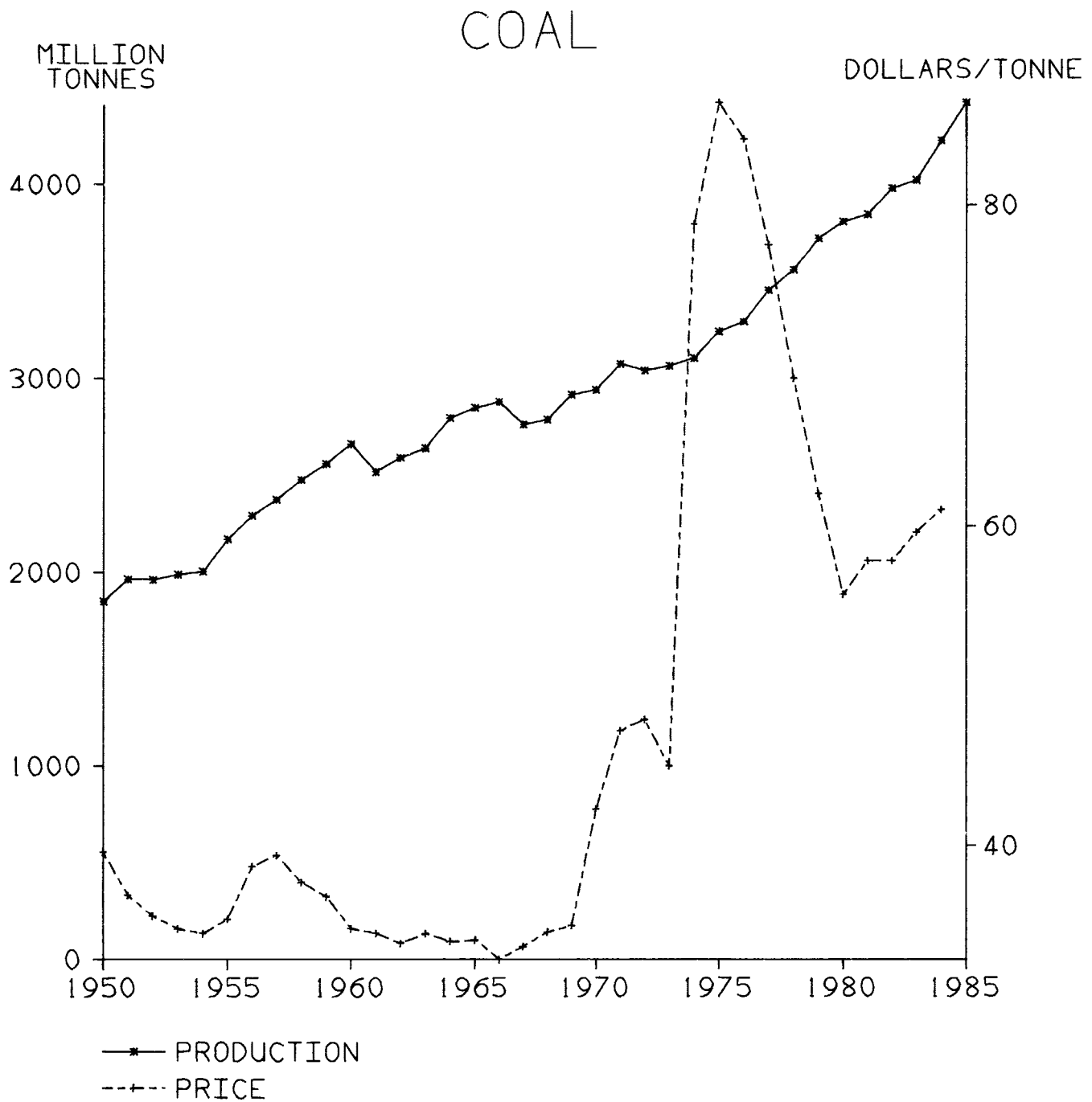


Figure 4 World production of coal from 1950 to 1985 compared with the yearly average export unit value of bituminous coal f.o.b. US ports expressed in constant 1980 US dollars.

Trend line analysis of the production data indicates a growth rate of approximately 2% per annum over 36 years.

Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Production of Coal

Country	1981	1982	1983	1984	1985
United Kingdom					
Anthracite	2 909 000	2 884 000	2 016 000	1 217 000	2 142 000
Bituminous	124 560 000	121 827 000	117 238 000	49 965 000	91 905 000
Belgium					
Anthracite	321 000	262 000	187 500	102 300	—
Bituminous	5 815 446	6 276 874	5 909 928	6 195 313	6 211 471
France					
Anthracite & bituminous	18 588 000	16 895 000	17 021 000	16 594 000	15 123 000
Lignite	2 945 000	3 065 000	2 605 000	2 426 000	1 861 000
Germany, Federal Republic of					
Anthracite & bituminous	88 460 000	89 014 000	82 202 000	76 426 000	82 396 000
Brown coal	130 619 000	127 307 000	124 281 000	126 739 000	120 667 000
Greece					
Lignite	27 303 699	27 326 248	30 705 519	32 489 701	35 961 538
Irish Republic					
Anthracite & semi-bituminous	70 000	62 000	74 800	70 000	56 700
Italy					
Lignite	1 957 958	1 912 677	1 736 643	1 806 103	1 852 436
Albania					
Brown coal & lignite	* 1 505 000	* 1 640 000	* 1 779 000	2 010 000	* 2 195 000
Austria					
Brown coal & lignite	3 061 262	3 297 488	3 041 260	2 927 939	3 081 086
Bulgaria					
Anthracite & bituminous	245 661	241 000	243 000	223 000	223 000
Brown coal & lignite	28 995 000	31 974 000	32 147 000	32 136 000	30 657 000
Czechoslovakia					
Bituminous	27 513 000	27 463 000	26 915 000	26 421 000	26 223 000
Brown coal	93 096 000	95 504 000	98 878 000	101 084 000	98 633 000
Lignite	3 269 000	3 440 000	3 538 000	3 659 000	3 682 000
German Democratic Republic					
Brown coal	266 734 000	276 038 000	277 968 000	296 341 000	312 156 000
Hungary					
Bituminous	3 065 763	3 038 720	2 826 780	2 573 382	2 639 103
Brown coal	14 463 295	14 753 868	14 406 136	14 448 203	14 016 288
Lignite	8 413 123	8 286 113	7 980 067	8 026 000	7 387 123
Norway					
Spitzbergen (d)—					
Bituminous	409 729	440 000	502 000	451 327	569 482
Poland					
Bituminous	163 022 000	189 314 000	191 092 000	191 592 000	191 642 000
Brown coal	35 616 000	37 649 000	42 532 000	50 378 000	57 746 000
Portugal					
Anthracite	183 760	178 540	185 228	194 855	238 414
Romania					
Anthracite & bituminous	9 826 000	9 658 000	10 629 000	8 458 000	8 500 000
Lignite	29 014 000	31 061 000	37 357 000	34 971 000	) 36 000 000
Brown coal	724 000	714 000	773 000	850 000)
Soviet Union					
Anthracite & bituminous	544 213 000	555 400 000	557 800 000	556 500 000	569 000 000
Lignite	159 831 000	162 700 000	158 300 000	155 800 000	157 000 000
Spain					
Anthracite	4 876 268	5 205 462	5 370 495	5 475 626	5 810 392
Bituminous	9 838 594	10 217 469	10 048 791	9 813 701	10 280 905
Lignite	20 886 388	23 881 898	24 533 916	24 302 928	23 571 958
Turkey					
Bituminous	7 284 834	7 222 871	6 725 000	7 103 413	7 260 000
Lignite	18 950 943	20 542 357	23 847 360	27 199 347	39 036 000
Yugoslavia					
Bituminous	384 000	388 514	391 607	388 000	400 000
Lignite	40 958 000	43 454 000	47 697 002	53 293 000	56 635 000
Brown coal	10 581 000	10 744 000	11 302 692	11 391 000	12 465 000

Coal

Production of Coal

tonnes

Country	1981	1982	1983	1984	1985
Botswana	379 924	413 778	395 087	392 854	437 088
Morocco					
Anthracite	703 000	735 000	751 000	837 500	774 500
Mozambique					
Bituminous	535 000	67 000	59 000	107 000	20 400
Niger	79 800	96 300	118 609	123 644	...
Nigeria					
Sub-bituminous	170 169	56 022	53 574	76 077	139 744
South Africa					
Anthracite	4 633 634	3 525 691	2 227 308	3 228 093	4 891 000
Bituminous	126 797 202	140 650 263	143 387 000	159 680 656	168 421 000
Swaziland					
Bituminous	157 701	115 043	101 652	124 569	166 079
Tanzania					
Bituminous	3 000	10 800	10 000	2 200	3 500
Zaire					
Bituminous	129 842	122 858	111 340	121 213	* 110 000
Zambia					
Bituminous	507 300	603 934	452 867	510 584	471 114
Zimbabwe					
Bituminous	2 867 000	2 769 000	3 326 000	3 109 000	3 114 000
Canada					
Bituminous	21 739 000	22 296 000	22 556 000	32 062 000	34 115 000
Sub-bituminous	11 551 000	13 021 000	14 464 000	15 422 000	16 620 000
Lignite	6 798 000	7 494 000	7 760 000	9 918 000	9 745 000
Mexico					
Bituminous	8 086 474	7 618 871	8 999 467	9 387 822	9 770 751
USA					
Anthracite	4 900 000	4 200 000	3 700 000	3 800 000	4 300 000
Bituminous & lignite	742 400 000	756 100 000	705 800 000	809 000 000	797 300 000
Argentina					
Lignite	497 546	516 891	490 960	516 000	* 400 000
Brazil					
Bituminous & lignite (e)	6 085 839	6 472 053	6 935 478	7 751 732	* 7 800 000
Chile					
Bituminous	1 147 122	975 070	1 077 831	1 306 785	1 369 763
Colombia					
Bituminous	5 030 000	5 550 000	6 000 000	6 897 000	9 706 000
Peru					
Anthracite	157 000	* 120 000	* 120 000	* 130 000	...
Venezuela					
Bituminous	45 736	46 506	39 174	51 000	* 50 000
Afghanistan (c)					
Bituminous	124 970	145 000	* 165 000	* 170 000	...
Burma (b)	18 327	29 119	35 969	* 43 200	* 43 000
China	622 000 000	666 000 000	715 000 000	789 000 000	847 000 000
India					
Bituminous	123 104 000	128 504 000	136 274 000	144 513 000	149 256 000
Lignite	5 966 000	6 673 000	7 310 000	7 681 000	7 766 000
Indonesia					
Bituminous	350 350	480 987	485 669	1 084 652	1 491 652
Iran (c)					
Bituminous	* 600 000	* 700 000	980 000	* 1 000 000	* 1 300 000
Japan					
Anthracite & bituminous	17 687 375	17 605 703	16 991 244	16 645 000	16 383 000
Lignite	11 549	11 860	10 960	...	...
Korea, Dem P.R. of					
Anthracite	* 36 000 000	* 36 500 000	* 36 500 000	* 44 000 000	* 55 000 000
Lignite	* 10 000 000	* 10 200 000	* 10 500 000	* 12 500 000	* 15 000 000
Korea, Republic of					
Anthracite	19 865 000	20 115 600	19 860 800	21 370 300	24 542 700
Mongolia					
Anthracite	346 000	401 000	408 000	458 000	...
Lignite	3 957 000	4 520 000	4 566 000	4 973 000	...

Production of Coal

Country	1981	1982	1983	1984	1985
Pakistan (a)	1 562 008	1 809 626	1 747 000	2 134 916	...
Philippines					
Bituminous	318 170	556 755	1 019 594	1 216 388	1 294 079
Taiwan					
Bituminous	2 445 782	2 383 579	2 236 065	2 010 775	1 857 858
Thailand					
Lignite	1 686 044	1 963 764	1 866 083	2 337 226	5 149 150
Vietnam					
Anthracite	5 952 000	6 080 000	6 235 000	4 900 000	...
Australia					
Bituminous	93 405 000	99 336 000	100 019 000	116 261 000	) 138 967 000
Sub-bituminous	7 190 000	7 992 000	8 998 000	8 288 000	
Brown coal	32 990 000	37 821 000	34 191 000	35 108 000	36 531 000
New Zealand					
Bituminous	474 600	427 800	496 400	582 400	* 609 200
Sub-bituminous	1 509 700	1 594 700	1 752 200	1 709 100	* 1 572 700
Lignite	211 900	221 900	235 000	235 100	* 226 600
World total	3 844 000 000	3 997 000 000	4 020 000 000	4 225 000 000	4 422 000 000

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

- (a) Including lignite
- (b) Years ended 31 March following that stated
- (c) Years ended 20 March following that stated
- (d) Not including production from mines controlled by the Soviet Union
- (e) Includes beneficiated and directly shipped material

Coal

Exports of Coal

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Anthracite	893 170	551 945	517 120	203 240	213 894
Other coal	8 619 348	6 835 137	5 822 496	2 237 167	2 343 979
Briquettes	104 020	126 338	124 555	73 440	98 812
Belgium-Luxembourg					
Anthracite	72 493	71 561	78 985	119 541	69 771
Other coal	820 440	676 747	721 856	1 098 769	1 393 706
Briquettes	16 254	13 254	17 000	83 967	46 478
Denmark	3 115	1 170	3 091	76 750	71 199
France					
Anthracite	67 402	86 606	120 732	170 756	82 387
Other coal	687 584	717 082	601 240	721 378	958 307
Lignite	6 492	4 630	3 397	2 409	1 748
Briquettes	26 716	21 727	25 704	49 049	63 004
Germany, Federal Republic of					
Coal (b)	11 995 765	9 944 737	10 581 581	10 489 141	8 957 013
Brown coal	259 859	217 977	214 979	307 022	455 917
Briquettes	953 583	872 308	854 965	1 179 654	1 286 379
Irish Republic (b)	9 235	3 430	4 866	25 196	16 637
Italy (b)	19 773	4 492	5 234	11 703	40 437
Netherlands					
Anthracite	250 490	188 252	185 777	169 639	322 113
Other coal	659 685	480 937	648 451	1 095 189	1 463 254
Briquettes	2 893	3 850	2 206	3 482	6 562
Austria					
Brown coal	19 518	15 291	9 422	8 180	8 493
Czechoslovakia					
Coal	2 605 000	2 822 000	2 928 000	2 672 000	2 676 000
Brown coal	2 527 000	2 710 000	2 679 000	2 644 000	2 832 000
German Democratic Republic					
Briquettes	2 789 000	3 000 000	3 285 000	3 971 000	3 313 000
Hungary					
Brown coal	42 422	35 085	22 712	17 222	293 978
Norway	84 140	96 386	127 492	187 835	235 498
Poland					
Coal	15 159 000	28 462 000	35 148 000	42 918 000	36 155 000
Brown coal	1 383 000	941 000	200 000	200 000	201 000
Soviet Union					
Coal (c)	* 17 589 000	* 18 379 000	* 19 155 000	* 20 355 000	* 22 374 000
Brown coal (c)	* 61 800	* 78 400	* 96 400	* 124 100	* 105 600
Spain					
Coal (b)	8 535	12 669	3 773	1 710	...
Briquettes	5 536	4 673	1 184	1 722	...
Sweden (b)	703	912	1 456	22 958	112 014
Turkey					
Coal	—	4 452	...	...	2 000
Lignite	—	25 000	* 30 000	1 365	...
Yugoslavia					
Brown coal	444 840	509 631	231 260	67 434	...
Lignite	75 291	60 082	164 371	151 656	...
Morocco					
Anthracite	62 935	24 755	40 200	65 940	62 433
Mozambique	236 400	108 400	17 300	15 100	...
South Africa					
Anthracite	4 297 987	1 927 870	1 564 416	2 769 760	3 814 200
Other coal	25 592 810	26 261 852	28 566 816	35 390 764	40 997 073
Swaziland	104 959	77 273	76 161	83 376	101 057
Zimbabwe	116 357	66 251	113 761	174 776	...
Canada	16 285 020	15 528 486	16 974 376	24 354 988	27 572 324
USA					
Anthracite	2 040 027	889 053	720 428	617 249	1 166 752
Other coal	100 011 646	95 477 268	69 750 160	73 294 538	82 881 376
Lignite	44 201	47 893	114 490	8 087	29 739
Briquettes	63 924	108 838	98 210	101 105	77 182
Colombia	89 323	173 729	277 527	720 242	...

Exports of Coal

Country	1981	1982	1983	1984	1985
China	6 940 000	6 730 000	6 860 000	7 040 000	7 770 000
India (a)	118 434	116 267	80 000	90 000	...
Indonesia					
Anthracite	72 263	94 371	251 810	136 420	...
Other coal	84 432	116 368	172 648	745 924	...
Japan	55 004	25 060	15 274	13 621	4 242
Korea, Dem. P.R. of (c)	* 126 000	* 40 500	* 30 300	* 92 600	* 259 100
Australia	50 662 000	49 791 000	60 504 000	75 856 000	87 902 000
New Zealand (d)	186 256	135 097	204 452	279 998	392 799

Note: This table excludes bunker shipments

(a) Years ended 31 March following that stated

(b) Including anthracite

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

(d) Years ended 30 June of that stated

Coal

Imports of Coal

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Anthracite	329 641	616 871	672 254	1 268 607	1 207 002
Other coal	3 960 522	3 445 445	3 783 895	7 625 715	11 525 071
Briquettes	132 428	89 395	97 182	241 639	230 390
Belgium-Luxembourg					
Anthracite	1 705 916	1 526 643	1 216 802	1 289 315	1 418 617
Other coal	8 707 874	9 398 103	6 735 525	8 074 165	8 096 674
Brown coal	113 925	116 132	113 801	205 252	264 131
Briquettes	193 899	187 749	198 677	199 552	295 668
Denmark					
Coal	10 884 615	9 662 819	8 822 365	9 807 382	12 712 102
Briquettes	61 527	59 228	41 926	38 977	46 675
France					
Anthracite	1 488 523	1 054 155	1 176 799	1 140 061	1 283 734
Other coal	25 882 151	20 801 922	18 592 259	19 490 727	17 173 052
Lignite	9 725	6 778	6 030	8 644	18 292
Briquettes	262 769	313 624	275 495	234 756	253 106
Germany, Federal Republic of					
Anthracite	164 423	67 927	71 048	28 473	32 899
Other coal	10 155 991	10 568 689	9 051 123	8 818 429	9 827 923
Brown coal	2 713 584	2 666 888	2 639 788	2 603 590	2 452 321
Briquettes	1 252 158	1 388 776	1 544 170	1 665 396	1 477 124
Greece					
Anthracite	1 770	24 762	...	...	18
Other coal	166 633	360 841	527 280	1 414 043	1 549 894
Irish Republic					
Anthracite	36 894	40 610	58 364	42 122	86 883
Other coal	1 251 847	1 195 501	1 367 947	1 351 802	1 823 653
Briquettes	11 884	15 286	15 043	23 108	20 462
Italy					
Anthracite	200 282	294 930	110 257	539 867	674 473
Other coal	18 264 303	17 579 153	15 665 615	19 637 618	20 124 350
Lignite	18 248	41 766	44 059	43 597	63 562
Briquettes	130 516	37 285	33 666	53 125	156 526
Netherlands					
Anthracite	419 242	329 366	224 502	240 099	388 001
Other coal	7 529 577	8 546 038	7 512 067	9 824 539	11 106 174
Brown coal	149 208	120 707	88 707	92 739	106 276
Briquettes	21 499	28 282	31 528	57 926	54 889
Albania (e)	* 187 000	* 308 000	* 188 000	* 271 000	* 275 000
Austria					
Anthracite	50 561	18 003	26 735	51 784	55 084
Other coal	2 663 210	2 833 702	2 933 274	3 721 039	3 522 148
Brown coal	523 867	601 331	363 518	191 121	341 149
Briquettes	369 119	470 274	449 963	466 403	507 387
Bulgaria	7 051 000	7 227 000	7 087 000	7 200 000	8 065 000
Czechoslovakia					
Coal	4 423 000	4 980 000	5 028 000	4 565 000	4 686 000
Briquettes	570 000	652 000	676 000	708 000	736 000
Finland					
Anthracite	111 832	89 585	70 390	74 723	78 971
Other coal	5 537 729	4 594 492	4 319 984	3 508 482	5 010 236
German Democratic Republic (c)	5 361 000	4 739 000	4 198 000	3 619 000	5 098 000
Greenland	2 150	1 167	637	818	296
Hungary					
Coal (c)	1 678 129	1 996 684	1 756 113	1 609 833	2 517 775
Briquettes	523 792	489 471	514 560	589 021	676 275
Iceland	23 995	24 629	37 557	54 822	69 000
Norway (a)					
Anthracite	79 128	63 267	85 685	94 982	97 093
Other coal	613 569	741 689	461 980	673 209	815 964
Poland					
Anthracite	31 000	30 000	21 000	—	—
Other coal	1 072 000	972 000	1 021 000	1 031 000	1 060 000

Imports of Coal

Country	1981	1982	1983	1984	1985
Portugal					
Anthracite	12 149	8 025	2 912	15 658	...
Other coal	338 204	354 130	422 912	474 358	...
Romania	3 769 000	3 631 000	5 312 800	5 300 000	...
Soviet Union (e)	* 3 834 000	* 8 869 000	* 10 000 000	* 12 834 000	* 10 373 000
Spain					
Coal	7 014 595	7 175 547	5 908 964	6 994 182	...
Lignite	6 810	4 512	3 441	2 311	...
Briquettes	30 346	12 842	167 206	477 333	...
Sweden					
Anthracite	10 069	26 143	31 910	18 283	30 437
Other coal	2 028 063	2 856 200	3 053 687	3 952 067	4 803 574
Switzerland					
Coal (c)	862 858	471 399	344 274	543 702	473 541
Briquettes	60 355	45 197	40 872	42 075	45 314
Turkey	336 131	1 038 710	901 674	1 932 653	2 139 000
Yugoslavia					
Anthracite	208 498	219 889	213 120	200 967	...
Other coal	3 614 030	3 317 030	3 791 833	3 411 698	...
Brown coal	2 191	1 149	70 444	96 476	...
Briquettes	156 988	113 679	78 587	50 422	...
Algeria	666 287	681 502	1 170 417	1 499 425	...
Botswana	22 373	20 281	29 760	27 224	...
Egypt	1 266 508	1 400 977	979 584	* 1 100 000	...
Ghana	* 2 000	* 2 000	* 2 000	* 2 000	...
Kenya	90 929	46 505	32 217	83 168	...
Madagascar	12 528	19 062	27 569	7 318	430
Malawi	47 681	60 986	45 000	39 000	...
Morocco	10 071	41 211	216 805	155 763	420 743
Mozambique	18 464	69 395	72 023	3 792	...
South Africa	51 515	795	987	1 761	1 059
Tunisia	26 436	14 207	* 28 000	23 880	20 661
Zaire	7 726	1 532	69 300	59 390	...
Zimbabwe	43 299	38 215	3 785	* 36 000	...
Canada					
Anthracite	289 802	214 373	205 386	227 780	235 228
Other coal	14 687 202	15 488 032	14 509 685	18 824 104	14 757 702
Cuba	75 310	107 786	75 219	85 271	...
Mexico					
Coal	675 301	644 751	272 869	366 315	582 991
Lignite	5 240	6 571	5 372	6 062	6 744
USA					
Coal	946 519	673 516	1 152 669	) 1 167 252	2 240 747
Briquettes	17 224	19 590	17 747)	
Argentina	878 377	739 485	492 088	536 995	...
Brazil					
Anthracite	32 291	41 545	32 661	30 038	...
Other coal	4 320 492	4 194 337	6 262 363	8 073 572	...
Chile	408 222	240 000	335 000	342 000	...
Peru	23 928	24 568	48 664	* 55 000	...
Venezuela	36 617	38 167	* 40 000	...	...
Burma	* 215 000	* 200 000	* 180 000	* 175 000	...
China	1 940 000	2 160 000	2 130 000	2 430 000	2 310 000
Hong Kong	57 004	1 454 698	3 418 316	4 462 239	5 523 189
India (g)	404 762	1 007 160	539 000	350 000	...
Indonesia	5 336	2 593	932	558	...
Iran (b)	25 744	64 908	64 612	* 50 000	...
Israel (d)	307 738	990 000	2 136 000	2 669 000	...
Japan					
Anthracite	872 732	630 197	913 389	1 511 193	1 950 132
Other coal	77 397 668	78 461 180	73 752 601	86 307 274	91 039 940
Lignite	28 204	44 206	43 315	24 870	31 585
Korea, Dem. P.R. of	* 450 000	* 450 000	* 400 000	* 450 000	...

Coal

Imports of Coal

tonnes

Country	1981	1982	1983	1984	1985
Korea, Republic of					
Anthracite	5 138 150	2 448 589	805 131	819 231	2 658 937
Other coal	7 310 891	9 044 396	10 150 926	12 193 393	17 131 446
Malaysia					
Anthracite	20 908	8 464	5 525	7 050	15 722
Other coal	86 794	98 268	361 378	384 679	476 166
Pakistan (f)	160 933	538 307	472 871	499 523	715 569
Philippines	12 705	120 303	70 687	504 825	1 152 634
Sri Lanka	351	48 071	28 162	468	1 032
Syria	1 354	250	522	250	...
Taiwan	5 187 010	5 589 187	6 510 177	7 684 357	10 270 099
Thailand					
Coal	15 311	98 954	99 173	145 249	245 646
Briquettes	17 344	8 482	18 408	44 981	37 048
Australia	1 781	12 183	19 255	22 064	26 640
New Caledonia	82 351	64 990	96 801	52 186	220 855

(a) Excludes coal imported from Spitzbergen

(b) Years ended 20 March following that stated

(c) Including anthracite

(d) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

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

(f) Years ended 30 June of that stated

(g) Years ended 31 March following that stated

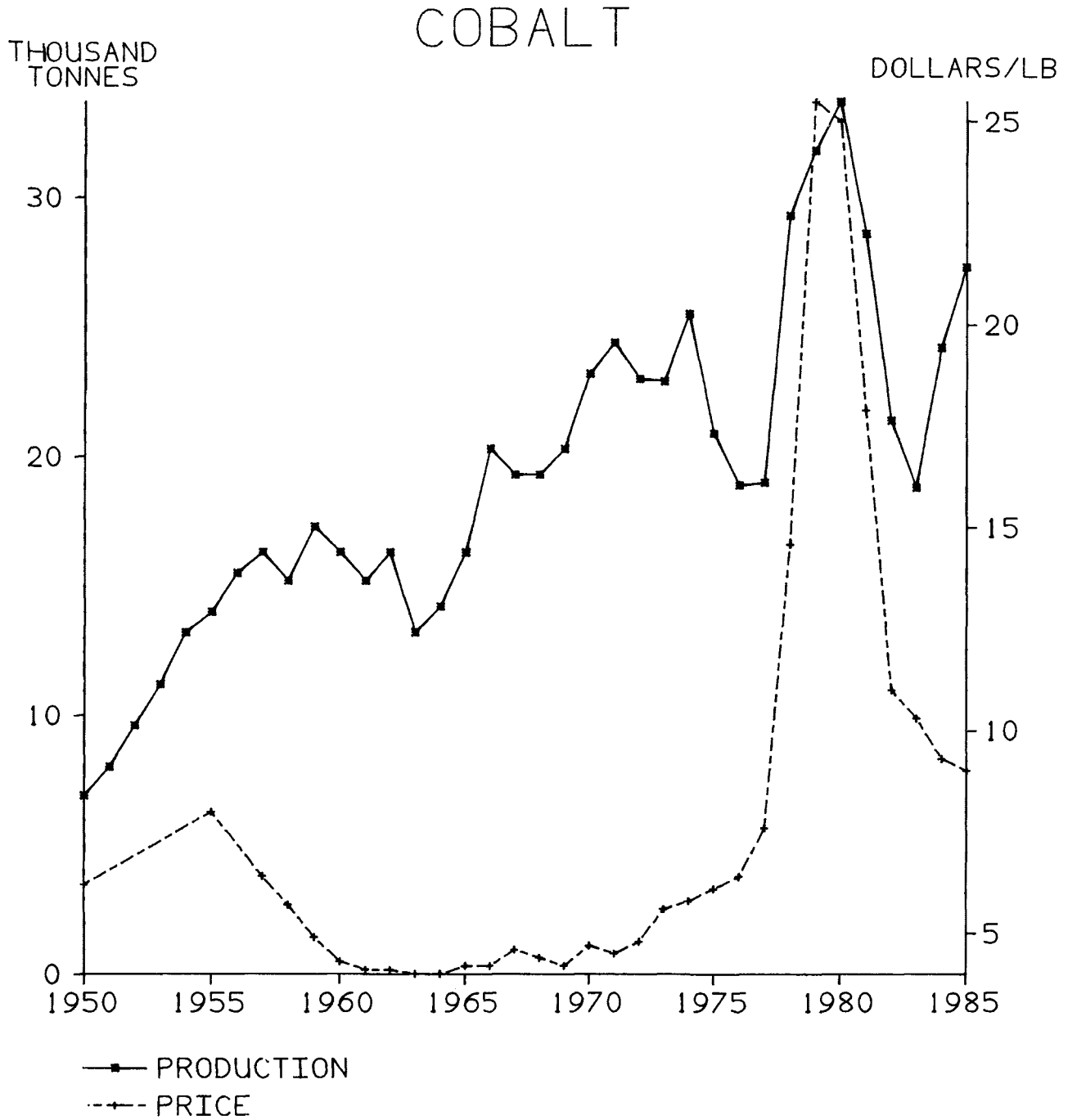


Figure 5 World mine production of cobalt from 1950 to 1985 compared with the AFRIMET INDUSSA Inc. average annual producer price expressed in constant 1980 US dollars.
Constant commodity prices to 1983 derived from those quoted by USBM in Mineral Facts and Problems (1960 et seq.), using the CPI for the USA taken from International Financial Statistics Yearbook (1986).

Mine Production of Cobalt

tonnes (metal content)

Country	1981	1982	1983	1984	1985
Albania	* 345	* 400	* 450	* 600	* 600
Finland	1 270	1 293	1 157	1 241	725
Soviet Union	* 2 250	* 2 350	* 2 400	* 2 600	* 2 700
Botswana	254	254	223	259	222
Morocco	783	792	—	—	—
Zaire	11 124	5 573	5 370	9 077	10 677
Zambia	2 570	2 446	2 407	3 472	4 359
Zimbabwe	94	98	73	77	91
Canada	2 080	1 274	1 410	2 123	2 067
Cuba	* 1 600	* 1 500	* 1 600	* 1 300	* 1 300
Philippines	997	466	165	64	886
Australia	2 902	3 132	2 196	1 620	* 1 500
New Caledonia	2 343	1 803	1 385	1 750	2 171
World total	28 600	21 400	18 800	24 200	27 300

Note: There is frequently a considerable disparity between the cobalt content of ore raised and cobalt actually recovered. Figures in this table relate where possible to cobalt recovered. The principal exceptions to this are Australia and New Caledonia, the figures for which relate to cobalt in ore raised

Production of Cobalt Metal

tonnes

Country	1981	1982	1983	1984	1985
Belgium (a)	...	...	...	...	...
France	815	501	131	116	* 110
Germany, Federal Republic of	* 150	* 150	* 100	* 100	* 100
Czechoslovakia (b)	...	...	...	...	...
Finland	1 937	2 181	1 453	2 384	1 426
Norway	1 444	991	879	1 191	1 525
Soviet Union	* 4 300	* 4 300	* 4 500	* 4 700	* 4 800
Zaire	11 124	5 573	5 370	9 077	10 677
Zambia	2 570	2 446	2 407	3 472	4 359
Canada	914	784	1 153	1 628	2 270
USA	406	461	93	—	—
Japan	2 421	1 942	1 371	905	1 276
World total	26 100	19 300	17 500	23 600	26 500

Note: In addition to the production listed above, several countries, including the United Kingdom, France, Federal Republic of Germany and USA, are known to produce substantial amounts of cobalt compounds

- (a) Production not reported. Much of the metal recorded under Zaire is believed to be further processed in Belgium
- (b) Czechoslovakia is thought to recover cobalt from materials imported from Cuba. However no data are available to enable a reliable estimate to be made

Cobalt

Exports of Cobalt

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	810	514	743	920	754
Oxides	838	500	385	359	430
Belgium-Luxembourg (a)					
Metal	* 1 400	* 1 300	* 2 200	* 1 800	* 1 400
Oxides	* 500	* 700	* 1 400	* 1 400	* 900
France					
Metal	805	780	1 133	1 216	961
Oxides	209	165	111	47	9
Germany, Federal Republic of					
Metal	619	817	885	1 270	913
Oxides	54	25	86	112	87
Italy	27	63	34	81	56
Netherlands					
Metal	60	117	158	47	286
Oxides	48	40	38	60	48
Austria					
Oxides	5	6	2	54	31
Finland					
Metal	1 564	1 297	1 325	1 077	1 108
Oxides	0	—	159	966	535
Norway	1 638	1 007	816	1 270	1 529
Sweden	342	65	67	58	125
Morocco					
Ore	6 333	5 017	1 852	0	—
Zaire	8 800	6 900	9 600	13 351	...
Zambia	1 059	3 186	...	3 329	...
Canada					
Metal	679	585	887	1 487	1 552
Oxides	601	212	192	373	268
Cuba					
Oxide, sinter & sulphide (b)	* 1 600	* 1 500	* 1 500	* 1 300	* 1 300
USA					
Metal	1 345	665	787	744	649
Oxides	220	240	348	506	424
Japan					
Oxides	13	10	66	74	12

(a) Exports of cobalt are not separately recorded. Figures shown are BGS estimates based on known imports into certain countries

(b) Co content

Imports of Cobalt

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	1 439	1 219	1 918	1 832	1 692
Oxides	890	363	344	502	377
Belgium-Luxembourg					
Oxides	74	62	34	30	35
Denmark					
Metal	14	16	24	27	25
Oxides	6	10	8	10	6
France					
Ore	6 460	5 767	—	—	—
Metal	1 133	1 721	1 397	1 574	1 374
Oxides	183	231	211	314	201
Germany, Federal Republic of					
Metal	1 212	1 451	2 008	2 678	2 122
Oxides	239	308	409	448	441
Italy					
Metal	209	252	328	409	415
Oxide	190	131	161	184	230
Netherlands					
Metal	52	140	240	100	177
Oxides	194	192	246	282	253
Austria					
Oxides	3	3	5	8	6
Finland					
Metal	252	2	4	6	4
German Democratic Republic					
Metal (b)	* 100	* 200	* 130	* 100	* 100
Norway					
Metal	502	341	166	(c) 2 290	491
Oxides	3	2	129	11	9
Portugal					
Oxide	6	3	7	6	...
Spain					
Metal	118	247	162	119	...
Oxides	94	86	113	84	97
Sweden					
Metal	555	273	233	372	488
Oxides	2	3	6	6	8
Turkey					
Oxides	41	42	60	37	34
Yugoslavia					
Oxides	53	20	25	34	43
Kenya					
Oxides	40	25	27	31	...
South Africa					
Metal	82	77	91	81	177
Oxides	15	9	16	23	17
Mexico					
Metal	88	90	84	117	124
Oxides	75	74	...	...	...
USA					
Metal	6 308	5 397	7 194	10 471	7 526
Oxide	201	164	183	320	111
Argentina					
Metal	17	27	57	...	...
Brazil					
Metal	237	239	377	282	...
Oxide	16	21	21	5	...
Venezuela					
Oxides	11	14	...	...	...
Hong Kong					
Oxide	42	26	28	23	19
India (a)					
Metal	141	113	...	...	...

Cobalt

Imports of Cobalt

tonnes

Country	1981	1982	1983	1984	1985
Indonesia					
Oxides	17	64	95	276	...
Japan					
Metal	1 129	2 014	2 071	2 588	2 323
Oxide	227	305	517	411	259
Korea, Republic of					
Metal	54	88	182	139	148
Oxides	8	9	12	21	8
Taiwan					
Oxides	24	23	56	43	23
Australia					
Metal	31	18	27	30	...
Oxide	39	25	28	29	...

(a) Years ended 31 March following that stated

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

(c) Includes nickel scrap containing some cobalt

Mine Production of Copper

tonnes (metal content)

Country	1981	1982	1983	1984	1985
United Kingdom	607	649	652	657	592
France	98	137	114	310	223
Germany, Federal Republic of	1 400	1 300	1 200	1 000	900
Greece	100	100	200	300	300
Irish Republic	3 400	1 573	—	—	—
Italy	771	138	1 556	876	127
Albania	11 500	14 000	15 000	14 100	15 000
Bulgaria	62 000	65 000	68 000	73 000	78 000
Czechoslovakia	9 200	9 300	9 800	10 200	10 500
Finland	41 892	41 739	38 570	34 529	26 600
German Democratic Republic	* 12 000	* 13 000	* 12 000	* 12 000	* 12 000
Norway	28 123	27 590	22 568	25 042	18 969
Poland	294 600	376 000	402 300	431 000	432 000
Portugal	2 849	2 287	2 615	2 706	2 563
Romania	* 30 000	* 30 000	* 28 000	* 30 000	* 30 000
Soviet Union	* 1 000 000	* 1 010 000	* 1 020 000	* 1 020 000	* 1 030 000
Spain	56 423	47 614	54 818	63 105	60 960
Sweden	51 472	52 682	75 338	90 448	91 845
Turkey	32 085	32 789	24 767	31 075	28 700
Yugoslavia	110 961	119 299	129 506	137 575	142 479
Algeria	200	200	200	200	200
Botswana	17 815	18 375	20 266	21 517	21 703
Congo	245	100	100	—	100
Morocco	6 767	20 723	22 936	22 060	32 800
Mozambique	194	224	250	263	124
Namibia	44 300	48 800	52 100	50 000	47 600
South Africa	208 567	195 643	212 112	206 550	205 052
Zaire	506 481	505 385	504 207	502 616	502 100
Zambia	587 442	529 641	591 300	576 000	519 600
Zimbabwe	24 583	24 800	21 560	22 687	20 700
Canada (a)	691 328	612 455	653 040	721 826	738 637
Cuba	2 908	2 645	2 667	2 701	3 100
Guatemala	726	—	—	—	—
Honduras	454	758	* 650	* 770	...
Mexico	230 466	239 091	206 062	189 111	178 904
USA	1 538 160	1 146 975	1 038 098	1 091 284	1 105 758
Argentina	80	37	318	200	300
Bolivia	2 637	2 270	1 982	1 610	1 665
Brazil	11 777	24 482	40 000	44 376	* 50 000
Chile	1 081 100	1 242 200	1 257 500	1 290 700	1 356 400
Colombia	315	293	540	...	...
Ecuador	825	25	8	—	100
Peru	327 614	356 300	322 200	364 100	384 600
Burma	77	101	4 200	12 000	16 700
China	* 170 000	* 175 000	* 175 062	* 180 000	* 190 000
Cyprus	259	841	1 148	1 267	1 065
India	25 200	24 000	43 800	47 000	48 000
Indonesia	62 550	75 136	78 608	85 619	88 750
Iran	2 000	43 000	57 600	43 300	* 50 000
Israel	4 400	4 100	—	—	—
Japan	51 513	50 658	46 045	43 309	43 208
Korea, Dem. P.R. of	* 12 000	* 12 000	* 10 000	* 10 000	* 10 000
Korea, Republic of	501	320	389	464	308

Copper

Mine Production of Copper

tonnes (metal content)

Country	1981	1982	1983	1984	1985
Malaysia	28 642	30 906	29 136	29 288	30 506
Mongolia	71 800	95 000	95 000	128 000	136 000
Oman	—	—	11 300	16 200	17 700
Philippines	302 328	292 086	271 403	233 359	237 713
Taiwan	500	—	—	—	—
Australia	231 339	245 322	261 476	235 671	258 474
Papua New Guinea	165 420	170 004	183 191	164 447	175 048
World total	8 200 000	8 000 000	8 100 000	8 300 000	8 500 000

(a) Blister copper plus recoverable copper in ores and matte exported

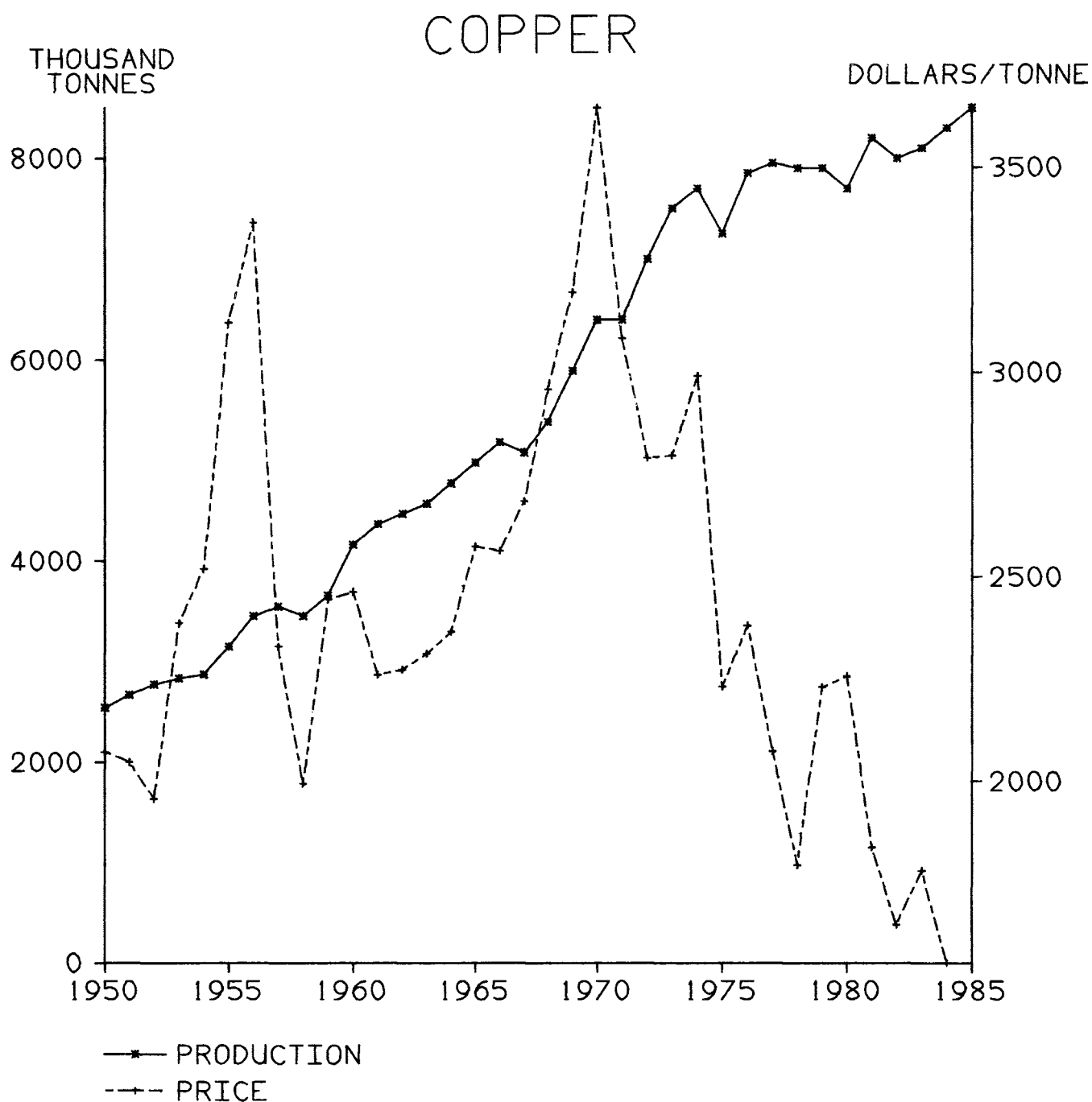


Figure 6 World mine production of copper from 1950 to 1985 compared with the yearly average producer price of domestic refinery electrolytic wirebars on the New York Market expressed in constant 1980 US dollars.

Trend line analysis of the production data indicates a growth rate of approximately 4% per annum over 36 years.

Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Smelter Production of Copper

tonnes

Country	1981	1982	1983	1984	1985
Belgium	* 3 100	* 2 500	* 2 800	* 500	* 900
Germany, Federal Republic of	163 100	161 800	159 100	148 800	152 400
Albania	10 000	12 000	12 000	12 600	13 000
Bulgaria	62 000	62 000	60 000	70 000	70 000
Czechoslovakia	30 180	30 317	33 019	33 000	33 400
Finland	54 747	66 333	74 455	83 266	68 900
German Democratic Republic	* 16 000	* 17 000	* 17 000	* 14 000	* 14 000
Hungary	2 351	2 639	2 765	3 050	3 318
Norway	31 951	24 358	25 658	36 821	38 242
Poland	326 000	360 000	357 000	365 000	380 000
Portugal	3 200	1 500	6 200	3 500	4 600
Romania	39 450	40 000	40 200	38 000	36 000
Soviet Union	* 1 150 000	* 1 130 000	* 1 120 000	* 1 120 000	* 1 140 000
Spain	107 900	135 000	118 000	127 200	120 500
Sweden	60 576	72 504	78 756	79 775	74 668
Turkey	27 263	25 683	19 113	32 023	34 000
Yugoslavia	92 505	84 013	86 833	84 700	137 100
Namibia	39 700	49 800	54 200	46 400	43 300
South Africa	185 400	191 800	192 300	180 800	168 400
Zaire (a)	471 224	469 406	468 658	467 843	469 447
Zambia (a)	560 616	584 790	562 722	531 945	544 176
Zimbabwe	30 100	30 500	31 200	24 200	24 400
Canada	479 000	412 440	406 417	440 000	480 000
Mexico	69 199	77 373	91 994	80 304	80 649
USA	1 316 756	975 695	927 739	1 014 016	943 457
Brazil	—	4 812	63 083	61 334	93 880
Chile	953 800	1 046 800	1 058 900	1 098 300	1 088 500
Peru	302 300	323 200	295 900	331 136	354 021
China	* 190 000	* 205 000	* 195 000	* 220 000	* 245 000
India	25 856	32 585	33 992	40 400	32 460
Japan	980 100	1 046 300	1 061 929	928 974	932 560
Korea, Dem. P.R. of	* 24 000	* 30 000	* 30 000	* 25 000	* 30 000
Korea, Republic of	108 200	119 400	124 000	100 200	112 700
Taiwan	53 100	47 500	37 900	47 600	55 100
Australia	172 181	175 536	173 619	179 822	167 026
World total	8 100 000	8 100 000	8 000 000	8 100 000	8 200 000

Note: This table shows, where possible, primary metal in the form of blister and anode produced from concentrates, but may include some secondary metal produced from scrap, residues, etc.

(a) Including leach cathodes

Production of Refined Copper

Country	1981	1982	1983	1984	1985
United Kingdom	136 163	134 132	144 366	136 834	125 426
Belgium (a)	436 579	501 634	431 264	427 707	456 935
France	46 369	46 585	43 865	40 967	43 704
Germany, Federal Republic of	387 433	394 072	420 325	378 998	414 165
Italy	23 700	19 600	31 200	50 300	64 300
Albania	* 9 500	* 9 500	* 10 000	* 11 000	* 11 000
Austria	39 117	41 559	41 900	43 885	43 173
Bulgaria	60 000	55 200	68 000	70 000	73 000
Czechoslovakia	25 513	25 636	25 746	26 068	26 414
Finland	33 796	47 969	55 376	57 318	58 766
German Democratic Republic	* 54 000	* 60 000	* 68 000	* 65 000	* 63 000
Hungary	28 840	22 773	24 040	25 863	23 018
Norway	26 776	18 564	22 705	30 323	31 073
Poland	327 178	348 027	360 100	372 300	387 000
Portugal	4 853	4 556	4 561	5 320	4 500
Romania	* 60 000	* 50 000	* 47 000	* 45 000	* 42 000
Soviet Union	* 1 320 000	* 1 350 000	* 1 400 000	* 1 380 000	* 1 400 000
Spain	152 100	171 900	158 600	156 400	151 700
Sweden	61 892	62 304	63 357	59 099	64 652
Turkey	22 400	34 700	37 900	51 400	73 900
Yugoslavia	132 603	126 870	123 708	127 611	135 442
Egypt	* 2 000	* 2 400	* 2 400	* 2 400	* 2 300
South Africa	144 800	142 500	157 700	148 400	145 500
Zaire	151 484	175 115	227 231	224 774	226 800
Zambia	560 600	584 500	576 100	523 300	479 446
Zimbabwe	16 700	25 700	25 400	22 800	22 500
Canada	476 655	337 780	464 333	504 262	499 626
Mexico	66 301	74 424	86 903	79 806	85 503
USA	2 037 600	1 694 300	1 583 800	1 509 600	1 436 300
Brazil	45 000	61 812	103 003	101 671	142 880
Chile	775 600	852 500	834 200	879 700	884 300
Peru	200 400	224 536	194 669	219 037	226 787
China	* 300 000	* 300 000	* 310 000	* 320 000	* 320 000
India	23 100	27 000	28 100	32 600	28 020
Iran	* 1 000	* 1 000	* 5 000	* 5 000	* 12 000
Japan	1 050 120	1 074 974	1 091 929	935 156	935 977
Korea, Dem. P.R. of	* 24 000	* 30 000	* 32 000	* 35 000	* 38 000
Korea, Republic of	121 942	128 377	143 806	150 176	159 242
Oman	—	—	3 800	15 200	14 300
Philippines	—	—	38 800	99 200	130 300
Taiwan	53 230	47 377	37 960	48 436	46 734
Australia	191 008	178 138	202 603	197 217	194 339
World total	9 600 000	9 500 000	9 700 000	9 600 000	9 700 000

Note: Figures relate to both primary and secondary refined copper, whether electrolytic or fire refined. Metal recovered from secondary materials by remelting alone is excluded

(a) Including alloys

Copper

Exports of Copper

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ore & matte	4	115	817	3 077	3 432
Unwrought—					
Unrefined	66	60	497	303	366
Refined	19 875	17 433	16 742	21 220	14 624
Alloys	23 095	15 149	15 564	16 927	16 561
Scrap	65 562	92 719	104 703	101 194	109 108
Belgium-Luxembourg					
Ore	727	630	674	742	532
Burnt cupreous pyrites	149 092	152 161	9 365	4 520	3 935
Unwrought—					
Matte, cement & unrefined	12 118	11 902	11 324	) 210 868	207 841
Refined	282 495	287 857	221 244)	
Alloys	8 551	6 717	8 338	8 354	10 032
Scrap	24 066	30 553	27 835	32 176	30 411
Denmark					
Unwrought	—	158	51	1 331	521
Unwrought alloys	1 447	1 147	1 842	2 512	1 044
Scrap	13 132	11 907	15 709	14 509	15 767
France					
Ore	801	648	448	293	341
Matte & cement	1 861	3 146	2 603	4 812	2 041
Unwrought—					
Unrefined	3 935	3 471	6 619	2 930	7 318
Refined	15 115	5 944	17 589	4 204	7 188
Alloys	4 510	2 374	2 021	3 057	2 402
Scrap	108 153	112 338	126 003	120 467	128 600
Germany, Federal Republic of					
Matte & cement	282	41	2 569	1 124	627
Unwrought—					
Unrefined	18 870	18 771	16 988	22 314	18 475
Refined	63 079	71 490	93 169	72 979	72 294
Alloys	13 180	13 131	12 748	15 719	14 798
Scrap	88 881	61 514	67 128	78 064	77 294
Irish Republic					
Ores & concentrates	17 525	7 430	360	—	—
Unwrought	759	481	530	903	1 062
Scrap	7 119	8 260	8 051	8 897	6 928
Italy					
Ore	2 356	657	1 970	8 860	1 685
Matte & cement	1 232	440	2 890	1 060	1 192
Unwrought—					
Unrefined	221	297	217	129	266
Refined	2 687	2 339	5 885	10 578	10 834
Alloys	4 288	5 929	7 042	3 110	3 011
Scrap	24 531	19 042	20 305	14 235	14 814
Netherlands					
Unwrought	5 190	1 377	432	534	1 379
Unwrought alloys	5 997	4 024	6 141	7 001	8 082
Scrap	57 388	53 616	59 055	62 443	73 072
Albania					
Unwrought (f)	* 300	* 200	* 100	...	...
Austria					
Unwrought	20 181	17 242	21 341	15 550	21 113
Unwrought alloys	3 392	2 333	1 687	6 038	5 646
Scrap	5 410	5 022	9 075	15 451	19 525
Bulgaria					
Unwrought (f)	* 500	* 300	...	* 1 200	* 600
Finland					
Ore	—	12 175	14 096	—	—
Unwrought—					
Unrefined	20 392	13 773	14 987	17 656	8 564
Refined	1 247	4 425	11 670	4 833	8 481
Alloys	1 110	1 192	1 882	1 790	1 714
Scrap	241	209	1 337	2 126	2 275
German Democratic Republic					
Unwrought (f)	* 8 500	* 5 000	* 12 200	* 12 600	* 11 200

Exports of Copper

Country	1981	1982	1983	1984	1985
Hungary					
Scrap	2 832	2 290	1 563	2 090	2 457
Norway					
Ore	97 387	92 712	92 465	72 619	82 851
Unwrought—					
Unrefined	5 268	6 691	6 224	5 949	5 949
Refined	24 371	18 106	20 261	29 379	28 256
Alloys	1 693	1 193	297	56	104
Scrap	5 851	4 271	7 730	5 761	5 257
Poland					
Unwrought	142 514	176 447	183 203	179 970	181 948
Portugal					
Ore	1 100	—	2 990	1 352	...
Unwrought	838	3 617	1 172	3 927	...
Scrap	2 063	104	1 001	855	...
Soviet Union					
Unwrought (f)	* 47 600	* 59 200	* 66 100	* 97 800	* 91 500
Scrap (f)	* 3 400	* 13 600	* 14 200	* 12 600	* 33 900
Spain					
Ore	33 471	36 383	32 067	50 205	74 977
Burnt cupreous pyrites	359 567	277 899	55 597	13 355	...
Matte	798	—	1 197	1 418	1 959
Unwrought	70 745	70 913	72 523	67 097	69 425
Unwrought alloys	3 642	2 403	5 176	4 784	3 049
Scrap	978	301	915	450	571
Sweden					
Ore	21 902	45 172	33 829	71 164	108 707
Unwrought—					
Unrefined	13 849	25 652	40 197	37 891	38 625
Refined	18 080	28 366	23 039	22 924	12 209
Alloys	4 846	2 967	3 887	5 226	3 373
Scrap	1 011	2 222	1 963	1 592	3 624
Switzerland					
Unwrought—					
Refined	725	870	1 560	712	2 593
Alloys	4 060	4 854	5 518	5 256	5 790
Scrap	11 458	13 259	18 886	15 518	13 268
Yugoslavia					
Unwrought	13 801	7 321	4 102	2 395	3 392
Scrap	4 035	3 048	6 062	3 201	2 436
Algeria					
Ore	853	800	1 128	—	...
Scrap	2 342	1 303	3 389	1 226	...
Botswana					
Matte (b)	17 300	19 300	20 200	21 400	19 400
Ivory Coast					
Matte & scrap	1 295	1 209	1 338	1 405	1 308
Morocco					
Ore	22 207	60 291	69 531	72 174	60 615
Matte	2 215	1 815	3 270	1 363	2 524
Scrap	1 860	2 616	2 539	2 376	2 361
Namibia					
Unwrought	38 600	44 400	46 800	46 100	49 300
Senegal					
Scrap	737	623	809	1 079	...
South Africa					
Ores & concentrates (b)	19 470	15 387	17 310	25 087	29 999
Unwrought	94 366	107 662	120 119	95 097	99 169
Scrap (f)	* 2 800	* 11 800	* 13 300	* 11 000	* 17 000
Tunisia					
Unwrought & scrap (g)	1 525	1 050	...	2 237	1 655
Zaire					
Ores & concentrates	99 969	80 000	83 200	65 305	* 80 000
Unwrought—					
Unrefined (e)	277 433	323 332	231 782	241 567	236 321
Refined	150 834	156 035	218 470	221 669	226 354

Copper

Exports of Copper

tonnes

Country	1981	1982	1983	1984	1985
Zambia					
Unwrought—					
Unrefined	220	—	—	—	—
Refined	555 760	602 583	570 453	530 093	504 986
Zimbabwe					
Unwrought	14 387	22 355	24 276	21 539	17 100
Canada					
Ores, concentrates & matte (b)	276 816	257 934	313 796	332 377	296 928
Unwrought	263 259	233 118	298 555	346 017	277 125
Scrap	41 324	51 745	53 469	52 676	62 996
Cuba					
Concentrates	2 770	2 789	2 527	2 544	...
Scrap (a)	308	1 411	2 075	2 799	7 450
Mexico					
Concentrates (b)	161 100	161 461	110 757	102 601	102 887
Unwrought, unrefined	6 931	9 473	10 905	14 713	10 565
Trinidad & Tobago					
Scrap	398	373	455	475	875
USA					
Ores & concentrates (b)	150 782	195 277	42 738	61 384	116 310
Unwrought—					
Unrefined	9 233	2 008	7 454	8 379	17 984
Refined	56 219	31 624	82 007	92 327	52 820
Alloys	4 399	5 175	7 160	3 912	11 894
Scrap	146 703	146 955	137 761	189 203	281 615
Bolivia					
Ore (b)	2 545	2 139	1 926	1 333	1 245
Chile					
Ores & concentrates (b)	111 500	) 203 100	196 500	178 900	274 100
Matte (b)	1 200)			
Unwrought—					
Unrefined	172 700	198 700	224 300	210 500	190 000
Refined	752 200	809 100	830 600	830 400	891 900
Colombia					
Ore	3 317	857	615	894	...
Peru					
Ore	* 85 000	92 181	* 110 000	* 135 000	* 220 000
Unwrought—					
Unrefined	104 534	97 091	92 722	96 823	126 705
Refined	192 410	204 051	161 757	174 664	182 588
Cyprus					
Cement copper	—	2 011	1 103	3 059	1 692
Dubai					
Scrap	—	—	5 285	5 111	4 920
Hong Kong					
Unwrought (Re-exports)	120	431	144	3 059	4 001
Scrap	18 288	19 302	22 212	22 802	24 444
Indonesia					
Ores & concentrates	197 146	191 749	229 053	188 428	* 250 000
Iran (c)					
Ore	...	7 500	3 000	13 019	...
Israel (h)					
Cement copper	5 845	5 535	4 795	1 544	—
Scrap	2 234	2 623	2 237	1 775	2 116
Japan					
Unwrought	43 192	48 417	182 829	22 414	58 621
Scrap	133	417	410	176	549
Korea, Republic of					
Unwrought	3 387	10 700	25 251	2 933	4 035
Scrap	250	336	2 716	1 517	751
Malaysia					
Ore	129 267	121 060	121 875	125 886	125 767
Scrap	6 033	6 661	8 297	9 685	12 354
Oman					
Unwrought	2	1	4 143	13 276	12 725

Exports of Copper

Country	1981	1982	1983	1984	1985
Pakistan (d)					
Scrap	—	—	320	18 756	21 671
Philippines					
Ores & concentrates	1 138 628	1 060 405	787 508	450 438	344 201
Unwrought	—	—	18 112	80 631	129 901
Scrap	1 201	621	2 062	9 314	6 915
Saudi Arabia					
Scrap	6 672	8 013	14 094	16 268	...
Singapore					
Scrap	13 849	15 328	19 507	17 882	21 726
Taiwan					
Unwrought	232	184	227	300	21
Scrap	2 861	8 911	8 095	6 496	7 452
Australia					
Ores & concentrates	113 625	159 980	248 265	202 190	269 898
Matte & cement	4 444	13 911	4 963	3 977	8 000
Unwrought—					
Unrefined	18 773	7 213	8 413	5 350	40
Refined	55 548	45 235	77 632	75 452	71 482
Alloys	565	539	318	455	...
Scrap	216	411	599	451	...
New Zealand (d)					
Unwrought	32	40	40	266	9
Scrap	1 519	1 858	2 003	1 409	1 339
Papua New Guinea					
Ores & concentrates (b)	168 065	173 261	182 473	167 107	168 712

Note: In this table the term 'unwrought' copper corresponds to item 682.1 of the Standard International Trade Classification (Revision 2) and includes both unrefined (including blister) and refined copper. Additionally the term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys

- (a) Imports into the Netherlands
- (b) Cu content
- (c) Years ended 20 March following that stated
- (d) Years ended 30 June of that stated
- (e) Including leach cathodes
- (f) BGS estimates, based on known imports into certain countries
- (g) Including matte
- (h) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

Copper

Imports of Copper

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ore & matte	570	687	1 000	2 409	1 245
Unwrought—					
Unrefined	66 880	68 135	82 592	87 422	65 366
Refined	214 598	255 441	200 680	225 864	247 875
Alloys	588	1 302	504	1 044	887
Scrap	8 141	10 021	10 025	8 117	13 328
Belgium-Luxembourg					
Ore	17 417	15 960	10 706	2 047	3 315
Burnt cupreous pyrites	1 375	70	1 951	—	1 331
Unwrought—					
Matte, cement & unrefined	203 637	213 831	194 275	213 954	215 520
Refined	278 264	255 273	141 671	180 884	199 548
Alloys	1 913	4 605	3 338	1 888	6 415
Scrap	104 715	113 628	131 918	115 165	152 481
Denmark					
Unwrought	1 354	67	330	148	125
Unwrought alloys	829	843	584	1 626	1 876
Scrap	5 281	4 244	3 141	5 165	4 509
France					
Ore	4	298	46	356	283
Burnt cupreous pyrites	5 732	—	661	2 863	4 834
Matte & cement	13	70	64	—	—
Unwrought—					
Unrefined	17 693	22 451	14 435	17 667	21 284
Refined	388 166	367 823	338 995	341 562	325 429
Alloys	4 661	4 901	3 836	4 925	4 740
Scrap	29 616	28 745	32 714	31 623	34 407
Germany, Federal Republic of					
Ore	481 142	553 963	496 262	550 531	549 080
Burnt cupreous pyrites	511 169	410 134	25 792	37 889	40 852
Matte & cement	4 675	6 309	11 358	2 724	7 086
Unwrought—					
Unrefined	65 706	81 223	68 903	85 517	77 989
Refined	381 748	423 208	403 807	465 575	442 128
Alloys	43 384	37 551	45 363	41 706	41 928
Scrap	151 352	177 122	205 405	211 757	269 855
Greece					
Matte & cement	3 665	6 864	15 583	13 367	9 959
Unwrought	18 959	15 916	19 090	20 216	12 054
Unwrought alloys	1 067	1 827	182	98	—
Scrap	1 909	2 129	22	447	—
Irish Republic					
Unwrought	215	330	131	275	246
Scrap	280	530	286	484	380
Italy					
Unwrought					
Unrefined	1 143	1 061	2 717	11 085	13 810
Refined	317 082	318 919	297 164	311 854	332 813
Alloys	11 151	6 160	6 828	13 803	16 822
Scrap	59 318	71 728	82 442	112 098	120 860
Netherlands					
Unwrought	22 822	20 648	25 598	23 851	19 669
Unwrought alloys	3 340	1 806	895	1 075	1 613
Scrap	37 746	38 211	38 047	43 123	62 001
Austria					
Unwrought—					
Unrefined	8 659	8 711	8 467	9 728	9 724
Refined	3 637	4 911	1 293	4 100	2 292
Alloys	679	1 784	1 074	1 199	1 299
Scrap	18 074	29 009	27 729	30 616	44 156
Bulgaria					
Ore (a)	* 5 100	...	...	...	...
Unwrought (a)	* 1 000	* 1 500	* 700	* 1 300	* 2 000
Czechoslovakia					
Unwrought	67 000	59 000	66 000	62 000	67 000

Imports of Copper

Country	1981	1982	1983	1984	1985
Finland					
Ore	53 626	74 305	103 800	120 130	152 619
Unwrought—					
Refined	20 060	18 435	18 716	15 104	21 873
Alloys	356	392	301	178	483
Scrap	2 004	2 318	702	463	438
German Democratic Republic					
Ores & concentrates (a)	* 10 100	* 3 800	* 3 800	* 12 200	* 10 700
Unwrought (a)	* 24 500	* 36 900	* 47 400	* 50 700	* 52 800
Scrap (a)	* 23 700	* 21 700	* 22 300	* 21 600	* 21 900
Hungary					
Unwrought (c)	35 799	33 428	31 785	30 112	28 129
Scrap	4 786	6 463	6 678	7 958	6 051
Norway					
Matte	4	437	6 367	3 604	2 488
Unwrought	659	590	468	656	330
Unwrought alloys	1 600	1 425	1 162	1 386	2 387
Scrap	232	47	71	92	526
Poland					
Unwrought	...	1 295	—	17 138	19 991
Portugal					
Ore	140	7 522	1 030	4 365	...
Matte & cement	3 107	463	20	0	...
Unwrought	10 474	13 801	13 947	15 072	...
Scrap	2 584	326	188	79	...
Romania					
Unwrought (a)	* 25 000	* 26 800	* 23 000	* 17 500	* 10 700
Soviet Union					
Ore (a)	* 97 500	* 97 000	...	...	* 12 000
Unwrought	(a)* 12 300	(a)* 3 600	* 7 000	* 7 000	* 7 000
Spain					
Ore	152 753	127 518	164 798	146 958	125 319
Matte & cement	8 659	13 155	7 178	8 032	3 127
Unwrought—					
Unrefined	31 560	22 796	17 878	20 869	23 571
Refined	19 423	11 676	19 791	24 621	23 346
Alloys	999	1 192	1 151	999	1 277
Scrap	32 236	43 720	32 121	23 296	31 114
Sweden					
Ore	88 872	92 449	90 133	48 058	106 474
Matte & cement	10 829	8 516	8 020	4 642	5 042
Unwrought	62 145	73 797	71 046	60 636	57 841
Unwrought alloys	3 453	3 672	4 394	4 566	3 406
Scrap	3 409	10 567	22 473	18 076	21 275
Switzerland					
Unwrought—					
Refined	10 046	8 615	8 370	8 928	11 637
Alloys	1 051	748	674	1 020	1 403
Scrap	3 762	3 695	2 201	3 290	6 845
Turkey					
Ore	29 979	—	16 202	23 292	33 168
Unwrought	9 358	6 164	26 110	24 460	35 452
Scrap	2 091	2 697	928	324	619
Yugoslavia					
Concentrates	11 561	9 691	...	...	...
Unwrought	67 037	52 334	26 844	31 823	39 251
Scrap	88	176	401	441	947
Algeria					
Unwrought	1 979	2 251	724	1 059	...
Egypt					
Unwrought (b)	2 534	3 102	626	...	...
Libya					
Unwrought	1 251	539	...	...	...
Morocco					
Unwrought	565	617	724	774	664

Copper

Imports of Copper

tonnes

Country	1981	1982	1983	1984	1985
South Africa					
Ores & concentrates	2 040	—	—	1	—
Unwrought	5 109	2 911	884	967	665
Unwrought alloys	71	133	94	73	54
Scrap	376	107	166	312	877
Canada					
Ores & concentrates (d)	19 618	12 361	24 231	36 226	76 177
Unwrought	24 778	28 028	24 559	25 563	19 131
Unwrought alloys	9 835	6 731	9 837	12 367	11 432
Scrap	37 974	41 127	71 542	76 338	85 201
Cuba					
Unwrought	4 702	5 154	4 328	5 323	...
Mexico					
Unwrought & scrap	101 882	23 626	19 918	34 754	89 916
USA					
Ores & concentrates (d)	30 200	93 903	89 272	13 246	3 957
Matte (d)	2 712	4 251	3 974	* 2 100	* 4 000
Unwrought—					
Unrefined (d)	73 054	102 211	80 419	60 683	29 026
Refined	354 899	284 773	482 983	504 369	381 088
Alloys	5 664	2 270	6 762	22 544	12 992
Scrap	41 740	41 830	65 091	55 012	46 527
Argentina					
Unwrought, refined	28 065	39 062	31 205	40 008	...
Brazil					
Ores & concentrates	0	10 544	89 159	87 553	...
Unwrought, refined	152 910	182 841	54 187	93 852	77 481
Scrap	1 483	1 437	441	854	...
Colombia					
Unwrought	2 316	888	3 270	2 643	...
Venezuela					
Unwrought—					
Refined	) 3 632	2 683	) 2 249	5 600	6 400
Alloys	)	256	)	...	...
China					
Ores & concentrates (a)	* 46 700	* 91 800	* 92 700	* 113 600	* 103 500
Unwrought	53 689	110 938	485 863	254 045	355 652
Hong Kong					
Unwrought	1 077	1 093	748	5 789	5 391
Scrap	1 202	2 010	2 896	7 394	9 148
India (e)					
Unwrought	84 850	55 871	61 300	48 600	85 600
Scrap	38 884	44 697	...	...	...
Indonesia					
Unwrought	14 745	17 527	16 678	17 535	...
Unwrought alloys	248	592	289	268	...
Iran (f)					
Unwrought	7 076	3 756	7 553	256	...
Scrap	5 345	4 737	565	740	...
Israel (h)					
Unwrought	396	...	(a)* 300	(a)* 1 300	(a)* 300
Japan					
Ores & concentrates	3 338 326	3 627 797	3 135 228	2 930 184	3 009 571
Matte & cement	—	478	4 394	1 311	132
Unwrought	331 425	373 748	246 276	535 860	390 634
Unwrought alloys	31	574	244	2 245	2 517
Scrap	51 866	56 418	57 486	92 595	81 660
Korea, Republic of					
Ore	382 919	394 250	371 278	347 665	355 210
Matte & cement	2 398	8 495	15 865	25 911	33 127
Unwrought	28 675	30 112	37 675	53 966	60 275
Scrap	25 736	94 433	42 787	32 364	32 592
Malaysia					
Unwrought	91	3 288	17 959	18 308	20 745
Pakistan (g)					
Scrap	423	5 081	412	331	79

Imports of Copper

Country	1981	1982	1983	1984	1985
Philippines					
Unwrought	5 734	5 610	5 714	151	5
Singapore					
Unwrought	271	411	255	876	2 250
Scrap	4 551	5 090	4 020	3 436	3 587
Taiwan					
Ores & concentrates	215 963	85 427	134 083	212 923	160 931
Unwrought	40 152	27 402	64 006	91 134	47 665
Scrap	32 984	23 367	30 441	34 017	28 401
Thailand					
Unwrought	5 668	6 298	10 778	15 835	19 223
Scrap	373	222	235	83	49
Australia					
Unwrought	2 059	2 176	4 430	7	5
Unwrought alloys	37	97	27	18	...
Scrap	7 748	2 143	1 200	1 174	...
New Zealand (g)					
Unwrought	1 551	2 560	1 883	2 490	3 427

Note: In this table the term 'unwrought' copper corresponds to item 682.1 of the Standard International Trade Classification (Revision 2) and includes both unrefined (including blister) and refined copper. Additionally the term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys

- (a) BGS estimates, based on known exports from certain countries
- (b) Including matte and scrap
- (c) Including semi-manufactures
- (d) Cu content
- (e) Years ended 31 March following that stated
- (f) Years ended 20 March following that stated
- (g) Years ended 30 June of that stated
- (h) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

Diamond

Production of Diamond

carats

Country	1981	1982	1983	1984	1985
Soviet Union	* 10 600 000	* 10 600 000	* 10 700 000	* 10 700 000	* 10 800 000
Angola	1 400 481	1 221 150	1 006 520	923 669	717 028
Botswana	4 960 000	7 562 000	10 897 000	12 904 000	12 608 000
Central African Republic	311 903	276 573	295 358	337 151	337 000
Ghana	836 200	684 200	339 300	348 800	631 801
Guinea	* 38 000	* 40 000	* 40 000	48 000	112 000
Lesotho	52 921	42 119	—	—	—
Liberia (a)	336 023	432 909	329 924	238 877	137 572
Namibia	1 247 960	1 014 464	962 752	930 183	941 000
Sierra Leone	305 356	290 000	368 598	* 345 000	* 345 000
South Africa	9 525 876	9 152 886	10 311 778	10 118 219	10 203 128
Swaziland	—	—	—	16 837	21 128
Tanzania	236 500	297 000	215 000	277 000	217 000
Zaire	7 161 000	6 164 000	11 982 000	18 459 000	19 617 000
Brazil	1 089 313	529 760	311 589	800 927	* 1 000 000
Guyana	9 533	11 492	12 362	7 496	11 868
Venezuela	490 426	435 272	278 915	272 000	198 000
China	* 950 000	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000
India	14 834	13 007	14 286	15 887	16 284
Indonesia	* 15 000	* 15 000	* 27 000	* 27 000	* 27 000
Australia	—	457 000	6 200 227	5 689 546	7 058 790
World total	39 600 000	40 200 000	55 300 000	63 500 000	66 000 000

Note: This table does not show production of synthetic diamond

(a) Exports

Exports of Diamond

Country	1981	1982	1983	1984	1985
United Kingdom					
Industrial	5 443 695	6 875 321	3 494 914	2 298 780	6 463 161
Other	21 964 870	24 520 616	29 006 530	30 547 167	32 308 258
Belgium-Luxembourg					
Rough	31 256 619	38 557 375	33 888 227	36 745 317	44 561 153
Cut	2 864 711	3 051 028	3 349 982	3 561 441	3 932 737
Industrial	10 700 324	9 027 296	9 468 688	11 793 810	9 761 317
France					
Rough	2 071	—	264	2 171	79 648
Cut	41 020	93 426	98 034	46 788	75 867
Industrial	155 999	205 303	148 930	358 172	270 584
Dust	89 155	217 950	304 565	351 830	661 550
Germany, Federal Republic of					
Industrial	286 887	249 798	314 850	431 591	452 399
Other	124 313	134 503	120 698	128 435	127 319
Irish Republic					
Industrial	5 000	10 000	—	115 000	685 000
Italy					
Industrial	44 102	23 870	9 300	4 208	49 029
Other	20 346	436 936	900 663	1 230	1 954
Netherlands					
Rough	259 946	220 574	100 716	184 830	170 555
Cut	98 310	202 932	219 956	237 351	202 676
Industrial	677 168	632 768	480 787	661 750	762 316
Austria					
Industrial	10 000	5 000	...	95 000	20 000
Other	25 000	20 000	25 000	20 000	10 000
Malta	£1 141 000	£1 877 000	£3 105 000	£3 025 000	£2 697 000
Portugal	44 669	51 717	65 539	60 489	...
Soviet Union (f)	* 553 000	* 551 600	* 364 300	* 618 200	* 687 200
Spain					
Industrial	£198 000	£309 000	£632 000	£652 000	£798 000
Other	£214 000	£541 000	£266 000	£333 000	£2 702 000
Sweden					
Industrial	£36 000	£66 000	£199 000	£56 000	£57 000
Other	£5 750 000	£5 350 000	£3 335 000	£2 904 000	£1 948 000
Central African Republic	£13 700 000	£15 000 000	£17 000 000	£22 700 000	...
Ghana					
Industrial	944 000	688 000	605 000	323 000	...
Ivory Coast	70 000	...	13 132	23 159	...
Kenya	54 740	75 415	1 720	17 640	...
Lesotho	55 718	53 580	—	—	—
Liberia	336 019	433 000	329 924	238 877	137 572
Sierra Leone	305 356	303 400	330 900	318 300	* 250 000
South Africa (c)					
Rough	£357 567 000	£461 436 000	£641 800 000	£558 899 000	£614 699 000
Cut	£102 560 000	£65 195 000	£96 391 000	£132 224 000	£137 541 000
Industrial	£11 106 000	£8 634 000	£5 376 000	£4 516 000	£9 098 000
Tanzania	791 090	...	...	...	...
Tunisia					
Industrial	...	60 000	...	125 000	155 000
Other	...	115 000	...	370 000	445 000
Zaire	7 161 000	6 164 000	11 713 000	18 130 000	22 442 176
Canada					
Cut	60 140	62 578	36 894	56 798	55 134
of which: Re-exports	60 021	62 578	36 894	56 798	55 134
Industrial	265 459	344 780	299 340	102 636	342 232
of which: Re-exports	252 280	344 780	299 340	102 636	342 232
Dust	72 679	191 879	77 850	271 131	1 211 990
of which: Re-exports	72 479	191 850	74 850	269 340	1 211 490

Diamond

Exports of Diamond

carats

Country	1981	1982	1983	1984	1985
USA					
Rough	2 782 060	2 675 960	2 001 703	1 739 936	1 807 846
of which: Re-exports	2 782 037	2 675 960	2 001 703	1 737 804	1 805 471
Cut	432 927	484 347	486 846	532 574	572 452
of which: Re-exports	235 840	299 476	162 473	149 544	134 407
Industrial	2 296 978	2 065 215	3 184 601	3 301 116	3 291 223
of which: Re-exports	1 847 016	1 650 510	1 932 607	2 441 922	1 734 890
Dust (b)	28 471 690	30 706 308	42 311 999	47 992 891	51 592 844
of which: Re-exports	584 451	1 118 829	1 240 924	779 447	1 867 827
Brazil	12 120	18 360	1 805	20 830	1 625
Guyana	252	1 749	...	...	...
Venezuela					
Rough	...	65 000	...	...	...
Industrial	...	295 000	...	...	...
Hong Kong	444 210	694 234	392 855	405 509	697 648
of which: Re-exports	438 425	685 572	387 548	399 582	695 023
India					
Gem (d)	3 933 950	4 518 126	...	...	...
Israel (a)					
Cut	2 662 000	2 459 000	2 565 000	2 633 000	3 139 000
Japan					
Industrial	2 098	6 123	22 639	29 369	4 694
Other	324	1 038	583	2 173	1 192
Korea, Republic of	£416 000	£144 000	£340 000	£467 000	£810 000
Malaysia					
Cut	£1 000 000	£517 000	£2 100 000	£5 003 000	£6 277 000
Singapore					
Rough	£111 000	£114 000	£9 000	£595 000	—
of which: Re-exports	£111 000	£108 000	£9 000	£539 000	—
Cut	£3 745 000	£7 643 000	£4 908 000	£12 932 000	£11 668 000
of which: Re-exports	£3 231 000	£7 272 000	£3 945 000	£10 943 000	£11 332 000
Industrial	£493 000	£747 000	£360 000	£938 000	£342 000
of which: Re-exports	£401 000	£513 000	£263 000	£901 000	£166 000
Taiwan					
Industrial	780 000	310 000	1 615 000	180 000	34 800
Other	275 000	11 075 000	8 380 000	27 990 000	6 600 000
Thailand	22 453	65 563	49 447	123 814	99 952
Australia					
Gem (e)	8 796	10 822	3 015 385	2 682 585	2 670 547
Industrial	272 322	269 526	1 046 103	898 480	561 451

Note: Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling. (See explanatory notes at the front of the volume)

- (a) Figures may be incomplete as value only given in Israeli trade return for exports to some countries
 (b) May include synthetic material
 (c) Values shown are for the common customs area
 (d) Years ended 31 March following that stated
 (e) Re-exports up to 1982
 (f) BGS estimates, based on known imports into certain countries

Imports of Diamond

carats

Country	1981	1982	1983	1984	1985
United Kingdom	£954 452 214	£969 891 705	£1 398 637 051	£1 438 041 669	£1 376 510 709
Belgium-Luxembourg					
Rough	29 574 750	29 267 085	31 731 755	37 746 620	42 855 082
Cut	1 990 760	2 453 910	2 576 938	2 698 445	2 662 239
Industrial	13 402 937	18 312 529	14 148 153	16 534 385	18 750 532
France					
Rough	18 060	9 443	89 677	949 325	23 950
Cut	627 869	1 099 717	469 559	297 018	662 310
Industrial	1 170 808	694 744	489 081	479 777	1 347 679
Dust	4 453 265	4 125 495	4 334 170	4 663 900	5 284 730
Germany, Federal Republic of					
Rough	18 529	18 061	24 967	9 678	20 405
Cut	477 949	474 943	509 479	461 321	401 563
Industrial	961 711	864 233	939 371	1 082 628	1 166 858
Irish Republic					
Industrial	25 000	3 380 000	1 015 000	5 000	3 015 000
Italy					
Industrial	183 034	169 727	114 613	179 458	187 880
Other	215 246	196 650	171 443	193 540	219 958
Netherlands					
Rough	209 968	332 238	373 147	394 046	456 201
Cut	138 497	160 376	130 338	201 484	205 906
Industrial	493 030	277 335	237 469	545 383	567 090
Austria					
Industrial	25 000	40 000	15 000	65 000	55 000
Other	230 000	115 000	75 000	40 000	80 000
Bulgaria (a)	* 133 600	* 126 800	* 86 700	* 87 300	* 179 200
Czechoslovakia (a)	* 130 000	* 101 900	* 30 200	* 103 500	* 52 900
Finland					
Industrial	10 000	10 000	10 000	10 000	15 000
Other	50 000	20 000	15 000	15 000	35 000
Hungary					
Industrial	24 186	31 025	23 819	18 926	21 474
Malta					
Rough	£3 066 000	£3 141 000	£3 245 000	£3 734 000	£2 487 000
Cut	£50	—	£100	—	—
Industrial	£903 400	£286 000	£344 000	£4 000	£73 000
Norway	100 000	20 000	45 000	40 000	100 000
Portugal	216 190	250 972	530 834	143 244	...
Romania (a)	* 374 900	* 284 400	* 435 900	* 521 500	* 387 200
Spain					
Rough	£521 700	£80 300	£121 000	£120 000	£103 000
Industrial	£347 400	£614 700	£855 000	£829 000	£1 403 000
Other	£8 803 700	£15 614 000	£17 657 000	£11 059 000	£19 706 000
Sweden					
Industrial	£451 000	£363 000	£425 800	£478 000	£577 000
Other	£9 486 700	£12 089 000	£9 836 000	£9 564 000	£7 167 000
Turkey					
Industrial	205 000	140 000	60 000	100 000	260 000
Yugoslavia					
Industrial	£742 000	£529 000	£314 000	£773 000	£1 100 000
Other	£258 000	£205 000	£118 000	£238 000	£346 000
Dust	£332 000	£468 000	£510 000	£742 000	£1 159 000
Algeria					
Industrial	£271 000	£529 000	£487 000	£229 000	...
Kenya					
Rough & cut	280 000	—	—	30 000	...
South Africa					
Rough	142 000	230 500	83 500	208 500	233 000
Cut	23 500	8 000	15 000	17 500	37 000
Industrial	2 144 000	1 384 000	1 547 000	278 500	361 500
Tunisia					
Industrial	...	5 000	...	200 000	270 000
Other	...	160 000	...	385 000	665 000
Canada					
Cut	191 293	200 582	275 711	263 143	297 961
Industrial	1 503 758	1 090 627	1 168 149	1 382 677	1 367 396
Dust	1 799 297	885 816	1 577 841	2 378 496	2 647 489

Diamond

Imports of Diamond

carats

Country	1981	1982	1983	1984	1985
Costa Rica					
Industrial	...	560 000	160 000	330 000	330 000
El Salvador					
Industrial	955 000	225 000	70 000	235 000	...
Honduras					
Industrial	1 070 000	...	805 000	...	...
Mexico					
Rough	...	10 000	—	...	...
Panama					
Industrial	370 000	910 000	100 000	625 000	...
USA					
Rough	933 285	885 735	1 008 851	1 240 982	1 042 183
Cut	3 469 567	3 744 094	5 238 650	2 606 491	7 108 422
Industrial	5 950 703	4 623 637	6 078 997	8 241 025	9 334 533
Bort	12 072	145 900	45 604	219 295	390 389
Dust	3 569 716	3 324 035	3 975 219	6 827 639	6 753 549
Argentina					
Industrial	305 000	45 000	15 000	...	...
Dust	487 170	429 700	360 220	...	...
Brazil					
Rough	2 000	715	750	—	...
Cut	2 085	4 210	1 925	225	...
Industrial	160 010	128 305	105 675	48 575	...
Dust	2 438 630	1 772 635	2 918 510	3 001 360	...
Venezuela					
Rough	...	85 000	...	...	...
Industrial	...	855 000	...	...	...
Abu Dhabi	225 000	25 000	50 000	40 000	1 175 000
China					
Industrial	240 616	266 124	358 123	502 298	551 052
Other (a)	* 6 900	* 22 200	* 19 100	* 65 600	* 68 900
Cyprus	£321 000	£486 000	£675 000	£1 088 000	£984 000
Dubai					
Industrial	...	...	...	115 000	...
Other	91 470	...	...	49 685	26 295
Hong Kong					
Rough	108 528	221 450	118 739	87 054	90 611
Cut	1 094 272	1 220 652	1 167 524	1 248 658	1 343 518
Industrial	9 260	127 489	20 190	148 748	234 076
India (d)					
Rough	19 637 202	36 646 703	...	...	...
Industrial	590 000	1 270 000	...	...	...
Indonesia					
Industrial	200 000	—	—	—	...
Israel					
Rough (c)	4 259 000	4 662 000	5 693 000	6 438 000	8 122 000
Cut (c)	72 000	197 000	296 000	401 000	444 000
Industrial (c)	2 453 000	2 667 000	3 565 000	4 325 000	5 779 000
Japan					
Rough	13 363	19 292	17 108	29 605	18 129
Cut	766 890	823 757	906 574	1 042 415	1 177 040
Industrial	634 540	757 507	793 890	681 713	721 704
Dust	726 815	881 650	987 205	1 399 120	1 267 595
Korea, Republic of					
Cut	£236 000	£373 000	£123 000	£171 000	£767 000
Industrial	£407 500	£405 000	£532 000	£721 000	£682 000
Other	£586 000	£207 000	£161 000	£452 000	£951 000
Dust	198 655	28 600	135 000	387 210	62 900
Malaysia					
Rough	£1 246 300	£1 669 000	£402 000	£918 000	£222 000
Cut	£576 100	£1 014 000	£3 637 000	£16 401 000	£18 770 000
Industrial	£182 000	£49 000	£325 000	£19 000	£36 000
Philippines					
Industrial	73 950	22 900	33 117	150 867	178 802
Qatar	105 000	13 105	30 890	5 090	...
Saudi Arabia					
Industrial	930 000	225 000	110 000	55 000	40 000
Other	1 635 000	165 000	585 000	77 000	90 000

Imports of Diamond

Country	1981	1982	1983	1984	1985
Singapore					
Rough	£211 500	£164 000	£312 000	£996 000	£101 000
Cut	£22 385 500	£27 170 000	£40 868 000	£32 703 000	£23 437 000
Industrial	£1 730 000	£2 030 000	£741 000	£1 409 000	£1 174 000
Taiwan					
Industrial	1 460 000	285 000	8 380 000	535 000	620 000
Other	5 645 000	1 990 000	1 515 000	80 000	105 000
Dust	1 865 000	1 735 000	4 615 000	3 930 000	7 075 000
Thailand					
Rough	122 760	819 056	251 233	963 131	318 261
Cut	68 559	140 161	279 492	214 962	134 235
Industrial	73 427	3 485	1 400	13 261	12 965
Australia					
Gem	78 558	75 801	71 981	91 506	119 445
Industrial	1 267 592	1 024 470	1 120 405	1 471 480	1 787 159
New Zealand (b)					
Industrial	£82 700	£65 000	£72 000	£93 000	£251 000
Other	£1 001 800	£1 699 000	£2 111 000	£2 639 000	£2 380 000

Note: Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling. (See explanatory notes at the front of the volume)

- (a) BGS estimates, based on known exports from certain countries
- (b) Years ended 30 June of that stated
- (c) Figures may be incomplete as value only given in Israeli trade return for imports from some countries
- (d) Years ended 31 March following that stated

Diatomite

Production of Diatomite

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	* 1 000	* 500	* 300	* 200	* 200
Denmark (a)					
Diatomite	3 465	3 903	3 518	...	...
Moler (d)	* 97 000	* 98 500	(e) 70 672	(e) 63 745	(e) 72 029
France (b)	223 281	244 349	221 300	247 400	269 900
Germany, Federal Republic of	42 400	42 700	44 200	49 000	48 400
Italy	* 25 000	* 20 000	* 25 000	* 28 000	* 30 000
Iceland	20 644	24 528	25 502	27 265	29 388
Portugal	2 690	1 770	1 870	1 600	1 600
Romania	* 290 000	* 290 000	* 290 000	* 300 000	* 300 000
Soviet Union	* 230 000	* 235 000	* 235 000	* 240 000	* 245 000
Spain (b)	38 111	63 365	55 638	73 013	96 251
Turkey	* 10 000	2 688	9 600	6 540	* 6 000
Yugoslavia	...	9 612	12 270	7 249	7 929
Algeria	4 500	* 4 500	* 4 500	* 1 800	* 1 800
Kenya	1 921	1 783	1 570	1 512	1 420
South Africa	615	712	1 088	258	214
Canada	4 000	2 000	* 2 000	* 2 000	* 2 000
Costa Rica	550	470	* 450	* 500	* 500
Mexico	56 600	56 342	43 967	44 634	45 781
USA (c)	623 000	556 000	562 000	569 000	576 000
Argentina	4 972	6 789	10 981	* 10 000	* 11 000
Brazil (f)	8 973	13 146	8 678	7 721	* 8 000
Chile	358	387	741	1 712	2 317
Colombia	* 600	* 600	* 600	* 600	* 600
Peru	* 7 300	* 7 300	* 7 300	* 7 300	* 7 300
Korea, Republic of	42 176	55 249	55 968	48 496	53 613
Thailand	128	80	425	471	410
Australia	2 073	1 561	7 921	6 873	* 8 000
World total	1 750 000	1 740 000	1 700 000	1 750 000	1 830 000

Note: In addition to the countries listed, Czechoslovakia, Hungary and Japan are also believed to produce diatomite

(a) Sales

(b) Including tripoli

(c) Sold or used by producers

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

(e) Excluding moler used for bricks, blocks etc.

(f) Includes beneficiated and directly shipped material

Exports of Diatomite

Country	1981	1982	1983	1984	1985
United Kingdom	567	377	309	611	177
Belgium-Luxembourg	924	65 126	2 297	1 627	107 661
Denmark					
Diatomite	3 515	4 515	) 65 509	67 960	71 960
Moler	56 526	59 943)		
Moler bricks	24 696	21 359	20 736	25 535	19 956
France	26 781	26 999	26 984	31 655	32 334
Germany, Federal Republic of	3 542	2 344	2 660	2 021	1 510
Italy	1 539	2 590	3 240	3 003	4 114
Netherlands	492	756	1 066	876	1 796
Austria	492	815	1 137	2 425	2 471
Czechoslovakia (a)	* 1 250	* 2 100	* 2 400	* 3 100	* 4 100
Finland	31	2	4	97	10
Hungary	* 3 100	* 2 000	(a)* 2 700	(a)* 3 200	(a)* 2 800
Iceland	19 836	24 966	24 508	26 486	27 123
Spain	2 504	1 852	3 268	2 233	3 250
Sweden	698	690	694	71	611
Switzerland	51	42	86	32	40
Turkey	—	138	15	363	62
Yugoslavia	—	—	—	394	1 504
Algeria	217	—	—	—	...
Kenya	783	511	382	298	210
Mexico	1 549	1 660	3 116	4 081	4 469
USA	146 681	128 349	132 426	115 282	108 944
Japan	2 321	2 165	1 322	2 200	2 599
Singapore (Re-exports)	79	377	795	366	202
Taiwan	112	49	95	226	60

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

Imports of Diatomite

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	12 296	14 352	17 601	20 881	23 915
Belgium-Luxembourg	8 368	6 535	6 400	8 008	8 463
Denmark	6 597	7 632	7 966	6 110	5 526
France	9 410	8 709	9 816	8 638	7 212
Germany, Federal Republic of	36 421	37 780	36 791	37 363	39 162
Greece	1 061	559	744	1 886	1 693
Irish Republic	472	469	453	329	364
Italy	5 019	4 743	5 347	4 669	5 044
Netherlands	16 796	15 275	16 150	24 376	64 815
Austria	8 007	7 958	11 395	11 142	12 931
Czechoslovakia (e)	* 350	* 900	* 2 400	* 2 500	* 2 900
Finland	2 184	3 925	4 312	4 295	4 739
German Democratic Republic (e)	* 1 400	* 1 700	* 1 600	* 1 500	* 1 100
Norway	1 807	1 609	1 578	1 640	2 177
Poland	* 2 100	* 800	(e)* 1 300	(e)* 700	(e)* 2 200
Portugal	3 932	3 608	3 763	4 000	...
Romania (e)	* 1 200	* 2 000	* 900	* 800	* 1 000
Spain	2 778	2 207	2 607	2 579	2 743
Sweden	3 363	3 039	3 148	2 566	2 826
Switzerland	11 169	12 067	10 209	6 244	6 920
Turkey	321	106	73	142	81
Yugoslavia	544	446	617	543	1 144
Algeria	403	267	67	12	...
Cameroon	* 400	...	...	* 300	* 100
Canary Islands	159	36	96	0	...
Gabon	132	354	171	375	348
Ivory Coast	258	163	173	132	129
Kenya	499	130	19	171	...
Morocco	331	36	107	247	53
South Africa	7 544	7 172	5 849	5 333	6 041
Tunisia	156	142	...	144	189
Zaire	482	88	248	100	...
Canada	25 545	23 130	23 298	23 892	24 227
Costa Rica	431	361	342	212	271
Dominican Republic	708	479	...	...	...
El Salvador	386	346	544	445	...
Guatemala	919	549	714	427	416
Honduras	327	283	305	...	...
Mexico	623	216	368	190	101
Nicaragua	545	234	644	...	...
Panama	439	443	222	306	314
USA	354	229	314	307	4 491
Argentina	2 199	1 662	1 466	2 810	...
Brazil	2 126	1 829	2 217	1 302	...
Colombia	1 153	1 232	630	561	...
Ecuador	567	1 519	...	...	...
Peru	2 401	1 353	1 076	...	...
Uruguay	109	49	49	50	155
Venezuela	3 864	7 719	7 150	...	...
Cyprus	123	195	115	176	156
Hong Kong	481	427	484	562	602
India (d)	28	119	...	...	...
Indonesia	435	179	1 188	1 075	...
Iran (c)	742	508	980	1 304	...
Israel (b)	292	...	(e)* 650	(e)* 600	(e)* 1 000
Japan	9 429	8 984	10 280	3 985	3 164
Malaysia	750	1 110	971	715	489
Pakistan (a)	29	240	464	17 575	198

Imports of Diatomite

Country	1981	1982	1983	1984	1985
Philippines	1 113	1 259	1 093	474	148
Saudi Arabia	37 297	49 756	10 518	6 871	4 252
Singapore	555	1 061	1 031	1 146	866
Sri Lanka	15	13	29	3 419	15
Taiwan	3 733	2 743	3 143	4 692	3 544
Thailand	25	30	60	98	36
Australia	12 312	11 477	9 884	11 115	...
Fiji	62	42	87	104	58
New Zealand (a)	920	1 384	1 197	1 370	1 067

(a) Years ended 30 June of that stated

(b) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(c) Years ended 20 March following that stated

(d) Years ended 31 March following that stated

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

Production of Feldspar

tonnes

Country	1981	1982	1983	1984	1985
France	205 400	200 600	175 200	208 900	171 500
Germany, Federal Republic of	342 100	331 400	256 200	286 200	261 400
Italy	428 485	783 411	826 865	985 603	1 116 375
Austria	10 357	2 960	1 063	2 554	13 570
Finland	66 980	69 108	53 226	64 733	52 940
Norway (d)	58 311	62 812	57 960	67 820	* 65 000
Poland	82 027	78 176	47 600	46 300	60 100
Portugal	44 007	41 327	33 509	29 003	29 011
Romania	* 84 000	* 84 000	* 85 000	* 85 000	* 86 000
Soviet Union	* 320 000	* 330 000	* 330 000	* 330 000	* 340 000
Spain (c)	129 593	131 071	116 137	136 943	136 190
Sweden (e)	40 341	54 669	52 913	49 833	50 000
Turkey	5 060	* 5 000	9 212	* 10 000	* 20 000
Yugoslavia	53 240	42 685	41 372	34 000	* 49 900
Egypt	3 480	8 436	6 470	12 413	27 400
Kenya	757	—	700	682	640
Morocco	2 156	1 025	* 1 000	* 1 000	* 1 000
Mozambique	775	696	317	125	67
Nigeria	* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
South Africa	57 052	47 854	45 114	39 018	33 012
Zambia	452	362	226	184	185
Zimbabwe	2 393	866	1 645	1 399	2 300
Guatemala	10 729	5 674	6 000	4 986	5 582
Mexico	130 826	115 559	117 518	84 791	* 100 000
USA (e)	603 000	558 000	644 000	644 000	635 000
Argentina	26 118	15 091	20 065	* 20 000	* 20 000
Brazil	109 797	78 854	64 041	84 033	82 930
Chile	2 506	469	3 356	3 026	2 565
Colombia	27 500	30 091	31 400	32 766	* 32 000
Peru	21 600	25 000	* 25 000	* 25 000	* 25 000
Uruguay	2 543	838	1 129	500	* 1 000
Venezuela	37 000	37 000	37 398	28 800	* 28 000
Burma (a)	2 572	6 712	6 106	6 218	* 6 350
Hong Kong	194	1 744	5 275	23 101	26 777
India	52 290	45 981	47 289	42 859	* 40 000
Iran (b)	* 2 000	* 2 500	* 2 600	* 2 500	* 2 500
Japan	425 007	461 528	451 478	476 189	* 498 000
Korea, Republic of	103 263	85 040	109 896	127 057	145 414
Pakistan	10 494	7 145	5 953	5 486	* 5 400
Philippines	15 999	15 213	6 524	11 486	* 11 800
Sri Lanka	3 506	2 922	2 609	3 155	2 878
Taiwan	17 215	10 620	11 866	15 452	11 055
Thailand	24 243	19 326	47 908	74 404	104 586
Australia	4 868	4 335	4 244	3 390	* 3 600
World total	3 600 000	3 800 000	3 800 000	4 100 000	4 300 000

Note: In addition to the countries listed, China, Czechoslovakia, Namibia and the United Kingdom are also believed to produce feldspar

(a) Years ended 31 March following that stated

(b) Years ended 20 March following that stated

(c) Including pegmatite

(d) Unground: production of ground withheld

(e) Sold or used by producers

Exports of Feldspar

Country	1981	1982	1983	1984	1985
United Kingdom	200	618	452	456	316
France	58 571	54 613	54 455	59 566	53 523
Germany, Federal Republic of	15 309	15 176	17 465	16 570	20 312
Italy	34 500	32 930	36 431	35 469	39 139
Netherlands	2 791	1 251	1 124	2 179	1 421
Finland (a)	46 725	41 891	35 498	35 299	35 209
Norway	77 634	61 032	71 040	81 026	86 708
Portugal (a)	11 301	4 398	4 480	1 240	...
Spain (a)	1 833	1 858	659	3 482	...
Sweden (a)	28 995	24 516	24 690	30 950	21 803
Switzerland (a)	183	129	97	169	159
Turkey	2 172	3 049	5 045	1 034	3 059
Yugoslavia	3 109	1 010	3 311	3 793	6 721
South Africa	2 018	1 389	459	620	—
Guatemala (c)	2 758	2 162	3 123	3 542	3 041
USA (a)	12 723	9 793	8 494	9 144	8 435
Brazil	3 001	5 000	4 000	2 400	5 000
China (a)(b)(c)	* 26 100	* 27 500	* 29 000	* 40 900	* 32 000
Hong Kong (c)	11 318	11 665	17 039	36 957	38 571
of which: Re-exports	11 318	11 665	16 970	24 257	28 721
India (d)	14 984	18 291	...	...	...
Japan	18 766	24 246	28 886	31 770	27 646
Korea, Republic of	18 409	23 551	31 679	22 988	22 746
Singapore (a)	4 083	2 915	4 894	4 938	4 314
of which: Re-exports	4 068	2 901	4 894	4 928	4 306
Thailand	2 793	3 707	12 621	16 982	35 198

(a) May include some leucite and nepheline

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

(c) Including some fluorspar

(d) Years ended 31 March following that stated

Imports of Feldspar

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	71 212	83 681	55 737	54 335	55 879
Belgium-Luxembourg	28 294	21 355	21 895	24 778	17 806
Denmark	11 448	5 896	3 873	5 678	6 558
France	16 808	18 844	19 353	19 846	23 497
Germany, Federal Republic of	60 031	54 006	54 355	51 164	46 213
Greece (a)	4 598	2 426	2 216	2 228	1 530
Irish Republic (a)(c)	5 856	7 586	6 333	6 425	7 612
Italy	13 866	9 747	10 319	13 117	12 453
Netherlands	14 860	13 038	12 931	21 609	20 167
Austria (a)	5 893	5 095	4 301	4 485	4 474
Finland (a)	49	67	32	64	61
German Democratic Republic (a)(f)	* 19 500	* 14 600	* 16 700	* 18 700	* 22 700
Poland	10 151	7 928	...	9 944	10 034
Portugal	(a) 2 423	(a) 2 621	295	277	...
Spain (a)	19 605	15 972	15 035	18 067	...
Sweden (a)	6 709	9 791	12 465	11 419	11 860
Switzerland (a)	9 754	7 883	7 571	11 890	17 301
Yugoslavia	1 904	1 529	906	769	...
Algeria (a)	3 142	3 564	3 642	2 255	...
Egypt (a)(c)	8 868	2 157	1 398	...	...
Morocco (a)	336	565	1 505	1 798	749
South Africa (a)(c)	117	33	33	29	67
Tunisia	(c) 12 560	1 463	...	2 329	1 934
Costa Rica (c)	2 055	1 814	2 235	2 623	2 229
Mexico	3 651	3 286	884	794	408
Panama (c)	1 034	430	1 100	865	712
Trinidad & Tobago (c)	2 493	84	55	59	106
USA	187	44	58	23	864
Venezuela	(c) 4 058	1 205	545	...	...
Hong Kong (c)	14 777	14 440	16 267	21 842	23 989
Indonesia (a)	13 133	10 653	7 230	13 522	...
Iran (a)(c)(e)	150	62	41	0	...
Israel (a)(b)	459	...	...	...	...
Japan (a)	4 981	6 114	7 915	9 611	7 802
Jordan (a)(c)	485	405	903	2 251	640
Malaysia (a)(c)	17 275	12 260	16 572	16 145	24 247
Philippines (a)(c)	5 176	1 855	2 474	2 667	1 633
Saudi Arabia (a)(c)	697	965	1 336	1 663	579
Singapore (a)	5 550	6 035	7 856	7 812	5 992
Syria (a)(c)	—	200	1 027	4 006	...
Taiwan (a)(c)	49 606	69 312	99 169	110 482	140 593
Thailand (a)	2 630	2 179	1 499	1 054	1 196
Australia (a)	11 504	2 076	1 385	...	...
New Zealand (a)(c)(d)	800	1 446	1 119	1 385	1 139

(a) May include some leucite and nepheline

(b) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(c) Including some fluorspar

(d) Years ended 30 June of that stated

(e) Years ended 20 March following that stated

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

Production of Fluorspar

Country	1981	1982	1983	1984	1985
United Kingdom	* 185 000	201 000	131 300	137 000	167 390
France	256 500	239 650	193 650	232 050	* 208 000
Germany, Federal Republic of	71 808	78 600	80 700	83 300	83 100
Greece	370	345	275	83	35
Italy	164 235	166 949	177 670	188 263	152 212
Czechoslovakia	* 96 000	* 96 000	* 96 000	* 96 000	* 95 000
German Democratic Republic	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Romania	* 20 000	* 20 000	* 20 000	* 20 000	* 20 000
Soviet Union	* 530 000	* 540 000	* 540 000	* 550 000	* 560 000
Spain	302 760	241 603	232 334	295 666	305 609
Sweden	—	2 854	2 042	3 454	...
Turkey	1 986	* 2 000	* 2 000	2 258	9 804
Egypt	535	750	342	118	—
Kenya	90 099	88 726	59 084	46 578	58 174
Morocco	66 700	50 200	60 300	65 900	74 350
South Africa	496 521	330 835	267 602	319 206	349 207
Tunisia	34 800	36 900	38 600	44 500	42 200
Mexico	1 116 342	735 093	604 781	699 429	730 447
USA	104 693	69 869	* 55 000	* 65 000	* 60 000
Argentina	20 755	23 727	28 985	23 157	25 000
Brazil (a)	56 539	57 371	70 629	75 711	72 395
China	* 480 000	* 480 000	* 500 000	* 650 000	* 650 000
India	22 994	24 902	22 616	21 928	* 22 000
Korea, Dem. P.R. of	* 40 000	* 40 000	* 40 000	* 40 000	* 40 000
Korea, Republic of	6 464	3 667	6 361	4 672	705
Mongolia	* 600 000	* 670 000	* 700 000	* 740 000	* 740 000
Pakistan	5	814	335	703	* 600
Thailand	212 492	257 108	206 648	287 379	298 899
World total	5 100 000	4 600 000	4 200 000	4 800 000	4 900 000

Note: In addition to the countries listed, Bulgaria is also believed to produce fluorspar

(a) Includes beneficiated and directly shipped material

Fluorspar

Exports of Fluorspar

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	30 250	18 044	12 034	8 200	7 504
Belgium-Luxembourg	4 697	3 431	3 524	1 902	237
France	84 181	71 096	47 356	60 928	56 185
Germany, Federal Republic of	16 210	13 219	12 920	16 518	15 833
Italy	63 934	65 284	60 994	70 801	44 786
Netherlands	1 176	1 101	135	290	224
German Democratic Republic (b)	* 48 400	* 43 600	* 48 100	* 46 500	* 41 800
Spain	152 826	119 570	162 450	151 313	...
Sweden	1 155	1 013	4 794	1 847	4 939
Kenya	59 297	74 890	48 893	52 180	61 776
Morocco	54 180	62 024	56 434	74 200	64 245
South Africa	405 807	232 635	246 462	343 432	283 023
Tunisia	...	1 410	...	3 150	7 250
Mexico	604 929	347 621	437 591	707 634	564 622
USA	10 216	9 592	8 689	11 128	9 060
Argentina	240	93	170	80	...
China	522 224	617 702	523 029	634 481	734 182
Japan (a)	326	486	458	327	157
Korea, Dem. P.R. of (b)	* 300	...	...	...	...
Korea, Republic of	—	—	—	513	—
Thailand	221 838	182 388	183 002	230 407	199 640

(a) May include some leucite and nepheline

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

Imports of Fluorspar

Country	1981	1982	1983	1984	1985
United Kingdom	4 229	1 400	10 759	* 20 000	* 18 000
Belgium-Luxembourg	12 128	11 988	7 744	8 310	7 773
Denmark	557	502	517	586	499
France	12 308	1 571	1 535	15 425	13 151
Germany, Federal Republic of	203 110	205 698	176 124	194 558	233 280
Greece	6 853	648	6 024	4 984	9 642
Irish Republic (a)(c)	5 856	7 586	6 333	6 425	7 612
Italy	84 322	57 048	88 099	97 836	91 645
Netherlands	20 361	24 168	18 684	18 330	27 152
Albania (b)	* 1 000	* 1 600	* 1 100	...	* 700
Austria	13 001	10 617	11 895	14 416	13 090
Bulgaria (b)	* 200	* 300	* 200	* 800	* 850
Finland	4 104	5 763	4 406	6 455	8 605
Hungary	3 457	7 874	6 305	8 034	7 715
Norway	43 319	35 846	39 084	43 925	47 089
Poland	24 005	35 756	...	20 779	20 561
Romania (b)	* 2 900	* 5 900	* 7 500	* 4 800	* 12 600
Soviet Union (b)	* 139 900	* 136 400	* 88 300	* 117 500	* 71 300
Sweden	12 822	12 837	6 476	11 932	9 929
Turkey	130	70	23	21	—
Yugoslavia	6 374	5 801	8 052	6 751	...
Algeria	62	4 959	14	1 187	...
Egypt (a)(c)	8 868	2 157	1 398	...	...
South Africa (a)(c)	117	33	33	29	67
Canada	173 599	126 594	141 928	166 709	111 726
Costa Rica (c)	2 055	1 814	2 235	2 623	2 229
Panama (c)	1 034	430	1 100	865	712
Trinidad & Tobago (c)	2 493	84	55	59	106
USA	767 231	500 667	397 580	650 432	552 576
Brazil	13 537	—	5	0	...
Chile (b)	* 3 500	...	* 3 000	* 3 000	* 3 000
Venezuela	(c) 4 058	200	155	...	...
Hong Kong (c)	14 777	14 440	16 267	21 842	23 989
India	272	5 024	...	...	...
Iran (a)(c)(e)	150	62	41	0	...
Japan	428 314	413 535	435 383	513 284	570 656
Jordan (a)(c)	485	405	903	2 551	640
Korea, Republic of	23 110	18 352	19 200	29 947	46 093
Malaysia (a)(c)	10 898	8 989	10 911	12 105	20 673
Philippines (a)(c)	5 176	1 855	2 474	2 667	1 633
Saudi Arabia (a)(c)	697	965	1 336	1 663	579
Syria (a)(c)	—	200	1 027	4 006	...
Taiwan (a)(c)	49 606	69 312	99 169	110 482	140 593
Thailand	408	681	1 783	703	983
Australia	26 275	20 331	12 676	25 885	...
New Zealand (a)(c)(d)	800	1 446	1 119	1 385	1 139

(a) May include some leucite and nepheline

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

(c) Including some feldspar

(d) Years ended 30 June of that stated

(e) Years ended 20 March following that stated

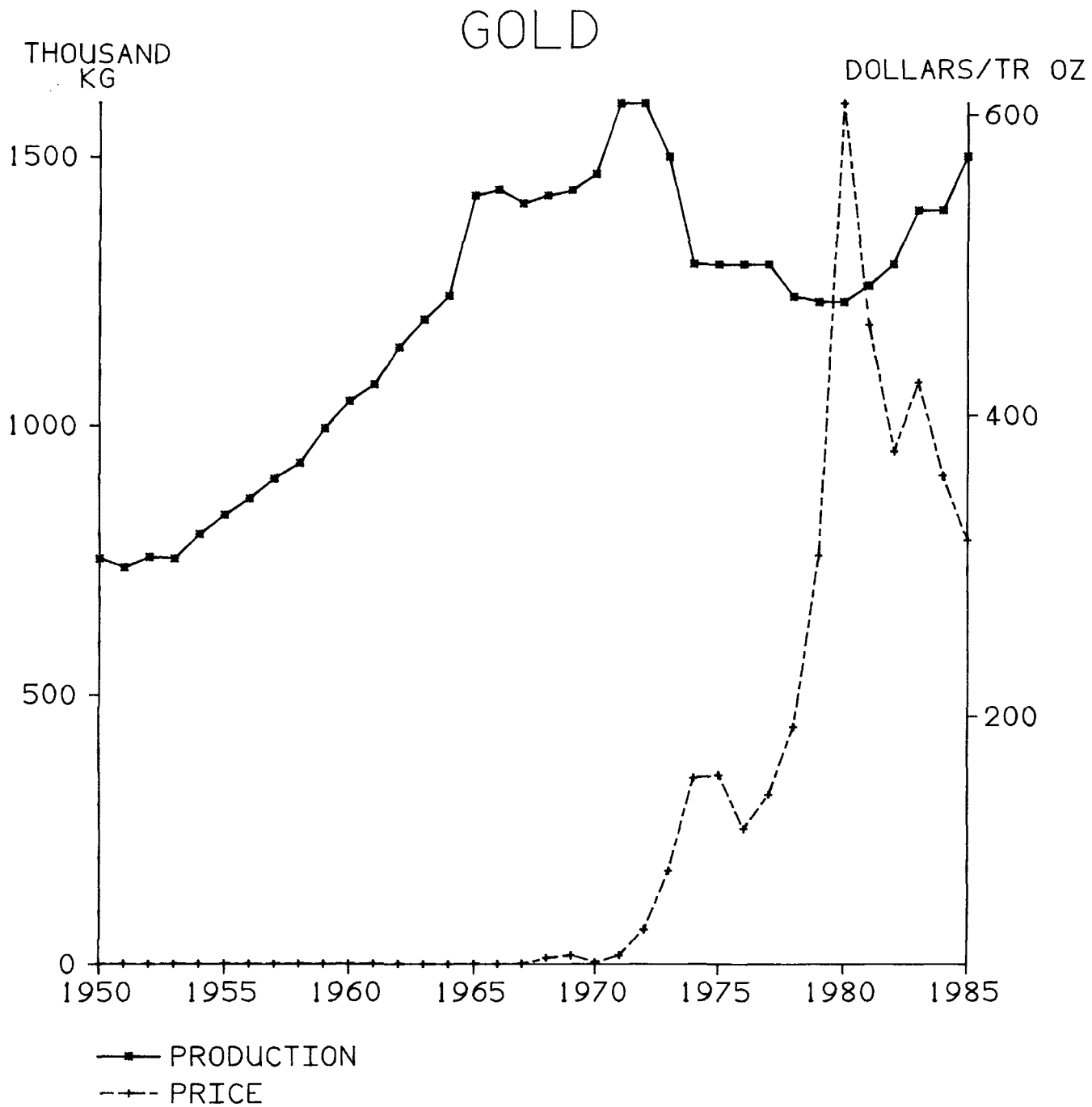


Figure 7 World mine production of gold from 1950 to 1985 compared with the actual price expressed in US dollars per troy ounce (London).
 Prices taken from International Financial Statistics Yearbook (1986) published by the International Monetary Fund.

Mine Production of Gold

kilograms (metal content)

Country	1981	1982	1983	1984	1985
France	1 131	2 180	2 760	2 498	2 751
Germany, Federal Republic of	95	56	* 60	* 50	* 60
Finland	1 424	756	872	1 046	595
Portugal	244	211	199	193	229
Romania	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Soviet Union	* 263 000	* 266 000	* 268 000	* 269 000	* 270 000
Spain	4 201	3 742	5 434	8 097	10 254
Sweden	2 039	2 447	3 369	4 408	4 295
Yugoslavia (d)	3 582	3 592	4 238	3 892	4 460
Botswana	10	15	11	18	13
Burundi	* 3	* 3	11	35	25
Cameroon	10	4	8	* 8	* 7
Central African Republic	43	31	78	216	187
Congo	4	3	8	3	5
Ethiopia (b)	371	492	* 450	* 500	* 500
Gabon	* 20	* 20	* 20	41	50
Ghana	10 595	10 280	8 601	8 923	9 311
Kenya	1	1	3	14	13
Liberia (a)	525	381	448	328	147
Madagascar	1	3	3	2	0
Mali	* 500	* 400	* 400	500	* 500
Rwanda	49	15	39	8	8
Sierra Leone	123	271	* 370	* 570	* 590
South Africa	657 670	664 420	679 679	683 358	672 925
Sudan	* 10	* 12	40	30	52
Tanzania	9	7	24	39	42
Uganda	304	215	...	2	...
Zaire	2 027	1 869	6 001	3 644	1 255
Zambia (c)	328	418	316	379	246
Zimbabwe	11 691	13 367	14 101	14 877	14 691
Canada	52 034	64 735	73 512	83 446	87 562
Costa Rica	* 620	* 840	* 930	* 900	* 900
Dominican Republic	12 685	12 016	11 012	10 522	10 219
El Salvador	121	103	20	9	* 10
Honduras	55	53	67	87	* 80
Mexico	6 319	6 104	6 930	7 058	7 524
Nicaragua	1 926	1 692	1 444	* 1 100	762
USA	42 898	45 589	62 287	64 840	76 996
Argentina	459	632	727	688	* 700
Bolivia	2 064	1 249	1 531	1 270	561
Brazil	17 276	25 517	53 684	37 218	30 049
Chile	12 456	16 907	17 759	16 829	17 240
Colombia	16 461	14 702	13 642	24 663	35 546
Ecuador	73	50	19	* 30	* 30
French Guiana	167	163	250	315	370
Guyana	599	269	143	328	321
Peru	4 821	4 305	4 815	5 100	5 856
Suriname	25	17	17	8	4
Venezuela	877	902	1 033	1 521	2 300
China	* 50 000	* 56 000	* 57 000	* 59 000	* 65 000
India	2 495	2 244	2 156	1 988	1 824
Indonesia	1 617	2 144	2 262	2 279	2 508
Japan	3 087	3 267	3 139	3 218	4 932
Korea, Dem. P.R. of	* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
Korea, Republic of	1 342	1 734	2 242	2 462	2 403
Malaysia	2 355	2 812	2 628	2 788	2 768
Philippines	23 586	25 954	25 397	25 727	34 978
Taiwan	1 763	2 232	1 629	1 176	953

Gold

Mine Production of Gold

kilograms (metal content)

Country	1981	1982	1983	1984	1985
Australia	18 374	26 961	30 591	40 309	56 742
Fiji	956	1 423	1 246	1 676	1 888
New Zealand	189	242	301	672	886
Papua New Guinea	16 972	17 775	18 320	18 573	31 025
Solomon Islands	33	41	* 35	80	29
World total	1 260 000	1 300 000	1 400 000	1 400 000	1 500 000

Notes:

- 1 In several countries, for example Brazil, Colombia and Indonesia, a certain amount of gold produced in very small operations is not recorded in the official statistics used in compiling this table; in the case of Brazil this amount is thought to be substantial
 - 2 In addition to the countries listed, Bulgaria, Burma, Czechoslovakia, German Democratic Republic, Hungary, Norway, and Thailand are also believed to produce gold
- (a) Exports
 (b) Years ended 6 July of that stated
 (c) Contained in blister copper, refinery muds and electrolytic copper
 (d) Metal production

Exports of Gold

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal—					
Refined	681 050	589 437	721 618	523 297	425 395
Other	9 905	5 858	3 319	4 631	4 990
Waste & scrap	32 003	12 493	940	30 962	25 392
Belgium-Luxembourg					
Metal	30 158	50 979	24 400	22 967	28 003
Waste & scrap	£1 711 000	£2 233 000	£17 656 000	£6 481 000	£3 001 000
Denmark					
Waste & scrap	12 856	9 779	10 014	12 204	11 080
of which: Re-exports	1 516	1 045	3 018	4 964	...
France					
Metal	23 070	24 972	11 858	24 135	18 944
Waste & scrap	58 624	8 454	54 702	37 667	125 100
Germany, Federal Republic of					
Metal	32 129	65 669	37 660	48 901	46 541
Waste & scrap	2 392	1 819	17 303	10 818	49 836
Irish Republic					
Metal	£605 000	£694 000	£1 004 000	£1 151 000	£781 000
Waste & scrap	£1 065 000	£610 000	£354 000	£564 000	£740 000
Italy					
Metal	2 191	1 315	1 671	3 063	5 169
Netherlands					
Metal	30 506	27 807	4 840	3 059	1 935
Waste & scrap	53 000	61 000	75 000	42 000	20 000
Austria					
Metal	349	559	625	435	510
Finland					
Metal	569	419	659	809	757
Norway					
Metal	461	392	412	433	273
Waste & scrap	356	812	1 429	316	318
Soviet Union					
Metal (c)	* 49 200	* 58 800	* 25 800	* 20 900	* 28 800
Spain					
Metal	18 462	1 185	40 001	3 876	...
Sweden					
Metal	4 000	3 000	3 000	4 000	5 000
Waste & scrap	8 000	7 000	9 000	7 000	13 000
Switzerland					
Metal	772 691	799 867	557 808	889 793	929 893
Ghana					
Metal	10 764	9 386	8 621	8 880	...
Liberia					
Metal	525	381	448	328	147
Sierra Leone					
Metal	121	311	64	642	591
South Africa					
Metal (a)	£4 858 000 000	£4 644 000 000	£6 042 000 000	£6 027 000 000	£5 399 000 000
Zaire					
Metal	800	2 100	5 200	2 498	1 085
Zimbabwe					
Metal	6 254	14 280	13 281	10 843	...
Canada					
Ores & concentrates (b)	5 509	5 114	6 146	5 815	5 969
Metal	83 295	88 404	78 783	124 483	112 697
Dominican Republic					
Metal (d)	77 610	82 255	52 322	48 079	59 387
Nicaragua					
Metal	2 000	1 392	1 222	...	...
USA					
Ore (b)	121	96	404	103	76
Metal—					
Unrefined	7 297	5 634	2 177	2 255	2 984
Refined	164 112	68 764	61 148	111 418	92 662
Other	2 555	2 163	2 051	2 212	37 062
Waste & scrap	31 880	36 971	37 266	44 289	31 566

Gold

Exports of Gold

kilograms

Country	1981	1982	1983	1984	1985
Chile					
Metal	3 669	6 824	5 863	7 516	8 552
Colombia					
Ore	499 184	80 000	141 698	199 000	...
Peru					
Metal	5 104	4 644	5 095	* 4 000	...
Hong Kong					
Metal (Re-exports)	2 288	25 783	35 671	2 174	3 421
Japan					
Metal	7 445	17 999	8 128	6 341	4 463
Korea, Dem. P.R. of					
Metal (c)	* 2 200	* 8 500	* 7 200	* 10 800	* 7 300
Philippines					
Ores & concentrates (b)	14 800	14 706	11 413	9 190	10 041
Singapore					
Metal	—	—	—	3 459	1 981
Waste & scrap	—	—	—	919	759
Taiwan					
Waste & scrap	—	—	—	17 860	21 446
Australia					
Ores, concentrates & unrefined metal (b)	3 474	3 283	2 872	1 156	1 381
Refined metal	3 912	9 794	17 743	30 461	47 959
Fiji					
Metal	875	1 426	1 237	1 650	1 863
Papua New Guinea					
Metal	16 972	17 775	18 320	18 573	31 025

Note: In this table the term 'metal' as used here includes both unwrought and partly worked gold and alloys but excludes gold coin

(a) Values shown are for the common customs area

(b) Au content

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

(d) Officially described as 'dore' (Au/Ag alloy), but contains a higher proportion of silver

Gold

kilograms

Imports of Gold

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	14 013	30 945	334	11 544	852
Metal—					
Unrefined	5 407	6 400	18 323	3 450	4 786
Refined	624 751	527 311	509 162	436 670	347 880
Other	11 942	8 609	6 193	8 455	19 228
Waste & scrap	28 206	156 360	108 517	175 111	162 774
Belgium-Luxembourg					
Metal	237 233	263 610	240 784	61 809	65 353
Waste & scrap	£1 218 000	£1 132 000	£1 065 000	£1 694 000	£1 903 000
Denmark					
Metal	613	602	687	763	823
France					
Metal	60 254	32 290	56 211	92 973	48 870
Waste & scrap	9 652	4 584	2 269	1 242	1 400
Germany, Federal Republic of					
Metal	82 714	120 639	61 113	73 145	83 125
Waste & scrap	125 474	126 366	176 898	97 997	176 469
Greece					
Metal	1 653	915	2 000	1 466	2 000
Irish Republic					
Metal	£3 849 000	£2 534 000	£4 353 000	£3 315 000	£5 034 000
Italy					
Metal	140 193	201 966	151 015	202 487	231 954
Netherlands					
Metal	29 775	28 018	6 947	4 711	5 869
Waste & scrap	1 000	2 000	2 000	3 000	6 000
Austria					
Metal	2 949	3 623	4 419	3 275	3 345
Finland					
Metal	895	1 048	1 019	910	892
Malta					
Metal	221	495	162	1 913	1 263
Norway					
Metal	741	854	621	582	632
Waste & scrap	539	16	547	2	15
Portugal					
Metal	309	1 462	105	188	...
Spain					
Metal	652	2 269	1 212	248	...
Sweden					
Metal	£4 790 000	£4 576 000	£5 382 000	£3 771 000	£4 639 000
Waste & scrap	£413 000	£190 000	£282 000	£231 000	£202 000
Switzerland					
Metal	820 894	1 017 543	753 593	766 297	883 081
Algeria					
Metal	1 947	3 681	4 520	2 254	...
Kenya					
Metal	442	—	0	—	...
South Africa					
Metal	274	108	267	3 410	375
Waste & scrap	774	86	11	1 685	—
Tunisia					
Metal	...	882	...	449	387
Bermuda					
Metal	448	432	780	...	...
Canada					
Ores & concentrates (c)	2 278	445	951	553	403
Metal	69 110	51 656	65 467	67 867	96 714
USA					
Ore (c)	5 907	10 579	8 819	7 446	2 490
Metal—					
Unrefined (a)	13 126	15 027	23 582	52 033	56 856
Refined	129 533	131 809	111 950	195 827	197 853

Gold

Imports of Gold

kilograms

Country	1981	1982	1983	1984	1985
Argentina					
Metal	334	1	75	39	...
Brazil					
Metal	333	606	1 109	55	...
Ecuador					
Metal	728	2 138	...	...	...
Venezuela					
Metal	...	237	...	...	...
Brunei					
Metal	115	342	84	113	...
Cyprus					
Metal	563	704	843	1 102	1 307
Hong Kong					
Metal	101 325	122 370	30 173	165 427	162 627
Indonesia					
Metal	22 278	29 650	450	1 500	...
Iran (d)					
Metal	14	...	296	2	...
Israel					
Metal	£48 653 300	£58 833 500	£57 694 000	£94 371 000	£104 853 000
Japan					
Metal	167 325	139 778	104 418	191 984	196 815
Waste & scrap	1 451	1 071	5 449	1 329	1 011
Jordan					
Metal	208	2 357	1 074	25 168	13 664
Korea, Republic of					
Metal	797	1 221	1 786	1 954	11 545
Macao					
Metal	—	—	247	876	2 600
Malaysia					
Metal	3 219	3 042	2 779	7 366	7 721
Saudi Arabia					
Metal	13 274	15 055	22 960	18 675	18 139
Singapore					
Metal	—	—	—	4 433	3 295
Taiwan					
Metal	22 456	36 667	33 844	52 165	34 496
Thailand					
Metal	374	13 228	4 535	2 379	4 360
Australia					
Metal	397	2 231	3 161	3 527	7 967
New Zealand (b)					
Metal	223	358	553	1 062	1 745

Note: In this table the term 'metal' as used here includes both unwrought and partly worked gold and alloys but excludes gold coin

(a) Including waste and scrap

(b) Years ended 30 June of that stated

(c) Au content

(d) Years ended 20 March following that stated

Production of Graphite

Country	1981	1982	1983	1984	1985
Germany, Federal Republic of (b)	10 400	10 600	12 000	12 400	12 800
Italy	3 545	3 209	2 299	—	—
Austria (a)	23 807	24 451	40 418	43 789	30 764
Czechoslovakia	20 317	21 977	26 666	* 27 000	* 35 000
Norway	6 864	7 451	8 063	10 067	2 275
Romania	* 12 500	* 12 500	* 12 600	* 12 400	* 12 000
Soviet Union	* 70 000	* 75 000	* 80 000	* 80 000	* 82 000
Turkey	3 298	3 360	4 805	* 4 500	...
Madagascar	16 045	15 211	13 496	14 155	14 700
Zimbabwe	11 218	8 225	19 862	12 334	10 450
Mexico	42 294	36 174	44 327	41 529	35 378
Brazil (d)	33 817	21 544	27 636	32 680	39 000
Burma (c)	116	244	272	234	* 200
China	* 180 000	* 185 000	* 185 000	* 185 000	* 185 000
India	72 796	61 803	42 778	39 106	* 40 000
Korea, Dem. P.R. of	* 25 000	* 25 000	* 25 000	* 25 000	* 25 000
Korea, Republic of	34 891	26 965	33 266	58 563	71 479
Sri Lanka	7 543	8 804	5 768	5 768	7 472
Thailand	1 800	630	86	—	—
World total	576 000	548 000	584 000	605 000	609 000

Notes:

1 This table includes all forms of amorphous and crystalline graphite but excludes synthetic material

2 In addition to the countries listed, Canada, Egypt and Namibia are also believed to produce graphite

(a) Crude

(b) Including production from imported crude graphite

(c) Years ended 31 March following that stated

(d) Includes beneficiated and directly shipped material

Exports of Graphite

Country	1981	1982	1983	1984	1985
United Kingdom	2 923	2 956	3 123	3 862	2 563
Belgium-Luxembourg	298	31	2 746	3 254	74
France	759	791	891	555	807
Germany, Federal Republic of	8 577	10 030	9 978	12 210	11 522
Italy	1 431	1 823	2 787	5 481	445
Netherlands	663	596	152	253	89
Austria	14 640	13 384	11 405	11 552	11 826
Czechoslovakia (a)	* 1 600	* 2 000	* 3 000	* 2 800	* 3 100
Norway	8 274	8 244	7 311	8 888	6 161
Soviet Union (a)	* 2 400	* 400	* 600	...	...
Sweden	2 225	135	13	117	128
Madagascar	16 326	14 875	11 685	14 527	16 125
Zimbabwe	...	...	9 720	11 989	...
Mexico	34 096	28 428	19 420	21 323	19 298
USA	10 562	9 528	8 729	6 667	9 240
Brazil	7 439	5 395	5 578	5 082	8 725
China (a)	* 46 000	* 58 900	* 55 100	* 77 900	* 71 200
Hong Kong (Re-exports)	278	188	53	856	508
India (b)	3 043	2 069	...	...	...
Japan	1 620	2 084	2 515	2 927	2 553
Korea, Dem. P.R. of (a)	* 6 100	* 7 000	* 2 200	* 11 000	* 5 800
Korea, Republic of	34 348	21 757	32 694	39 864	48 353
Sri Lanka	4 350	2 903	4 223	7 215	9 170
Taiwan	502	352	100	237	188

Note: This table excludes synthetic graphite

(a) BGS estimates, based on known imports into certain countries (b) Years ended 31 March following that stated

Graphite

Imports of Graphite

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	15 529	17 862	28 352	19 540	23 460
Belgium-Luxembourg	6 494	811	963	992	827
Denmark	853	1 254	1 225	1 414	1 316
France	4 672	4 677	3 662	4 578	5 276
Germany, Federal Republic of	29 763	32 432	28 869	31 983	33 998
Greece	378	252	255	229	630
Italy	4 046	5 137	4 104	6 280	5 955
Netherlands	900	863	564	954	636
Austria	1 056	2 653	3 738	7 134	3 280
Bulgaria (d)	* 200	* 500	* 400	* 2 000	* 2 000
Czechoslovakia (d)	* 800	* 500	* 500	* 300	* 300
Finland	2 268	480	263	37	84
German Democratic Republic	6 759	7 945	6 359	5 712	6 634
Hungary	1 410	1 481	1 722	1 549	993
Norway	861	693	496	573	495
Poland	7 972	6 775	6 688	7 445	6 082
Portugal	174	248	146	95	...
Spain	1 404	2 446	1 905	2 004	2 519
Sweden	504	534	401	675	743
Switzerland	149	167	112	141	108
Turkey	273	326	334	474	555
Yugoslavia	1 601	1 854	2 996	2 220	2 267
Algeria	210	136	263	481	...
Egypt	812	479	227	...	...
Mauritius	1	609	1 046	390	...
South Africa	1 261	1 630	2 129	4 122	3 836
Mexico	1 013	363	196	14	46
USA	59 566	48 217	39 540	52 840	47 842
Argentina	349	241	312	301	...
Venezuela	903	737	594	...	...
Hong Kong	640	549	494	1 545	1 499
India (c)	428	130	...	...	...
Indonesia	191	231	161	98	...
Iran (a)	596	421	611	526	...
Japan	52 697	53 138	54 195	85 009	78 857
Korea, Republic of	205	414	443	1 260	1 084
Malaysia	366	531	834	1 183	908
Pakistan (b)	3 944	986	1 418	1 777	1 566
Philippines	177	206	141	199	73
Singapore	554	583	455	1 125	427
Taiwan	10 440	7 942	10 957	6 574	8 428
Thailand	864	369	733	532	722
Australia	1 460	1 429	795	979	...
New Zealand (b)	190	79	67	113	36

Note: This table excludes synthetic graphite

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

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

Production of Gypsum

Country	1981	1982	1983	1984	1985
United Kingdom					
Gypsum	2 896 647	2 674 000	2 916 000	3 082 000	3 130 000
Anhydrite	46 861	67 261	51 000	56 000	59 000
Belgium (a)(d)	154 425	131 030	...	...	...
France					
Gypsum	6 146 900	6 102 000	5 557 000	5 820 000	5 262 000
Anhydrite	...	...	834 500	909 681	935 075
Germany, Federal Republic of					
Gypsum	1 317 100	1 102 500	1 919 500	1 756 700	1 396 400
Anhydrite	600 000	595 000	620 000	560 000	607 000
Greece	629 489	685 883	645 431	* 650 000	* 640 000
Irish Republic	359 000	371 000	352 400	325 000	304 100
Italy	1 514 401	1 331 982	1 388 187	1 003 677	* 1 270 000
Luxembourg	702	* 900	* 400	* 400	* 400
Austria					
Gypsum	664 112	585 988	611 224	600 094	569 671
Anhydrite	136 403	141 532	139 697	140 023	124 322
Bulgaria	350 173	375 575	385 000	393 000	* 395 000
Czechoslovakia (a)	766 782	794 000	848 000	842 000	771 600
German Democratic Republic (d)	303 138	309 682	296 932	302 300	311 700
Poland (d)	290 000	224 000	217 000	250 000	235 900
Portugal	243 537	237 364	249 092	208 811	* 250 000
Romania	* 1 633 000	* 1 630 000	* 1 630 000	* 1 814 000	* 1 542 000
Soviet Union	* 4 900 000	* 4 900 000	* 4 900 000	* 4 900 000	* 4 900 000
Spain	5 288 295	5 048 649	5 620 395	5 365 795	5 524 511
Switzerland	* 86 000	* 73 000	* 77 000	* 77 000	* 82 000
Turkey	90 470	70 227	75 572	53 080	78 058
Yugoslavia	669 000	640 000	623 000	607 000	600 000
Algeria	* 200 000	* 200 000	* 250 000	* 250 000	* 250 000
Angola	* 20 000	* 20 000	* 20 000	* 20 000	* 20 000
Egypt	689 000	845 000	721 000	750 000	* 750 000
Ethiopia	4 200	* 4 000	* 4 000	* 4 200	* 4 500
Kenya	300	300	1 350	320	48 606
Libya	180 000	175 000	180 000	* 180 000	* 180 000
Mauritania	1 860	—	—	800	5 470
South Africa	544 827	534 991	518 353	535 286	458 399
Sudan	6 000	6 000	8 000	8 200	6 350
Tanzania	11 500	16 000	6 800	7 600	14 400
Tunisia	47 000	24 700	* 50 000	* 55 000	* 60 000
Canada (a)	7 025 418	5 987 396	7 507 000	7 775 082	8 447 000
Cuba	* 130 000	* 127 000	* 132 000	* 132 000	* 132 000
Dominican Republic	237 647	278 304	146 723	* 200 000	* 230 000
Guatemala	13 491	20 940	21 623	10 998	16 565
Honduras	* 20 000	* 20 000	* 23 000	* 23 000	* 23 000
Jamaica	180 000	107 500	108 000	180 200	179 000
Mexico	2 390 431	2 042 484	2 958 085	2 945 222	* 3 000 000
Nicaragua	* 30 000	* 20 000	* 12 000	* 9 000	8 200
USA	10 430 000	9 560 000	11 688 000	12 990 000	13 359 000
Argentina	670 544	615 540	578 188	* 570 000	* 530 000
Brazil (e)	597 461	612 096	428 099	420 978	* 450 000
Chile	237 853	89 636	66 337	167 477	195 911
Colombia	270 200	280 600	224 000	260 000	250 000
Ecuador	2 000	2 000	2 000	2 000	* 2 000
Paraguay	10 000	* 6 500	* 3 600	* 6 000	* 5 000
Peru	350 000	* 360 000	* 360 000	* 360 000	* 360 000
Uruguay	18 400	122 284	151 832	* 75 000	* 100 000
Venezuela	218 234	297 313	206 469	151 200	133 400

Gypsum

Production of Gypsum

tonnes

Country	1981	1982	1983	1984	1985
Afghanistan	—	3 000	* 5 000	* 4 000	* 4 000
Burma (b)	13 827	18 115	21 507	39 200	39 000
China	* 3 400 000	* 3 500 000	* 4 300 000	* 4 800 000	* 5 040 000
Cyprus	26 300	28 900	32 000	22 100	16 100
India	957 000	965 572	988 025	1 257 756	1 260 000
Iran (c)	5 987 000	* 5 000 000	* 5 500 000	* 5 000 000	* 4 800 000
Iraq	* 170 000	* 170 000	* 170 000	* 300 000	* 300 000
Israel	42 700	42 000	42 000	* 42 000	* 42 000
Jordan	53 054	39 959	41 188	111 524	91 965
Laos	40 500	60 000	70 000	82 000	* 100 000
Lebanon	* 9 000	* 5 000	* 5 000	* 5 000	* 3 000
Mongolia	* 32 000	* 32 000	* 32 000	* 32 000	* 32 000
Pakistan (a)	317 870	329 055	310 578	368 554	* 430 000
Saudi Arabia	96 278	92 908	143 524	* 90 000	* 90 000
Syria	67 917	70 000	78 750	79 580	106 250
Taiwan	6 039	2 045	3 022	1 882	2 199
Thailand	540 383	753 433	760 361	1 110 660	1 273 459
Vietnam	* 15 000	* 25 000	* 25 000	* 25 000	* 25 000
Yemen Arab Republic	* 20 000	21 923	23 138	24 295	* 24 000
Australia	1 752 266	1 863 719	1 509 800	(f) 1 615 212	* 2 000 000
World total	67 200 000	63 500 000	70 500 000	72 900 000	74 000 000

(a) Including anhydrite

(b) Years ended 31 March following that stated

(c) Years ended 20 March following that stated

(d) Calcined

(e) Includes beneficiated and directly shipped material

(f) Excludes Victoria

Exports of Gypsum

Country	1981	1982	1983	1984	1985
United Kingdom					
Crude	3 819	3 250	4 018	2 721	4 295
Calcined	14 593	13 273	17 693	13 927	12 060
Belgium-Luxembourg					
Crude	79 490	56 227	69 301	51 816	40 453
Calcined	60 532	57 916	67 627	58 291	76 460
Denmark					
Crude & calcined	973	371	690	1 855	2 023
France					
Crude	901 883	874 307	785 054	918 172	1 061 618
Calcined	231 380	271 717	262 936	270 505	232 431
Germany, Federal Republic of					
Crude	191 088	165 578	167 261	131 915	120 921
Calcined	183 637	161 833	142 545	133 486	153 666
Greece	162	15 150	38 951	312	2
Irish Republic					
Crude	19 140	27 143	2 192	831	1 439
Calcined	20 852	27 101	38 983	50 708	61 184
Italy					
Crude	48	174	897	3 133	4 054
Calcined	13 723	11 094	11 269	11 174	12 718
Netherlands					
Crude	72	970	26 932	24 520	36 231
Calcined	1 429	1 786	1 877	2 371	5 922
Austria					
Crude	93 495	72 970	105 715	99 577	84 167
Calcined	98 341	93 552	84 748	92 227	57 293
German Democratic Republic					
Calcined	103 009	101 758	84 863	88 663	105 498
Norway					
Crude	—	2 537	—	2 341	—
Poland	* 50	* 100	* 38 000	66 163	50 596
Romania					
Calcined (a)	* 19 700	* 20 000	* 15 100	* 16 900	* 18 500
Soviet Union (a)	* 44 500	* 24 300	* 23 400	* 19 800	* 23 400
Spain					
Crude & calcined	1 075 833	1 119 802	1 935 217	2 274 742	2 192 572
Sweden					
Crude & calcined	646	809	789	496	377
Switzerland					
Crude & calcined	5 647	13 992	14 027	13 847	11 970
Turkey					
Crude & calcined	...	254	2 649	854	3 657
Kenya	1	1	1 839	702	...
Morocco					
Crude	218 780	221 792	106 020	124 750	140 350
Calcined	2 818	2 932	3 378	2 356	4 506
South Africa	2 604	2 769	3 003	2 184	1 599
Canada					
Crude	5 094 845	4 775 755	5 187 032	6 229 110	5 880 430
Dominican Republic	116 278	65 345	52 754	4 097	13 243
Guatemala	14 270	13 275	10 792	13 281	9 091
Jamaica	162 293	87 634	57 730	170 553	160 548
Mexico	1 563 281	1 329 917	3 656 886	3 911 840	1 942 256
Nicaragua	9 206	2 100	1 314	...	...
USA					
Crude	7 082	5 123	4 237	5 284	4 085
Calcined	135 665	106 626	101 976	113 491	70 835
Argentina	6 202	2 682	3 759	5 012	...
Bolivia	748	756	...	...	...
Brazil	3 118	113	54	30	122
Colombia	660	463	200	76	...
Venezuela	10 154	8 633	...	...	...

Gypsum

Exports of Gypsum

tonnes

Country	1981	1982	1983	1984	1985
China (a)	* 7 700	* 9 800	* 12 600	* 10 100	* 11 900
Cyprus					
Crude	506	—	—	2 045	4 449
Calcined	5 185	7 629	4 932	4 883	1 342
Dubai					
Crude & calcined	2 785	1 862	2 226	1 176	...
Hong Kong (Re-exports)	1 172	2 185	6 738	1 677	7 307
India (b)	12 362	21 093	...	...	...
Japan					
Crude	394	2 636	4 483	4 137	689
Calcined	7 234	6 537	5 556	5 521	5 453
Korea, Republic of					
Crude	9 068	3 368	85	96	34
Calcined	151 817	351 928	59 074	24 130	19 000
Saudi Arabia					
Crude & calcined	20 806	38 361	39 976	29 517	...
Singapore					
Crude & calcined	1 076	1 483	1 784	2 316	2 666
of which: Re-exports	1 013	1 417	1 649	2 076	2 563
Syria	31 509	22 090	30 565	181	...
Taiwan	1 049	350	734	228	553
Thailand					
Crude	213 876	370 695	484 755	771 194	892 243
Calcined	2 749	6 454	6 372	8 514	14 025
Australia					
Crude & calcined	647 002	606 891	803 146	732 222	...

Note: In this table the term 'crude' as used here may include some anhydrite

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

(b) Years ended 31 March following that stated

Imports of Gypsum

Country	1981	1982	1983	1984	1985
United Kingdom					
Crude	13 769	26 492	37 357	30 566	52 042
Calcined	34 814	51 623	48 225	56 521	57 213
Belgium-Luxembourg					
Crude	215 297	209 920	203 107	267 177	265 187
Calcined	161 157	161 263	161 155	153 351	136 607
Denmark					
Crude	220 123	165 100	196 319	206 835	150 825
Calcined	4 937	53 890	77 382	11 912	8 000
France					
Crude	16 026	24 916	24 812	17 626	27 817
Calcined	7 258	8 382	8 534	8 195	11 401
Germany, Federal Republic of					
Crude	640 316	596 588	623 347	686 562	775 736
Calcined	133 199	116 301	135 146	136 688	101 124
Greece					
Crude	107	109	73	97	111
Calcined	1 138	878	739	698	803
Irish Republic					
Crude	9 017	1 526	1 488	1 454	1 487
Calcined	5 147	3 948	3 424	3 653	3 160
Italy					
Crude	258	242	132	187	254
Calcined	21 606	14 682	11 463	9 283	13 189
Netherlands					
Crude	255 123	213 734	279 596	280 379	269 597
Calcined	206 281	114 643	93 586	137 184	156 792
Austria					
Crude	5 426	3 134	2 499	5 344	6 117
Calcined	6 542	6 493	6 418	5 908	5 709
Czechoslovakia	22 000	21 000	21 000	24 000	26 000
Finland					
Crude	135 283	130 437	173 302	175 509	166 283
Calcined	4 379	3 753	2 960	2 820	2 748
Hungary					
Calcined	85 653	89 583	79 940	87 973	82 133
Iceland	8 311	3 747	8 183	5 174	7 124
Norway					
Crude	104 702	130 707	128 265	172 412	146 742
Calcined	20 012	14 755	14 445	6 798	56 812
Portugal					
Crude	46 733	38 995	33 280	36 478	...
Calcined	231	728	771	945	...
Spain					
Crude & calcined	2 092	1 279	753	879	19 055
Sweden					
Crude	267 111	299 097	251 654	293 204	283 971
Calcined	5 231	4 960	5 478	5 820	6 138
Switzerland					
Crude	37 781	32 013	32 989	30 580	31 898
Ground & calcined	35 121	34 229	34 535	35 825	38 198
Algeria					
Crude & calcined	548	168	110	3	...
Egypt	625	1 354	622	...	...
Gabon					
Crude & calcined	260	6 998	8 668	564	1 466
Ivory Coast					
Crude	39 357	53 151	35 902	27 664	26 888
Calcined	5 881	3 745	4 071	2 568	4 014
Kenya	40 071	15 745	25 997	15 698	...
Libya					
Crude & calcined	1 737	368	...	...	5 234

Gypsum

Imports of Gypsum

tonnes

Country	1981	1982	1983	1984	1985
Mauritius					
Crude & calcined	1 535	1 267	540	...	...
Melilla	823	598	496	282	...
Mozambique					
Crude & calcined	13 212	4 585	20 040	...	...
Senegal					
Crude	7 266	15 219	18 910	23 592	...
Calcined	219	216	86	314	...
South Africa					
Crude & calcined	8 049	7 026	9 523	8 609	7 377
Togo					
Crude	22 440	...	...	...	...
Calcined	537	...	...	...	...
Tunisia					
Crude & calcined	141	381	...	680	848
Zaire					
Crude & calcined	7 512	5 460	9 557	463	...
Zimbabwe	4 126	2 293	1 619	2 293	...
Bahamas	1 002	2 687	1 389	699	2 230
Canada					
Crude	143 499	93 843	100 939	131 809	121 803
Calcined	18 851	18 925	24 728	21 427	24 632
Costa Rica					
Crude	19 055	6 859	9 464	17 761	23 622
Calcined	635	769	571	930	1 064
El Salvador					
Crude	15 813	15 039	10 443	12 658	...
Calcined	151	242	152	321	...
Guadeloupe	14 059	4 518	17 133	...	9 967
Martinique	9 801	9 903	6 787	...	8 257
Mexico					
Crude	32 981	13 772	1 731	7 338	6 300
Calcined	11 438	8 631	4 165	5 492	5 070
Panama	9 284	9 530	18 172	15 961	9 011
Trinidad & Tobago					
Crude & calcined	8 497	6 084	6 640	2 048	3 407
USA					
Crude	6 887 972	6 094 265	7 285 451	8 078 000	9 001 000
Ground & calcined	1 883	2 234	4 297	10 000	1 800
Brazil	1 001	801	1	1	...
Colombia	66 830	63 860	40 522	26 544	...
Ecuador	8 249	...	...	...	...
Uruguay					
Crude & ground	11 146	2 074	699	874	1 340
Venezuela	29 893	78 704	35 140	...	...
Abu Dhabi	976	1 916	555	963	1 380
Bahrain	10 839	12 967	18 477	2 429	13 186
Hong Kong	71 441	104 289	77 842	89 364	103 210
Indonesia	316 158	294 349	356 155	384 301	...
Iran (a)	1 290	75	...	45	...
Israel (c)	110	...	(d)* 1 200	(d)* 1 100	(d)* 1 100
Japan					
Crude	202 829	222 286	201 326	255 426	304 834
Calcined	309	524	825	827	860
Jordan	1 984	2 178	3 182	2 383	2 015
Korea, Republic of	741	17 337	218 722	222 204	151 864
Kuwait	25 127	85 634	54 921	...	...
Macao	—	—	12 032	6 685	14 584
Malaysia					
Crude & calcined	97 316	125 499	137 754	170 782	185 990
Oman	105	291	6 422	10 788	20 992
Philippines					
Crude	68 525	60 075	74 739	68 289	127 351
Calcined	7 071	3 890	4 749	3 577	3 276
Saudi Arabia					
Crude	2 952	17 945	4 961	47 778	70 859
Calcined	27 882	41 195	91 827	63 394	36 780

Imports of Gypsum

Country	1981	1982	1983	1984	1985
Singapore					
Crude & calcined	83 527	117 305	149 291	141 613	97 845
Sri Lanka	16 043	2 623	14 998	7 037	15 108
Taiwan					
Crude	69 222	123 611	180 328	260 406	333 373
Calcined	291 744	189 282	168 896	72 290	78 465
Thailand					
Crude & calcined	250	1 830	662	570	655
Australia	1 105	1 136	1 555	1 158	...
Fiji	1 335	3 566	3 056	5 040	40
New Zealand (b)					
Crude	106 477	135 138	102 488	130 006	140 277
Calcined	234	516	470	394	334

Note: In this table the term 'crude' as used here may include some anhydrite

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

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

Iodine

Production of Iodine

kilograms

Country	1981	1982	1983	1984	1985
Soviet Union	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000
USA	* 800 000	* 800 000	* 900 000	* 800 000	* 800 000
Chile	2 688 000	2 596 000	2 792 500	2 661 000	2 585 000
China	* 450 000	* 450 000	* 450 000	* 450 000	* 450 000
Indonesia	25 360	28 920	25 297	24 970	* 25 000
Japan	6 862 000	7 180 000	7 273 000	7 302 000	7 251 000
World total	12 800 000	13 100 000	13 400 000	13 200 000	13 100 000

Exports of Iodine

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom	105 773	132 869	96 046	96 738	224 044
Belgium-Luxembourg	112 100	154 700	171 100	123 300	66 400
Denmark	3 500	400	1 600	6 500	33 600
France	140 000	72 000	48 000	52 000	60 900
Germany, Federal Republic of	73 200	44 600	49 500	74 400	63 800
Italy	23 799	237	1 154	3 050	1 800
Netherlands	35 000	15 000	34 000	17 000	14 000
Portugal	100	...	100	200	...
Spain	7	1 000	200	1 228	...
Chile	(a)* 1 900 000	2 186 000	3 265 000	2 856 000	(a)* 2 350 000
Indonesia	9 500	17 900	2 000	28 000	...
Japan (b)	5 442 205	5 198 774	6 281 747	5 229 939	6 605 257
Taiwan	1 000	2 550	1 500	1 700	2 379

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

(b) Includes fluorine and bromine but is thought to be mainly iodine

Imports of Iodine

Country	1981	1982	1983	1984	1985
United Kingdom	1 358 447	1 470 589	2 043 114	2 069 652	1 329 097
Belgium-Luxembourg	95 700	139 900	226 200	194 200	179 500
Denmark	2 700	2 100	2 400	4 400	4 200
France	899 000	1 032 000	1 122 000	880 000	893 800
Germany, Federal Republic of	1 290 300	1 133 800	1 190 200	961 300	1 879 500
Greece	1 000	2 000	1 000	1 000	1 000
Italy	172 765	315 200	213 170	293 957	538 300
Netherlands	258 000	206 000	322 000	367 000	458 000
Hungary	53 900	88 800	48 600	35 000	44 500
Portugal	9 700	12 500	20 200	10 800	...
Spain	175 000	158 000	168 000	189 021	...
Turkey	6 322	...	...	5 503	...
Yugoslavia	86 000	51 000	73 000	53 000	...
Algeria	794	625	1 532	3 358	...
Morocco	444	697	359	695	512
Tunisia	...	1 693	...	2 014	2 780
Canada	180 892	111 000	193 000	275 000	427 000
Dominican Republic	1 269	2 299	...	...	...
USA	2 782 193	2 144 907	2 840 530	2 298 400	2 254 800
Argentina	22 737	24 013	10 251	...	...
Brazil	129 620	201 678	147 002	222 540	...
Colombia	8 102	6 530	5 373	8 247	...
Ecuador	1 079	2 342	...	...	...
Peru	1 671	965	1 077	...	...
Uruguay	—	400	500	1 100	500
Venezuela	...	48 588	...	...	...
India (a)	184 924	421 763	...	...	...
Indonesia	25 552	39 692	54 491	11 486	...
Korea, Republic of	3 884	6 632	10 901	15 536	13 464
Pakistan (b)	—	1 600	7 741	11 153	16 533
Taiwan	5 621	4 504	11 844	18 739	34 814
Thailand	2 002	1 824	1 569	2 895	2 803
Australia (b)	23 024	17 600	33 446	24 306	19 460

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

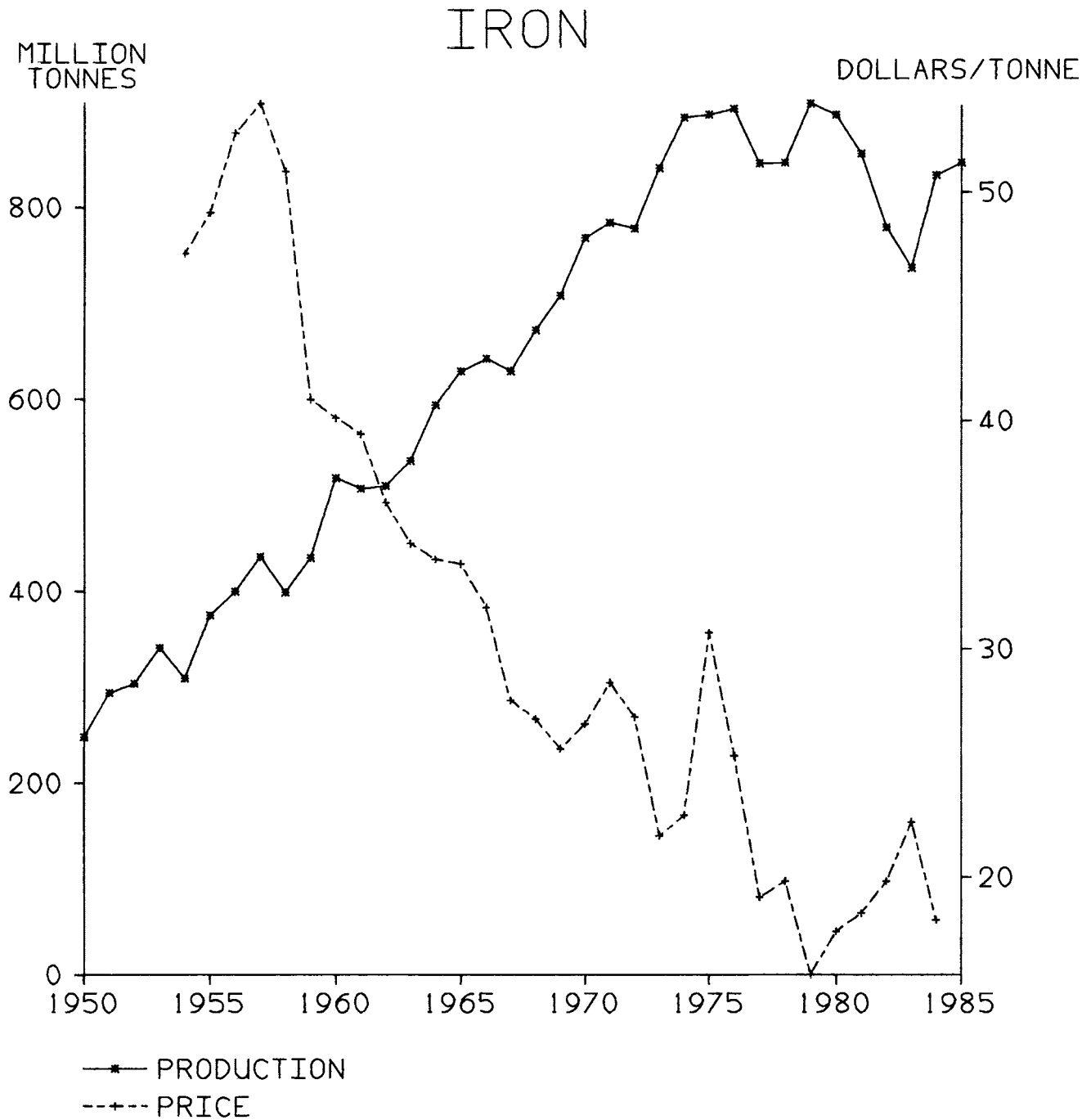


Figure 8 World production of iron ore from 1950 to 1985 compared with the yearly average price of 60% Swedish ore c.i.f. Rotterdam expressed in constant 1980 US dollars from 1954.
Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Production of Iron Ore

Country	1981	1982	1983	1984	1985
United Kingdom	731 200	470 100	384 000	379 300	274 400
France	21 598 000	19 411 000	15 967 000	15 029 000	14 376 000
Germany, Federal Republic of (f)	1 572 000	1 304 000	976 000	977 000	1 060 000
Italy	345 604	195 034	67 700	237 700	...
Luxembourg	429 080	—	—	—	—
Albania (b)	600 000	702 000	850 000	1 082 000	1 130 000
Austria	3 050 000	3 330 000	3 540 000	3 600 000	3 270 000
Bulgaria	1 754 000	1 552 000	1 803 000	2 063 000	1 985 000
Czechoslovakia	1 935 000	1 861 000	1 903 000	1 869 000	1 824 000
Finland	871 360	883 800	865 715	1 099 920	752 700
German Democratic Republic	41 000	41 000	40 000	36 000	—
Hungary	422 000	467 000	441 000	383 000	311 000
Norway	4 137 680	3 545 120	3 545 477	3 837 042	3 468 264
Poland	105 000	49 300	10 000	10 900	11 300
Portugal (f)	37 096	27 100	35 500	36 400	73 210
Romania	2 304 000	2 146 000	1 987 000	1 916 000	2 287 000
Soviet Union	242 417 000	244 411 000	245 200 000	247 104 000	248 000 000
Spain	8 483 212	8 261 826	7 939 654	7 981 174	6 462 977
Sweden	23 201 000	15 768 000	13 696 000	17 806 000	20 454 000
Turkey	2 935 265	3 055 090	3 629 563	4 049 425	3 794 000
Yugoslavia	4 794 000	5 106 000	5 018 284	5 321 000	5 478 000
Algeria	3 481 000	3 892 000	3 684 000	3 664 000	3 776 000
Egypt (h)	1 944 000	2 139 000	2 223 000	2 500 000	2 140 000
Liberia	19 773 000	18 029 000	15 599 000	14 857 000	14 369 000
Mauritania	8 473 000	7 660 000	7 402 000	9 105 320	9 200 000
Morocco	73 112	223 820	173 010	162 967	190 528
South Africa (c)	28 318 856	24 553 600	16 604 923	24 495 995	24 414 154
Tunisia	395 952	274 457	314 000	309 623	309 338
Zimbabwe	1 096 000	837 316	924 000	925 000	1 098 000
Canada (g)	49 551 000	33 197 561	32 958 678	39 929 907	39 502 000
Mexico	8 019 105	8 154 908	8 039 914	8 317 186	7 819 915
USA	74 348 000	36 002 000	38 165 000	52 092 000	49 533 000
Argentina	397 649	586 852	608 557	512 000	611 000
Brazil (a)	97 860 171	93 159 018	88 715 604	112 057 012	123 000 000
Chile	8 514 176	6 469 670	5 973 672	7 115 792	6 509 986
Colombia	433 411	469 850	456 000	441 100	447 100
Peru	6 069 000	5 774 000	4 347 000	4 076 000	5 104 000
Venezuela	15 722 000	11 680 000	9 297 000	13 055 000	14 723 000
China	* 70 000 000	* 71 000 000	* 72 000 000	* 77 000 000	* 77 000 000
India	41 460 000	41 997 000	38 672 000	41 943 000	42 036 000
Indonesia (d)	86 625	144 493	124 903	82 967	130 930
Iran (e)	600 000	750 000	* 850 000	* 850 000	* 850 000
Japan (d)	441 735	362 449	295 503	325 000	340 000
Korea, Dem. P.R. of	* 8 000 000	* 8 000 000	* 8 000 000	* 8 000 000	* 8 000 000
Korea, Republic of	593 600	620 100	655 300	625 200	668 100
Malaysia	532 455	340 300	113 700	193 827	181 660
Philippines	5 746	5 573	2 645	—	—
Thailand	62 472	26 750	40 304	60 670	93 800
Australia	84 661 367	87 693 780	71 037 299	94 406 000	97 529 000
New Zealand	3 253 153	2 791 621	2 203 380	2 417 113	2 536 462
World total	856 000 000	779 000 000	737 000 000	834 000 000	847 000 000

Note: In addition to the countries listed, Cuba and Vietnam are also believed to produce iron ore

- (a) Includes beneficiated and direct shipping ore
- (b) Nickeliferous iron ore
- (c) Including by-product magnetite
- (d) Including iron sand
- (e) Years ended 20 March following that stated
- (f) Including manganiferous iron ore
- (g) Including shipments of by-product iron ore
- (h) Years ended 30 June of that stated

Iron Ore

Exports of Iron Ore

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	20	685	965	343	5 710
Belgium-Luxembourg					
Iron ore	18 692	401	1 433	302	15 263
Burnt pyrites	10 173	21 597	50 696	50 314	149 816
Denmark	8 867	14 551	11 565	6 647	6 834
France	6 378 303	5 836 355	5 030 858	4 752 054	4 627 846
Germany, Federal Republic of					
Iron ore	6 538	6 424	9 190	3 732	2 576
Burnt pyrites	76 826	51 219	38 932	32 478	16 930
Greece					
Burnt pyrites	14 500	14 300	...	...	...
Irish Republic	17 296	1 980	23	—	—
Italy					
Iron ore	22	165	87	678	35
Burnt pyrites	45 750	39 271	28 679	45 045	22 873
Netherlands (b)	239 761	148 920	13 850	45 392	55 203
Finland	22 965	—	—	—	—
Norway					
Iron ore	3 482 274	2 166 227	2 945 494	3 083 237	2 577 892
Burnt pyrites	177 740	168 208	142 899	136 340	107 445
Portugal					
Burnt pyrites	14 315	12 000	—	0	...
Soviet Union	34 917 000	33 201 000	33 245 000	35 293 000	33 950 000
Spain					
Iron ore	1 141 192	1 868 923	1 579 639	1 973 178	2 128 000
Burnt pyrites	1 198	2 712	569	1 126	4 000
Sweden					
Iron ore	17 709 000	12 597 000	14 191 000	17 600 000	18 302 000
Burnt pyrites	306 000	57 000	0	0	0
Switzerland (b)	222	2 772	41	75	28
Yugoslavia					
Burnt pyrites	109 597	58 454	61 195	45 740	60 000
Algeria	1 479 368	1 419 991	1 398 182	974 452	7 000
Canary Islands					
Burnt pyrites	28 700	28 200	—	—	...
Liberia	20 694 290	16 370 251	15 703 974	16 870 127	12 965 737
Mauritania	8 609 000	7 753 000	7 402 000	9 526 400	9 333 000
Morocco					
Burnt pyrites	64 383	237 400	139 637	116 538	161 673
Sierra Leone	—	—	356 000	373 000	* 100 000
South Africa	13 713 984	11 355 632	7 811 402	11 869 778	10 226 420
Canada	41 451 829	27 281 255	25 527 958	30 737 477	32 216 269
USA (b)	5 635 191	3 228 955	3 841 931	5 073 164	5 114 168
Bolivia (c)	4 113	4 891	7 001	4 192	—
Brazil	85 797 917	84 408 515	74 199 952	90 294 409	94 217 889
Chile	6 639 843	5 767 067	4 594 000	5 230 000	4 824 000
Peru	5 156 000	5 596 000	4 182 000	4 091 000	5 242 000
Venezuela	12 423 000	6 616 000	6 245 000	8 456 000	9 032 000
India	19 824 364	25 359 000	22 001 000	25 696 000	28 840 000
Malaysia	31 288	25 445	31 075	16 636	13 134
Philippines					
Iron ore	3 550 826	3 751 608	3 284 801	4 050 631	4 034 354
Burnt pyrites	35 408	18 423	15 408	13 709	11 751
Australia	71 147 000	72 711 000	74 039 000	85 480 000	87 880 000
New Zealand (a)	2 819 828	2 705 667	2 355 001	2 067 668	2 227 140

(a) Years ended 30 June of that stated

(b) Including burnt pyrites

(c) Fe content of concentrates

Imports of Iron Ore

Country	1981	1982	1983	1984	1985
United Kingdom					
Iron ore	14 581 627	10 572 403	13 164 214	14 138 152	15 404 459
Burnt pyrites	265 906	210 265	230 660	295 647	250 183
Belgium-Luxembourg					
Iron ore	21 148 340	18 613 043	17 519 395	19 701 313	18 996 516
Burnt pyrites	94 312	59 996	38 721	55 160	1 574 252
Denmark					
Iron ore	127 226	183 114	62 855	1 330	1 993
Burnt pyrites	18 928	15 304	13 977	20 348	19 710
France					
Iron ore	16 510 764	14 942 736	12 552 833	16 088 410	16 219 754
Burnt pyrites	57 248	51 978	82 404	70 196	44 487
Germany, Federal Republic of					
Iron ore	44 288 124	38 909 559	35 497 187	42 568 169	45 007 234
Burnt pyrites	29 293	20 224	62 426	51 184	35 550
Italy (a)	15 210 597	16 131 078	13 799 673	19 243 947	18 294 000
Netherlands (a)	6 659 598	6 160 403	4 979 959	7 238 702	8 508 191
Albania (d)	* 101 900	* 158 900	* 172 900	* 71 100	* 53 000
Austria					
Iron ore	3 423 021	3 241 201	2 390 940	3 889 886	3 684 492
Burnt pyrites	45 515	33 962	20 882	10 411	19 860
Bulgaria	2 280 000	2 360 000	2 313 000	2 286 000	2 215 000
Czechoslovakia	12 166 000	11 640 000	11 683 000	11 108 000	11 268 000
Finland	1 495 401	1 493 211	1 299 321	1 856 315	1 755 577
German Democratic Republic (b)	2 335 000	1 932 000	1 842 000	1 971 000	2 681 000
Hungary	3 765 125	3 756 651	3 966 804	4 169 685	2 381 513
Norway	11 196	47 293	225 640	39 813	230 175
Poland	15 870 000	13 493 000	13 787 000	17 110 000	16 973 000
Portugal	524 098	262 723	470 415	147 431	...
Romania	15 016 000	14 397 000	14 477 000	14 963 000	15 207 000
Spain	4 687 152	4 620 000	4 202 000	4 220 470	5 023 000
Sweden	1 000	5 000	19 000	38 000	68 000
Switzerland (a)	49 487	21 050	8 016	10 049	6 418
Turkey	1 049 888	1 170 757	1 329 494	1 655 668	1 725 000
Yugoslavia	1 359 660	1 476 539	1 567 500	1 566 357	2 180 000
Kenya	12 747	29	15	14 500	...
Libya	—	15 727	...	...	...
Nigeria (a)	95 000	96 716	...	15 225	371 845
Tunisia	11 665	32 305	...	—	12 532
Canada	5 794 604	3 359 286	4 013 109	4 946 892	5 800 194
Mexico	446 627	1 076	160	131	2 137
Trinidad & Tobago	198 997	201 746	246 596	199 755	318 284
USA (a)	28 788 679	14 951 482	13 541 778	17 435 339	16 221 626
Argentina	2 558 037	2 105 789	1 903 509	2 213 022	2 459 000
Abu Dhabi	51 120	31 248	30 419	0	—
China	3 355 142	3 752 273	3 924 101	5 957 437	10 046 592
Dubai	47 800	10 000	26 499	24 000	12 000
Indonesia					
Iron ore	701 574	121 039	127 999	198 460	...
Burnt pyrites	112 650	178 786	60 450	1 268 438	...
Japan (c)	123 379 351	121 827 155	109 180 816	125 372 449	124 512 701
Korea, Republic of					
Iron ore	10 687 712	11 509 940	10 121 155	10 287 389	12 418 239
Burnt pyrites	—	45 543	49 394	131	—
Malaysia	25 095	33 497	27 650	414 284	830 524
Pakistan (e)	244 649	707 833	765 091	924 405	1 188 443
Philippines	3 286 333	3 825 051	2 277 767	3 615 003	3 388 907

Iron Ore

Imports of Iron Ore

tonnes

Country	1981	1982	1983	1984	1985
Qatar	—	—	...	619 371	...
Saudi Arabia	42 565	95 695	294 657	1 044 173	324 638
Singapore	30 576	25 256	13 013	7 441	12 581
Taiwan					
Iron ore	2 413 058	4 048 764	4 956 581	5 199 177	4 896 129
Burnt pyrites	55 079	21 014	13 757	15 151	11 360
Australia	46 912	90 956	52 096	52 101	24 221

(a) Including burnt pyrites

(b) Fe content of concentrates

(c) Including manganiferous iron ore

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

(e) Years ended 30 June of that stated

Production of Pig-Iron

Country	1981	1982	1983	1984	1985
United Kingdom (a)	9 554 000	8 388 300	9 559 800	9 562 300	10 458 300
Belgium	9 786 000	7 836 000	8 034 000	8 968 000	8 720 000
France (a)	17 274 000	15 046 000	13 770 000	15 039 000	15 420 000
Germany, Federal Republic of (a)	31 876 000	27 308 000	26 526 000	30 046 000	31 348 000
Greece	* 43 500	* 110 000	* 140 000	* 140 000	* 140 000
Italy	12 259 190	11 537 389	10 312 716	11 631 038	11 658 000
Luxembourg	2 889 320	2 586 820	2 316 300	2 767 930	2 753 800
Netherlands	4 599 600	3 616 600	3 747 400	4 925 600	4 818 700
Austria	3 477 257	3 114 985	3 320 260	3 745 315	3 703 992
Bulgaria	1 514 447	1 564 590	1 626 878	1 583 155	1 713 240
Czechoslovakia	9 903 000	9 525 000	9 466 000	9 561 000	9 562 000
Finland	1 965 000	1 943 800	1 898 458	2 033 700	1 891 000
German Democratic Republic (a)	2 440 900	2 149 400	2 206 800	2 356 700	2 578 200
Hungary	2 193 000	2 181 000	2 047 000	2 097 000	2 095 000
Norway	586 584	456 490	565 392	545 972	610 069
Poland (a)	9 351 000	8 523 000	9 719 000	9 981 000	9 807 000
Portugal	314 274	222 233	365 796	381 799	423 000
Romania	8 857 000	8 637 000	8 190 000	9 557 000	9 212 000
Soviet Union	107 766 000	106 723 000	110 453 000	110 893 000	110 000 000
Spain	6 250 776	5 843 148	5 667 252	5 319 000	5 457 000
Sweden	1 987 796	1 967 697	2 194 737	2 420 166	2 521 000
Switzerland	33 000	10 000	10 000	54 000	66 000
Turkey	1 954 076	2 379 497	2 952 754	3 014 847	3 371 000
Yugoslavia	2 817 000	2 703 000	2 844 681	2 855 000	3 120 000
Algeria	897 000	1 097 000	1 100 000	1 100 000	* 1 100 000
Egypt	220 000	113 000	196 000	225 000	* 225 000
South Africa	7 369 000	6 804 000	4 998 000	5 254 800	6 574 200
Tunisia	149 900	93 300	141 200	143 500	138 600
Zimbabwe	643 520	478 017	583 963	379 721	674 219
Canada	9 743 499	8 000 149	8 566 621	9 643 260	9 665 000
Mexico	5 483 000	5 103 000	5 034 000	5 374 000	5 095 000
Trinidad & Tobago	179 500	217 900	302 300	239 000	243 200
USA	66 909 000	39 319 000	44 243 000	47 138 000	45 326 000
Argentina	1 735 900	1 940 300	1 862 000	1 799 000	2 320 000
Brazil	11 021 569	11 053 828	13 199 122	17 464 382	19 245 462
Chile	582 200	453 300	538 600	593 300	575 000
Colombia	233 000	246 000	241 000	270 000	246 000
Peru	241 000	204 000	140 000	62 000	* 200 000
Venezuela	2 230 000	2 357 000	2 246 000	3 185 000	* 2 900 000
China	34 170 000	35 551 000	37 380 000	40 010 000	43 543 000
India	9 463 000	9 606 000	9 158 000	9 292 000	9 835 000
Iran (b)	500 000	600 000	* 700 000	* 700 000	* 700 000
Japan	80 048 000	77 658 000	72 936 000	80 403 000	80 569 000
Korea, Dem. P.R. of	* 5 000 000	* 5 300 000	* 5 500 000	* 5 700 000	* 5 800 000
Korea, Republic of	7 928 000	8 445 000	8 024 000	8 763 000	8 832 000
Pakistan	142 340	472 649	473 604	563 600	803 147
Taiwan	197 539	161 112	183 625	213 483	225 730
Thailand	10 310	6 338	159	—	—
Australia	6 830 000	5 956 000	5 045 000	5 329 000	5 607 000
World total	502 000 000	456 000 000	461 000 000	493 000 000	502 000 000

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

(a) Includes blast-furnace ferro-alloys

(b) Years ended 20 March following that stated

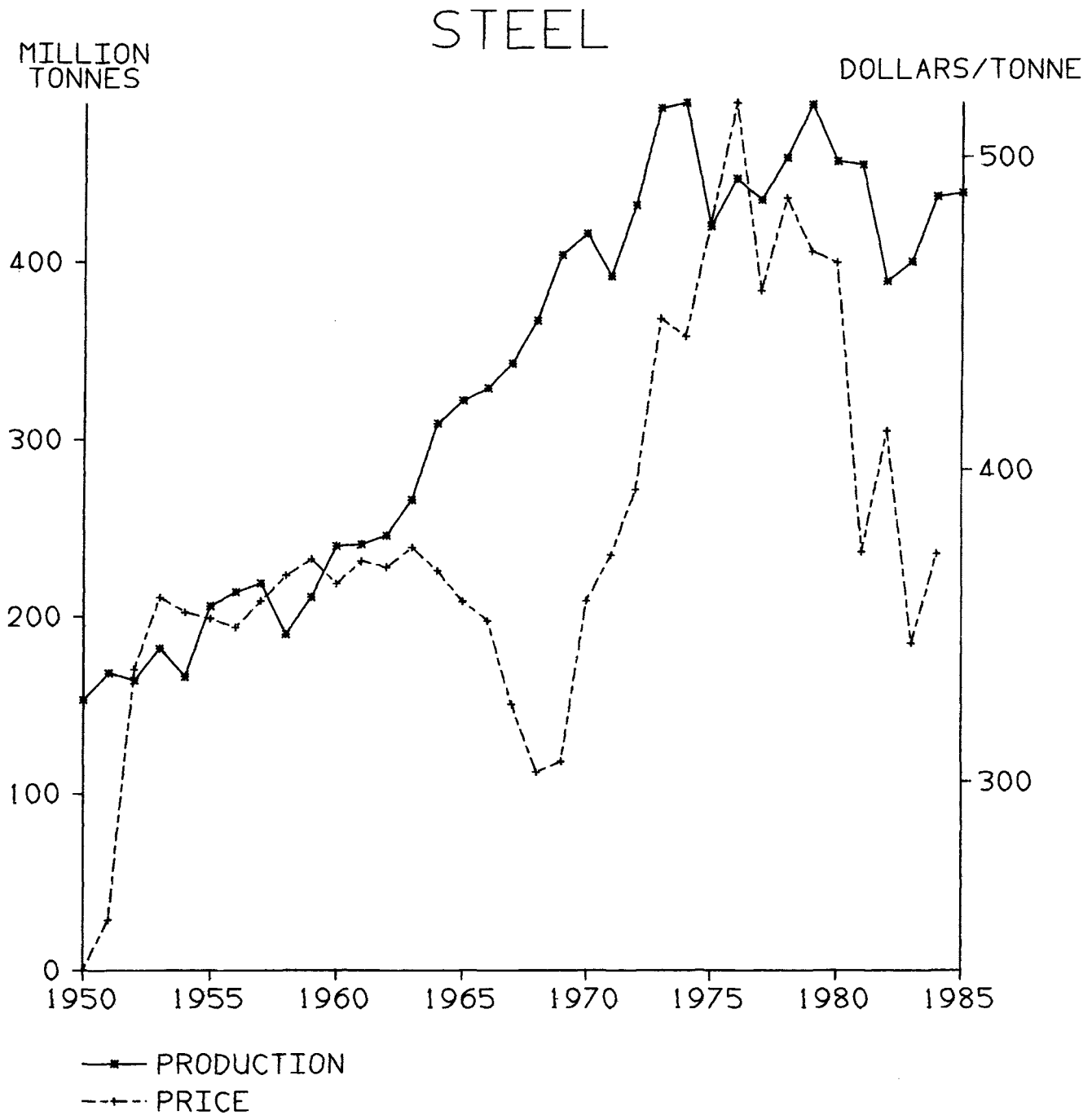


Figure 9 Production of steel ingots and castings in the non-communist world from 1950 to 1985 compared with the yearly average price of Bessemer bars delivered Oberhausen expressed in constant 1980 US dollars.

Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Production of Steel Ingots and Castings

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	15 573 000	13 704 000	14 986 000	15 121 000	15 722 000
Belgium	12 379 729	9 995 850	10 157 031	11 303 381	10 687 000
Denmark	612 000	560 000	493 000	548 000	528 000
France	21 258 000	18 402 000	17 582 000	19 000 000	18 808 000
Germany, Federal Republic of	41 610 000	35 880 000	35 729 000	39 389 000	40 497 000
Greece	909 000	933 000	868 000	898 000	985 000
Irish Republic	* 40 000	* 60 000	* 140 000	* 168 000	* 200 000
Italy	24 777 415	24 009 490	21 810 787	24 111 318	23 872 000
Luxembourg	3 790 320	3 509 850	3 293 760	3 987 440	3 945 275
Netherlands	5 472 100	4 345 800	4 477 300	5 738 700	5 517 300
Austria	4 655 504	4 258 156	4 410 907	4 869 841	4 660 426
Bulgaria	2 484 000	2 584 000	2 831 000	2 878 412	2 944 000
Czechoslovakia	15 270 000	14 992 000	15 024 000	14 831 000	15 036 000
Finland	2 427 000	2 413 943	2 415 931	2 632 000	2 518 000
German Democratic Republic	7 466 900	7 168 500	7 218 800	7 573 300	7 852 800
Hungary	3 643 000	3 702 000	3 616 000	3 750 000	3 647 000
Norway	847 170	767 991	895 019	919 685	929 825
Poland	15 719 000	14 794 700	16 235 900	16 532 600	16 126 000
Portugal	549 908	501 679	628 512	687 000	665 000
Romania	13 025 000	13 055 000	12 593 000	14 437 000	13 795 000
Soviet Union	148 445 000	147 165 000	152 514 000	154 238 000	155 000 000
Spain	13 168 140	12 742 560	13 711 656	13 379 000	14 032 000
Sweden	3 781 000	3 936 000	4 116 000	4 657 000	4 813 000
Switzerland	966 000	950 000	953 000	978 000	987 000
Turkey	1 744 051	1 997 631	2 478 875	2 753 392	3 080 304
Yugoslavia	3 976 000	3 850 000	4 134 919	4 236 000	4 480 000
Algeria	522 000	550 000	560 000	580 000	* 600 000
Egypt	900 000	480 000	125 000	200 000	533 000
Nigeria	22 000	90 000	182 000	187 000	254 000
South Africa	8 397 000	8 036 000	7 248 000	7 509 000	8 444 000
Tunisia	173 000	104 900	162 800	166 200	160 300
Zimbabwe	691 421	537 609	646 463	423 443	730 841
Canada	14 811 223	11 871 374	12 832 477	14 699 204	13 451 745
Cuba	329 700	301 200	363 700	338 200	412 900
Mexico	7 673 000	7 056 000	6 978 000	7 560 000	7 367 000
Trinidad & Tobago	53 100	179 200	209 600	198 900	166 900
USA	109 613 000	67 655 000	76 761 000	83 940 000	80 067 000
Argentina	2 517 100	2 897 400	2 942 800	2 621 700	2 940 000
Brazil	13 226 128	12 995 241	14 671 428	18 385 724	20 450 061
Chile	625 500	478 400	593 200	662 800	* 650 000
Colombia	402 000	423 000	482 000	499 000	530 000
Peru	364 000	274 000	299 000	342 000	411 000
Uruguay	15 139	28 019	45 674	47 930	45 000
Venezuela	2 030 000	2 216 000	2 319 000	2 900 000	3 035 900
Bangladesh (b)	139 343	108 624	47 401	73 387	101 419
China	35 600 000	37 160 000	40 020 000	43 470 000	46 724 000
Hong Kong	* 120 000	* 120 000	* 120 000	* 120 000	* 120 000
India	10 602 000	10 834 000	10 364 000	10 084 000	10 388 000
Indonesia	500 000	500 000	800 000	* 1 000 000	* 1 200 000
Iran	1 180 000	* 1 200 000	* 1 400 000	* 1 200 000	* 1 200 000
Israel	114 000	87 000	83 000	92 000	100 000
Japan	101 676 000	99 548 000	97 179 000	105 586 000	105 279 000
Jordan	123 418	156 369	148 196	112 502	136 266
Korea, Dem. P.R. of	* 5 500 000	* 5 800 000	* 6 100 000	* 6 500 000	* 8 400 000
Korea, Republic of	9 841 000	10 863 000	11 227 000	12 734 000	13 591 000
Malaysia	233 128	245 683	241 057	350 000	* 550 000
Philippines	350 000	350 000	200 000	250 000	* 250 000
Qatar	458 147	483 245	469 000	478 000	533 000
Saudi Arabia	72 000	70 000	275 000	842 000	1 106 000
Singapore	263 000	359 000	305 000	362 000	* 365 000
Syria	* 110 000	99 000	* 80 000	* 70 000	* 70 000
Taiwan	3 157 000	4 152 000	5 031 000	5 010 000	5 088 000
Thailand	300 000	312 158	243 900	380 971	350 000
Vietnam	36 100	47 100	48 000	53 000	* 50 000

Production of Steel Ingots and Castings

tonnes

Country	1981	1982	1983	1984	1985
Australia (a)	7 635 000	6 371 000	5 625 000	6 299 000	6 577 000
New Zealand	231 384	251 847	233 413	273 840	227 925
World total	705 000 000	642 000 000	661 000 000	706 000 000	714 000 000

Note: The figures in this table refer to crude steel and cast semi-manufactures are not included

(a) Includes recovery from scrap

(b) Years ended 30 June of that stated

Production of Ferro-alloys

Country	1981	1982	1983	1984	1985
United Kingdom					
Ferro-manganese	83 900	61 400	82 800	75 200	76 900
Belgium					
Ferro-manganese	90 000	* 90 000	* 90 000	* 95 000	* 90 000
France					
Blast furnace ferro-alloys—					
Spiegeleisen & ferro-					
manganese	312 237	332 223	270 331	329 447	* 330 000
Electric furnace & alumino-					
thermic ferro-alloys—					
Ferro-chrome & ferro-silico-					
chrome	32 038	38 121	19 827	18 638	* 19 000
Ferro-silicon (50% Si)	189 062	168 858	192 762	204 637	* 205 000
Ferro-silico-manganese	10 180	29 655	32 710	34 886	* 35 000
Ferro-titanium, ferro-					
tungsten, ferro-					
molybdenum, ferro-					
vanadium (a)	2 860	4 838	4 223	4 236	) * 120 000
Other ferro-alloys	111 858	98 371	102 257	114 944	) * 120 000
Silicon metal	57 500	57 200	64 500	70 500	71 300
Germany, Federal Republic of					
Blast furnace ferro-alloys—					
Spiegeleisen & ferro-					
manganese	214 000	) 242 000	174 000	309 000	205 000
Ferro-silicon	50 000)			
Electric furnace ferro-alloys—					
Ferro-chrome	* 50 000	* 42 000	* 38 000	* 70 000	* 72 000
Ferro-manganese & ferro-					
silico-manganese	* 19 000	* 19 000	* 17 000	* 25 000	* 31 000
Ferro-silicon	* 42 000	* 34 000	* 31 000	* 60 000	* 60 000
Other ferro-alloys	* 43 000	* 36 000	* 33 000	* 65 000	* 61 000
Greece					
Electric furnace ferro-alloys—					
Ferro-chrome	—	—	18 000	32 394	* 35 000
Ferro-nickel	51 000	* 51 000	* 50 000	* 53 000	* 55 000
Italy					
Blast furnace ferro-alloys—					
Spiegeleisen	832	957	494	935	...
Ferro-manganese	59 302	57 366	49 200	34 815	...
Silicon pig-iron (10—12% Si)	1 694	1 024	580	342	...
Electric furnace ferro-alloys—					
Ferro-chrome	10 333	36 541	45 414	49 942	* 45 000
Ferro-silico-chrome	800	—	...	...	...
Ferro-manganese	12 468	15 987	12 647	15 651	...
Ferro-silico-manganese	54 563	58 118	37 244	72 779	* 50 000
Ferro-molybdenum	807	235	...	1 422	...
Ferro-phosphorus	60	...	...	...	...
Ferro-silicon	55 144	63 947	51 913	71 157	* 60 000
Ferro-titanium & ferro-					
silico-titanium	1 456	1 243	1 876	2 158	...
Ferro-vanadium	148	68	...	79	...
Calcium-silicide	8 147	8 982	5 778	9 075	...
Silicon metal	19 595	14 012	11 737	22 812	17 812
Albania					
Electric furnace ferro-alloys—					
Ferro-chrome	* 28 000	* 30 000	* 35 000	* 40 000	* 43 000
Austria					
Electric furnace ferro-alloys	12 000	14 000	14 000	13 000	14 000
Bulgaria					
Electric furnace ferro-alloys—					
Ferro-manganese & ferro-					
silico-manganese	* 34 000	* 34 000	* 30 000	* 22 000	* 30 000
Ferro-silicon	* 20 000	* 20 000	* 17 000	* 15 000	* 14 000
Other ferro-alloys	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000

Production of Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Czechoslovakia					
Electric furnace ferro-alloys—					
Ferro-chrome	28 025	29 751	29 135	23 500	25 178
Ferro-manganese	58 113	53 708	62 549	) * 87 000	62 358
Ferro-silico-manganese	* 40 000	* 40 000	* 40 000	) * 87 000	* 31 000
Ferro-silicon	31 012	25 876	19 507	* 28 000	20 765
Other ferro-alloys	* 9 000	* 9 000	* 9 000	* 8 500	* 9 000
Silicon metal	* 5 000	* 4 500	* 4 500	* 4 000	* 4 500
Finland					
Electric furnace ferro-alloys—					
Ferro-chrome	51 624	54 533	58 698	58 644	133 350
Other ferro-alloys	10 375	15 476	23 259	52 000	52 500
German Democratic Republic					
Electric furnace ferro-alloys—					
Ferro-chrome	* 20 000	* 20 000	* 17 250	* 19 500	* 19 500
Ferro-manganese & ferro-silico-manganese	* 67 000	* 62 500	* 63 000	* 64 000	* 63 000
Ferro-silicon	* 25 000	* 24 000	* 24 000	* 24 000	* 23 000
Other ferro-alloys	* 19 000	* 15 400	* 18 250	* 16 250	* 15 250
Silicon metal	* 4 000	* 3 100	* 3 250	* 3 250	* 3 250
Hungary					
Electric furnace ferro-alloys—					
Ferro-silicon	11 077	10 493	9 458	10 297	10 578
Silicon metal	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Iceland					
Electric furnace ferro-alloys—					
Ferro-silicon	33 411	41 077	49 446	58 443	57 700
Norway					
Electric furnace ferro-alloys—					
Ferro-chrome & ferro-silico-chrome	12 422	* 11 000	* 4 400	—	—
Ferro-manganese	233 390	203 256	283 492	285 169	215 272
Ferro-silico-manganese	214 534	215 732	194 784	280 953	242 113
Ferro-silicon	313 736	296 071	368 817	437 164	385 855
Other ferro-alloys	4 530	* 4 000	* 4 600	—	—
Silicon metal	59 202	64 882	76 856	89 398	101 953
Poland					
Blast furnace ferro-alloys—					
Spiegeleisen	6 410	4 370	4 500	4 000	1 900
Ferro-manganese	103 692	87 372	81 400	87 900	99 400
Electric furnace ferro-alloys—					
Ferro-chrome	* 40 500	* 35 500	* 48 500	* 48 000	* 49 000
Ferro-manganese & ferro-silico-manganese	* 40 500	* 35 000	* 48 000	* 48 000	* 49 000
Ferro-silicon	* 43 000	* 35 500	* 51 500	* 51 000	* 52 000
Other ferro-alloys	* 14 000	* 12 500	* 17 000	* 17 000	* 16 500
Silicon metal	* 9 000	* 7 500	* 10 000	* 10 000	* 10 500
Portugal					
Electric furnace ferro-alloys—					
Ferro-tungsten	244	211	176	183	151
Other ferro-alloys	51 276	89 029	77 165	* 65 000	* 42 000
Silicon metal	* 32 000	* 32 000	* 32 000	* 30 000	* 28 000
Romania					
Electric furnace ferro-alloys—					
Ferro-chrome	* 36 000	* 39 000	* 42 000	* 45 000	* 44 000
Ferro-manganese	* 70 000	* 75 000	* 80 000	* 87 000	* 80 000
Ferro-silico-manganese	* 33 000	* 35 000	* 38 000	* 41 000	* 39 000
Ferro-silicon	* 42 000	* 45 000	* 48 000	* 52 000	* 50 000
Silicon metal	* 3 300	* 3 600	* 3 800	* 4 100	* 4 500

Production of Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Soviet Union					
Blast furnace ferro-alloys--					
Spiegeleisen	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Ferro-manganese	* 550 000	* 550 000	* 550 000	* 550 000	* 550 000
Electric furnace ferro-alloys--					
Ferro-chrome	* 400 000	* 415 000	* 415 000	* 420 000	* 420 000
Ferro-silico-chrome	* 10 000	* 10 000	* 12 000	* 12 000	* 12 000
Ferro-manganese	* 430 000	* 450 000	* 500 000	* 600 000	* 675 000
Ferro-silico-manganese	* 32 000	* 32 000	* 34 000	* 35 000	* 37 000
Ferro-silicon	* 650 000	* 680 000	* 720 000	* 750 000	* 750 000
Other ferro-alloys	* 209 000	* 225 000	* 230 000	* 230 000	* 230 000
Silicon metal	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Spain					
Electric furnace ferro-alloys--					
Ferro-chrome	17 605	17 066	9 348	* 14 000	* 17 000
Ferro-manganese	95 738	81 994	114 456	* 85 000	* 86 000
Ferro-silico-manganese	70 007	69 933	73 224	* 70 000	* 70 000
Ferro-silicon	85 559	62 847	50 460	* 60 000	* 61 000
Other ferro-alloys	5 362	5 283	5 000	* 1 000	* 4 000
Silicon metal	* 18 000	* 18 000	* 17 000	* 15 000	* 15 000
Sweden					
Electric furnace ferro-alloys--					
Ferro-chrome	145 716	116 724	119 491	134 028	123 600
Ferro-silico-chrome	22 516	19 954	18 377	30 633	* 20 000
Ferro-molybdenum	726	552	641	229	...
Ferro-silicon	18 619	14 177	19 406	23 278	* 20 000
Ferro-tungsten	377	365	121	...	...
Ferro-vanadium	129	8	—	—	...
Silicon metal	14 340	14 852	20 340	20 206	* 16 000
Switzerland					
Electric furnace ferro-alloys--					
Ferro-silicon	* 3 000	* 3 000	* 2 000	* 3 000	* 3 000
Silicon metal	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Turkey					
Electric furnace ferro-alloys--					
Ferro-chrome	40 775	39 862	30 175	48 081	* 48 000
Ferro-silicon	—	4 300	4 500	6 902	* 6 900
Yugoslavia					
Electric furnace ferro-alloys--					
Ferro-chrome	69 194	50 591	63 807	75 441	73 308
Ferro-silico-chrome	5 873	6 129	5 998	10 721	7 199
Ferro-manganese	51 126	38 895	39 677	47 375	36 108
Ferro-silico-manganese	28 600	20 286	26 254	37 214	43 374
Ferro-nickel	—	1 500	1 000	1 800	7 500
Ferro-silicon	80 201	70 888	78 014	94 075	91 702
Other ferro-alloys	1 072	2 497	9 216	2 684	* 3 400
Silicon metal	28 358	29 818	26 256	28 428	33 094
Egypt					
Electric furnace ferro-alloys--					
Ferro-silicon	* 5 000	* 6 000	* 6 000	* 7 500	* 7 500
South Africa					
Ferro-chrome	639 676	458 170	690 507	889 203	852 338
Ferro-silico-chrome	2	2 544	2 839	4 987	4 651
Ferro-manganese	441 680	366 080	166 591	236 930	331 302
Ferro-silico-manganese	145 172	141 485	107 211	143 981	237 864
Ferro-silicon	56 644	59 490	49 622	89 414	75 126
Other ferro-alloys	* 800	* 800	* 800	* 3 000	400
Silicon metal	24 219	25 109	27 332	34 775	35 830
Zimbabwe					
Electric furnace ferro-alloys--					
Ferro-chrome	192 110	189 737	148 178	170 259	* 180 000
Ferro-silico-chrome	32 692	25 692	27 542	30 878	* 43 000
Ferro-manganese	2 200	2 132	2 085	1 891	* 2 000

Production of Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Canada					
Electric furnace ferro-alloys—					
Ferro-manganese	* 109 000	* 138 000	* 107 000	* 116 000	* 118 000
Ferro-silicon	116 000	* 105 000	85 000	* 80 000	* 84 000
Other ferro-alloys	* 28 000	—	—	—	—
Silicon metal	28 000	* 27 000	25 000	* 25 000	* 25 000
Dominican Republic					
Electric furnace ferro-alloys—					
Ferro-nickel	49 970	14 375	52 278	63 966	66 831
Mexico					
Electric furnace ferro-alloys—					
Ferro-chrome	3 018	6 320	2 518	* 6 900	6 254
Ferro-silico-magnesium	1 953	1 196	1 348	1 736	* 1 000
Ferro-manganese	140 953	135 374	138 953	* 160 100	153 473
Ferro-silico-manganese	25 694	31 850	41 338	* 42 400	39 500
Ferro-silicon	22 682	24 111	23 892	* 23 100	27 718
Other ferro-alloys	166	109	84	274	294
USA					
Ferro-chrome	148 815	83 375	18 078	) (e) 86 546	(e) 100 000
Ferro-silico-chrome	(e) 56 659	(e) 24 839	(e) 14 942)	
Ferro-manganese	174 805	108 136	77 954	) (f) 155 246	(f) 140 000
Ferro-silico-manganese	157 182	62 475	...)	
Ferro-niobium	805	...	...	...	...
Ferro-phosphorus	73 071	55 835	68 032	82 660	(d)
Ferro-silicon	526 245	271 200	284 958	444 857	413 000
Other ferro-alloys (b)	124 873	67 788	128 854	89 820	128 000
Silicon metal	118 163	69 493	110 577	127 792	110 000
Argentina					
Electric furnace ferro-alloys—					
Ferro-manganese	25 451	30 586	28 724	28 016	18 786
Ferro-silico-manganese	12 780	15 679	13 523	* 14 000	* 16 000
Ferro-silicon	9 932	8 850	12 296	16 884	15 962
Other ferro-alloys	1 523	2 089	4 005	* 4 000	* 4 500
Brazil					
Electric furnace ferro-alloys—					
Ferro-calcium-silicon	7 481	9 657	7 400	17 755	(g)
Ferro-chrome	118 781	96 646	77 326	125 125	127 412
Ferro-silico-chrome	8 654	2 598	5 526	7 628	8 875
Ferro-manganese	107 872	122 898	103 271	106 459	134 870
Ferro-silico-manganese	142 743	162 648	178 266	185 631	180 271
Ferro-molybdenum	797	337	126	437	(d)
Ferro-nickel	10 744	10 597	25 991	33 659	33 473
Ferro-niobium	14 632	11 506	9 665	16 522	17 724
Ferro-phosphorus	346	1 122	1 211	926	(d)
Ferro-silicon	120 662	121 348	156 683	157 873)
Ferro-silico-magnesium	11 001	11 275	10 698	15 429	) 224 722
Ferro-titanium	499	430	166	551)
Ferro-vanadium	296	238	102	456	) 6 014
Other ferro-alloys	592	577	313	483)
Silicon metal	18 023	17 921	20 602	25 884	29 291
Chile					
Electric furnace ferro-alloys—					
Ferro-manganese	5 254	2 982	5 209	4 757	6 516
Ferro-silico-manganese	104	—	—	...	754
Ferro-molybdenum	656	1 456	1 712	2 211	* 2 000
Ferro-silicon	2 477	1 413	4 885	6 365	* 5 800
Colombia					
Ferro-nickel	—	* 5 600	* 35 500	* 44 500	* 29 800
Venezuela					
Ferro-manganese	1 518	* 2 000	* 2 000	* 2 000	* 2 000
Ferro-silico-manganese	9 002	* 9 000	* 9 000	* 9 000	* 7 000
Ferro-silicon	43 986	42 136	46 636	* 44 000	* 42 000
China					
Ferro-chrome	* 120 000	* 120 000	* 120 000	* 120 000	* 120 000
Ferro-manganese	* 526 000	* 472 000	* 490 000	* 490 000	* 490 000
Ferro-silicon	* 195 000	* 195 000	* 195 000	* 195 000	* 195 000
Other ferro-alloys	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Silicon metal	* 20 000	* 20 000	* 20 000	* 20 000	* 20 000

tonnes

Production of Ferro-alloys

Country	1981	1982	1983	1984	1985
India					
Electric furnace ferro-alloys--					
Ferro-chrome	31 903	40 540	34 911	26 280	31 426
Ferro-silico-chrome	4 339	4 468	1 675	4 096	12 215
Ferro-manganese	205 571	151 234	152 951	158 314	163 438
Ferro-silico-manganese	16 190	14 213	10 946	4 673	13 000
Ferro-silicon	60 354	36 060	52 448	52 931	39 478
Other ferro-alloys	775	427	271	284	145
Silicon metal	3 868	656	—	1 082	* 1 000
Indonesia					
Electric furnace ferro-alloys--					
Ferro-nickel	19 884	21 501	20 835	22 727	23 789
Japan					
Electric furnace ferro-alloys--					
Ferro-calcium-silicon	2 590	3 834	2 357	1 724	2 496
Ferro-chrome	306 104	328 480	304 053	323 930	349 496
Ferro-manganese	567 746	538 355	389 381	485 008	441 703
Ferro-silico-manganese	282 852	269 379	222 204	233 061	216 916
Ferro-molybdenum	3 056	3 413	3 104	3 299	3 143
Ferro-nickel	244 135	214 523	180 826	217 053	227 043
Ferro-niobium	825	1 039	530	1 031	1 072
Ferro-silicon	234 524	192 372	157 939	153 386	150 167
Ferro-tungsten	362	329	200	144	114
Ferro-vanadium	4 063	4 465	2 821	3 733	3 353
Other ferro-alloys	3 167	2 309	2 159	2 727	2 575
Silicon metal	11 906	9 760	—	—	—
Korea, Dem. P.R. of					
Ferro-manganese	* 70 000	* 70 000	* 70 000	* 70 000	* 70 000
Ferro-silicon	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Other ferro-alloys	* 20 000	* 20 000	* 20 000	* 20 000	* 20 000
Korea, Republic of					
Electric furnace ferro-alloys--					
Ferro-manganese	68 300	60 306	52 896	58 600	* 61 000
Ferro-silicon	32 000	32 478	32 489	35 300	* 35 000
Other ferro-alloys	27 185	33 240	43 824	50 215	* 55 000
Philippines					
Electric furnace ferro-alloys--					
Ferro-chrome	* 10 000	* 12 000	* 21 500	* 32 800	* 40 000
Ferro-silicon	* 26 000	* 29 000	* 20 000	* 18 500	* 19 500
Taiwan					
Electric furnace ferro-alloys--					
Ferro-manganese	19 175	18 665	21 763	19 803	18 508
Ferro-silico-manganese	14 376	21 311	18 509	23 082	22 688
Ferro-silicon	17 523	16 930	18 304	23 714	17 272
Thailand					
Electric furnace ferro-alloys--					
Ferro-manganese	369	—	—	—	—
Ferro-silicon	280	—	—	—	—
Australia (c)					
Electric furnace ferro-alloys--					
Ferro-manganese	67 563	54 717	53 463	75 600	69 000
Ferro-silico-manganese (60% Mn)	29 916	29 548	19 810	31 000	27 000
Ferro-silicon	18 313	19 678	18 669	18 800	* 18 000
New Caledonia					
Electric furnace ferro-alloys--					
Ferro-nickel	109 679	112 028	86 868	116 632	138 614

(a) Ti, W, Mo, V content

(b) Includes ferro-boron and other complex boron additive alloys, ferro-nickel, ferro-molybdenum, ferro-tungsten, ferro-vanadium, spiegeleisen, ferro-zirconium and other miscellaneous alloys

(c) Years ended 30 November of that stated

(d) Included with 'other ferro-alloys'

(e) Includes other chromium alloys and chromium metal

(f) Includes manganese metal

(g) Included with ferro-silicon

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Pig-iron	14 892	7 010	45 841	33 730	43 741
Sponge & powder	248	430	348	451	471
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	2 216	2 490	2 736	1 717	2 066
Ferro-chrome	1 927	678	2 609	642	2 421
Ferro-silico-chrome	—	64	93	45	—
Ferro-manganese	21 589	23 902	14 039	687	17 556
Ferro-silico-manganese	—	54	233	1 027	127
Ferro-molybdenum	1 206	1 214	1 876	3 561	4 274
Ferro-nickel	315	—	—	5	28
Ferro-niobium & ferro- niobium-tantalum	95	51	49	51	38
Ferro-silicon	2 889	1 173	1 699	1 223	2 016
Ferro-titanium & ferro- silico-titanium	4 355	4 084	4 864	4 965	7 059
Ferro-tungsten & ferro- silico-tungsten	—	19	130	192	167
Ferro-vanadium	94	69	164	163	241
Other ferro-alloys	2 566	2 760	1 893	2 646	2 685
Ingots, blooms, billets	192 979	281 884	573 939	480 382	741 919
Scrap (a)	3 367 288	3 052 322	3 793 721	4 317 011	4 535 868
Belgium-Luxembourg					
Pig-iron	8 574	4 176	2 419	3 479	4 254
Spiegeleisen	482	106	10	119	1 727
Sponge & powder	632	372	526	882	798
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	335	64	733	423	628
Ferro-chrome	3 858	1 960	3 909	2 913	1 338
Ferro-manganese	12 128	13 230	13 892	23 741	20 556
Ferro-silicon	4 633	4 270	2 627	877	368
Ferro-titanium & ferro- silico-titanium	1 861	1 774	984	1 289	1 424
Ferro-tungsten & ferro- silico-tungsten	16	—	0	165	184
Ferro-silico-manganese, ferro- molybdenum & ferro-vanadium	31 093	18 546	15 947	17 740	17 282
Other ferro-alloys	1 251	1 024	1 259	891	1 354
Ingots, blooms, billets	595 099	510 538	575 747	732 514	594 958
Scrap	578 482	497 550	681 748	773 706	736 458
Denmark					
Ingots, blooms, billets	158	5 521	2 778	11 624	8 988
Scrap	185 200	117 849	174 934	234 279	269 534
France					
Pig-iron	195 674	178 644	135 620	192 206	232 633
Spiegeleisen	633	565	952	233	834
Sponge & powder	88	210	927	350	312
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	1 126	1 040	1 712	2 241	841
Ferro-chrome	4 742	605	516	1 452	333
Ferro-silico-chrome	2 095	1 884	898	121	346
Ferro-manganese	383 596	177 151	282 508	314 111	238 966
Ferro-silico-manganese	11 507	5 657	6 530	21 551	18 352
Ferro-molybdenum	1 115	829	1 022	1 333	1 161
Ferro-nickel	48 611	45 034	48 464	56 408	55 671
Ferro-silicon	70 137	68 003	86 022	82 294	75 913
Ferro-silico-magnesium	4 914	5 045	6 271	8 263	7 154
Ferro-silico-zirconium	2 914	2 369	3 408	3 368	2 671
Ferro-titanium & ferro- silico-titanium	1 400	858	648	659	541
Ferro-tungsten & ferro- silico-tungsten	167	201	15	230	46
Ferro-vanadium	254	418	415	1 249	1 296
Other ferro-alloys	25 664	20 533	23 850	29 239	25 249
Ingots, blooms, billets	264 724	305 446	454 720	853 918	1 000 163
Scrap	3 184 185	3 082 180	3 227 103	4 104 316	3 962 158

Exports of Iron, Steel and Ferro-alloys

Country	1981	1982	1983	1984	1985
Germany, Federal Republic of					
Pig-iron	838 279	613 938	461 808	531 875	677 864
Spiegeleisen	1 834	1 346	1 280	98	182
Sponge & powder	80 765	204 114	72 531	40 189	35 847
Ferro-chrome	55 675	53 989	55 902	61 218	58 445
Ferro-silico-chrome	1 179	2 920	3 179	4 184	3 021
Ferro-manganese	48 876	32 975	48 197	96 692	66 108
Ferro-silico-manganese	7 832	5 729	5 134	4 380	3 682
Ferro-molybdenum	912	1 010	1 025	819	503
Ferro-nickel	555	50	274	1 034	2 023
Ferro-niobium	980	837	351	521	490
Ferro-silicon	60 956	59 192	59 052	79 569	69 445
Ferro-titanium & ferro-silico-titanium	881	507	263	340	463
Ferro-tungsten & ferro-silico-tungsten	187	184	238	222	16
Ferro-vanadium	2 470	1 973	2 329	1 440	2 245
Other ferro-alloys	11 302	5 759	8 596	11 297	10 832
Ingots, blooms, billets	1 288 265	1 078 234	1 068 748	1 798 815	1 963 995
Scrap	3 514 653	3 048 638	3 172 613	3 445 580	3 634 060
Greece					
Ferro-chrome	—	—	11 966	29 410	23 070
Ferro-nickel	49 350	19 852	33 583	77 149	89 542
Irish Republic					
Scrap	73 308	58 753	21 279	42 973	50 045
Italy					
Pig-iron	855	3 039	22 109	10 144	21 547
Sponge & powder	1 607	1 874	4 013	2 638	2 403
Ferro-chrome & ferro-silico-chrome	8 805	9 195	24 005	20 189	24 592
Ferro-manganese	672	2 818	1 411	319	303
Ferro-silico-manganese	8 382	3 027	5 383	11 561	2 677
Ferro-molybdenum	430	221	96	762	1 119
Ferro-silicon	6 626	4 361	6 965	14 004	16 783
Ferro-silico-magnesium	1 056	1 360	1 326	3 137	3 513
Ferro-titanium	1 241	969	1 520	1 732	1 656
Ferro-vanadium	65	58	4	47	179
Other ferro-alloys	2 041	2 503	2 309	3 905	2 426
Ingots, blooms, billets	243 745	345 524	318 500	330 034	350 443
Scrap	22 628	17 238	18 476	19 492	10 028
Netherlands					
Pig-iron	4 828	4 648	12 045	7 999	17 945
Sponge & powder	26	46	298	484	75
Ferro-chrome	18 243	13 990	3 308	4 087	1 714
Ferro-manganese	1 059	141	74	562	154
Ferro-silico-manganese	377	2 064	—	115	—
Ferro-molybdenum	103	14	145	83	289
Ferro-nickel	139	—	650	8	92
Ferro-silicon	2 391	1 234	5 176	13	230
Ferro-titanium & ferro-silico-titanium	60	—	0	132	875
Ferro-vanadium	19	—	33	—	1
Other ferro-alloys	196	223	200	71	167
Ingots, blooms, billets	986 573	615 084	856 475	1 315 698	1 285 172
Scrap	1 251 711	1 180 248	1 521 860	1 683 958	1 834 659
Albania					
Ferro-chrome (f)	* 32 700	* 25 700	* 25 900	* 26 400	* 8 500
Austria					
Pig-iron	—	100	26	64	1 074
Ferro-alloys	10 904	12 085	12 771	12 669	12 264
Ingots & blooms	11 200	11 304	15 792	39 499	38 293
Scrap	12 315	8 840	12 642	20 910	32 191
Bulgaria					
Pig-iron	34 000	16 000	38 000	263 000	79 000
Ferro-alloys	31 000	28 000	23 000	15 000	12 000
Ingots, blooms, billets (f)	* 111 900	* 107 500	* 107 700	* 218 100	* 219 700
Scrap	79 000	57 000	38 000	48 000	38 000

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Czechoslovakia					
Ferro-chrome (f)	* 6 000	* 6 300	* 5 600	* 3 900	* 2 800
Ferro-manganese (f)	* 22 800	* 14 300	* 15 700	* 12 500	* 15 400
Other ferro-alloys (f)	* 3 100	* 1 400	* 3 900	* 4 900	* 6 500
Blooms	308 000	294 000	270 000	437 000	468 000
Scrap (f)	* 103 200	* 97 200	* 124 400	* 185 600	* 140 100
Finland					
Pig-iron	275	114	57	717	1
Ferro-chrome & ferro-silico-chrome	25 459	22 705	18 483	7 677	56 311
Other ferro-alloys	1	2	41	6	—
Blooms & billets	206 019	139 922	118 775	(f)* 102 000	(f)* 111 000
Scrap	206	126	107	9 466	9 646
German Democratic Republic					
Pig-iron (f)	* 34 200	* 17 200	* 8 600	* 5 000	...
Ferro-silicon (f)	* 5 600	* 7 500	* 10 200	* 7 300	* 5 900
Other ferro-alloys (f)	* 2 400	* 2 700	* 1 800	* 400	* 400
Ingots, blooms, billets (f)	* 534 900	* 412 100	* 396 200	* 336 200	* 535 100
Scrap (f)	* 12 500	* 22 700	* 13 700	* 17 400	* 23 600
Hungary					
Pig-iron	—	—	4 810	20 922	—
Scrap	32 283	53 172	49 761	79 152	26 912
Iceland					
Ferro-silicon	32 082	42 174	49 238	57 252	56 845
Scrap	3 125	4 518	10 268	9 784	6 237
Malta					
Scrap	3 727	6 366	7 252	12 744	11 798
Norway					
Pig-iron	70 568	64 524	43 456	27 832	32 120
Ferro-chrome	10 540	9 515	6 632	601	—
Ferro-silico-chrome	948	1 173	732	349	—
Ferro-manganese	209 631	196 746	198 288	204 540	180 018
Ferro-silico-manganese	183 737	172 105	172 893	217 817	220 087
Ferro-silicon	271 438	287 766	347 911	427 489	376 486
Ferro-vanadium	420	288	9	—	0
Other ferro-alloys	8 324	6 822	12 069	10 842	11 273
Ingots, blooms, billets	227 655	192 602	233 956	199 137	143 727
Scrap	32 536	32 569	35 430	21 326	9 300
Poland					
Ingots, blooms, billets	17 000	27 000	154 000	160 000	83 000
Scrap	79 787	257 912	146 138	176 150	79 993
Portugal					
Pig-iron	41	792	1 229	29	...
Ferro-manganese	26 617	13 890	9 918	46 123	14 000
Ferro-silico-manganese	13 570	22 020	59 820	38 512)
Ferro-silicon	5 577	13 153	18 951	6 177	) 57 000
Ferro-tungsten	245	223	168	193)
Other ferro-alloys	—	—	1 220	—)
Scrap	4 734	9 167	9 710	9 177	16 000
Romania					
Pig-iron & ferro-alloys	* 10 400	* 2 900	* 2 900	* 17 000	* 9 000
Ingots, blooms, billets (f)	* 71 500	* 18 600	* 19 500	* 22 900	* 13 600
Scrap (f)	* 600	* 200	* 4 400	* 700	...
Soviet Union					
Pig-iron (f)	* 1 624 000	* 1 927 000	* 1 773 000	* 1 608 000	* 1 641 000
Ferro-chrome & ferro-silico-chrome (f)	* 20 800	* 22 800	* 27 100	* 21 600	* 20 900
Ferro-manganese & ferro-silico-manganese (f)	* 30 800	* 34 300	* 40 500	* 33 600	* 39 100
Ferro-silicon (f)	* 22 800	* 27 200	* 44 300	* 46 900	* 43 200
Ferro-titanium & ferro-silico-titanium (f)	* 1 100	* 1 600	* 1 600	* 2 600	* 2 300
Other ferro-alloys (f)	* 13 800	* 10 000	* 12 100	* 11 000	* 11 100
Ingots, blooms, billets (f)	* 118 200	* 182 600	* 381 800	* 337 700	* 307 400
Scrap	2 681 421	2 859 053	3 369 905	3 407 062	3 315 424

Exports of Iron, Steel and Ferro-alloys

Country	1981	1982	1983	1984	1985
Spain					
Pig-iron	18 950	—	5 605	927	30 127
Ferro-silico-aluminium, ferro-silico-mangano- aluminium & ferro-silico- aluminio-calcium	1 733	3 668	811	480	(c)
Ferro-chrome	8 927	8 179	4 332	14 538	(c)
Ferro-manganese	32 031	22 057	15 842	24 579	26 782
Ferro-silico-manganese	6 583	10 282	5 569	5 257	(c)
Ferro-molybdenum	291	269	638	956	(c)
Ferro-silicon	42 834	16 534	3 442	8 233	5 980
Ferro-titanium & ferro- silico-titanium	—	—	30	6	) 26 617
Other ferro-alloys	88	9	23	651)
Ingots, blooms, billets	475 400	576 417	623 465	549 563	1 079 954
Sweden					
Pig-iron	45 103	29 626	26 285	3 048	6 994
Sponge & powder	97 631	96 795	103 986	110 707	100 704
Ferro-chrome	105 676	80 576	105 736	95 793	103 121
Ferro-silico-chrome	182	1 037	362	2 279	2 226
Ferro-manganese	769	674	668	673	1 167
Ferro-silico-manganese	80	16	1	11	65
Ferro-molybdenum	794	413	737	193	101
Ferro-niobium	40	54	42	48	13
Ferro-silicon	15 160	6 533	18 990	20 564	21 416
Ferro-titanium	911	371	305	389	123
Ferro-tungsten	247	120	107	94	20
Ferro-vanadium	156	44	53	15	6
Other ferro-alloys	801	50	26	388	189
Ingots, blooms, billets	258 883	313 182	237 485	458 304	638 678
Scrap	14 351	18 341	20 317	21 667	21 630
Switzerland					
Pig-iron	789	701	501	659	227
Sponge & powder	463	493	444	558	574
Ferro-silicon	112	157	119	140	115
Other ferro-alloys	896	674	676	207	201
Ingots, blooms, billets	2 106	3 281	9 260	9 038	4 228
Scrap	128 334	105 915	149 484	106 296	100 135
Turkey					
Pig-iron	6 254	254	16 052	60 169	500
Ferro-chrome	27 850	37 457	32 803	53 350	* 53 000
Ingots, blooms, billets	718	2 486	65 727	185 725	535 672
Yugoslavia					
Pig-iron	22 674	7 441	3 258	118	14 486
Ferro-chrome	63 087	30 661	53 864	58 029	(c)
Ferro-manganese	21 304	12 165	10 946	12 109	7 650
Ferro-silico-manganese	17 847	11 709	16 620	28 645)
Ferro-silicon	61 583	43 569	46 783	59 095	) 148 584
Other ferro-alloys	1 157	—	1 290	3 818)
Ingots, blooms, billets	23 750	19 348	11 015	48 541	60 364
Scrap	59 229	63 342	70 384	141 732	173 416
Algeria					
Pig-iron	244 872	174 484	212 615	279 684	...
Scrap	43 402	56 148	55 388	82 881	...
Ivory Coast					
Scrap	18 434	16 025	26 477	24 931	25 286
Morocco					
Scrap	50 945	51 942	65 512	91 900	80 689
Senegal					
Scrap	14 291	11 179	12 685	7 478	...

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
South Africa					
Pig-iron (f)	* 104 400	* 89 000	* 75 600	* 122 300	* 399 700
Ferro-chrome	553 688	393 224	769 115	855 588	758 617
Ferro-manganese	467 148	394 827	306 538	334 559	458 165
Ferro-silicon	15 501	24 132	29 593	42 822	41 016
Other ferro-alloys	24 588	22 587	32 860	39 486	13 524
Ingots, blooms, billets (f)	* 46 300	* 159 500	* 196 200	* 144 400	* 367 500
Scrap (f)	* 1 600	* 4 700	* 46 400	* 46 800	* 67 200
Sudan					
Scrap	230	3 452	50	50	...
Tunisia					
Scrap	1 717	1 200	...	790	2 614
Zimbabwe					
Pig-iron	10 196	5 141	144	250	...
Ferro-chrome	188 329	163 919	228 395	185 908	...
Ferro-silico-chrome	22 051	18 704	18 316	23 577	...
Blooms & billets	207 827	252 525	214 370	184 134	...
Scrap	2 424	8 261	4 799	10 049	...
Canada					
Pig-iron	466 422	485 661	348 278	393 893	574 131
Sponge	123 282	29 065	36 974	45 715	36 395
Ferro-manganese	57 182	11 739	4 160	9 202	43 583
Ferro-silicon	52 455	40 860	45 728	35 299	33 224
Other ferro-alloys	6 333	5 129	5 188	5 202	10 668
of which: Re-exports	1 017	71	1 006	151	1 060
Ingots, blooms, billets	894 634	255 611	579 096	249 086	77 135
Scrap	577 756	627 773	866 932	763 574	878 202
Dominican Republic					
Ferro-nickel	49 073	14 161	53 825	62 361	67 893
Mexico					
Ferro-alloys	25 688	17 351	73 696	57 496	60 521
Scrap	1 970	19 741	5 123	15 445	16 699
Trinidad & Tobago					
Sponge	79 316	27 185	42 253	64 482	61 324
USA					
Pig-iron	19 186	50 268	6 441	54 645	33 475
Sponge & powder	16 581	12 818	13 005	13 487	9 822
Ferro-chrome & ferro-silico-chrome	13 906	4 900	6 111	15 217	10 506
Ferro-manganese	14 026	9 177	7 832	6 470	6 871
Ferro-silico-manganese	1 726	3 204	5 864	4 902	2 832
Ferro-molybdenum	257	123	78	295	601
Ferro-phosphorus	6 771	3 663	24 435	35 928	44 802
Ferro-silicon	14 379	13 281	12 565	26 661	11 801
Ferro-vanadium	394	308	705	425	423
Other ferro-alloys	5 890	5 996	5 318	25 080	14 048
Ingots, blooms, billets	505 588	331 774	107 451	72 700	85 010
Scrap (a)	5 927 684	6 215 378	6 844 187	8 643 090	9 032 434
Argentina					
Ingots, blooms, billets	186 432	133 698	2 995	1 743	...
Brazil					
Pig-iron	714 446	692 529	1 801 472	2 474 329	2 479 622
Ferro-chrome	67 330	51 770	38 048	53 880	60 285
Ferro-manganese	36 490	31 435	49 511	21 302	33 594
Ferro-nickel	1 800	1 529	15 494	11 175	9 871
Ferro-niobium	14 542	11 036	9 256	13 771	14 324
Ferro-silicon	68 800	64 518	111 846	89 874	127 371
Ferro-silico-spiegeleisen & silico-manganese	62 976	64 501	123 708	100 388	65 327
Other ferro-alloys	8 130	7 878	7 761	13 552	11 695
Ingots, blooms, billets	130 955	160 243	429 601	1 374 833	2 434 504
Chile					
Ferro-molybdenum (f)	* 200	* 700	* 500	* 300	* 500
Ferro-silicon (f)	* 1 200	* 100	* 700	* 2 600	* 1 500
Colombia					
Ferro-nickel	—	1 303	26 959	33 720	...

Exports of Iron, Steel and Ferro-alloys

Country	1981	1982	1983	1984	1985
Venezuela					
Sponge & powder	301 781	239 799	381 088	...	...
Ferro-silicon	2 484	43 707	67 130	...	...
Bahrain					
Scrap	160	4 439	7 450	20 951	33 100
Brunei					
Scrap	5 131	4 979	8 640	11 329	...
China					
Pig-iron (f)	* 987 400	* 1 086 800	* 61 800	* 3 300	* 2 000
Ferro-silicon (f)	* 56 400	* 38 600	* 17 500	* 3 900	* 1 500
Other ferro-alloys (f)	* 39 400	* 137 200	* 6 300	* 18 300	* 5 000
Ingots, blooms, billets (f)	* 233 000	* 197 900	* 12 200	* 1 500	* 200
Scrap (f)	* 146 500	* 103 400	* 36 700	* 23 500	* 18 500
Cyprus					
Scrap (Re-exports)	8 444	7 341	8 300	13 223	14 288
Hong Kong					
Pig-iron (Re-exports)	6 166	6 966	4 398	67	1 977
Ferro-manganese (Re-exports)	—	813	102	5 430	500
Ferro-silicon (Re-exports)	488	1 187	610	—	—
Other ferro-alloys (Re-exports)	1 150	200	162	114	563
Ingots, blooms, billets (Re-exports)	9 800	3 896	24 217	41 574	41 920
Scrap	364 360	296 651	329 556	300 067	319 137
India (d)					
Pig-iron	1 194	1 315	...	...	...
Ferro-chrome	10 501	7 539	...	...	...
Ferro-manganese	18 631	3 536	...	...	...
Ferro-silicon	2 999	2 000	...	...	...
Scrap	30 967	99 088	...	...	...
Indonesia					
Sponge & powder	82 041	117 080	119 941	69 557	...
Israel (b)					
Scrap	...	...	(f)* 4 100	(f)* 8 600	(f)* 4 900
Japan					
Pig-iron	1 510	49 333	332 386	276 749	1 066 307
Sponge & powder	3 847	3 208	4 150	6 798	9 318
Ferro-chrome	3 470	3 137	5 429	2 095	5 468
Ferro-manganese	34 866	26 683	22 202	22 822	25 988
Ferro-silico-manganese	1 158	583	107	93	170
Ferro-nickel	20 742	21 405	13 369	4 365	4 475
Ferro-silicon	2 199	1 042	1 135	1 199	913
Ferro-vanadium	84	132	168	122	10
Other ferro-alloys	1 318	975	1 479	2 276	2 067
Ingots, blooms, billets	117 990	132 527	129 722	136 026	323 693
Scrap	186 783	174 787	115 822	146 473	165 636
Korea, Dem. P.R. of					
Pig-iron (f)	* 67 100	* 60 500	* 31 500	* 67 700	* 69 500
Korea, Republic of					
Pig-iron	1 169 188	41 324	9 671	10 110	74
Ferro-manganese	—	—	701	338	30
Ferro-silico-manganese	—	—	1 241	350	—
Ferro-silicon	165	335	180	71	36
Other ferro-alloys	3	9	3 032	3 035	1 021
Ingots, blooms, billets	339 834	364 193	551 689	440 171	373 788
Scrap	25 109	140 608	284 597	135 288	74 006
Kuwait					
Scrap	24 691	18 394	69 571	...	...
Malaysia					
Scrap	11 843	6 450	12 724	20 180	21 530
Pakistan (e)					
Pig-iron	—	220 336	136 478	391 999	58 258
Philippines					
Ferro-silicon	25 582	28 364	22 827	20 856	22 428
Other ferro-alloys	5 686	4 219	28 656	45 414	50 379
Scrap	1 412	1 582	1 014	844	952
Saudi Arabia					
Scrap	52 193	28 680	62 228	89 836	...

Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Singapore					
Pig-iron	7 502	9 242	6 514	6 580	3 263
of which: Re-exports	7 490	9 229	6 485	6 557	3 227
Ferro-alloys	1 149	2 119	601	607	1 126
of which: Re-exports	1 137	2 102	587	603	1 072
Ingots & blooms	10 463	3 519	4 362	4 752	8 621
of which: Re-exports	1 997	2 528	3 549	3 783	3 790
Scrap	1 602	7 876	119 468	108 948	166 636
Taiwan					
Pig-iron	713	246	2 890	562	1 011
Ferro-manganese	2 028	3 175	785	191	111
Ferro-silicon	764	508	515	2 211	861
Other ferro-alloys	5 790	3 088	5 022	3 450	1 717
Ingots, blooms, billets	204 568	294 275	250 617	107 725	104 780
Scrap	128 251	402 215	279 854	202 414	388 225
Thailand					
Scrap	1 373	7 850	1 712	3 548	3 575
Australia					
Pig-iron	158 262	101 399	468 621	70 665	27 000
Ferro-alloys	39 715	36 178	50 747	46 496	* 92 000
Ingots, blooms, billets	378 418	217 714	383 663	293 622	566 000
Scrap	665 067	749 106	493 257	410 397	...
Fiji					
Scrap	1 883	1 132	857	1 810	717
of which: Re-exports	1 164	—	429	648	359
New Caledonia					
Ferro-nickel	109 300	107 100	91 600	123 100	142 000
New Zealand (e)					
Ingots, blooms, billets	13 620	48 455	36 176	42 380	38 781
Scrap	2 152	2 759	2 206	3 113	3 061

Note: In this table the term 'ingots, blooms, billets' corresponds to items 672.4 and 5 of the Standard International Trade Classification (Revision 2) which includes those of alloy and high carbon steel

- (a) Excluding ships intended for breaking up
- (b) Figures may be incomplete as value only given in Israeli trade return for exports to some countries
- (c) Included with 'other ferro-alloys'
- (d) Years ended 31 March following that stated
- (e) Years ended 30 June of that stated
- (f) BGS estimates, based on known imports into certain countries

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Pig-iron	110 682	125 066	91 188	86 804	101 216
Sponge & powder	16 137	39 062	13 054	13 975	13 620
Ferro-chrome	62 901	72 198	86 660	68 086	77 082
Ferro-silico-chrome	104	102	437	—	1 063
Ferro-manganese	56 443	58 031	99 436	37 625	44 553
Ferro-silico-manganese	22 307	31 107	28 934	28 062	29 401
Ferro-molybdenum	825	608	383	403	374
Ferro-nickel	6 128	9 564	9 187	16 437	17 270
Ferro-niobium	756	719	459	731	864
Ferro-silicon	75 454	75 484	69 735	81 754	84 669
Ferro-titanium & ferro-silico-titanium	58	173	494	992	799
Ferro-tungsten & ferro-silico-tungsten	83	103	23	41	86
Ferro-vanadium	868	593	636	827	655
Other ferro-alloys	9 800	9 575	11 795	10 663	9 576
Ingots, blooms, billets	332 563	290 627	239 418	273 399	250 382
Scrap (a)	20 866	37 335	11 231	33 809	51 020
Belgium-Luxembourg					
Pig-iron	91 522	90 715	46 835	94 478	113 020
Spiegeleisen	166	259	686	579	1 171
Sponge & powder	1 595	2 618	1 545	2 733	1 914
Ferro-aluminium, ferro-silico-aluminium & ferro-silico-mangano-aluminium	1 239	949	1 238	892	464
Ferro-chrome	25 474	26 231	35 337	44 974	49 686
Ferro-silico-chrome	1 527	1 229	1 909	3 189	3 157
Ferro-manganese	91 262	54 012	53 479	52 460	56 037
Ferro-silico-manganese	19 956	19 609	21 326	35 439	30 594
Ferro-molybdenum	446	254	312	298	591
Ferro-nickel	3 226	3 316	6 407	6 322	7 239
Ferro-silicon	38 202	33 831	33 056	29 170	30 947
Ferro-titanium & ferro-silico-titanium	225	257	437	494	608
Ferro-tungsten & ferro-silico-tungsten	21	7	4	4	7
Ferro-vanadium	125	60	172	226	120
Other ferro-alloys	1 679	1 127	5 850	2 779	3 296
Ingots, blooms, billets	443 720	333 864	376 975	629 469	548 315
Scrap	955 711	887 439	1 045 214	1 672 749	1 489 540
Denmark					
Pig-iron	48 574	62 825	29 275	35 777	58 763
Sponge & powder	484	503	592	4 031	861
Ferro-aluminium, ferro-silico-aluminium & ferro-silico-mangano-aluminium	1 473	1 618	158	1 035	811
Ferro-chrome & ferro-silico-chrome	380	370	840	249	144
Ferro-manganese	3 708	3 091	1 968	2 707	2 042
Ferro-silico-manganese	1 891	2 892	2 911	3 540	4 002
Ferro-molybdenum	20	13	18	14	17
Ferro-silicon	3 114	3 500	3 250	3 140	2 774
Other ferro-alloys	112	98	104	132	160
Ingots, blooms, billets	65 271	6 347	3 153	8 781	81 510
Scrap	180 402	87 494	67 523	131 692	47 734

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
France					
Pig-iron	405 921	370 359	364 216	413 009	479 925
Spiegeleisen	56	1 080	1 094	340	366
Sponge & powder	21 208	16 913	71 650	11 298	11 527
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	62	123	177	14	270
Ferro-chrome	113 284	119 203	113 135	154 506	160 070
Ferro-silico-chrome	157	1 635	1 030	849	493
Ferro-manganese	33 820	29 374	22 722	40 990	35 479
Ferro-silico-manganese	34 275	30 942	27 144	41 018	39 064
Ferro-molybdenum	1 630	1 269	1 445	1 367	1 513
Ferro-nickel	83 279	73 555	76 983	93 980	106 699
Ferro-silicon	28 720	29 075	26 420	35 238	38 524
Ferro-silico-magnesium	191	164	206	665	858
Ferro-titanium & ferro- silico-titanium	436	817	894	1 458	1 578
Ferro-tungsten & ferro- silico-tungsten	90	166	208	335	454
Ferro-vanadium	683	636	408	625	760
Other ferro-alloys	1 710	1 340	1 152	2 670	3 097
Ingots, blooms, billets	627 367	830 860	677 192	805 794	652 133
Scrap	347 699	273 681	307 305	407 253	461 411
Germany, Federal Republic of					
Pig-iron	221 784	223 125	180 874	213 032	218 013
Spiegeleisen	—	—	—	—	89
Sponge & powder	17 345	19 107	19 374	21 239	19 260
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	210	268	148	502	190
Ferro-chrome	148 161	221 879	297 662	244 644	287 300
Ferro-silico-chrome	12 870	7 570	5 753	12 520	17 793
Ferro-manganese	103 111	96 809	98 242	87 111	129 855
Ferro-silico-manganese	121 177	110 704	115 360	122 635	123 253
Ferro-molybdenum	5 111	4 317	4 583	5 401	5 795
Ferro-nickel	64 805	33 358	73 107	99 327	101 491
Ferro-niobium	3 172	2 836	2 405	3 363	2 947
Ferro-silicon	146 695	198 505	195 001	241 656	220 079
Ferro-titanium & ferro- silico-titanium	3 199	3 359	3 085	3 533	3 717
Ferro-tungsten & ferro- silico-tungsten	411	228	147	532	819
Ferro-vanadium	1 698	1 577	1 682	2 644	2 754
Other ferro-alloys	6 714	4 299	5 756	5 755	8 531
Ingots, blooms, billets	1 047 576	792 844	839 718	1 068 611	1 327 219
Scrap	1 344 405	1 296 896	1 300 364	1 766 682	1 619 550
Greece					
Pig-iron	16 164	13 953	14 826	3 015	—
Ferro-manganese	2 628	4 551	1 563	2 598	6 115
Ferro-silico-manganese	4 478	8 172	4 271	5 924	...
Ferro-silicon	3 891	2 424	1 737	2 812	2 809
Other ferro-alloys	265	324	326	322	352
Ingots, blooms, billets	32 939	119 678	708 011	537 586	437 259
Scrap	288 110	432 021	516 525	325 218	346 651
Irish Republic					
Pig-iron	809	768	263	600	574
Ferro-alloys	1 038	827	2 186	2 188	2 662
Ingots, blooms, billets	1 521	861	369	557	780
Scrap	3 845	2 424	70 309	87 580	135 912

Imports of Iron, Steel and Ferro-alloys

Country	1981	1982	1983	1984	1985
Italy					
Pig-iron	282 477	346 595	270 644	310 388	265 842
Spiegeleisen	2 101	880	615	2 777	485
Sponge & powder	52 025	53 991	34 544	75 591	46 786
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	1 284	1 847	1 799	1 844	1 129
Ferro-chrome	73 434	85 215	66 973	106 703	97 833
Ferro-silico-chrome	1 960	2 497	1 273	518	1 114
Ferro-silico-magnesium	1 591	933	1 107	1 242	1 357
Ferro-manganese	99 488	114 113	64 719	115 780	81 824
Ferro-silico-manganese	28 784	34 701	24 914	27 968	27 008
Ferro-molybdenum	798	1 355	1 307	1 248	1 500
Ferro-nickel	11 671	15 331	13 375	16 134	22 085
Ferro-niobium	2 101	2 483	1 622	2 348	1 912
Ferro-silicon	55 103	54 864	46 135	65 506	48 133
Ferro-titanium & ferro- silico-titanium	591	630	408	1 064	780
Ferro-tungsten & ferro- silico-tungsten	80	48	71	97	95
Ferro-vanadium	622	691	753	816	916
Other ferro-alloys	762	1 961	690	1 593	1 280
Ingots, blooms, billets	590 182	611 994	515 606	533 576	1 090 573
Scrap	5 540 156	5 571 390	4 446 092	5 487 097	5 777 199
Netherlands					
Pig-iron	32 322	34 620	29 601	44 078	41 628
Sponge & powder	3 066	3 270	2 832	3 562	2 322
Ferro-aluminium, ferro-silico- aluminium & ferro-silico- mangano-aluminium	22	92	87	82	144
Ferro-chrome	19 889	16 206	3 406	5 523	2 798
Ferro-silico-chrome	99	43	66	57	61
Ferro-manganese	16 902	18 916	12 065	26 629	22 664
Ferro-silico-manganese	3 606	7 463	3 758	6 656	5 737
Ferro-molybdenum	126	47	147	122	502
Ferro-nickel	64	103	1 148	890	86
Ferro-silicon	7 884	6 609	8 683	5 203	5 063
Ferro-titanium & ferro- silico-titanium	159	74	72	241	977
Ferro-tungsten & ferro- silico-tungsten	12	1	17	1	72
Ferro-vanadium	43	84	80	75	72
Other ferro-alloys	459	878	602	541	770
Ingots, blooms, billets	116 990	286 994	185 512	220 102	156 445
Scrap	236 817	221 641	363 764	479 712	586 431
Albania					
Ferro-alloys (g)	* 4 600	* 1 800	* 1 100	* 1 600	* 600
Austria					
Pig-iron	77 097	69 481	32 630	43 839	47 179
Sponge & powder	3 447	6 607	3 903	5 403	5 204
Ferro-chrome	16 827	23 625	18 524	25 904	20 677
Ferro-manganese	21 804	24 467	22 710	25 430	22 779
Ferro-molybdenum	31	59	67	63	109
Ferro-nickel	(d)	(d)	3 337	4 580	3 305
Ferro-niobium & ferro- niobio-tantalum	336	346	271	292	299
Ferro-silicon	13 368	14 413	13 670	14 726	16 215
Ferro-titanium	506	502	491	479	766
Ferro-tungsten	98	8	6	253	106
Ferro-vanadium	170	157	174	33	129
Other ferro-alloys	10 220	8 075	4 477	8 409	10 142
Ingots & blooms	108 583	81 100	59 246	72 248	75 936
Scrap	169 751	380 562	218 822	363 084	239 048
Bulgaria					
Pig-iron	434 601	399 488	407 482	664 573	411 000
Ingots, blooms, billets	* 708 000	* 675 000	* 570 000	* 451 000	* 392 000

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Czechoslovakia					
Pig-iron	843 000	901 000	780 000	745 000	869 000
Ferro-chrome & ferro-silico-chrome (g)	* 6 300	* 1 100	* 1 200	* 1 200	* 3 200
Ferro-titanium & ferro-silico-titanium (g)	* 2 300	* 1 600	* 1 300	* 800	* 1 200
Ingots, blooms, billets	17 000	16 000	22 000	154 000	318 000
Scrap (g)	* 252 000	* 74 000	* 156 000	* 84 000	* 44 000
Finland					
Pig-iron	19 727	17 823	9 589	6 729	15 317
Sponge & powder	1 737	1 336	1 090	880	953
Ferro-chrome & ferro-silico-chrome	2 592	1 233	1 387	6 339	1 443
Ferro-manganese	3 606	5 465	3 779	5 825	4 293
Ferro-silico-manganese	13 873	17 999	15 776	17 291	21 690
Ferro-molybdenum	287	186	163	345	692
Ferro-silicon	9 195	8 838	7 442	10 198	7 138
Ferro-titanium	272	178	173	248	399
Ferro-vanadium	104	76	55	84	105
Other ferro-alloys	7 210	8 999	12 255	21 342	18 152
Ingots, blooms, billets	5 241	4 970	7 174	6 891	10 689
Scrap	62 095	50 594	37 293	32 516	113 350
German Democratic Republic					
Pig-iron	646 500	821 400	834 800	863 900	1 090 500
Ferro-alloys	74 000	78 000	68 000	78 000	88 000
Ingots, blooms, billets	...	...	282 000	172 000	111 000
Scrap	693 000	455 000	672 000	1 035 000	886 000
Hungary					
Pig-iron	289 546	234 024	293 562	279 461	272 413
Ferro-chrome	6 547	7 540	9 098	8 801	10 390
Ferro-manganese	44 431	45 008	39 980	37 794	44 951
Ferro-molybdenum	548	227	407	255	261
Ferro-silicon	6 863	7 783	6 654	6 373	6 742
Other ferro-alloys	15 237	12 120	13 186	12 564	14 799
Ingots, blooms, billets	2 956	702	—	5 602	—
Scrap	144 000	14 188	28 347	20 084	14 000
Malta					
Ingots, blooms, billets	3 734	5 852	6 755	7 804	6 044
Norway					
Pig-iron	11 712	7 611	5 641	5 859	5 458
Ferro-silicon	2 460	2 961	5 261	553	1 512
Other ferro-alloys	646	237	428	732	1 313
Ingots, blooms, billets	3 392	9 800	5 593	826	5 708
Scrap	23 571	4 950	15 140	12 888	10 831
Poland					
Pig-iron & ferro-alloys	1 545 215	1 377 391	1 232 283	1 271 515	1 411 338
Ingots, blooms, billets	15 000	185 000	166 000	19 000	13 000
Scrap	51 339	4 494	3 668	5 543	3 786
Portugal					
Pig-iron	12 260	13 865	8 858	7 421	...
Ferro-manganese	111	160	105	94)
Ferro-silico-manganese	41	41	10	8)
Ferro-silicon	679	657	205	643	) 1 000
Other ferro-alloys	543	660	255	487)
Ingots, blooms, billets	59 811	204 929	46 968	11 099	3 000
Scrap	91 781	124 826	106 203	120 120	105 000
Romania					
Pig-iron	285 900	285 400	212 800	165 000	117 000
Ferro-alloys	148 900	163 700	148 700	152 000	152 000
Ingots, blooms, billets	155 000	141 000	391 000	218 000	281 000
Soviet Union					
Pig-iron (g)	* 196 000	* 95 600	...	* 64 200	...
Sponge & powder (g)	* 4 800	* 4 500	* 5 600	* 4 000	* 3 400
Ferro-silicon (g)	* 2 700	* 2 800	* 3 100	* 2 500	* 3 400
Other ferro-alloys (g)	* 850	* 850	* 400	* 1 700	* 800

tonnes

Imports of Iron, Steel and Ferro-alloys

Country	1981	1982	1983	1984	1985
Spain					
Pig-iron	41 502	103 748	100 513	54 530	86 819
Sponge & powder	117 548	97 515	116 341	81 010	88 047
Ferro-aluminium & ferro-silico-aluminium	1	27	37	315)
Ferro-chrome	21 442	29 634	35 606	52 294	) (d)
Ferro-silico-chrome	1 271	2 394	1 679	2 368)
Ferro-manganese	508	1 444	1 893	1 045	1 260
Ferro-silico-manganese	104	405	2 000	1 601)
Ferro-molybdenum	78	133	110	67	) (d)
Ferro-nickel	3 563	4 296	6 028	8 690)
Ferro-silicon	3 259	2 650	2 684	2 750	5 300
Ferro-titanium & ferro-silico-titanium	138	191	172	159)
Ferro-tungsten & ferro-silico-tungsten	93	10	21	17	) 61 377
Ferro-vanadium	253	189	112	79)
Other ferro-alloys	1 887	2 695	3 095	2 699)
Ingots, blooms, billets	158 971	115 322	51 946	130 402	162 164
Scrap	3 894 493	4 536 095	4 538 232	5 020 310	6 146 301
Sweden					
Pig-iron	36 902	58 159	38 042	38 593	46 772
Sponge & powder	1 441	1 250	842	375	901
Ferro-chrome	23 246	39 819	36 007	47 653	52 006
Ferro-silico-chrome	634	2 396	1 344	1 450	1 645
Ferro-manganese	33 071	29 139	28 744	31 588	28 406
Ferro-silico-manganese	9 956	12 109	12 085	12 241	15 696
Ferro-molybdenum	1 199	1 243	1 091	1 624	1 377
Ferro-nickel	12 426	9 619	12 875	22 056	7 317
Ferro-niobium	214	255	253	280	212
Ferro-silicon	24 186	21 802	23 757	27 834	21 251
Ferro-titanium	1 130	1 740	1 226	1 308	1 059
Ferro-tungsten	398	112	44	301	639
Ferro-vanadium	781	876	733	955	1 057
Other ferro-alloys	524	687	727	982	743
Ingots, blooms, billets	105 464	115 663	100 276	79 643	35 031
Scrap	244 585	529 095	450 132	840 314	884 889
Switzerland					
Pig-iron	64 686	73 690	72 248	71 123	63 011
Sponge & powder	15 447	4 617	4 295	5 113	3 785
Ferro-aluminium	204	206	338	286	301
Ferro-silicon	5 538	4 726	5 954	8 049	7 219
Other ferro-alloys	11 271	11 744	12 854	17 269	15 003
Ingots, blooms, billets	42 034	32 512	63 226	93 993	80 443
Scrap	113 138	106 433	146 802	272 801	239 933
Turkey					
Pig-iron	22 663	50 889	66 937	42 831	139 226
Ferro-manganese	18 846	29 640	20 905	25 619	25 647
Ferro-silicon	9 530	57 765	12 636	11 379	12 099
Other ferro-alloys	835	3 509	9 004	15 300	20 478
Ingots, blooms, billets	199 562	209 459	705 911	1 210 309	1 669 677
Scrap	525 054	748 280	1 073 575	1 038 108	1 147 622
Yugoslavia					
Pig-iron	70 917	82 286	61 323	64 129	55 000
Sponge & powder	26 929	15 989	2 188	2 124	1 981
Ferro-chrome	118	113	917	763	(d)
Ferro-manganese	539	425	2 482	1 754	1 563
Ferro-molybdenum	522	719	600	1 022)
Ferro-phosphorus	625	291	120	567)
Ferro-silicon	1 556	1 194	2 084	1 657	) 6 528
Ferro-tungsten	120	80	162	64)
Ferro-vanadium	287	313	354	250)
Other ferro-alloys	2 208	2 135	2 090	1 785)
Ingots, blooms, billets	439 896	318 341	472 994	488 202	438 612
Scrap	479 327	507 770	738 095	781 453	728 581

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Algeria					
Pig-iron	19 284	9 798	12 209	25 833	...
Ferro-chrome	321	644	551	516	...
Ferro-manganese	1 800	8 681	919	8 572	...
Ferro-silico-manganese	276	437	870	122	...
Ferro-phosphorus	254	475	347	85	...
Ferro-silicon	1 636	6 038	3 902	7 118	...
Ferro-vanadium	20	179	150	50	...
Other ferro-alloys	187	343	264	457	...
Ingots, blooms, billets	228 347	197 550	27 352	2 725	...
Cameroon					
Ingots & blooms	...	40 471	...	...	...
Egypt					
Pig-iron & spiegeleisen	30 706	33 677	43 004	...	...
Ferro-alloys	1 894	6 810	3 364	...	...
Ingots & billets	12 699	16 108	821	...	...
Scrap	13 804	12 259	2 140	...	...
Ethiopia					
Ingots, blooms, billets	7 844	13 173	4 739	1 789	...
Scrap	...	572	462	640	...
Ghana					
Scrap	2 011	...	...	...	...
Ivory Coast					
Ingots, blooms, billets	4 503	...	1 005	269	530
Kenya					
Pig-iron & ferro-alloys	720	3 541	348	1 024	...
Ingots & blooms	10 966	14 145	9 587	24 714	...
Liberia					
Pig-iron	1 407	...	12 996	4 843	8 190
Libya					
Pig-iron & ferro-alloys (c)	18 933	195	...	...	...
Ingots, blooms, billets	20 364	8 356	...	...	...
Mauritius					
Pig-iron & ingots	11 781	5 440	10 869	...	...
Morocco					
Pig-iron	1 281	2 291	2 147	2 764	1 146
Ferro-chrome	82	21	99	68	55
Ferro-manganese	177	189	206	133	125
Ferro-silico-manganese	20	26	30	20	5
Ferro-silicon	73	116	176	126	210
Ingots, blooms, billets	12 233	17 596	26 108	177 746	299 517
Scrap	1 703	2 683	2 298	896	2 167
Nigeria					
Pig-iron & spiegeleisen	30 635	6 833	...	367	92
Ferro-manganese	5 061	11 107	...	841	2 986
Other ferro-alloys	5 719	3 439	...	1 912	7 403
Ingots & blooms	115 525	249 893	...	51 988	191 567
South Africa					
Pig-iron	18 901	7 231	323	236	64
Sponge & powder	2 583	2 016	2 182	1 926	1 262
Ferro-chrome	6 027	7 626	8 088	5 630	5 081
Ferro-silicon	2 601	1 955	932	511	20
Other ferro-alloys	1 268	931	1 251	2 556	2 808
Ingots & blooms	14 526	39 064	50 299	45 513	22 984
Scrap	12 462	27 462	7 274	55 548	7 190
Sudan					
Ingots, blooms, billets	3 965	3 263	7 967	794	...
Tanzania					
Pig-iron & ferro-alloys	1 307	769	1 325	...	...
Ingots & blooms	8 357	...	2 861	...	...
Tunisia					
Pig-iron	...	1 274	...	1 753	1 552
Ferro-alloys	...	1 116	...	1 524	726
Ingots, blooms, billets	10 116	70 020	...	15 292	37 696
Scrap	992	5 303	...	—	2 695
Zaire					
Ferro-alloys	417	452	471	251	...

Imports of Iron, Steel and Ferro-alloys

Country	1981	1982	1983	1984	1985
Zimbabwe					
Ferro-chrome	2 249	582	1 838	1 933	...
Ferro-manganese	1 994	2 600	1 892	893	...
Other ferro-alloys	365	216	1 597	323	...
Canada					
Pig-iron	6 965	2 262	4 856	5 269	10 080
Sponge & powder	9 770	6 257	6 614	8 151	7 317
Ferro-chrome	31 579	21 785	32 565	33 091	28 269
Ferro-manganese & spiegeleisen	36 656	25 088	18 263	29 805	27 489
Ferro-silico-manganese & silico-spiegeleisen	12 669	2 877	416	6 830	6 601
Ferro-silicon	18 630	9 860	13 090	24 777	12 077
Ferro-tungsten	5	5	2	5	1
Ferro-vanadium	562	241	172	245	189
Other ferro-alloys	17 804	4 806	7 057	11 810	11 334
Ingots, blooms, billets	167 067	16 322	37 161	184 183	144 671
Scrap	835 070	454 403	665 853	1 131 024	881 567
Costa Rica					
Ingots, blooms, billets	17 433	21 134	25 593	45 933	44 332
Cuba					
Pig-iron	162 218	164 296	182 213	224 611	...
Dominican Republic					
Ferro-alloys	660	112	...	...	...
Ingots, blooms, billets	307	57 864	51 377	...	...
Scrap	27 048	565	1 232	...	...
El Salvador					
Ingots, blooms, billets	182	747	2 000	15 655	...
Scrap	7 660	233	186	4 662	...
Guatemala					
Ingots, blooms, billets	28 231	19 075	12 461	22 144	25 416
Haiti (i)					
Ingots, blooms, billets	19 553	5 915	...	...	...
Honduras					
Ingots & blooms	1 607	324	4 773	...	...
Jamaica					
Ingots & blooms	7 655	5 689	7 553	3 596	1 332
Mexico					
Pig-iron	147 927	41 225	2 234	7 190	16 746
Sponge & powder	3 708	1 883	1 678	1 944	2 810
Ferro-alloys	28 293	4 800	1 531	7 603	4 877
Ingots, blooms, billets	403 284	89 299	71 060	258 356	163 076
Scrap	213 560	420 903	616 692	631 182	645 025
Nicaragua					
Ingots, blooms, billets	7 645	13 269	25 517	...	...
Panama					
Ingots, blooms, billets	21 337	14 657	13 330	10 288	16 091
Trinidad & Tobago					
Ingots, blooms, billets	8 094	11	37	16 434	872
USA					
Pig-iron	392 823	296 198	220 549	639 706	317 421
Spiegeleisen	3 169	39	142	199	245
Sponge & powder	66 406	45 792	122 761	159 113	93 928
Ferro-chrome	403 801	129 741	243 717	386 287	300 337
Ferro-silico-chrome	15 511	2 690	1 305	7 205	3 574
Ferro-manganese	614 986	428 753	308 391	371 320	332 823
Ferro-silico-manganese	122 853	56 821	126 343	125 640	150 160
Ferro-molybdenum	533	778	473	946	646
Ferro-nickel	63 370	19 369	38 753	39 052	33 138
Ferro-niobium	4 234	2 183	1 772	3 031	3 279
Ferro-silicon	137 863	70 873	144 353	130 318	140 996
Ferro-titanium & ferro-silico-titanium	397	121	798	525	438
Ferro-tungsten & ferro-silico-tungsten	185	86	60	357	118
Ferro-vanadium	1 121	776	767	1 315	876
Ferro-zirconium	810	981	570	689	571
Ingots, blooms, billets	721 262	650 078	746 144	1 375 079	1 481 199
Scrap	507 770	429 207	578 672	518 919	545 581

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Argentina					
Pig-iron	10 101	121 792	205 482	176 771	32 000
Ferro-chrome	1 711	2 390	2 813	(d)	...
Ferro-manganese	620	269	805	543	...
Ferro-molybdenum	58	6	114	(d)	...
Ferro-silicon	441	—	—	112	...
Ferro-titanium	87	21	60	) 4 303	...
Other ferro-alloys	714	1 153	891)	...
Blooms & billets	93 138	55 900	85 658	265 950	...
Scrap	2 168	1 807	7 220	1 530	...
Brazil					
Sponge & powder	80 672	57 931	4 736	4 226	...
Ferro-chrome	564	881	292	197	...
Ferro-silico-chrome	224	255	181	—	...
Ferro-silicon	862	8	6	61	...
Other ferro-alloys	4 516	83	41	67	...
Ingots, blooms, billets	291 728	190 184	48	—	...
Scrap	6 828	7 185	0	30 506	...
Chile					
Scrap (g)	* 10 200	* 10 200	* 25 600	* 23 300	* 20 800
Colombia					
Ferro-chrome	466	189	184	261	...
Ferro-manganese	2 500	2 500	2 332	8 009	...
Ferro-silico-manganese	620	1 462	405	1 331	...
Ferro-silicon	1 676	1 506	2 181	1 732	...
Other ferro-alloys	163	434	332	379	...
Ingots, blooms, billets	37 279	26 507	11 872	18 748	...
Scrap	29 968	26 982	46 199	43 587	...
Ecuador					
Ingots, blooms, billets	42 419	137 216	...	...	...
Peru					
Ferro-chrome	144	146	127	...	...
Ferro-manganese	1 758	2 087	3 241	...	...
Ferro-silico-manganese	67	1 031	—	...	...
Ferro-silicon	733	354	1 194	...	...
Ingots, blooms, billets	26 130	6 662	9 209	...	...
Scrap	7 046	16 236	166	...	...
Suriname					
Ferro-alloys	8 614	8 483	...	...	...
Ingots, blooms, billets	6 985	6 874	...	...	...
Scrap	8 575	6 705	...	...	...
Uruguay					
Ferro-alloys	143	249	472	843	634
Ingots, blooms, billets	32 903	16 593	948	6 800	450
Venezuela					
Ferro-manganese	16 497	19 059	20 430	...	...
Ferro-silico-manganese	) 4 272	2 420	3	...	...
Ferro-silicon	) 4 272	20	26	...	...
Other ferro-alloys	) 89 524	549	905	...	...
Ingots, blooms, billets	89 524	112 915	...	...	...
Scrap	50 328	20 491	18 581	...	...
Bahrain					
Blooms & billets	19 206	44 090	57 892	60 411	52 011
China					
Pig-iron (g)	* 85 400	...	* 688 900	* 1 019 200	* 2 524 900
Ferro-alloys (g)	* 1 300	...	* 20 000	* 18 500	* 7 600
Ingots, blooms, billets	133 000	210 000	260 469	658 159	1 979 454
Scrap (g)	* 2 100	* 2 200	* 1 300	* 67 800	* 146 400
Cyprus					
Pig-iron	1 000	500	1 334	356	1 740
Hong Kong					
Pig-iron	22 509	12 425	12 028	5 635	4 471
Ferro-manganese	511	1 976	563	6 326	1 848
Ferro-silicon	854	1 750	1 259	1 067	1 690
Other ferro-alloys	2 180	1 864	1 240	1 547	1 670
Ingots, blooms, billets	127 018	91 326	72 371	147 722	128 827
Scrap	94 411	64 112	26 883	27 748	20 093

Imports of Iron, Steel and Ferro-alloys

Country	1981	1982	1983	1984	1985
India (e)					
Pig-iron	252 172	503 762	204 000	200 000	* 200 000
Ferro-chrome & ferro-silico-chrome	2 710	11 344	...	...	...
Ferro-manganese & ferro-silico-manganese	327	483	...	...	...
Ferro-molybdenum	138	99	...	...	...
Ferro-nickel	1 893	5 923	...	...	...
Ferro-phosphorus	54	206	...	...	...
Ferro-silicon	614	1 939	...	...	...
Other ferro-alloys	5 284	653	...	...	...
Ingots, blooms, billets	237 886	41 940	...	...	...
Scrap	620 842	518 659	804 000	800 000	* 1 000 000
Indonesia					
Pig-iron	73 157	83 249	86 587	94 910	...
Ferro-manganese	2 744	5 680	7 437	20 727	...
Ferro-silicon	3 360	7 335	8 444	7 769	...
Other ferro-alloys	126	501	1 471	2 170	...
Ingots, blooms, billets	496 556	220 468	157 487	118 883	...
Scrap	62 693	226 894	257 890	243 121	* 250 000
Iran (f)					
Pig-iron	* 600	5 152	30 597	173	...
Ferro-alloys	1 949	797	8 592	3 836	...
Ingots, blooms, billets	136 813	9 124	458 718	252 352	...
Israel (b)					
Pig-iron	594	...	(g)* 1 500	(g)* 1 000	(g)* 800
Spiegeleisen	336	...	...	...	...
Ferro-manganese	469	...	(g)* 150	(g)* 700	(g)* 900
Other ferro-alloys	1 333	...	(g)* 500	(g)* 700	(g)* 700
Ingots, blooms, billets	23 713	67 631	76 675	126 081	50 101
Scrap	26 635	12 188	(g)* 13 900	(g)* 2 100	(g)* 2 100
Japan					
Pig-iron	1 068 400	1 337 082	951 571	777 318	604 462
Sponge & powder	17 092	43 955	48 448	44 869	142 151
Ferro-chrome	189 928	214 313	297 533	395 381	317 595
Ferro-silico-chrome	9 764	6 662	5 379	8 665	10 026
Ferro-manganese	6 505	11 965	15 832	14 102	5 878
Ferro-silico-manganese	(d)	75 627	115 533	114 082	121 600
Ferro-molybdenum	266	374	460	591	988
Ferro-nickel	26 493	29 758	36 750	44 754	46 155
Ferro-niobium	1 586	2 326	1 778	2 050	2 869
Ferro-silicon	196 487	237 541	273 907	338 646	306 830
Ferro-tungsten	45	72	192	268	100
Ferro-vanadium	830	698	741	566	457
Other ferro-alloys	71 120	4 685	5 287	8 870	7 413
Ingots, blooms, billets	195 666	96 483	105 001	232 911	353 195
Scrap	1 790 950	2 025 440	3 905 649	4 017 591	3 253 534
Jordan					
Pig-iron	20 443	65 131	12 961	241	16 005
Ingots, blooms, billets	123 785	111 816	181 996	145 510	94 281
Scrap	5 573	2 468	4 978	2 551	2 073
Korea, Dem. P.R. of					
Ferro-manganese (g)	* 16 500	* 13 900	* 13 300	* 13 300	* 7 500
Korea, Republic of					
Pig-iron	63 914	72 399	104 976	203 169	99 452
Sponge & powder	1 922	2 056	2 338	3 090	19 282
Ferro-chrome	1 340	3 821	4 390	6 222	7 529
Ferro-manganese	4 625	5 812	9 004	4 084	1 818
Ferro-nickel	200	121	120	820	780
Ferro-silicon	4 024	3 868	4 745	5 899	9 094
Other ferro-alloys	941	1 116	2 362	4 409	3 528
Ingots & blooms	116 980	126 024	88 724	99 779	75 812
Scrap	2 310 403	1 808 880	1 895 975	2 080 765	2 395 299
Kuwait					
Scrap	1 595	384	703	...	...

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Malaysia					
Pig-iron	12 803	11 573	13 021	5 701	3 128
Ferro-manganese	3 427	3 371	3 965	8 764	6 578
Ferro-silicon	2 101	1 681	2 257	3 389	2 408
Other ferro-alloys	682	1 345	929	1 133	1 312
Ingots, blooms, billets	157 690	241 166	560 949	550 324	350 369
Scrap	54 878	25 465	49 791	48 361	33 507
Pakistan (h)					
Ferro-manganese	3 072	50 707	4 526	4 927	4 616
Ferro-silicon	2 743	(d)	13 566	7 716	5 053
Other ferro-alloys	328	50 317	863	21 003	13 211
Scrap	572 661	219 419	115 702	136 908	92 524
Philippines					
Pig-iron	1 241	3 014	3	90	—
Ferro-manganese	1 079	2 167	3 315	894	591
Ferro-silicon	496	718	499	3	14
Other ferro-alloys	629	586	736	449	53
Ingots, blooms, billets	293 801	488 516	558 790	280 712	219 868
Scrap	8 789	25 031	142	1 568	751
Qatar					
Scrap	244 760	614 677	11 900	6 954	...
Saudi Arabia					
Pig-iron	14 228	39 041	256 990	103 153	98 862
Sponge & powder	14 381	48 931	90 703	342	202
Ferro-alloys	346	356	140	192	30 968
Ingots, blooms, billets	79 765	132 218	99 422	20 463	51 895
Scrap	424	1 278	—	552	636
Singapore					
Pig-iron	61 245	101 222	55 536	7 559	41 503
Ferro-manganese	505	3 611	287	1 101	6 186
Ferro-silicon	2 113	1 662	986	1 319	1 940
Other ferro-alloys	6 957	5 612	3 440	8 334	1 542
Ingots & blooms	43 599	200 469	210 160	113 806	161 503
Scrap	78 214	93 028	94 511	78 646	65 402
Sri Lanka					
Ingots, blooms, billets	24 004	9 293	6 342	6 397	8 049
Syria					
Pig-iron	5 389	7 791	4 513	5 797	...
Ingots, blooms, billets	60 969	27 903	43 687	72 604	72 238
Scrap	17 313	24 856	6 451	1 778	...
Taiwan					
Pig-iron	173 185	142 036	218 323	211 151	170 484
Sponge & powder	10 921	3 753	2 441	2 932	3 613
Ferro-chrome	785	335	5 613	9 261	10 186
Ferro-manganese	591	2 615	856	975	3 593
Ferro-silicon	1 378	2 142	3 498	3 096	1 768
Other ferro-alloys	670	374	674	2 435	612
Ingots, blooms, billets	71 727	136 155	127 290	238 682	233 934
Scrap	880 789	650 988	735 515	577 658	694 665
Thailand					
Pig-iron	26 783	14 103	14 510	13 641	11 707
Ferro-manganese	2 874	2 973	4 017	3 386	4 015
Ferro-silico-manganese	1 291	397	731	1 186	1 644
Ferro-silicon	3 303	3 003	3 538	3 606	3 967
Other ferro-alloys	879	228	2 377	1 682	1 516
Ingots, blooms, billets	58 033	23 045	36 118	14 581	43 760
Scrap	417 183	389 928	641 288	494 354	657 950
Australia					
Ferro-chrome	7 189	2 521	5 438	15 000	...
Ferro-manganese (c)	3 916	1 834	1 318	2 989	...
Ferro-silico-manganese	217	193	336	(d)	...
Ferro-molybdenum	171	175	115	168	...
Ferro-nickel	1 637	106	807	864	...
Ferro-silicon	9 716	10 761	7 174	9 461	...
Other ferro-alloys (c)	7 713	1 698	1 300	2 055	...
Ingots & billets	1 255	1 451	802	5 920	26 000
Scrap (h)	853	736	348	226	618

Imports of Iron, Steel and Ferro-alloys

tonnes

Country	1981	1982	1983	1984	1985
Fiji					
Ingots, blooms, billets	8 413	9 109	9 335	12 909	9 227
New Zealand (h)					
Pig-iron	444	268	356	259	308
Ferro-manganese	585	957	1 185	665	248
Other ferro-alloys	2 835	2 754	2 526	2 475	3 877
Ingots, blooms, billets	3 782	5 897	4 402	4 312	3 743
Scrap	1 937	6 599	3 538	2 391	3 147

Note: In this table the term 'ingots, blooms, billets' corresponds to items 672.4 and 5 of the Standard International Trade Classification (Revision 2) which includes those of alloy and high carbon steel

- (a) Excluding ships intended for breaking up
- (b) Figures may be incomplete as value only given in Israeli trade return for imports from some countries
- (c) Including powder
- (d) Included with 'other ferro-alloys'
- (e) Years ended 31 March following that stated
- (f) Years ended 20 March following that stated
- (g) BGS estimates, based on known exports from certain countries
- (h) Years ended 30 June of that stated
- (i) Years ended 30 September of that stated

Production of Kaolin

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom (a)	2 629 000	2 421 000	2 722 000	* 2 990 000	3 150 000
Belgium	54 400	52 600	60 000	70 000	* 70 000
Denmark	* 10 000	4 996	* 10 000	* 14 000	* 15 000
France	402 700	324 900	289 200	306 600	313 300
Germany, Federal Republic of (g)	370 000	378 000	361 000	370 000	342 000
Greece	37 364	50 179	60 749	92 407	89 833
Italy	74 084	53 495	50 450	52 604	59 856
Austria	79 214	77 286	83 560	91 669	93 889
Bulgaria	221 000	237 000	242 000	256 000	257 000
Czechoslovakia (h)	508 000	527 000	539 000	540 000	548 000
German Democratic Republic	* 200 000	* 210 000	* 200 000	* 170 000	* 170 000
Hungary (c)	60 000	52 000	45 000	47 000	* 30 000
Poland	43 207	52 128	54 200	52 900	55 200
Portugal	107 968	94 437	101 594	87 225	80 097
Romania	* 410 000	* 410 000	* 410 000	* 410 000	* 410 000
Soviet Union	* 2 500 000	* 2 500 000	* 2 600 000	* 2 800 000	* 2 900 000
Spain (c)	261 655	238 892	255 112	319 273	413 719
Sweden (h)(i)	289	305	300	196	...
Turkey	44 795	37 841	35 496	60 882	69 390
Yugoslavia	224 797	218 018	208 254	201 822	244 534
Algeria	* 19 000	* 15 000	* 17 000	8 000	* 8 000
Burundi	4 180	* 2 000	4 053	1 990	4 536
Egypt	32 113	49 787	100 176	116 152	99 400
Ethiopia	9 000	* 9 000	* 9 000	...	...
Kenya	301	1 077	650	295	265
Madagascar	1 746	2 511	4	5	...
Nigeria	765	560	604	114	—
South Africa	155 003	129 368	130 806	136 160	128 899
Tanzania	5 400	2 800	1 600	1 700	1 600
Zimbabwe	4 657	2 441	4 470	1 350	1 104
Mexico	207 824	172 390	162 000	130 296	282 337
USA (e)	6 949 472	5 771 694	6 534 184	7 214 541	7 069 984
Argentina	66 821	72 421	145 098	* 90 000	* 100 000
Brazil (b)	556 753	600 632	501 706	596 688	* 600 000
Chile	56 778	21 086	40 812	48 608	48 537
Colombia (h)	...	30 210	27 944	...	...
Ecuador	3 000	5 872	3 449	2 484	2 981
Paraguay	70 000	* 55 000	* 45 000	* 50 000	* 50 000
Peru	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Venezuela	* 66 000	27 000	11 250	* 22 000	* 23 000
Bangladesh (d)	5 005	5 862	2 269	2 613	—
Hong Kong	2 040	286	834	70	9 602
India (c)	504 473	554 656	583 254	609 780	720 000
Indonesia	80 904	77 207	59 628	67 795	90 160
Iran	* 100 000	* 110 000	* 100 000	* 100 000	* 100 000
Israel	37 299	12 000	26 844	* 27 000	* 27 000
Japan	153 544	144 234	173 480	224 614	222 000
Jordan	10 439	14 565	10 517	26 453	15 848
Korea, Republic of	645 963	582 016	636 536	670 735	612 202
Malaysia	44 084	44 363	57 432	72 472	82 576
Pakistan	40 934	32 483	23 412	10 383	3 073
Sri Lanka	7 315	8 206	7 976	7 390	6 346
Taiwan	90 836	87 532	102 895	79 411	76 605
Thailand	14 086	17 846	36 350	58 616	106 704
Australia (c)(f)	170 472	152 133	115 526	195 000	* 130 000
New Zealand	49 307	23 957	23 917	25 098	24 471
World total	18 400 000	16 800 000	18 000 000	19 600 000	20 000 000

Note: In addition to the countries listed, China, Lebanon and Vietnam are also believed to produce kaolin

(a) Sales

(b) Includes beneficiated and directly shipped material

(c) Including beneficiated material

(d) Years ended 30 June of that stated

(e) Sold or used by producers

(f) White clays; including kaolin and ball clay

(g) Washed and dried

(h) Beneficiated

(i) By-product, total production not reported

Exports of Kaolin

Country	1981	1982	1983	1984	1985
United Kingdom	2 196 529	2 105 753	2 131 469	2 559 668	2 574 959
Belgium-Luxembourg	8 362	16 324	25 079	31 728	38 642
Denmark	732	644	639	686	602
France	167 284	139 029	143 859	147 872	136 223
Germany, Federal Republic of	92 602	91 488	96 395	91 955	104 302
Greece	10 820	11 812	13 827	18 186	15 341
Italy	20 562	23 858	19 986	33 918	50 304
Netherlands	81 526	94 327	108 861	106 473	119 020
Austria	24 987	27 863	35 664	49 853	45 193
Bulgaria (a)	* 6 900	* 10 600	* 7 200	* 12 800	* 10 800
Czechoslovakia	347 000	369 000	390 000	389 000	386 000
German Democratic Republic	15 883	146 062	111 417	147 848	148 704
Hungary	6 615	5 995	6 115	6 603	8 098
Soviet Union (a)	* 28 700	* 55 500	* 40 600	* 43 800	* 42 600
Spain	51 809	51 156	54 363	108 994	...
Sweden	560	403	160	5 505	4 466
Turkey	18 287	...	...	16 901	...
South Africa	1 346	1 387	979	638	1 297
Mexico	1 428	29	235	2 117	2 527
USA	1 281 771	1 178 866	1 214 153	1 286 750	1 251 539
Argentina	486	28	117	...	...
Brazil	133 779	143 358	181 555	195 830	196 402
China (a)	* 34 900	* 31 400	* 25 700	* 58 700	* 49 900
Hong Kong	9 983	9 936	2 997	10 275	10 655
of which: Re-exports	9 677	9 346	2 122	9 670	9 453
India (b)	4 934	7 108	...	...	...
Indonesia	9 310	2 063	3 796	10 920	...
Japan	2 502	2 785	4 439	4 476	2 824
Jordan	10 439	7 756	—	7 126	—
Korea, Republic of	88 127	51 423	51 092	67 702	60 331
Malaysia	11 541	14 156	29 636	38 132	36 756
Singapore	1 840	2 797	—	—	—
of which: Re-exports	1 732	2 722	—	—	—

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

(b) Years ended 31 March following that stated

Imports of Kaolin

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	3 396	3 462	4 287	4 187	4 202
Belgium-Luxembourg	237 297	267 577	247 264	275 863	297 481
Denmark	35 912	37 452	37 703	38 169	36 182
France	280 343	303 345	325 242	360 501	310 456
Germany, Federal Republic of	834 114	851 426	863 565	910 816	871 793
Greece	56 793	43 750	37 921	43 763	41 180
Italy	646 354	599 598	597 990	603 297	635 996
Netherlands	403 112	415 497	460 289	453 660	454 237
Austria	110 763	94 299	95 035	102 598	95 401
Bulgaria (c)	* 1 600	* 2 300	* 2 000	* 1 300	* 9 400
Czechoslovakia (c)	* 6 900	* 6 600	* 7 100	* 7 300	* 8 100
Finland	365 051	370 054	429 672	518 724	571 391
German Democratic Republic	11 200	6 700	4 600	3 100	1 400
Hungary	30 868	37 772	40 232	60 843	59 451
Norway	67 529	71 914	67 224	75 477	79 528
Poland	139 379	137 028	137 918	123 782	145 961
Portugal	10 885	11 455	7 765	8 249	...
Romania (c)	* 23 400	* 16 100	* 8 400	* 5 200	* 4 300
Spain	166 780	176 301	164 424	187 548	...
Sweden	283 761	297 454	336 310	403 377	419 400
Turkey	5 327	...	...	5 922	...
Yugoslavia	76 214	80 845	81 076	83 307	...
Algeria (d)	17 260	4 842	8 015	13 445	...
Ivory Coast	114	121	108	114	139
Morocco	5 398	8 133	7 228	9 908	7 853
Tunisia	...	6 641	...	7 975	8 974
Zimbabwe	2 012	2 114	...	...	...
Canada	231 760	205 955	249 834	253 080	271 472
Mexico	80 289	67 233	64 146	84 162	91 219
USA	12 357	8 554	6 757	9 669	8 515
Argentina	10 964	12 815	24 769	...	...
Brazil	2 935	2 045	1 976	1 369	...
Colombia	5 566	4 260	6 197	9 197	...
Peru	3 451	3 511	2 154	...	...
Uruguay	2 461	394	1 086	2 848	2 539
Venezuela	...	24 757	6 612	...	...
Bangladesh (b)	...	3 554	5 003	7 629	5 158
Hong Kong	28 501	25 336	13 234	42 503	38 827
Indonesia	13 688	13 218	20 347	29 956	...
Iran (a)	9 941	8 272	15 622	14 666	...
Japan	521 681	560 071	549 763	684 405	706 745
Korea, Republic of	46 292	129 624	36 258	36 032	41 979
Malaysia	2 012	2 182	2 024	4 168	2 666
Pakistan (b)	4 811	5 262	5 385	5 136	4 569
Philippines	7 872	7 530	9 098	6 115	7 401
Saudi Arabia	1 579	3 582	3 937	4 570	3 094
Singapore	6 573	8 635	—	—	—
Taiwan	54 261	52 357	58 509	82 337	80 129
Thailand	4 173	4 016	2 661	2 668	4 320
Australia	11 294	12 715	9 401	7 310	...
New Zealand (b)	615	669	974	210	5 659

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

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

(d) Including bentonite

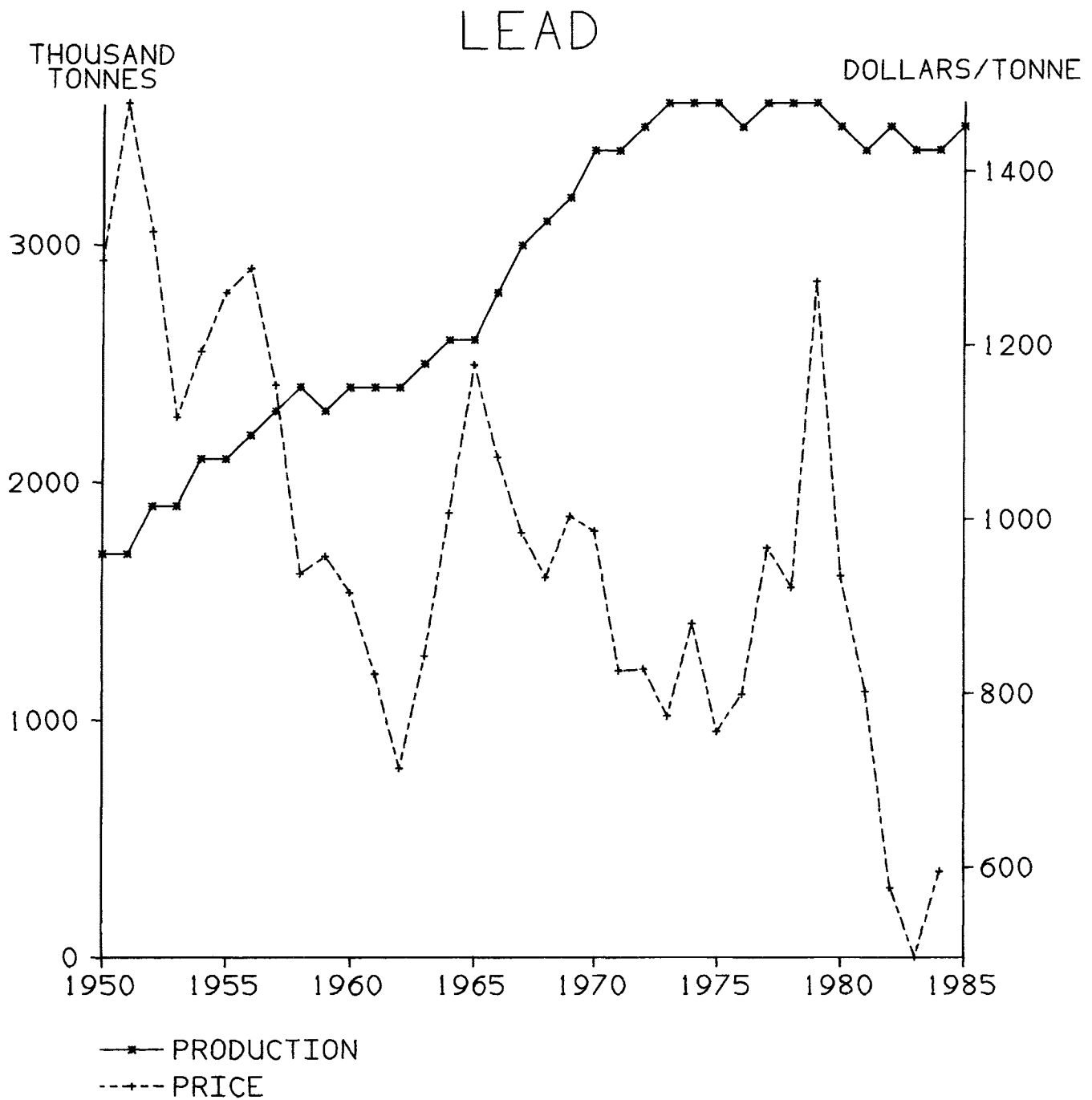


Figure 10 World mine production of lead from 1950 to 1985 compared with the yearly average domestic producer price of pig on the New York Market expressed in constant 1980 US dollars.
Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Mine Production of Lead

tonnes (metal content)

Country	1981	1982	1983	1984	1985
United Kingdom	6 965	3 993	3 797	2 431	3 994
France	19 186	6 867	2 377	2 647	2 500
Germany, Federal Republic of (a)	21 600	23 500	23 500	21 000	20 500
Greece	22 400	19 470	20 090	22 154	19 752
Irish Republic	29 000	39 000	34 000	37 200	34 600
Italy	21 300	16 300	23 500	21 500	15 600
Austria	5 683	5 574	5 750	5 574	7 500
Bulgaria	90 000	95 000	95 000	95 000	97 000
Czechoslovakia	2 675	2 649	2 652	3 100	2 718
Finland	2 007	2 384	2 651	2 956	2 400
Greenland	27 000	26 500	21 600	17 800	17 800
Hungary	937	583	671	587	575
Norway	2 973	4 002	4 309	3 967	3 349
Poland	44 200	45 300	47 000	52 800	51 300
Romania	* 20 000	* 27 000	* 28 500	* 30 000	* 35 000
Soviet Union	* 570 000	* 575 000	* 560 000	* 570 000	* 580 000
Spain	83 909	73 271	82 032	96 726	85 636
Sweden	88 103	86 767	85 762	87 297	76 200
Turkey	8 385	10 675	9 087	15 786	10 000
Yugoslavia	118 556	113 100	114 385	113 600	115 100
Algeria	3 200	3 000	3 000	3 600	3 800
Congo	7 682	4 000	4 000	2 500	2 500
Morocco	115 974	103 571	97 157	100 558	106 784
Namibia	46 500	34 900	33 800	42 600	48 600
Nigeria	* 200	* 300	* 300	* 300	300
South Africa	98 901	90 288	87 533	94 764	98 425
Tunisia	6 000	5 300	4 900	4 100	2 500
Zambia	18 018	23 198	25 695	20 310	15 062
Canada	332 045	341 212	251 383	311 391	284 595
Honduras	13 654	12 417	19 300	20 500	21 300
Mexico	157 384	145 844	167 405	183 314	206 732
USA (a)	445 535	512 516	449 295	322 677	413 955
Argentina	32 652	32 777	31 684	28 500	28 500
Bolivia	16 757	12 433	12 105	7 448	6 242
Brazil	21 650	19 360	18 821	16 692	18 200
Chile	223	1 552	1 679	4 284	2 473
Colombia	154	235	185	94	* 100
Peru (a)	186 735	175 771	205 100	198 400	200 600
Burma	4 900	9 100	8 900	8 300	7 623
China	* 160 000	* 160 000	* 160 000	* 165 000	* 175 000
India	15 200	14 000	19 900	18 600	26 000
Iran (b)	20 000	25 000	18 500	19 900	21 600
Japan	45 882	45 225	46 994	48 735	49 951
Korea, Dem. P.R. of	* 90 000	* 90 000	* 95 000	* 90 000	* 80 000
Korea, Republic of	13 635	12 166	12 225	10 837	9 698
Philippines	1 066	—	—	—	—
Thailand	17 273	18 580	21 019	16 662	19 654
Australia	388 122	455 338	480 626	440 620	493 493
World total	3 400 000	3 500 000	3 400 000	3 400 000	3 500 000

(a) Recoverable

(b) Years ended 20 March following that stated

Lead

Production of Refined Lead

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	333 361	306 194	322 196	338 374	327 197
Belgium (a)	109 932	99 720	134 152	127 711	114 293
Denmark (b)	24 030	15 927	10 052	13 128	4 503
France	227 998	208 559	198 388	205 701	223 500
Germany, Federal Republic of	348 300	350 500	352 500	357 200	356 400
Greece	20 900	3 200	—	11 600	13 700
Irish Republic	* 13 000	* 10 000	* 8 000	9 000	10 000
Italy	132 956	133 660	126 829	140 458	134 955
Netherlands	33 900	32 500	25 600	33 600	37 300
Austria	16 640	18 706	18 241	20 066	19 696
Bulgaria	* 123 000	* 118 000	* 116 000	* 114 000	* 116 000
Czechoslovakia	20 663	21 071	21 030	21 134	21 437
Finland	5 535	5 124	3 430	2 074	4 600
German Democratic Republic	* 45 000	* 45 000	* 44 000	* 47 000	* 55 000
Norway	161	69	37	35	—
Poland	69 000	78 800	81 000	83 400	87 300
Portugal	3 000	4 000	6 000	6 000	7 000
Romania	40 665	45 675	49 298	45 900	47 000
Soviet Union	* 800 000	* 800 000	* 790 000	* 800 000	* 810 000
Spain	117 200	131 600	144 700	147 600	156 100
Sweden	21 795	63 690	62 805	65 636	69 100
Switzerland	3 500	3 000	2 000	2 000	2 000
Turkey	2 500	6 500	7 500	9 000	10 000
Yugoslavia	86 401	81 248	97 531	82 815	99 954
Algeria	5 000	5 500	5 000	5 000	4 000
Morocco	52 300	58 600	57 600	48 300	63 500
Namibia	41 700	40 600	35 400	28 900	38 500
Nigeria	2 000	2 000	400	600	800
South Africa	26 900	30 400	23 600	24 000	34 100
Tunisia	17 822	15 511	10 513	8 399	2 000
Zambia	9 866	14 645	14 572	8 825	8 873
Canada	238 108	238 882	241 957	254 380	238 808
Jamaica	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Mexico	188 600	171 200	191 500	193 200	223 500
Trinidad & Tobago	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
USA	1 067 579	1 032 230	(c) 964 006	(c) 971 309	(c) 1 025 315
Argentina	34 600	30 600	31 300	31 300	35 000
Brazil	63 644	48 265	49 520	63 683	72 900
Colombia	* 3 000	* 3 000	* 3 000	* 3 400	* 3 700
Peru	84 200	82 000	65 100	71 200	83 300
Venezuela	12 000	15 000	15 000	17 000	* 20 000
Burma	4 068	7 829	7 636	6 995	9 400
China	* 175 000	* 175 000	* 195 000	* 200 000	* 215 000
India	25 406	23 193	21 556	22 421	24 000
Japan	317 017	302 200	321 642	362 948	367 000
Korea, Dem. P.R. of	* 65 000	* 65 000	* 65 000	* 65 000	* 65 000
Korea, Republic of	14 659	16 093	17 753	20 304	22 394
Malaysia	3 500	3 000	4 000	9 000	10 000
Philippines	4 000	6 000	6 000	4 000	7 000
Taiwan	30 000	35 000	38 000	44 300	48 700
Thailand	548	929	3 174	6 198	7 536
Australia	239 169	247 112	223 335	220 347	215 747
New Zealand	7 000	6 000	6 000	6 000	6 000
World total	5 300 000	5 300 000	5 200 000	5 400 000	5 600 000

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

(a) Including alloys

(b) Sales

(c) Excludes Pb content of primary antimonial lead

Exports of Lead

Lead
tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	2 378	2 496	10 096	2 644	3 728
Unwrought	104 513	94 800	88 231	116 686	93 478
Unwrought alloys	25 608	33 235	24 816	26 395	29 695
Scrap	18 221	22 607	22 314	34 383	30 800
Belgium-Luxembourg					
Unwrought	59 904	63 230	63 887	69 709	52 726
Unwrought alloys	10 675	11 418	12 501	14 993	17 847
Scrap	13 417	13 811	6 063	7 427	8 555
Denmark					
Ore	—	—	220	200	—
Unwrought	5 986	2 655	356	600	330
Unwrought alloys	8 822	7 289	7 561	10 231	3 697
Scrap	1 889	5 977	8 040	14 206	14 534
France					
Ore	140	44	3 096	122	14
Unwrought	45 841	41 083	33 888	35 781	39 557
Unwrought alloys	16 348	14 734	15 761	18 055	20 207
Scrap	10 635	8 928	10 674	17 973	12 630
Germany, Federal Republic of					
Ore	300	55	741	3	9 991
Unwrought	63 278	62 711	76 969	66 093	70 802
Unwrought alloys	33 084	37 911	43 361	40 467	36 190
Scrap	18 550	13 588	17 194	15 756	14 558
Greece					
Ore	21 580	28 700	36 800	33 706	23 000
Unwrought	1 455	—	—	2 000	2 168
Irish Republic					
Ores & concentrates	63 779	49 383	59 606	61 114	62 622
Unwrought (a)	3 612	1 715	177	294	132
Scrap	2 226	3 858	2 995	5 107	4 085
Italy					
Ore	17 319	21 549	21 023	30 906	24 907
Unwrought	2 993	3 634	3 129	4 397	5 036
Unwrought alloys	1 441	839	2 765	4 409	6 749
Scrap	180	496	1 168	320	1 255
Netherlands					
Unwrought	1 676	2 448	1 141	2 547	7 062
Unwrought alloys	12 090	11 697	12 056	12 826	12 989
Scrap	33 604	26 835	25 946	30 024	20 213
Austria					
Unwrought	334	837	767	467	988
Scrap	4	111	2	93	49
Bulgaria					
Unwrought (a)(f)	* 4 600	* 5 800	* 2 100	* 1 600	* 1 400
Czechoslovakia					
Ores & concentrates (f)	* 5 800	* 5 700	* 5 700	* 5 800	* 5 900
Finland					
Ore	3 135	17	42 708	7 494	6 105
Unwrought (a)	853	1 088	1 345	25	83
Greenland					
Ores & concentrates	31 399	34 424	34 216	29 376	26 313
Hungary					
Scrap	6 953	6 220	2 594	2 614	3 017
Norway					
Ore	5 161	7 449	6 898	6 732	6 686
Unwrought (a)	31	29	131	28	44
Scrap	8 020	6 507	6 706	8 159	6 475
Portugal					
Ore	956	1 193	1 049	1 048	...
Soviet Union					
Unwrought (a)(f)	* 27 500	* 24 200	* 17 200	* 23 000	* 25 200
Spain					
Ore	32 182	20 364	153	42 322	40 769
Unwrought (a)	21 003	33 342	39 544	61 486	66 015

Lead

Exports of Lead

tonnes

Country	1981	1982	1983	1984	1985
Sweden					
Ore	91 258	49 246	51 326	47 895	42 962
Unwrought	24 276	51 149	52 204	55 450	50 587
Unwrought alloys	2 099	3 264	3 207	7 956	14 185
Scrap	23	69	513	458	165
Switzerland					
Unwrought	4 847	5 101	7 694	6 815	4 983
Scrap	7 311	6 725	5 980	10 077	10 391
Turkey					
Ore (e)	—	2 022	2 725	76	...
Yugoslavia					
Concentrates	12 864	9 116	4 274	5 925	5 764
Unwrought	13 583	17 769	17 623	14 698	) 17 102
Unwrought alloys	2 114	1 152	483	1 599)
Algeria					
Ore	3 889	6 485	2 655	6 777	...
Ivory Coast					
Unwrought	649	175	—	—	0
Scrap	844	82	1 567	1 006	702
Morocco					
Ore	89 735	61 930	72 119	85 272	60 366
Unwrought	42 488	51 908	55 697	46 107	55 893
Senegal					
Scrap	153	141	93	431	...
South Africa					
Concentrates (b)	93 945	99 931	85 984	81 377	102 922
Unwrought (f)	* 18 200	* 17 100	* 17 700	* 10 600	* 6 700
Scrap (f)	* 400	* 200	* 700	* 1 400	* 600
Tunisia					
Unwrought	10 821	10 102	...	5 949	1
Scrap	513	4 275	...	621	99
Zambia					
Unwrought	7 027	7 288	12 700	9 201	5 000
Canada					
Ore (b)	146 307	106 744	85 548	114 721	62 606
Unwrought	119 816	146 168	147 281	124 528	114 006
Scrap	9 921	15 895	8 535	5 960	11 392
Honduras					
Ores & concentrates (b)	11 909	8 634	11 581	13 772	...
Mexico					
Ores & concentrates	6 497	0	370	10 980	9 874
Unwrought	57 177	61 883	90 603	93 496	106 038
Panama					
Unwrought (a)	410	520	175	30	163
USA					
Ores & concentrates (b)	33 050	29 105	20 123	11 858	9 987
Unwrought	14 485	47 374	13 245	3 745	23 468
Unwrought alloys	2 334	3 846	4 443	1 232	1 931
Scrap	59 454	52 269	50 920	45 097	59 950
Argentina					
Ores & concentrates	18 007	18 112	20 948	15 540	...
Bolivia					
Ore (b)	15 613	11 557	9 342	2 361	1 369
Colombia					
Ore	92	331	—	620	...
Peru					
Ores & concentrates	173 748	231 748	298 870	274 137	221 090
Unwrought (a)	87 000	66 946	55 000	54 400	61 200

Exports of Lead

Country	1981	1982	1983	1984	1985
Burma (d)					
Unwrought	6 101	8 984	6 668	...	...
Hong Kong					
Scrap	2 522	2 291	2 596	3 097	1 883
Iran (c)					
Ore	7 906	60	9 263	14 823	...
Japan					
Ores & concentrates	7 810	4 807	3 001	14 172	5 343
Unwrought (a)	2 900	7 530	15 501	17 454	25 131
Scrap	690	—	129	548	3 974
Korea, Dem.P.R. of					
Unwrought (a)(f)	* 12 500	* 23 500	* 9 900	* 16 300	* 13 100
Korea, Republic of					
Ore	8 400	800	—	3 000	1 700
Philippines					
Concentrates	1 801	—	—	18	—
Singapore					
Unwrought (a)	730	1 550	2 265	1 472	673
of which: Re-exports	707	1 441	1 668	1 154	527
Scrap	3 524	2 812	1 862	3 597	7 057
Taiwan					
Unwrought	14 078	14 790	16 033	15 925	20 602
Thailand					
Ore	37 460	37 636	42 737	42 004	46 788
Australia					
Ores & concentrates	63 233	91 312	91 227	150 687	180 986
Unwrought—					
Base bullion (b)	136 593	165 433	159 390	199 119	163 179
Refined (a)	176 664	201 335	185 664	150 441	156 733
Scrap	5 299	1 986	4 549	9 024	19 075

Note: In this table the term 'unwrought' lead corresponds to item 685.1 of the Standard International Trade Classification (Revision 2) and comprises base bullion, pigs, unwrought bars, etc

(a) Including alloys

(b) Pb content

(c) Years ended 20 March following that stated

(d) Years ended 31 March following that stated

(e) Complex lead-zinc ore

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

Lead

Imports of Lead

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	59 832	39 216	34 571	* 50 000	* 40 000
Unwrought	159 393	169 653	138 146	173 092	182 476
Unwrought alloys	3 031	3 997	1 786	2 581	2 799
Scrap	754	953	1 246	1 482	2 047
Belgium-Luxembourg					
Ore	83 142	106 078	85 480	67 774	114 697
Unwrought	35 147	37 319	55 356	50 579	39 195
Unwrought alloys	6 087	6 572	7 945	7 372	10 195
Scrap	7 520	11 238	13 485	15 053	11 626
Denmark					
Unwrought	2 270	4 225	10 269	9 337	246
Unwrought alloys	1 322	3 246	2 912	6 732	20 216
Scrap	18 161	7 706	6 782	5 872	994
France					
Ore	142 392	167 556	144 346	158 366	190 535
Unwrought	33 848	35 113	33 303	41 588	28 097
Unwrought alloys	6 767	8 308	15 829	13 661	13 007
Scrap	21 058	19 836	13 246	4 870	9 278
Germany, Federal Republic of					
Ore	214 800	192 371	217 753	206 723	236 490
Unwrought	100 570	140 184	103 830	130 402	118 711
Unwrought alloys	15 219	13 793	14 840	14 281	16 428
Scrap	34 594	35 606	30 886	69 865	45 905
Greece					
Ore	3	39	...	8 531	9 783
Unwrought (a)	6 061	18 418	21 569	13 507	9 751
Irish Republic					
Unwrought (a)	1 389	1 478	973	2 204	257
Scrap	7 455	7 689	3 918	4 700	4 787
Italy					
Ore	26 213	5 420	5 589	11 329	12 019
Unwrought	116 241	108 127	110 901	105 455	97 924
Unwrought alloys	16 542	20 236	22 548	19 289	17 071
Scrap	15 268	24 626	21 640	14 188	12 763
Netherlands					
Unwrought	30 280	40 392	30 587	23 060	26 500
Unwrought alloys	11 112	6 668	6 152	9 140	9 009
Scrap	11 483	11 614	15 220	22 045	24 593
Austria					
Ore	1 728	6 993	4 611	7 730	3 987
Unwrought	35 740	32 549	31 362	39 271	37 501
Scrap	3 605	2 367	2 925	4 332	6 745
Bulgaria					
Ore (f)	* 35 500	* 11 200	* 5 000	* 2 100	* 2 000
Czechoslovakia					
Unwrought (a)	38 000	30 000	28 000	27 000	25 000
Finland					
Unwrought (a)	21 422	20 282	12 319	14 940	19 578
German Democratic Republic					
Unwrought (a)(f)	* 3 400	* 3 900	* 3 000	* 4 100	* 6 900
Scrap (f)	* 3 000	* 3 200	* 5 300	* 4 900	* 7 600
Hungary					
Unwrought & semi-manufactures	11 033	13 647	11 930	9 343	7 454
Norway					
Unwrought	6 571	6 189	6 100	8 156	6 965
Unwrought alloys	5 208	6 107	6 076	5 994	6 825
Poland					
Unwrought	3 060	6 358	1 621	6 133	6 195
Portugal					
Unwrought (a)	19 244	20 143	24 321	21 175	...
Scrap	21	222	5	3	...
Soviet Union					
Ore (f)	* 35 900	* 14 800	* 49 800	* 22 400	* 28 600
Unwrought (a)(f)	* 32 000	* 67 900	* 57 200	* 57 900	* 62 100

Lead

tonnes

Imports of Lead

Country	1981	1982	1983	1984	1985
Spain					
Ore	28 190	66 115	64 599	88 050	66 863
Unwrought (a)	7 172	6 495	5 268	4 936	3 664
Scrap	1 908	370	1 486	226	785
Sweden					
Ore	300	—	12 551	21 524	6 592
Unwrought	7 043	1 717	1 852	457	2 021
Unwrought alloys	1 279	2 444	2 048	2 877	2 790
Scrap	4 340	5 040	2 984	10 393	20 660
Switzerland					
Unwrought	10 155	12 867	10 429	8 167	10 681
Turkey					
Unwrought (a)	5 358	3 828	8 735	10 179	16 480
Yugoslavia					
Concentrates	1 023	—	6 537	573	416
Unwrought	12 117	15 623	10 731	11 614	9 518
Algeria					
Unwrought	11 803	6 996	4 276	3 959	...
Unwrought alloys	1 231	600	562	2 103	...
Egypt					
Unwrought & scrap	7 106	11 520	16 881	...	...
Kenya					
Unwrought (a)	198	178	188	229	...
Libya					
Unwrought	679	2 380	...	...	...
Madagascar					
Unwrought (a)	60	184	126	233	259
Mozambique					
Unwrought	199	268	300	133	...
Nigeria					
Unwrought (a)	457	360	...	35	1 542
South Africa					
Ore	17	15	—	7 277	15 567
Unwrought	9 405	3 976	5 438	9 912	3 877
Scrap	7 752	12 734	216	791	126
Sudan					
Unwrought	90	103	40	134	...
Tunisia					
Ore	19 400	18 733	...	6 319	—
Canada					
Unwrought	9 221	5 661	2 551	6 314	5 676
Costa Rica					
Unwrought (a)	21	72	72	252	120
Mexico					
Unwrought & scrap	1 050	1 014	255	1 250	375
USA					
Ores & concentrates (b)	58 545	35 807	47 514	68 800	42 666
Unwrought—					
Base bullion	449	19	53	45	799
Other	92 166	80 743	113 602	148 411	121 050
Alloys	11 570	12 001	19 149	14 871	13 752
Scrap	1 930	4 107	2 630	2 873	1 850
Argentina					
Unwrought	1 397	1 450	1 138	555	...
Brazil					
Ore	15 405	—	6 591	10 724	...
Unwrought (a)	151	611	649	652	...
Scrap	1 770	—	2 849	6 543	...
Colombia					
Unwrought (a)	1 944	1 504	1 328	618	...
Uruguay					
Unwrought	1 619	966	476	1 169	1 068
Venezuela					
Unwrought (a)	6 697	6 079	5 233	...	...
Scrap	404	—	...	...	...
China					
Unwrought (a)(f)	* 27 600	* 13 800	* 9 200	* 6 400	* 1 700

Lead

Imports of Lead

tonnes

Country	1981	1982	1983	1984	1985
Hong Kong					
Unwrought (a)	1 460	2 026	2 591	1 893	2 321
Scrap	377	205	157	287	458
India (c)					
Unwrought	24 192	57 046	...	...	...
Unwrought alloys	2 874	5 093	...	...	...
Scrap	5 058	3 177	...	...	...
Indonesia					
Unwrought (a)	8 083	6 923	12 717	14 410	...
Iran (d)					
Unwrought	1 120	19 717	768	6 603	...
Israel (g)					
Unwrought	1 932	1 752	1 909	1 753	2 990
Japan					
Ore	255 765	225 654	237 807	249 226	261 795
Unwrought	57 464	52 442	52 752	97 982	74 561
Unwrought alloys	10 008	9 336	8 457	10 466	13 279
Scrap	2 668	2 762	1 012	450	185
Jordan					
Unwrought & scrap	1 377	1 078	745	332	314
Korea, Republic of					
Unwrought	17 920	217 007	23 261	22 900	37 109
Unwrought alloys	22 236	10 129	15 133	8 566	26 694
Scrap	4 301	5 704	6 661	6 534	20 162
Malaysia					
Unwrought (a)	7 941	7 288	9 177	13 505	12 291
Scrap	294	23	280	792	4 666
Pakistan (e)					
Unwrought (a)	948	2 337	2 096	2 284	2 276
Philippines					
Unwrought (a)	7 019	6 323	9 600	2 756	2 984
Singapore					
Unwrought (a)	3 900	3 163	5 873	6 349	5 457
Syria					
Unwrought & scrap	1 573	1 638	2 680	1 204	...
Taiwan					
Unwrought (a)	7 419	8 805	17 540	12 170	12 272
Scrap	38 796	35 142	48 215	56 773	54 839
Thailand					
Unwrought	10 589	10 260	16 718	11 655	8 917
Unwrought alloys	2 060	981	1 135	777	386
Australia (e)					
Ores & concentrates	16 003	18 839	11 092	—	10 900
New Zealand (e)					
Unwrought (a)	6 557	5 375	5 873	5 220	5 408

Note: In this table the term 'unwrought' lead corresponds to item 685.1 of the Standard International Trade Classification (Revision 2) and comprises base bullion, pigs, unwrought bars, etc

- (a) Including alloys
- (b) Pb content
- (c) Years ended 31 March following that stated
- (d) Years ended 20 March following that stated
- (e) Years ended 30 June of that stated
- (f) BGS estimates, based on known exports from certain countries
- (g) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

Production of Lithium Minerals

tonnes

Country	1981	1982	1983	1984	1985
Portugal					
Lepidolite	1 200	905	545	985	—
Soviet Union	* 55 000	* 55 000	* 55 000	* 55 000	* 55 000
Namibia	1 263	1 040	780	880	1 960
Zimbabwe	16 444	9 786	19 193	22 548	27 910
USA (a)(b)	* 5 000	* 3 500	* 4 500	* 5 000	* 4 500
Argentina	25	113	152	22	* 20
Brazil					
Amblygonite	277	66	113	49	75
Lepidolite	2	74	1	—	—
Petalite	2 080	2 293	1 892	477	* 500
Spodumene	243	341	116	288	* 300
Chile (c)	—	—	—	2 110	4 508
China	* 14 000	* 14 000	* 15 000	* 15 000	* 15 000
Australia					
Spodumene	—	* 80	2 492	* 6 500	11 200
World total (a)	* 6 800	* 5 200	* 6 400	* 7 400	* 7 500

(a) Li content

(b) Mostly spodumene

(c) Carbonate

Lithium

Exports of Lithium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	3	17	97	163	...
Oxides	7	98	117	222	...
Carbonate	19	73	72	38	100
Belgium-Luxembourg					
Oxides	54	67	2	—	54
France					
Oxides	47	105	62	79	48
Germany, Federal Republic of					
Metal	19	40	60	59	71
Oxides	490	510	610	692	761
Carbonate	876	929	914	1 294	1 093
Netherlands					
Oxides	70	188	145	14	27
Carbonate	125	299	432	31	9
Spain					
Lithium minerals	55	—	942	1 567	...
South Africa					
Lithium minerals (a)	...	...	...	* 300	...
Zimbabwe					
Lithium minerals	16 163	9 739	16 172	23 805	...
USA					
Oxides	2 740	2 381	2 594	3 721	3 562
Carbonate	...	4 721	8 065	8 213	6 312
Brazil					
Lithium minerals	2 244	2 805	17	8	33
China					
Oxides (a)	* 300	* 700	* 600	* 500	* 400
Carbonate (a)	* 200	* 400	* 300	* 400	* 700

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

Imports of Lithium

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	...	...	7	12	21
Oxides	340	1 046	1 533	1 188	459
Carbonate	375	375	430	431	659
Belgium-Luxembourg					
Metal	7	16	2	1	2
Oxides	133	209	160	156	175
Carbonate	126	199	239	257	214
France					
Metal	6	8	8	10	18
Oxides	467	520	602	479	473
Carbonate	335	358	440	548	410
Germany, Federal Republic of					
Metal	7	14	13	21	22
Oxides	1 205	1 684	641	674	687
Carbonate	4 597	3 858	4 014	5 026	5 328
Italy					
Metal	1	0	2	5	6
Oxides	293	120	215	416	298
Carbonate	286	340	297	361	335
Netherlands					
Metal	2	3	2	21	11
Oxides	132	278	143	68	102
Carbonate	392	497	697	244	246
Spain					
Lithium minerals	433	233	53	441	...
Metal	0	11	0	0	...
Oxides	120	101	170	100	...
Carbonate	90	122	163	210	...
South Africa					
Lithium minerals	870	1 163	1 228	1 146	443
USA					
Lithium minerals	708	13	7	136	4 278
Brazil					
Oxides	416	220	346	271	...
Japan					
Metal	30	35	30	32	42
Oxides	631	670	766	858	797
Carbonate	3 229	3 189	3 626	3 773	4 430
Korea, Republic of					
Carbonate	121	22	32	159	152
Australia					
Oxides (a)	131	147	87	151	139

(a) Years ended 30 June of that stated

Magnesite

Production of Magnesite

tonnes

Country	1981	1982	1983	1984	1985
Greece	817 375	901 988	858 840	1 043 606	845 888
Austria	1 158 852	1 031 404	1 005 768	1 183 409	1 255 043
Czechoslovakia	664 000	672 000	662 000	660 000	654 000
Poland	11 282	17 047	16 100	20 600	19 200
Soviet Union	* 2 100 000	* 2 150 000	* 2 200 000	* 2 200 000	* 2 200 000
Spain	476 392	533 595	597 137	691 542	692 196
Turkey	783 966	910 249	724 541	723 268	1 151 000
Yugoslavia	299 676	328 436	303 965	326 099	417 407
South Africa	56 557	31 927	22 560	33 059	28 898
Zimbabwe	60 194	60 660	24 072	21 642	19 385
Canada (b)	49 545	35 250	80 000	112 000	136 000
Brazil (c)	285 885	226 772	231 297	326 235	260 676
Colombia	* 1 600	* 1 600	* 1 600	* 1 600	* 1 600
China	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000
India	462 534	417 900	436 210	417 979	* 420 000
Iran (a)	* 4 000	* 5 000	* 5 000	* 5 000	* 5 000
Korea, Dem. P.R. of	* 1 900 000	* 1 900 000	* 1 900 000	* 1 900 000	* 1 900 000
Pakistan	1 551	1 206	1 844	3 876	* 4 800
Australia	26 445	29 671	20 539	50 312	* 50 000
World total	11 200 000	11 300 000	11 100 000	11 700 000	12 100 000

Note: In addition to the countries listed, Bulgaria, Egypt, Kenya, New Caledonia and USA are also believed to produce magnesite

(a) Years ended 20 March following that stated

(b) Officially described as magnesitic dolomite and brucite

(c) Includes beneficiated and directly shipped material

Exports of Magnesite

Country	1981	1982	1983	1984	1985
United Kingdom					
Crude	70	491	42	50	155
Calcined	7 261	30 532	7 394	28 374	28 472
Belgium-Luxembourg					
Crude	80	1 293	365	404	282
Calcined	1 418	1 536	1 210	2 553	4 140
France					
Crude	53	1 610	66	222	980
Calcined	1 363	662	2 208	1 549	2 933
Germany, Federal Republic of					
Crude	47	21	168	133	24
Calcined	22 879	17 093	18 890	17 285	22 661
Greece					
Crude	37 420	24 983	25 068	24 931	) 343 065
Calcined	243 417	326 247	350 192	402 391)
Irish Republic	77 361	70 861	33 127	(a)* 74 600	(a)* 72 100
Italy					
Crude	965	35 604	1 115	946	2 373
Calcined	58 296	1 772	28 647	60 433	59 301
Netherlands					
Crude	1 561	1 302	1 875	1 554	1 049
Calcined	26 169	28 001	25 678	25 122	33 020
Austria					
Crude	) 96 636	160 567	1 461	697	573
Calcined	)		129 583	167 799	154 233
Czechoslovakia	305 000	303 000	291 000	428 000	446 000
Norway	19 247	12 865	9 575	9 870	10 271
Soviet Union (a)	* 14 900	* 16 900	* 15 500	* 9 200	* 9 700
Spain					
Crude & calcined	98 749	105 443	111 996	123 050	122 479
Sweden	169	266	240	502	1 869
Turkey					
Crude	16 169	19 521	10 003	46 812	) 159 409
Calcined	99 437	116 212	82 067	117 802)
Yugoslavia	29 360	24 524	5 049	6 857	8 270
South Africa (c)	£35 000	£477 000	£670 000	£1 599 000	£17 000
Zimbabwe	52 923	54 801	22 678	18 051	...
Brazil					
Calcined	106 189	78 849	73 802	97 267	84 169
China (a)	* 211 100	* 311 100	* 312 400	* 413 600	* 494 500
Hong Kong					
Crude & calcined (Re-exports)	8 988	10 977	15 416	18 399	15 457
India (d)					
Calcined	1 487	1 817	...	...	...
Israel (b)	—	...	(a)* 24 800	(a)* 24 100	(a)* 19 700
Japan	2 560	2 974	3 728	4 109	4 144
Korea, Dem. P.R. of (a)	* 222 600	* 210 100	* 231 800	* 212 300	* 232 700
Singapore	333	187	151	602	245
of which: Re-exports	125	42	151	602	245
Australia	2 617	2 831	2 808	3 984	...

Notes:

- So far as possible sea water magnesia has been excluded from this table if specifically identified in trade accounts. Countries known to produce sea water magnesia and which do not specifically identify it in their trade accounts are Irish Republic, Israel and Norway
 - The term 'calcined', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material
- (a) BGS estimates, based on known imports into certain countries
(b) Figures may be incomplete as value only given in Israeli trade return for exports to some countries
(c) Values shown are for the common customs area
(d) Years ended 31 March following that stated

Magnesite

Imports of Magnesite

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Crude	11 707	13 769	15 282	12 420	14 860
Calcined	75 500	69 766	107 420	119 216	118 218
Belgium-Luxembourg					
Crude	663	711	1 500	524	315
Calcined	10 862	11 953	13 901	18 295	17 616
Denmark					
Crude	1 393	660	6	24	—
Calcined	9 010	9 274	10 583	10 027	8 685
France					
Crude	395	172	5 691	80	53
Calcined	106 019	121 048	157 645	158 681	158 894
Germany, Federal Republic of					
Crude	733	797	4 395	5 779	6 242
Calcined	340 779	319 561	356 929	390 625	369 230
Greece	117	259	7 139	9 878	27 024
Irish Republic	19 816	37 114	40 042	43 948	36 123
Italy					
Crude	11 955	31 320	16 096	23 141	20 266
Calcined	56 653	30 167	73 908	84 030	72 517
Netherlands					
Crude	2 971	1 792	3 187	4 408	3 933
Calcined	54 815	59 874	54 923	60 868	74 263
Austria					
Crude	52	5	111	221	153
Calcined	104 440	99 694	95 445	116 497	150 117
Bulgaria (b)	* 17 100	* 7 100	* 8 100	* 24 100	* 25 100
Finland	16 775	19 973	21 336	14 359	17 631
German Democratic Republic (b)	* 40 600	* 50 100	* 33 000	* 63 200	* 58 200
Hungary					
Calcined	103 865	101 161	98 312	91 467	94 990
Norway	3 840	5 620	5 142	6 110	7 947
Poland					
Calcined	227 767	223 455	243 021	222 513	263 398
Portugal	1 486	1 542	1 678	741	...
Romania (b)	* 23 100	* 25 800	* 29 700	* 78 300	* 66 700
Soviet Union					
Calcined	593 015	705 112	618 370	569 887	582 650
Spain					
Crude & calcined	78 660	56 516	47 918	63 967	67 008
Sweden	21 767	22 214	20 752	30 005	28 126
Switzerland					
Calcined	4 753	4 212	4 221	4 524	5 178
Yugoslavia					
Crude	31 505	10 771	26 883	31 543	) 43 339
Calcined	58 665	29 138	19 663	19 712)
Algeria	433	527	237	545	...
Egypt	6 134	5 470	1	...	...
Morocco	115	163	42	162	49
South Africa					
Crude & calcined	94 090	105 916	59 213	79 915	75 510
Tanzania	165	421	...	...	...
Zaire	539	1 234	447	627	...
Canada					
Calcined	59 018	37 657	42 054	49 943	46 468
Mexico					
Crude & calcined	13 212	13 081	...	...	...
USA					
Crude & calcined	91 754	75 758	101 994	191 255	223 462

Imports of Magnesite

tonnes

Country	1981	1982	1983	1984	1985
Argentina					
Calcined	2 404	8 884	17 633	17 686	...
Brazil					
Crude & calcined	849	1 446	697	1 268	...
Chile (b)	* 2 100	* 2 100	* 4 700	* 2 800	* 3 600
Peru					
Crude & calcined	7 041	2 016	1 689	...	...
Venezuela					
Crude & calcined	3 014	580	11 941	...	...
Hong Kong	11 332	17 826	20 378	22 593	21 331
India (c)	1 682	6 516	...	...	...
Indonesia	2 580	3 613	3 955	3 690	...
Iran (d)	1 050	975	394	385	...
Israel	544	295	(b)* 200	(b)* 1 500	(b)* 1 000
Japan					
Crude	30 764	57 432	44 778	50 420	38 538
Calcined	168 592	192 516	238 958	268 207	296 228
Korea, Republic of	7 346	7 575	7 232	335 380	12 347
Malaysia	3 008	2 429	2 866	5 921	9 645
Pakistan (a)	1 918	2 370	20 003	1 513	1 318
Philippines					
Crude & calcined	3 198	5 404	6 051	6 039	5 651
Singapore	431	603	371	567	791
Syria	523	60	10	15	...
Taiwan	7 446	11 918	17 736	20 264	20 242
Thailand					
Crude	4 627	1 243	4 376	7 426	7 704
Calcined	944	1 637	2 095	3 771	2 493
Australia					
Calcined	21 016	11 235	11 706	9 619	...
New Zealand (a)	2 622	1 841	1 944	5 691	7 650

Notes:

- 1 So far as possible sea water magnesia has been excluded from this table if specifically identified in trade accounts
- 2 The term 'calcined', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material

(a) Years ended 30 June of that stated

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

(c) Years ended 31 March following that stated

(d) Years ended 20 March following that stated

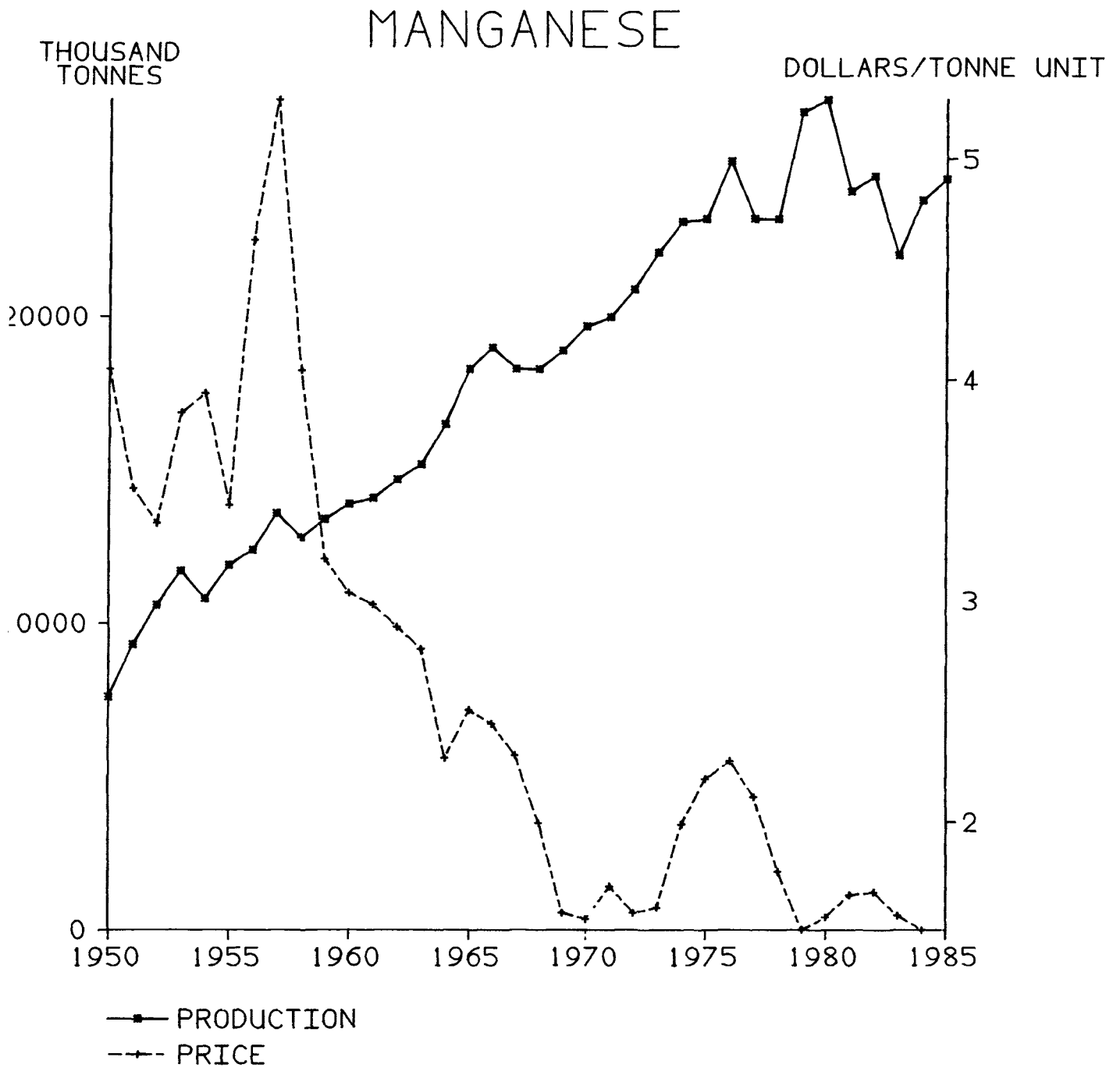


Figure 11 World production of manganese ore from 1950 to 1985 compared with the yearly average price of Indian 46–48% Mn ore c.i.f. US ports expressed in constant 1980 US dollars per metric ton unit.

Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Production of Manganese Ore

tonnes

Country		1981	1982	1983	1984	1985
Greece	(50%)	5 800	5 600	4 636	5 447	5 058
Italy	(30%)	8 756	8 727	7 205	9 528	8 621
Austria (e)		55 876	61 549	65 284	67 037	60 074
Bulgaria	(30%)	45 000	45 000	45 000	45 000	38 000
Czechoslovakia (d)	(17%)	* 900	* 900	* 900	* 900	* 900
Hungary	(30%)	70 833	82 855	58 606	67 000	62 294
Romania	(22%)	57 000	55 000	78 000	66 000	68 000
Soviet Union	(35%)	9 150 000	9 821 000	9 876 000	10 089 000	9 900 000
Turkey	(40%)	14 932	7 310	3 200	42 796	10 750
Yugoslavia	(34%)	31 149	27 494	31 643	21 000	* 33 000
Gabon	(50%)	1 487 783	1 511 000	1 856 586	2 102 868	2 339 301
Ghana	(40%)	223 100	159 900	173 100	286 700	307 000
Morocco	(50%)	109 647	96 529	73 515	56 127	43 690
South Africa						
Metallurgical	(40%)	5 039 687	5 216 517	2 626 672	2 857 619	3 442 544
Chemical	(55%)	340 856	337 820	259 291	191 750	157 924
Zaire	(48%)	17 610	—	—	—	—
Mexico	(38%)	578 314	508 667	350 011	476 158	396 439
USA (a)	(13%)	158 540	28 584	30 412	80 216	18 037
Argentina	(30%)	2 706	3 900	6 926	* 6 000	* 5 500
Brazil (b)	(45%)	2 042 144	2 340 974	2 091 631	2 693 131	2 700 000
Chile	(33%)	25 557	16 111	26 050	26 172	35 635
China	(30%)	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000
India (c)	(35%)	1 528 000	1 480 952	1 277 236	1 130 109	1 236 000
Indonesia	(50%)	2 587	17 894	8 318	12 267	22 287
Japan	(35%)	86 178	78 160	75 543	62 000	21 000
Philippines	(44%)	3 113	1 556	2 242	615	293
Thailand	(45%)	10 917	7 758	6 710	8 695	4 412
Australia	(48%)	1 448 977	1 127 085	1 370 233	1 828 717	1 989 000
World total		24 100 000	24 600 000	22 000 000	23 800 000	24 500 000

Notes:

- 1 Estimated average manganese content is given in parentheses for each country, relating where possible to the later years
- 2 In addition to the countries listed, Colombia, Cuba and Vietnam are also believed to produce manganese ore

- (a) Shipments of manganiferous iron ore only
 (b) Includes beneficiated and direct shipping ore
 (c) Includes ore grading 54% to less than 35% Mn
 (d) Manganiferous iron ore
 (e) Mn content of domestic iron ore

Manganese

Exports of Manganese

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ore (a)	6 197	6 659	1 413	1 934	3 853
Metal	147	878	1 232	1 001	...
Belgium-Luxembourg					
Ore	8 333	8 546	2 882	2 757	492
Metal	141	265	1 185	1 489	1 327
France					
Ore (a)	17 242	11 136	20 907	76 454	73 774
Metal	2 987	4 188	4 949	6 434	5 788
Germany, Federal Republic of					
Ore (a)	2 174	1 497	4 020	757	1 144
Metal	43	99	143	131	118
Greece					
Ore	1 500	300	1 429	350	—
Italy					
Ore (a)	1 327	1 345	1 009	1 919	1 272
Netherlands					
Ore	44 913	42 077	43 208	46 597	47 849
Metal	3 266	3 845	2 257	1 338	1 830
Bulgaria					
Ore (c)	* 8 000	* 10 000	* 39 000	* 36 000	* 10 000
Hungary					
Ore	221 066	15 865	9 608	11 657	11 417
Norway					
Ore	2 561	5	1 522	5	—
Portugal					
Ore	3 410	450	4 625	—	...
Soviet Union					
Ore	1 194 000	1 144 000	1 079 000	1 081 000	1 126 000
Sweden					
Ore	115	182	509	—	24
Metal	79	68	111	68	86
Turkey					
Ore	—	—	—	—	6 914
Yugoslavia					
Ore	1 274	3 030	5 175	7 156	13 281
Gabon					
Ore	1 548 000	1 419 000	1 986 810	...	...
Ghana					
Ore	142 000	97 000	127 000	237 000	* 217 000
Morocco					
Ore	99 668	81 594	57 860	69 665	47 012
South Africa					
Ore	3 187 136	2 870 875	1 995 649	3 038 301	2 890 306
Metal	28 333	15 580	24 634	36 603	29 126
Zaire					
Ore	* 13 000	* 16 300	(c)* 27 600	(c)* 19 700	(c)* 25 500
Mexico					
Ore	207 347	169 891	143 069	246 470	129 885
USA					
Ore	80 284	34 475	21 299	223 197	69 753
Metal	4 394	3 266	5 937	3 718	4 805
Brazil					
Ore	1 018 355	845 991	747 436	878 976	901 201
China					
Ore (c)	* 22 400	* 23 200	* 22 800	* 12 900	* 4 400
Metal (c)	* 600	* 400	* 850	* 200	* 600
India (d)					
Ore (b)	552 426	422 192	...	...	...
Indonesia					
Ore (a)	29 018	8 400	27 670	26 260	...
Japan					
Ore (b)	991	1 557	1 973	2 476	1 605
Malaysia					
Ore	2 000	10	—	—	—

Exports of Manganese

Manganese

tonnes

Country	1981	1982	1983	1984	1985
Philippines					
Ore (a)	2 800	—	1 315	—	—
Singapore					
Ore	27 203	19 104	27 449	25 492	21 954
of which: Re-exports	6 236	3 668	8 065	12 230	7 392
Thailand					
Ore	16 920	2 000	1	4 100	—
Australia					
Ore	899 687	906 416	1 003 513	1 460 139	1 403 000

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Includes manganese iron ore
- (b) Includes ferruginous manganese ore
- (c) BGS estimates, based on known imports into certain countries
- (d) Years ended 31 March following that stated

Manganese

Imports of Manganese

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ore (b)	278 056	178 946	367 206	269 865	386 299
Metal	1 962	2 741	3 424	3 113	4 215
Belgium-Luxembourg					
Ore	244 784	227 057	162 653	221 559	230 711
Metal	711	1 467	1 757	2 333	2 096
Denmark					
Ore	611	510	322	416	1 085
France					
Ore (b)	880 817	921 816	745 625	1 007 721	1 039 791
Metal	984	1 173	1 461	1 184	823
Germany, Federal Republic of					
Ore (b)	606 851	393 546	434 261	535 843	377 795
Metal	5 146	5 989	5 468	6 102	6 225
Greece					
Ore	5	25 157	...	...	10 830
Irish Republic					
Ore (b)	16 103	10 815	21 152	28 072	24 178
Italy					
Ore (b)	354 225	333 064	385 550	273 192	392 646
Metal	1 711	1 713	1 974	2 653	3 522
Netherlands					
Ore	53 392	67 628	44 389	50 386	72 493
Metal	3 474	4 102	2 170	1 560	2 113
Austria					
Ore	459	439	362	441	666
Bulgaria					
Ore	114 000	81 900	96 800	94 400	93 000
Czechoslovakia					
Ore	480 000	502 000	506 000	482 000	457 000
Finland					
Ore	337	1 733	10 154	7 005	10 045
German Democratic Republic					
Ore (a)	46 000	39 800	27 400	21 800	19 500
Hungary					
Ore	150	404	343	340	480
Norway					
Ore	484 640	764 085	623 305	737 061	701 993
Metal	351	320	1 579	1 121	1 678
Poland					
Ore	583 207	689 370	574 194	648 163	617 977
Portugal					
Ore	109 916	122 071	68 587	227 526	...
Spain					
Ore	253 987	260 600	213 765	417 653	299 033
Metal	2 869	454	676	524	...
Sweden					
Ore	531	25 835	24 527	486	336
Metal	708	1 331	1 442	977	1 073
Turkey					
Ore	722	1 952	1 910	1 348	1 300
Yugoslavia					
Ore	87 741	109 043	130 169	148 033	140 249
Ivory Coast					
Ore	900	1 800	1 250	1 301	2 067
Kenya					
Ore (b)	2 089	1 407	1 739	1 998	...
South Africa					
Ore	7 052	4 351	5 542	7 970	5 250
Zimbabwe					
Ore	4 149	6 795	4 174	5 131	...
Canada					
Ore (a)	119 748	71 658	42 260	77 545	102 188
Metal	10 371	781	2 652	3 078	3 757
Mexico					
Ore	64 238	59 320	155 418	141 803	24 332

Imports of Manganese

Country	1981	1982	1983	1984	1985
USA					
Ore	587 244	208 390	334 151	306 714	350 953
Metal	7 573	5 049	5 606	12 033	8 609
Argentina					
Ore	56 211	126 250	95 426	28 969	...
Brazil					
Ore	15 289	11 324	19 206	1 006	...
Metal	754	1 020	1 174	1 217	...
Colombia					
Ore	3 993	4 284	1 477	3 397	...
Peru					
Ore	1 638	1 442	625	...	...
Venezuela					
Ore	23 386	54 436	5 150	...	...
Hong Kong					
Ore	—	5	204	135	243
India (e)					
Ore	3 807	3 165	...	...	...
Metal	338	444	...	...	...
Indonesia					
Ore (b)	9 513	4 890	2 889	1 545	...
Iran					
Ore (d)	* 1 000	* 2 700	* 3 000	* 3 700	* 1 500
Japan					
Ore (c)	2 492 728	2 146 444	1 623 244	2 212 243	2 183 066
Korea, Dem. P.R. of					
Ore (d)	* 15 000	* 28 200	* 20 200	* 21 000	* 21 300
Korea, Republic of					
Ore	282 015	236 585	196 457	255 364	275 920
Malaysia					
Ore	1 557	1 332	1 499	1 462	1 128
Philippines					
Ore (b)	1 984	3 021	3 981	3 438	2 669
Singapore					
Ore	80 900	68 209	44 840	35 095	35 923
Sri Lanka					
Ore	1 147	1 120	867	1 342	290
Taiwan					
Ore	62 742	135 556	106 195	97 160	128 970
Thailand					
Ore	9	2 932	—	73	2
Australia					
Ore	2 139	451	1 004	1 298	2 000
Metal	1 693	567	1 144	1 561	...

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Mn content

(b) Includes manganese iron ore

(c) Includes ferruginous manganese ore

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

(e) Years ended 31 March following that stated

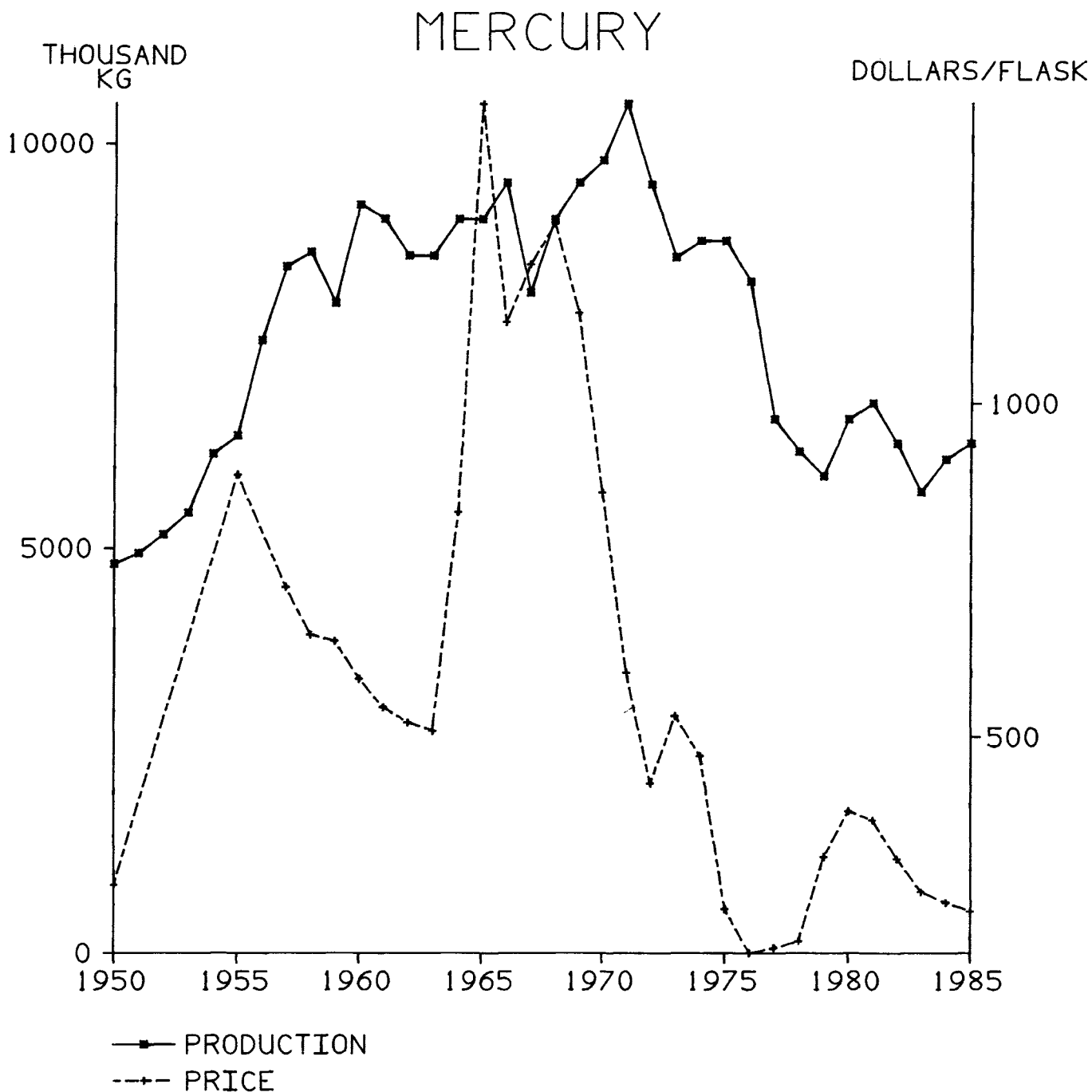


Figure 12 World production of mercury from 1950 to 1985 compared with the annual average price (USA) expressed in constant 1980 US dollars.
Constant commodity prices derived from those quoted in Metals Week, using the CPI for the USA published in International Financial Statistics Yearbook (1986).

Production of Mercury

Country	1981	1982	1983	1984	1985
Germany, Federal Republic of	76 000	53 000	—	—	—
Italy	251 643	159 350	—	—	—
Czechoslovakia	153 000	151 000	144 000	152 000	158 000
Finland	67 189	71 000	64 000	79 000	130 000
Soviet Union	* 1 700 000	* 1 700 000	* 1 700 000	* 1 600 000	* 1 600 000
Spain	1 560 469	1 656 000	1 416 156	1 519 898	1 552 707
Turkey	204 345	246 262	161 667	182 125	226 000
Yugoslavia	—	—	51 750	72 000	88 000
Algeria	* 863 000	* 379 500	* 345 000	* 793 500	* 862 500
Mexico	240 000	295 000	221 000	384 000	394 000
USA	961 935	888 025	864 239	656 642	569 839
China	* 700 000	* 700 000	* 700 000	* 700 000	* 700 000
World total	6 800 000	6 300 000	5 700 000	6 100 000	6 300 000

Mercury

Exports of Mercury

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom	69 515	212 975	131 004	43 392	69 778
Belgium-Luxembourg	14 200	34 200	77 200	26 800	9 900
Denmark	7 200	4 300	5 100	7 600	6 300
France	23 000	8 000	107 000	79 000	55 300
Germany, Federal Republic of	137 000	278 500	573 200	199 300	149 600
Italy	49 791	98 700	380 037	82 005	19 400
Netherlands	149 000	113 000	418 000	420 000	25 000
Austria	6 600	3 500	3 600	6 200	2 900
Finland	52 000	62 000	66 000	177 000	108 000
Norway	69 000	133 000	63 000	57 000	57 000
Spain	741 000	615 000	903 000	1 590 000	944 000
Sweden	9 000	10 000	114 000	97 000	5 000
Switzerland	4 652	3 216	951	7 993	29 450
Turkey	156 042	317 229	241 708	270 649	298 000
Yugoslavia	100 000	...	2 000	22 000	41 000
Algeria	142 899	252 195	501 544	1 144 770	...
Dominican Republic	5 102	1 620	3 895	3 800	...
Mexico	238 995	188 508	215 807	229 735	92 295
USA (a)	* 84 000	* 121 000	* 257 000	* 137 000	* 122 000
China (a)	* 556 400	* 429 000	* 243 400	* 154 000	* 303 800
Hong Kong (Re-exports)	133 614	26 769	76 176	5 813	42 637
Japan	238 448	251 503	25 453	74 785	330 946
Singapore	13 724	50 287	15 357	6 703	10 678
of which: Re-exports	13 582	50 277	15 309	6 703	10 653

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

Imports of Mercury

Country	1981	1982	1983	1984	1985
United Kingdom	205 412	260 929	185 052	287 637	393 346
Belgium-Luxembourg	178 800	285 200	262 200	329 400	259 800
Denmark	8 900	7 900	8 100	12 000	15 600
France	108 000	105 000	171 000	148 000	156 200
Germany, Federal Republic of	212 200	242 700	560 300	426 100	402 800
Greece	2 000	2 000	2 000	2 000	2 000
Irish Republic	2 700	15 400	11 800	1 100	19 900
Italy	80 710	37 100	27 868	137 731	170 000
Netherlands	158 000	131 000	344 000	170 000	26 000
Austria	15 200	10 000	12 700	11 400	6 500
Czechoslovakia (e)	* 69 000	* 104 500	* 42 500	* 26 300	* 20 000
Finland	4 000	38 000	...	1 000	1 000
German Democratic Republic (e)	* 158 000	* 230 000	* 321 000	* 333 000	* 187 000
Hungary	77 000	132 000	77 000	97 000	61 000
Norway	1 000	16 000	4 000	9 000	13 000
Poland	...	* 5 000	* 5 000	(e)* 18 000	...
Portugal	29 300	70 200	8 200	15 300	...
Romania (e)	* 9 000	* 2 000	* 143 000	* 254 000	* 17 000
Sweden	23 000	12 000	32 000	20 000	16 000
Switzerland	21 884	30 317	40 076	61 656	58 778
Yugoslavia	45 000	50 000	67 000	29 000	8 000
Algeria	999	928	1 196	...	...
Egypt	14 000	46 000	...	...	...
Morocco	8 699	9 854	6 699	7 477	11 279
South Africa	94 300	63 400	41 900	29 000	22 600
Tunisia	7 004	343	...	7 965	10 772
Canada	48 217	53 000	74 000	75 000	40 000
USA	455 112	529 512	505 215	918 488	618 901
Argentina	29 653	59 649	61 465	75 000	...
Brazil	93 372	125 800	91 956	177 005	...
Colombia	47 013	28 201	55 079	31 819	...
Peru	24 714	16 946	11 454	...	...
Uruguay	2 400	900	400	200	300
Venezuela	4 000	5 173	...	...	...
Burma (d)	99 000	160 000	...	...	...
Hong Kong	98 927	70 077	99 546	15 390	97 683
India (d)	318 000	384 269	...	...	...
Indonesia	23 645	18 052	22 119	11 118	...
Iran (b)	228 846	6 948	6 863	5 215	...
Israel (a)	11 000	...	(e)* 3 700	(e)* 4 000	(e)* 2 100
Japan	69 509	81 309	123 525	52 470	17 694
Korea, Dem. P.R. of (e)	* 104 000	* 70 300	* 79 900	* 10 000	* 10 000
Korea, Republic of	22 635	19 107	19 218	13 983	14 179
Malaysia	6 560	20 980	4 500	14 850	8 360
Pakistan (c)	50 798	43 134	93 867	77 718	21 646
Philippines	4 655	3 484	1 784	16 842	30 549
Saudi Arabia	83 241	11 721	21 750	—	—
Singapore	14 301	74 938	27 910	14 181	25 345
Sri Lanka	12 211	183	406	1 333	1 089
Taiwan	14 604	15 570	8 743	11 185	9 989
Thailand	19 987	10 850	8 472	5 219	8 636
Australia	57 791	35 033	40 045	34 439	...

(a) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

(b) Years ended 20 March following that stated

(c) Years ended 30 June of that stated

(d) Years ended 31 March following that stated

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

Mica

Production of Mica

tonnes

Country	1981	1982	1983	1984	1985
France (e)	9 059	7 950	9 286	10 854	10 084
Norway (b)	* 4 600	* 3 600	* 4 000	* 4 000	* 4 000
Portugal (a)	189	145	206	823	440
Soviet Union	* 47 000	* 48 000	* 49 000	* 49 000	* 50 000
Spain (e)	3 524	3 428	1 300	990	727
Yugoslavia	265	1 403	946	157	382
Madagascar	588	1 300	1 096	719	589
Morocco	1 805	512	* 500	* 1 200	* 1 440
Mozambique	300	147	309	126	* 150
South Africa	2 395	1 762	2 672	4 478	2 153
Sudan	183	165	10	100	—
Zimbabwe	1 406	844	547	960	581
Canada	11 284	* 9 500	* 11 000	* 11 000	* 12 000
Mexico	2 077	510	1 560	1 676	1 446
USA (d)(e)	121 000	96 000	127 000	146 000	125 000
Argentina	503	242	313	290	296
Brazil (a)	1 950	1 077	3 408	3 265	931
China (c)	* 10 200	* 11 800	* 13 100	* 15 900	* 16 700
India	12 990	13 315	11 660	9 608	* 8 000
Sri Lanka	1 398	863	973	626	529
Taiwan	85	44	311	304	114
Australia	3 365	2 773	266	2 194	...
World total	236 000	205 000	239 000	264 000	238 000

Note: In addition to the countries listed, Namibia, Pakistan and Romania are also believed to produce mica

(a) Exports

(b) Crude only

(c) Conservative BGS estimates, based on reconstructed exports

(d) Sold or used by producers

(e) Including mica recovered from mica schists and/or kaolin beneficiation

Exports of Mica

Country	1981	1982	1983	1984	1985
United Kingdom					
Unmanufactured	412	508	105	89	112
Ground	1 871	1 243	1 169	754	1 310
Waste	643	1 697	2 403	2 563	1 668
Belgium-Luxembourg	38	18	32	26	225
France					
Unmanufactured	2 119	1 473	1 832	5 050	2 887
Ground	3 895	3 608	3 969	4 548	4 842
Germany, Federal Republic of					
Unmanufactured	71	20	13	52	36
Ground	1 020	859	906	1 203	1 411
Italy					
Unmanufactured	324	580	227	194	116
Ground	423	677	271	364	113
Netherlands					
Unmanufactured	676	589	383	315	983
Ground	2 407	2 521	2 451	458	475
Austria	448	602	829	829	316
Finland	1	132	814	548	566
Norway	2 298	1 820	2 009	2 009	1 934
Portugal	189	145	206	823	440
Spain	2 683	2 021	465	49	59
Sweden	7	1	58	28	20
Switzerland	27	115	75	75	130
Madagascar	998	1 408	900	874	779
Morocco	1 353	1 570	—	1 434	1 330
Mozambique	275	62	...	286	...
South Africa (a)	* 900	* 1 150	* 950	* 850	* 1 100
Zimbabwe					
Ground	758	518	111	259	...
USA					
Unmanufactured	3 892	2 584	2 185	1 909	1 361
Ground	6 364	7 619	7 453	5 236	6 559
Argentina	71	24	4	19	...
Brazil	1 950	1 077	3 408	3 265	931
China (a)	* 10 200	* 11 800	* 13 100	* 15 900	* 16 700
India (b)					
Block	1 349	956)		
Splittings	4 353	2 087)		
Condenser films	93	9	)	10 864	22 150
Waste	7 721	7 769)		
Japan	373	149	158	455	290
Malaysia	—	110	325	246	862
Singapore	351	200	363	396	222
of which: Re-exports	350	161	194	350	215
Sri Lanka	1 393	1 007	1 043	631	534
Taiwan	121	50	413	295	248

Note: This table shows unmanufactured mica and includes sheet, block, splittings, ground and waste, unless these are separately specified. Mica powder is included under the term 'ground'

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

(b) Years ended 31 March following that stated

Mica

Imports of Mica

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Block	19	72	) 144	169	82
Splittings	200	262)		
Ground	2 180	2 117	3 323	6 334	3 185
Waste	11 495	11 622	12 941	12 391	12 587
Belgium-Luxembourg					
Unmanufactured	410	750	890	1 138	3 600
Ground	1 202	1 054	882	2 866	962
Denmark	179	167	223	254	272
France					
Unmanufactured	3 930	4 340	1 156	3 022	2 676
Ground	989	1 124	1 097	1 025	632
Germany, Federal Republic of					
Unmanufactured	5 044	6 684	5 133	4 620	4 912
Ground	4 030	4 661	5 381	6 222	7 034
Greece	192	211	139	263	473
Irish Republic	313	375	168	241	135
Italy					
Unmanufactured	495	283	269	313	400
Ground	786	698	628	985	1 111
Netherlands					
Unmanufactured	49	203	348	330	876
Ground	3 865	3 782	3 704	1 589	1 724
Austria	231	222	203	205	321
Finland	177	187	239	198	248
German Democratic Republic	1 224	1 616	1 350	1 042	1 124
Norway					
Unmanufactured	283	214	190	178	165
Waste	1 588	1 932	1 763	2 113	3 878
Poland	1 442	1 066	779	1 750	1 241
Portugal	466	375	320	283	...
Soviet Union	* 550	* 575	...	...	...
Spain	1 343	1 136	1 300	1 244	4 002
Sweden	337	422	438	422	447
Switzerland	655	682	480	753	611
Turkey	22	23	39	25	20
Yugoslavia	539	243	977	133	253
Egypt	180	205	27	...	...
Kenya	119	10	22	6	...
South Africa	948	545	486	1 073	588
Tunisia	107	166	...	106	12
Canada	3 133	2 860	2 791	2 395	2 310
Jamaica	73	77	134	59	119
Mexico	153	129	47	161	132
Trinidad & Tobago	176	184	197	176	117
USA					
Block	14	58	8	76	296
Splittings	1 097	809	164	559	483
Ground	6 064	4 910	4 673	5 812	5 487
Waste	186	450	518	) 4 730	3 613
Other unmanufactured	3 946	2 392	1 889)	
Brazil	170	76	109	—	...
Colombia	80	980	105	150	...
Peru	160	49	30	...	...
Uruguay	71	16	19	23	17
Venezuela	1 316	1 969	656	...	...
Abu Dhabi	395	46	281	39	61
Brunei	25	13	24	—	...
Dubai	36	150	251	230	248
Hong Kong	33	42	19	48	32
Indonesia	389	587	547	704	...
Iran (a)	253	0	51	15	...

Imports of Mica

Mica
tonnes

Country	1981	1982	1983	1984	1985
Japan					
Block	1 344	886	783	2 963	2 163
Splittings	516	598	1 301	2 611	1 903
Waste	4 833	4 008	4 395	3 554	3 088
Other unmanufactured	5 905	9 017	3 226	3 873	3 711
Korea, Republic of	121	185	434	569	1 023
Malaysia	73	83	114	67	118
Philippines	77	173	84	67	26
Saudi Arabia	908	1 584	1 032	670	608
Singapore	1 250	1 392	1 553	2 027	1 220
Taiwan					
Unmanufactured	34	33	50	51	33
Ground	258	224	174	243	160
Thailand	82	91	172	319	153
Australia					
Unmanufactured	243	) 474	335	204	...
Ground	562)			
New Zealand (b)	£70 000	£92 000	£91 000	£122 000	£120 000

Note: This table shows unmanufactured mica and includes sheet, block, splittings, ground and waste, unless these are separately specified. Mica powder is included under the term 'ground'

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

Molybdenum

Mine Production of Molybdenum

tonnes (metal content)

Country	1981	1982	1983	1984	1985
Bulgaria	* 150	* 170	* 190	* 190	* 190
Soviet Union	* 10 700	* 11 000	* 11 100	* 11 200	* 11 300
Turkey	* 100	* 100	* 100	* 100	* 100
Niger	116	42	* 40	* 30	* 30
Canada	12 850	13 961	10 194	11 557	7 852
Mexico	451	5 190	5 866	4 054	3 761
USA	63 458	38 275	15 238	47 021	49 173
Chile	15 360	20 048	15 264	16 861	18 391
Peru	3 054	2 873	2 563	3 081	3 715
China	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Japan	79	103	102	147	* 100
Korea, Republic of	467	363	143	159	335
Mongolia	660	* 800	* 950	* 1 000	* 1 000
Philippines	94	80	40	—	—
World total	110 000	95 000	64 000	97 000	98 000

Note: In addition to the countries listed, Australia, India, Democratic P.R. of Korea, and Romania are also believed to produce molybdenum

Exports of Molybdenum

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	4 257	5 769	6 120	4 906	4 402
Metal	261	365	460	414	408
Oxides	1 086	1 854	1 035	1 614	1 594
Belgium-Luxembourg					
Ores & concentrates	9 093	9 300	8 649	10 847	11 412
Metal	183	67	90	90	114
Oxides	154	53	35	39	42
France					
Ores & concentrates	1 481	502	364	227	193
Metal	180	165	284	288	276
Germany, Federal Republic of					
Ores & concentrates	5 428	7 442	6 898	5 291	3 526
Metal	319	431	622	680	649
Italy					
Ores & concentrates	209	348	298	—	43
Metal	6	20	150	49	4
Netherlands					
Ores & concentrates	(b) 16 768	(b) 14 047	8 905	15 801	18 224
Metal	148	247	184	122	274
Oxides	1 546	1 683	1 504	1 631	1 509
Austria					
Metal	1 018	1 047	1 201	1 284	1 439
Finland					
Ores & concentrates	340	425	310	488	—
Sweden					
Ores & concentrates	1 691	1 970	1 458	745	1 375
Metal	38	7	5	71	118
Canada					
Ores & concentrates (a)	13 688	17 429	11 349	8 896	5 635
Mexico					
Ores & concentrates (a)	—	2 504	7 482	4 674	4 533
USA					
Ores & concentrates (a)	23 291	22 581	21 350	28 764	28 966
Metal	1 643	998	826	907	862
Chile					
Ores & concentrates (a)	9 109	11 184	3 793	4 677	5 523
Oxides	...	...	16 250	11 538	...
Peru					
Ores & concentrates (c)	* 2 300	* 2 200	* 2 500	* 3 800	* 3 200
Japan					
Metal	54	54	51	41	55
Korea, Republic of					
Ores & concentrates	651	360	—	—	230
Philippines					
Ores & concentrates	139	155	122	—	—

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Mo content

(b) May include other ores

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

Molybdenum

Imports of Molybdenum

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	15 149	17 738	14 419	18 042	19 057
Metal	176	178	308	489	358
Oxides	432	195	191	102	304
Belgium-Luxembourg					
Ores & concentrates	20 772	20 469	22 976	21 952	22 150
Metal	126	162	278	173	223
Oxides	120	192	298	282	39
France					
Ores & concentrates	9 078	7 713	5 650	6 246	5 676
Metal	117	166	225	243	260
Oxides	62	29	35	77	144
Germany, Federal Republic of					
Ores & concentrates	18 138	21 524	19 061	18 597	17 600
Metal	984	766	749	964	1 146
Oxides	502	265	274	192	174
Italy					
Ores & concentrates	4 522	2 768	2 360	4 438	4 810
Metal	120	110	175	189	142
Oxides	68	232	47	86	65
Netherlands					
Ores & concentrates	(a) 21 501	(a) 19 677	13 816	20 741	24 061
Metal	148	172	235	178	186
Oxides	83	19	29	9	24
Austria					
Metal	188	38	143	109	97
Oxides	1 493	1 896	1 748	2 063	2 241
Czechoslovakia					
Ores & concentrates (b)	* 700	* 400	* 800	* 600	* 600
Finland					
Ores & concentrates	454	488	558	671	1 121
Metal	4	6	3	6	6
Soviet Union					
Ores & concentrates (b)	* 1 000	...	* 1 000	* 300	* 100
Spain					
Ores & concentrates	1 817	2 283	2 787	3 446	...
Metal	17	36	24	38	25
Sweden					
Ores & concentrates	5 618	6 397	5 254	6 357	6 481
Metal	43	59	33	71	137
Oxides	169	483	232	138	125
Switzerland					
Metal	20	29	9	21	22
Yugoslavia					
Metal	15	15	23	29	14
South Africa					
Metal	11	11	26	23	23
Oxides	170	138	10	188	414
Canada					
Oxides	423	193	141	238	187
Mexico					
Ores & concentrates	927	240	0	72	52
Metal	204	52	1	4	18
USA					
Ores & concentrates	2 672	2 488	924	21	83
Metal	247	183	271	323	343
Oxides	1 191	2 087	3 548	3 992	1 893
Argentina					
Oxides	250	509	473	...	...
Brazil					
Ores & concentrates	2 240	1 303	1 465	2 590	...
Metal	44	42	28	51	...

Imports of Molybdenum

Country	1981	1982	1983	1984	1985
Japan					
Ores & concentrates	16 290	17 245	18 737	18 246	21 138
Metal	219	296	203	423	428
Oxides	660	635	549	578	384
Korea, Republic of					
Metal	7	11	67	15	21
Philippines					
Metal	127	13	30	20	20
Singapore					
Metal	1	9	19	11	4
Taiwan					
Metal	44	45	70	90	60
Australia					
Ores & concentrates	155	116	63	...	...

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) May include other ores

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

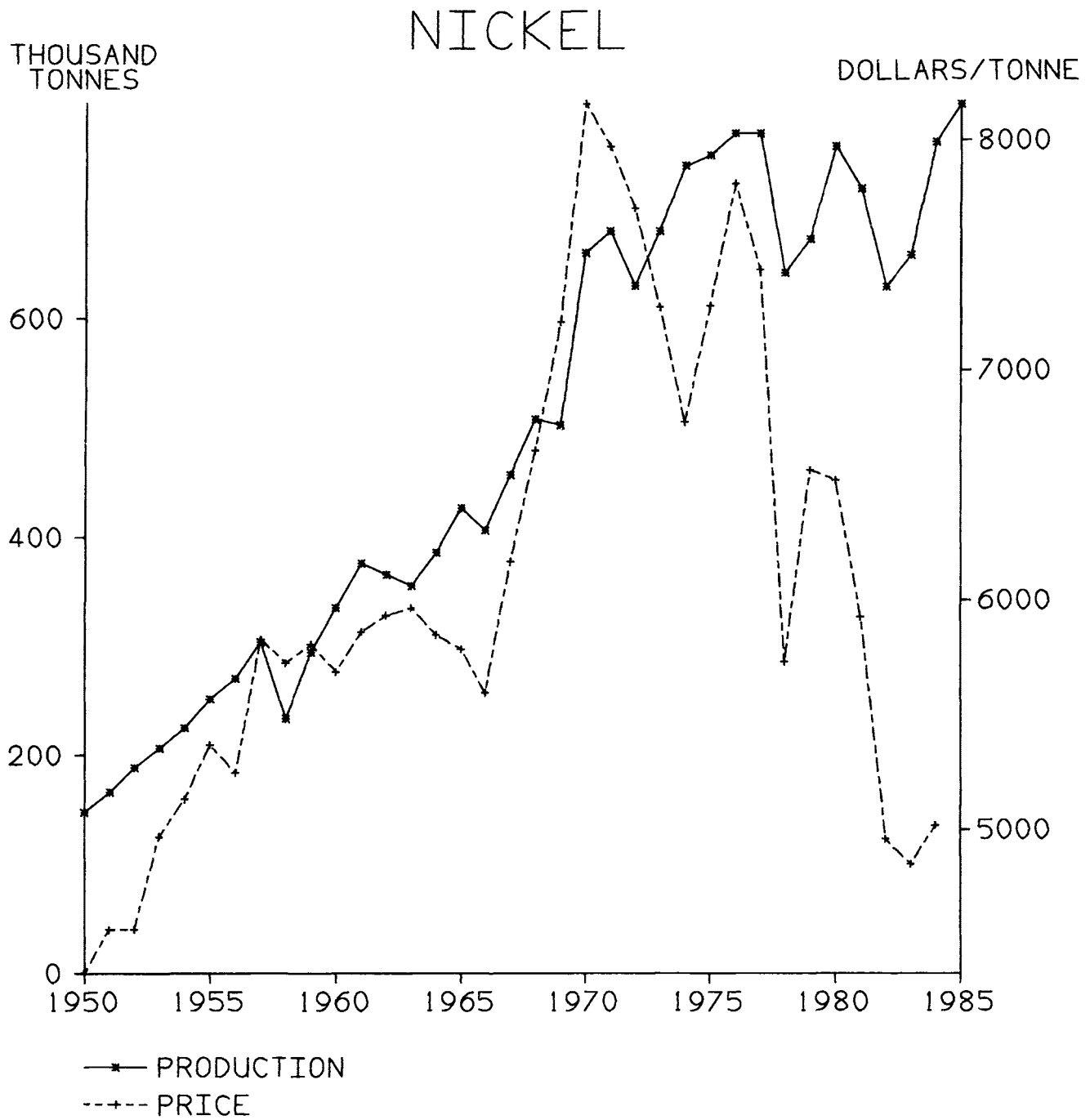


Figure 13 World mine production of nickel from 1950 to 1985 compared with the yearly average f.o.b. contract price of Canadian electrolytic cathodes expressed in constant 1980 US dollars. (From 1980: LME cathodes.)
Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Mine Production of Nickel

tonnes (metal content)

Country	1981	1982	1983	1984	1985
Greece (d)	10 900	5 000	12 900	13 600	15 900
Albania	8 800	9 000	9 000	9 700	10 000
Finland	7 557	4 746	5 214	6 928	7 920
German Democratic Republic	2 700	2 500	2 200	2 000	2 000
Norway	489	405	359	326	* 440
Poland	* 1 000	* 700	* 300	—	—
Soviet Union	* 150 000	* 170 000	* 172 000	* 175 000	* 175 000
Yugoslavia	* 2 000	* 3 500	* 1 600	* 2 200	* 7 500
Botswana	18 279	17 763	18 214	18 562	19 560
Morocco	500	500	—	—	—
South Africa (a)	25 000	20 500	20 500	22 500	29 000
Zimbabwe	13 018	13 309	10 147	10 251	9 897
Canada (b)	160 247	88 581	125 022	173 725	169 971
Cuba (c)	40 260	37 603	39 257	33 227	33 400
Dominican Republic (d)	19 020	5 958	19 017	24 805	25 400
USA	10 976	2 906	—	13 190	5 558
Brazil	6 567	14 451	15 561	23 532	20 300
Colombia	—	2 244	14 183	17 800	12 500
Burma (e)	20	* 20	* 20	* 20	* 20
China	* 11 000	* 13 500	* 15 000	* 17 500	* 19 000
Indonesia	49 400	48 500	41 200	47 800	48 200
Philippines	29 247	19 634	13 900	13 601	27 653
Australia	74 355	87 552	76 625	76 923	85 761
New Caledonia (c)	78 090	60 101	46 162	58 326	72 372
World total	719 000	629 000	658 000	762 000	797 000

(a) Refined nickel and nickel in matte

(b) Refined nickel and nickel in oxide and salts plus nickel in matte and concentrate exported

(c) Ni and Co content

(d) Ni content of ferro-nickel

(e) Ni content of nickel speiss. Years ended 31 March following that stated

Nickel

Smelter/Refinery Production of Nickel

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	25 400	6 902	23 200	22 300	17 800
France	10 051	7 360	4 878	5 217	7 019
Greece	10 860	4 778	12 858	15 829	15 900
Albania	* 4 500	* 4 500	4 500	4 000	4 000
Czechoslovakia	* 1 600	* 1 500	* 3 000	* 4 500	* 4 000
Finland	13 051	12 304	14 514	15 282	15 656
German Democratic Republic	* 2 800	* 3 000	* 3 000	* 3 000	* 3 000
Norway	36 954	25 833	28 619	35 548	37 513
Poland	* 1 500	* 700	* 300	—	—
Soviet Union	* 170 000	* 190 000	* 192 000	* 193 000	* 193 000
Yugoslavia	—	1 500	1 000	1 800	7 500
South Africa	17 200	17 300	19 200	20 500	24 000
Zimbabwe	12 400	14 600	13 000	10 400	11 500
Canada	106 406	61 544	84 935	114 315	110 021
Cuba	20 850	21 001	21 135	17 554	18 000
Dominican Republic (a)	18 679	5 484	21 202	24 219	25 802
USA	44 275	40 783	(b) 30 300	40 763	33 005
Brazil	2 334	4 813	10 740	12 716	13 166
Colombia	—	1 463	14 453	16 460	11 340
China	* 12 000	* 12 500	* 16 500	* 17 000	* 19 000
Indonesia	4 703	5 000	4 900	4 800	4 800
Japan	93 600	87 300	82 300	89 361	92 594
Philippines	21 485	11 223	6 097	3 528	14 800
Australia	42 505	45 931	41 800	38 660	40 807
New Caledonia	27 989	28 007	21 717	29 158	36 103
World total	701 000	615 000	676 000	740 000	760 000

Note: Data relate to refined nickel plus the nickel content of ferro-nickel and nickel oxide

(a) Shipments of ferro-nickel (Ni content)

(b) Excludes production from domestic ores

Exports of Nickel

Country	1981	1982	1983	1984	1985
United Kingdom					
Mattes, sinters etc.	4 941	2 010	572	184	323
Unwrought	18 329	10 166	12 696	10 527	8 477
Unwrought alloys	2 051	1 259	1 039	1 849	2 108
Scrap	4 195	5 136	5 637	5 842	5 408
Oxides	162	294	150	88	130
Belgium-Luxembourg					
Unwrought	62	562	229	173	146
Unwrought alloys	56	127	213	80	72
Scrap	1 432	984	708	843	1 139
Denmark					
Scrap	32	47	43	58	14
France					
Unwrought	4 711	3 600	4 504	4 316	5 267
Unwrought alloys	553	759	912	1 266	953
Scrap	2 461	2 064	2 070	3 602	3 635
Oxides	235	390	62	80	30
Germany, Federal Republic of					
Mattes, sinters etc.	52	136	5 553	1 786	1 491
Unwrought	2 632	6 175	11 497	6 651	2 726
Unwrought alloys	1 869	3 286	2 861	3 695	3 905
Scrap	7 780	7 700	7 637	9 404	10 032
Oxides	95	135	2 437	76	58
Greece					
Scrap	394	42	590	21	18
Irish Republic					
Unwrought (a)	75	19	108	59	36
Scrap	85	47	51	149	151
Italy					
Unwrought (a)	131	209	713	141	124
Scrap	318	290	165	169	119
Netherlands					
Mattes, sinters etc.	2 602	3 115	2 782	(b)* 4 800	(b)* 3 400
Unwrought (a)	3 087	2 495	2 013	426	443
Scrap	1 564	1 808	2 206	3 015	3 068
Oxides	264	375	781	(b)* 500	(b)* 400
Austria					
Scrap	451	255	457	774	295
Finland					
Mattes, sinters etc.	2 690	2 051	955	—	—
Unwrought (a)	11 135	9 757	11 322	13 247	13 852
Scrap	—	392	4 628	2 269	1 777
Norway					
Ore	11 360	10 824	9 952	8 231	10 843
Unwrought	36 931	29 270	30 014	37 812	35 669
Scrap	583	197	107	49	143
Soviet Union					
Mattes, sinters etc. (b)	* 800	* 500	* 800	* 250	* 200
Unwrought (b)	* 31 700	* 35 000	* 35 500	* 37 500	* 28 000
Spain					
Scrap	78	24	36	328	165
Sweden					
Mattes, sinters etc.	—	106	117	—	—
Unwrought (a)	1 397	717	482	622	96
Scrap	525	573	1 620	613	533
Switzerland					
Unwrought, mattes, sinters etc.	16	23	27	12	105
Scrap	247	241	318	422	256
Yugoslavia					
Unwrought	189	25	46	466	347
Scrap	148	170	93	154	398
Botswana					
Mattes, sinters etc.	46 185	41 587	52 117	86 587	53 155
South Africa					
Slurry, mattes, sinters etc. (b)	* 79 500	* 48 600	* 36 200	* 46 000	* 42 800
Unwrought (a)(b)	* 17 900	* 16 800	* 15 500	* 16 400	* 16 100
Scrap (b)	* 100	* 200	* 100	* 400	* 400

Nickel

Exports of Nickel

tonnes

Country	1981	1982	1983	1984	1985
Canada					
Ores, concentrates, mattes etc. (c)	68 265	40 164	51 273	79 492	77 920
Unwrought	79 987	62 463	67 386	80 508	81 771
Scrap	2 927	3 283	2 988	9 693	4 949
Cuba					
Oxide, sinter & sulphide (e)	39 076	38 005	37 807	36 656	...
USA					
Unwrought (a)	15 657	31 283	20 309	23 815	16 415
Scrap	9 834	10 100	12 056	11 934	14 093
Hong Kong					
Unwrought (Re-exports)	2 895	2 793	4 277	3 020	3 242
Scrap	435	487	378	293	118
Indonesia					
Ore	842 045	721 518	514 972	579 284	...
Mattes, sinters etc.	44 947	37 951	46 010	49 848	...
Japan					
Unwrought (a)	1 262	298	286	349	323
Malaysia					
Unwrought alloys	8	116	213	473	106
Philippines					
Ores & concentrates	557 583	408 712	346 973	527 205	616 455
Unwrought (a)	15 469	5 869	10 362	2 344	11 284
Singapore					
Unwrought	1 201	2 774	9 440	4 717	2 069
of which: Re-exports	1 201	2 774	9 409	4 685	2 017
Scrap	503	533	413	160	1 072
of which: Re-exports	62	68	32	16	947
Taiwan					
Unwrought	36	38	111	3	392
Scrap	947	1 198	1 423	1 825	1 889
Australia (d)	* 51 600	* 54 500	* 62 000	* 60 900	* 61 500
New Caledonia					
Ores	1 600 877	1 498 837	1 065 479	1 332 945	1 443 908
Mattes, sinters etc.	22 500	10 200	4 700	8 300	11 800

Notes:

- 1 In this table the term 'unwrought' nickel corresponds to item 683.1 of the Standard International Trade Classification (Revision 2) which excludes all electro-plating anodes
 - 2 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys
(b) BGS estimates, based on known imports into certain countries
(c) Ni content
(d) BGS estimates; unwrought metal and Ni content of ores, concentrates, matte etc., based on known imports into certain countries
(e) Ni-Co content (mainly nickel)

Imports of Nickel

Country	1981	1982	1983	1984	1985
United Kingdom					
Mattes, sinters etc.	41 232	15 015	25 937	39 891	42 753
Unwrought	16 431	14 778	10 423	13 280	13 948
Unwrought alloys	526	474	467	2 079	2 216
Scrap	2 390	3 359	2 298	2 810	4 137
Oxides	257	216	511	553	1 062
Belgium-Luxembourg					
Mattes, sinters etc.	446	338	423	2 402	1 669
Unwrought	2 176	3 149	2 993	2 079	2 322
Unwrought alloys	273	969	1 347	971	274
Scrap	983	499	327	601	527
Oxides	106	88	349	384	142
Denmark					
Unwrought	115	159	222	204	106
Unwrought alloys	0	2	22	156	38
France					
Mattes, sinters etc.	19 374	10 756	7 092	8 649	13 599
Unwrought	16 802	16 377	17 893	18 094	15 414
Unwrought alloys	3 109	3 121	2 659	4 604	4 357
Scrap	983	466	529	917	942
Oxides	262	243	545	283	204
Germany, Federal Republic of					
Mattes, sinters etc.	12 361	13 847	11 999	12 239	12 583
Unwrought (a)	39 929	40 576	44 830	48 284	42 368
Scrap	5 469	6 419	4 902	8 389	7 561
Oxides	315	193	186	383	234
Greece					
Unwrought	41	152	100	71	133
Irish Republic					
Unwrought (a)	188	187	142	220	305
Italy					
Mattes, sinters etc.	1 766	1 870	2 676	4 261	4 426
Unwrought	11 502	16 847	13 593	19 811	17 336
Unwrought alloys	651	1 063	664	473	583
Scrap	335	320	140	81	271
Oxides	2 897	2 430	2 300	2 106	975
Netherlands					
Mattes, sinters etc.	2 633	(e)* 8 800	(e)* 14 600	(e)* 7 600	...
Unwrought	3 681	3 312	3 054	1 604	1 737
Unwrought alloys	54	78	62	30	34
Scrap	1 377	1 527	1 320	3 737	2 943
Oxides	1 075	1 245	267	152	314
Austria					
Mattes, sinters etc.	734	833	622	1 122	1 207
Unwrought (a)	2 586	2 129	2 888	3 105	2 664
Scrap	567	357	222	608	572
Czechoslovakia					
Unwrought (a)	8 347	6 741	8 060	6 483	6 558
Finland					
Ore	12 402	11 579	12 188	7 325	13 661
Mattes, sinters etc.	6 270	7 853	9 901	8 786	9 759
Unwrought (a)	2 460	2 868	4 973	4 661	5 084
Scrap	1 449	1 959	1 987	2 489	2 681
Norway					
Mattes, sinters etc.	84 252	62 419	63 140	93 459	102 443
Unwrought (a)	188	85	281	146	202
Scrap	21	31	8	73	3
Portugal					
Unwrought (a)	246	297	275	223	...
Spain					
Mattes, sinters etc.	2 244	2 353	2 625	2 376	1 850
Unwrought (a)	3 668	5 036	4 982	4 776	3 782
Sweden					
Mattes, sinters etc.	3 113	2 603	4 059	2 934	2 603
Unwrought	7 754	10 553	9 224	12 566	11 874
Unwrought alloys	284	308	372	293	410
Scrap	2 082	2 930	3 365	4 575	5 678

Nickel

Imports of Nickel

tonnes

Country	1981	1982	1983	1984	1985
Switzerland					
Unwrought, mattes, sinters etc.	1 164	1 034	895	901	1 261
Scrap	240	242	94	70	86
Yugoslavia					
Unwrought	2 150	1 074	1 394	2 659	2 837
South Africa					
Mattes, sinters, etc.	150	560	455	577	904
Unwrought	522	103	40	57	41
Canada					
Ores, concentrates & scrap (b)	23 760	22 355	29 401	24 736	31 556
Unwrought (a)	2 927	3 403	3 355	4 102	3 336
Mexico					
Mattes, sinters etc.	4 049	4 312	1 227	2 088	3 539
Oxides	511	268	...	...	...
USA					
Ore	8 354	1 813	—	0	0
Slurry, mattes, sinters etc.	85 994	50 165	54 552	* 70 900	* 56 000
Unwrought (a)	109 804	74 328	84 709	93 456	88 705
Scrap	4 741	3 901	5 507	5 623	5 036
Oxides	3 928	2 852	3 818	5 013	4 618
Argentina					
Unwrought	395	443	762	735	...
Brazil					
Unwrought (a)	4 950	1 747	174	341	...
Colombia					
Unwrought	245	121	231	309	...
Venezuela					
Unwrought	207	185	109	...	...
Hong Kong					
Unwrought	4 534	3 312	5 008	4 494	3 811
India (c)					
Mattes, sinters etc.	1 918	1 466	...	...	...
Unwrought	5 598	4 744	...	...	...
Unwrought alloys	2 130	1 969	...	...	...
Scrap	3 357	1 702	...	...	...
Japan					
Ore	3 462 801	2 996 755	2 297 076	2 834 813	2 976 005
Mattes, sinters etc.	36 608	41 812	38 323	50 510	52 656
Unwrought	17 732	19 689	26 822	31 377	24 690
Unwrought alloys	151	218	237	172	208
Scrap	2 252	2 938	3 668	3 242	2 622
Oxides	1 439	—	—	—	—
Korea, Dem. P.R. of					
Unwrought (a)(e)	* 400	* 600	* 200	* 500	* 700
Korea, Republic of					
Unwrought	3 811	2 451	2 002	2 306	2 472
Scrap	4	318	167	224	327
Malaysia					
Unwrought (a)	2 010	499	296	398	104
Singapore					
Unwrought	1 415	1 414	11 385	917	2 638
Scrap	135	193	145	182	170
Taiwan					
Mattes, sinters etc.	18	486	429	1 949	2 938
Unwrought (a)	2 479	2 822	4 060	4 497	3 863
Scrap	79	155	133	136	396

Imports of Nickel

Nickel

tonnes

Country	1981	1982	1983	1984	1985
Thailand					
Unwrought	415	440	622	433	387
Australia					
Mattes, sinters etc.	0	31	51	0	121
Unwrought	838	1 307	306	1 133	737
Unwrought alloys	646	682	77	132	80
New Zealand (d)					
Unwrought (a)	116	142	10	105	131

Notes:

- 1 In this table the term 'unwrought' nickel corresponds to item 683.1 of the Standard International Trade Classification (Revision 2) which excludes all electro-plating anodes
 - 2 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys
 (b) Ni content
 (c) Years ended 31 March following that stated
 (d) Years ended 30 June of that stated
 (e) BGS estimates; based on known imports from certain countries

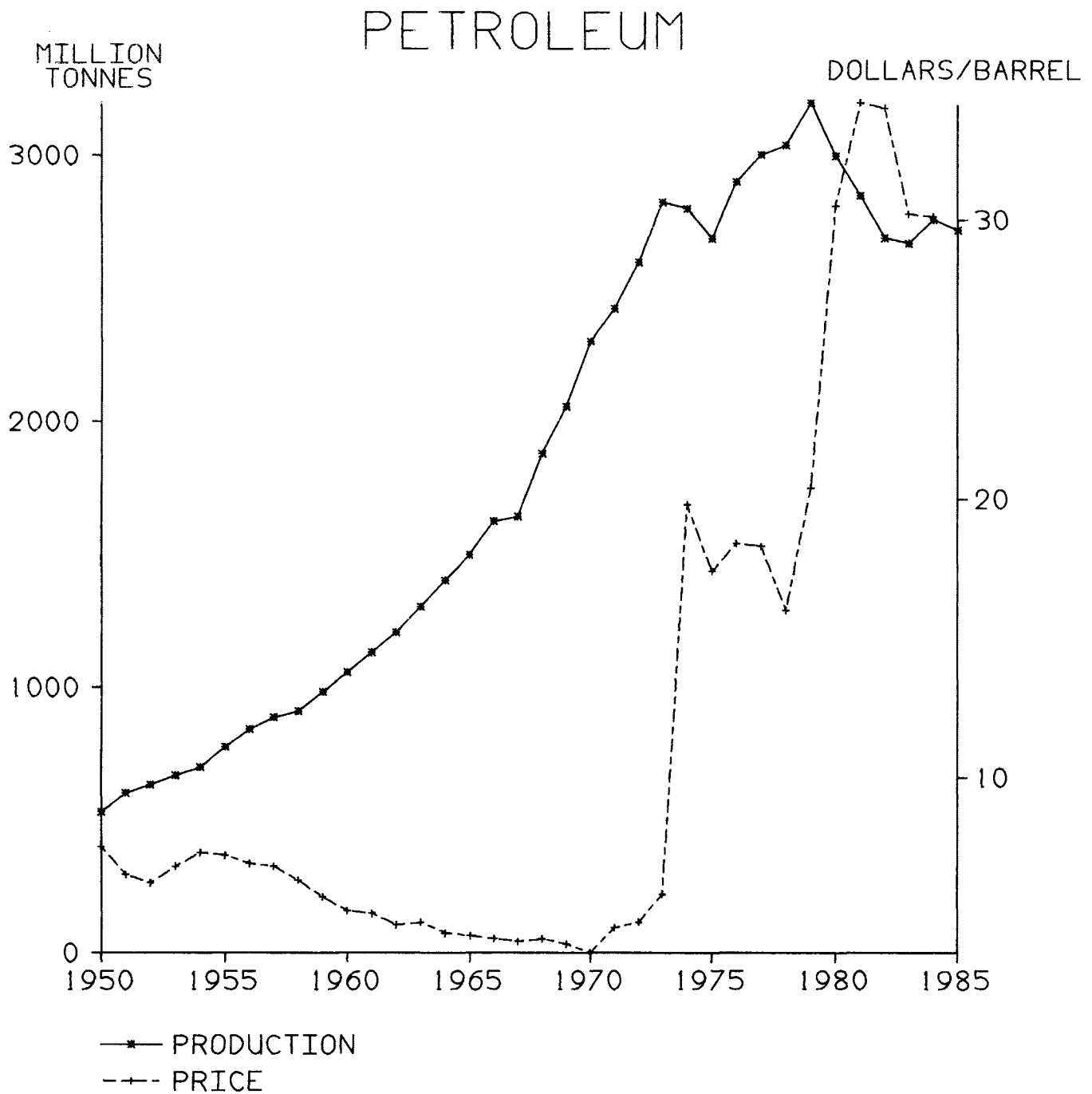


Figure 14 World production of crude petroleum from 1950 to 1985 compared with the weighted yearly average price f.o.b. OPEC countries of light crude expressed in constant 1980 US dollars (prior to 1974, f.o.b. Ras Tanura).

Trend line analysis of the production data indicates a growth rate of approximately 5½% over 36 years.

Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Production of Crude Petroleum

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	87 946 000	100 311 000	110 839 000	121 180 000	122 421 000
Denmark (e)	760 088	1 662 918	2 148 712	2 219 205	2 853 368
France	1 676 000	1 646 000	1 660 000	2 064 000	2 648 400
Germany, Federal Republic of	4 459 000	4 255 000	4 116 000	4 055 000	4 105 000
Greece	202 186	1 012 216	1 219 899	1 310 000	1 300 000
Italy	1 465 093	1 728 165	2 197 582	2 236 203	2 352 006
Netherlands	1 348 000	1 637 000	2 589 000	3 102 000	3 728 000
Albania	* 2 190 000	* 2 310 000	* 4 000 000	* 3 000 000	* 3 500 000
Austria	1 337 679	1 290 363	1 268 573	1 205 430	1 146 958
Bulgaria	* 290 000	* 300 000	* 300 000	* 280 000	* 280 000
Czechoslovakia	89 000	89 000	93 000	91 000	123 000
German Democratic Republic	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Hungary	2 024 000	2 027 000	2 004 000	2 007 000	2 012 000
Norway	23 450 041	24 515 371	30 482 453	34 681 721	38 409 000
Poland	315 000	241 000	210 000	189 000	194 000
Romania	11 644 000	11 742 000	11 593 000	11 453 000	13 800 000
Soviet Union	608 820 000	612 600 000	616 300 000	612 700 000	595 000 000
Spain	1 253 291	1 530 576	2 976 845	2 245 179	2 088 248
Turkey	2 364 209	2 333 118	2 204 481	2 086 715	2 110 000
Yugoslavia	4 375 000	4 340 000	4 124 751	4 044 000	4 149 000
Algeria	44 570 000	43 700 000	42 300 000	46 100 000	44 800 000
Angola	6 466 600	6 493 900	8 895 000	10 191 000	11 514 300
Benin	—	—	* 250 000	* 400 000	* 350 000
Cameroon	4 420 000	5 410 000	5 650 000	7 850 000	8 850 000
Congo	3 810 588	4 382 351	5 365 144	6 210 000	7 230 000
Egypt (f)	32 900 000	34 500 000	37 700 000	38 600 000	43 400 000
Gabon	7 650 000	7 720 000	7 920 000	7 600 000	7 700 000
Ivory Coast	384 279	747 730	1 025 000	1 120 000	1 300 000
Libya	58 973 653	50 510 000	54 400 000	53 500 000	52 100 000
Nigeria	71 073 365	67 350 706	61 000 000	68 600 000	72 800 000
Tunisia	5 407 000	5 146 000	5 532 000	5 480 000	5 408 000
Zaire	1 067 500	1 167 300	1 285 500	1 628 600	1 350 000
Canada	68 009 200	67 318 700	71 838 600	76 262 900	78 053 600
Cuba	253 200	541 000	742 200	770 400	867 600
Guatemala	207 200	317 900	353 600	237 900	150 000
Mexico	119 580 928	142 079 921	138 983 294	145 090 791	139 758 862
Trinidad & Tobago	9 756 399	9 121 794	8 235 968	8 758 037	9 070 986
USA	419 689 000	423 459 000	425 368 000	434 720 000	439 224 000
Argentina	26 296 100	25 951 600	25 977 400	25 318 400	23 616 000
Bolivia	1 173 500	1 293 400	1 174 800	1 104 800	912 000
Brazil	11 298 000	13 756 000	17 461 000	22 200 000	26 400 000
Chile	2 190 553	2 266 159	2 083 322	2 040 390	1 892 273
Colombia	6 896 000	7 308 000	7 657 000	8 586 000	9 000 000
Ecuador	10 707 824	10 833 696	12 043 653	13 239 624	14 285 756
Peru	9 495 000	9 598 000	8 419 000	9 370 000	9 840 000
Venezuela	111 687 672	100 391 367	95 525 697	* 95 500 000	* 89 000 000
Abu Dhabi	55 628 310	44 215 352	41 864 229	38 900 000	41 500 000
Bahrain	2 303 552	2 195 082	2 086 475	2 500 000	2 490 000
Brunei	8 258 000	8 950 000	8 650 000	8 320 000	8 060 000
Burma (d)	1 474 732	1 381 846	1 435 347	1 660 220	1 500 000
China (a)	101 220 000	102 120 000	106 070 000	114 640 000	124 700 000
Dubai	17 594 972	16 803 300	17 194 515	18 300 000	18 900 000
India	14 925 000	19 712 000	25 148 000	28 046 000	29 880 000
Indonesia	77 379 995	64 592 352	64 896 930	68 403 149	64 007 409
Iran	93 425 140	117 861 480	120 426 620	108 225 873	110 500 000
Iraq	43 047 670	41 745 200	53 864 799	55 211 419	70 400 000
Israel	16 785	13 680	12 130	17 420	9 396
Japan	415 550	426 310	448 665	433 950	569 815
Kuwait	56 756 383	41 407 867	53 015 873	58 578 330	51 485 000
Malaysia	12 329 486	14 478 786	18 303 756	21 402 997	20 900 000
Neutral Zone (c)	19 160 000	15 550 000	16 900 000	21 100 000	18 700 000
Oman	16 339 330	16 721 220	19 353 520	20 785 600	25 400 000
Pakistan	473 906	614 905	650 027	891 332	1 650 000
Philippines	354 160	411 805	638 847	513 384	564 000

Production of Crude Petroleum

tonnes

Country	1981	1982	1983	1984	1985
Qatar	19 277 126	15 610 068	13 993 349	20 100 000	14 500 000
Ras al Khaimah	—	—	—	300 000	400 000
Saudi Arabia	490 208 733	323 687 380	226 783 603	233 000 000	174 800 000
Sharjah	457 050	336 100	382 713	2 700 000	3 200 000
Syria	8 659 747	8 219 143	8 537 509	8 590 418	8 425 305
Taiwan	166 765	126 786	122 825	123 970	107 782
Australia	19 798 921	18 839 167	21 968 994	25 336 911	28 817 030
New Zealand (b)	418 060	674 060	649 660	836 540	880 140
World total	2 850 000 000	2 690 000 000	2 670 000 000	2 760 000 000	2 720 000 000

Note: The figures shown in this table exclude natural gasoline

- (a) Including oil from shale and coal
- (b) Petroleum condensate
- (c) Neutral zone of Kuwait and Saudi Arabia
- (d) Years ended 31 March following that stated
- (e) Sales
- (f) Years ended 30 June of that stated

Production of Natural Gas

Million m³

Country	1981	1982	1983	1984	1985
United Kingdom	38 537	42 159	(e) 38 700	(e) 38 529	(e) 42 947
Belgium	43	36	23	47	60
France	7 086	6 583	6 662	6 344	5 420
Germany, Federal Republic of	19 058	16 110	17 623	15 950	14 459
Irish Republic	1 415	2 037	2 194	2 327	2 413
Italy	13 961	14 520	12 991	13 902	14 245
Netherlands	84 617	72 035	76 536	77 251	80 721
Albania	* 380	* 410	* 400	* 500	* 380
Austria	1 437	1 324	1 213	1 272	1 164
Bulgaria	137	81	57	47	* 50
Czechoslovakia	662	656	613	758	705
German Democratic Republic	* 9 900	* 8 200	* 7 600	12 370	13 000
Hungary	6 011	6 641	6 510	6 911	7 441
Norway	26 162	25 534	25 831	27 482	26 667
Poland	6 172	5 555	5 491	6 087	6 390
Romania	37 022	37 417	38 106	39 100	35 700
Soviet Union	465 262	500 700	535 700	587 400	643 000
Spain	2	3	5	176	273
Yugoslavia	2 247	2 267	2 090	1 997	2 400
Algeria	13 200	29 700	35 590	35 040	38 500
Angola	* 70	* 70	350	340	340
Egypt	* 2 000	* 2 200	3 210	4 060	5 140
Gabon	76	65	150	290	70
Libya	3 058	3 256	4 050	4 600	5 200
Morocco	85	79	83	83	90
Nigeria	2 454	2 254	2 000	2 750	3 100
Tunisia	391	423	412	426	372
Canada	85 530	87 102	83 311	89 904	* 95 000
Mexico	30 120	31 458	31 271	28 984	26 703
Trinidad & Tobago	2 834	3 532	4 013	4 133	4 077
USA (f)	543 153	502 843	453 990	492 480	463 876
Argentina	9 789	11 304	13 137	13 760	15 570
Bolivia	2 438	2 297	2 227	2 210	* 2 100
Brazil	900	1 041	1 529	1 958	* 2 100
Chile	* 3 700	3 530	1 494	1 419	1 260
Colombia	3 400	3 414	3 756	3 840	* 3 800
Peru	* 595	* 595	* 625	* 625	* 700
Venezuela	16 643	17 608	17 165	17 260	17 500
Abu Dhabi	9 065	8 495	6 500	7 660	10 140
Afghanistan (c)	2 675	2 300	2 400	2 300	* 2 300
Bahrain	3 482	3 696	3 945	3 770	4 640
Bangladesh (d)	1 414	1 834	2 042	2 353	2 679
Brunei	8 850	8 678	8 900	8 496	8 204
Burma (b)	421	493	515	702	830
China	12 740	11 930	12 210	12 414	12 861
Dubai	* 1 080	* 1 980	* 3 400	* 3 400	...
India	1 997	2 412	3 432	3 236	3 780
Indonesia	31 820	31 486	33 546	43 083	44 684
Iran	5 950	7 200	8 900	13 500	17 000
Iraq	620	680	650	590	670
Israel	175	73	66	53	53
Japan	2 102	2 047	2 085	2 133	2 225
Kuwait (a)	5 334	4 129	4 837	5 199	5 100
Malaysia	* 750	1 338	3 700	9 200	12 380
Oman	476	555	753	971	* 1 200

Production of Natural GasMillion m³

Country	1981	1982	1983	1984	1985
Pakistan	8 937	9 771	9 728	9 991	10 525
Qatar	4 587	5 040	5 341	5 930	5 410
Saudi Arabia (a)	* 14 800	* 14 700	* 12 900	* 18 200	* 20 280
Sharjah	—	—	—	900	1 300
Syria	227	255	250	150	150
Taiwan	1 502	1 232	1 237	1 266	1 125
Australia	11 260	11 595	11 914	12 600	13 464
New Zealand	1 390	2 388	2 552	3 233	3 980
World total	1 600 000	1 600 000	1 600 000	1 700 000	1 800 000

Note: So far as possible the figures in this table exclude flared gas

- (a) Includes one-half of the output of the Neutral Zone
- (b) Years ended 31 March following that stated
- (c) Years ended 20 March following that stated
- (d) Years ended 30 June of that stated
- (e) Excluding heavier natural gases and condensates
- (f) Dry gas

Exports of Crude Petroleum

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	52 548 820	60 320 953	68 278 840	75 858 236	79 580 673
Belgium-Luxembourg	58 553	181 564	80 139	78 082	11 468
Denmark	0	6	1 117 767	803 941	1 042 763
France	89	584 076	436 279	68 181	681
Germany, Federal Republic of	1 071 236	1 141 828	1 114 665	1 097 809	1 206 185
Greece	—	—	—	346 181	374 000
Italy	—	34 947	240 922	188 093	278 818
Netherlands	46 633	101 802	254 572	535 170	1 328 149
Czechoslovakia	209 000	481 000	428 000	* 400 000	...
Hungary	534 000	1 796 000	2 489 000	2 134 000	...
Norway	20 453 396	20 665 923	25 623 382	30 064 286	32 602 346
Soviet Union (a)	* 96 479 000	* 107 470 000	* 116 660 000	* 124 815 000	* 120 031 000
Spain	114 303	170 228	191 202	166 423	...
Algeria	34 558 354	24 457 899	25 172 102	23 420 053	...
Angola	5 203 274	5 356 071	7 482 947	8 753 070	9 934 516
Cameroon	1 434 000	1 871 770	1 996 129	* 2 975 000	...
Congo	2 829 853	4 572 827	2 080 456	5 480 152	5 124 850
Egypt	7 187 997	7 863 837	7 800 450	* 14 576 000	...
Gabon	6 225 000	6 553 000	6 728 000	8 118 000	8 350 000
Ivory Coast	200 000	234 969	181 320	425 670	169 512
Libya	57 024 881	48 170 000	45 184 000	* 47 780 000	...
Nigeria	61 641 579	51 285 599	54 026 000	55 212 062	63 454 315
Tunisia	4 991 407	3 978 542	4 089 300	4 005 641	3 892 961
Zaire	1 016 488	1 109 801	1 283 157	1 658 472	...
Bahamas (Re-exports)	21 637 210	12 628 042	9 105 083	...	...
Canada	8 670 665	11 096 318	15 305 074	19 041 544	25 128 607
Guatemala	93 209	157 639	257 386	135 278	64 945
Mexico	56 767 375	77 140 785	79 462 516	78 821 400	74 354 500
Netherlands Antilles	664 000	...	653 000	478 000	...
Trinidad & Tobago	6 144 774	4 448 184	4 660 839	4 319 975	4 860 133
USA	2 468 931	1 859 470	963 724	822 058	1 069 260
Brazil	606 665	1 087 486	48 771	—	—
Ecuador	4 745 501	5 951 535	6 429 297	5 908 659	8 597 728
Peru	1 348 779	1 525 083	1 108 000	973 000	* 1 340 000
Venezuela	66 138 000	55 456 000	51 132 000	52 720 000	42 878 000
Brunei	8 028 719	8 287 805	8 504 468	8 249 257	...
China	13 870 000	14 680 000	14 830 000	22 010 000	30 030 000
Indonesia	50 130 321	56 069 961	54 894 367	50 055 502	...
Iran (a)	* 31 900 000	* 67 100 000	* 108 500 000	* 75 100 000	* 64 100 000
Iraq	34 154 000	39 787 000	* 54 722 000	* 58 474 000	...
Kuwait	43 642 374	18 619 556	27 561 932	* 34 107 000	...
Malaysia	10 143 173	11 973 851	14 223 964	16 497 360	16 722 986
Oman	16 380 250	16 149 000	17 440 000	* 20 246 000	...
Qatar	18 854 784	15 565 840	13 480 912	* 15 488 000	...
Saudi Arabia	451 431 337	281 943 763	196 229 411	159 340 130	...
Singapore	50 440	276 145	465 106	331 656	198 777
of which: Re-exports	50 440	276 143	465 106	330 811	85 202
Syria	5 542 000	5 317 062	5 864 738	5 126 778	...
United Arab Emirates	70 498 723	57 008 000	52 643 000	* 51 077 000	...
Australia	55 663	88 831	137 991	2 307 374	6 223 196

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

Imports of Crude Petroleum

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	32 990 199	28 256 208	22 802 643	25 002 401	26 869 737
Belgium-Luxembourg	27 213 278	23 484 441	19 984 899	17 869 509	15 464 760
Denmark	5 017 574	4 492 081	5 312 434	5 296 283	4 765 912
France	90 095 874	76 456 847	69 207 937	72 112 223	68 476 100
Germany, Federal Republic of	79 246 855	72 541 789	65 212 699	66 933 641	64 193 086
Greece	8 904 378	11 539 098	11 091 382	9 988 737	12 966 000
Irish Republic	652 678	495 803	1 064 969	1 171 185	1 322 211
Italy	84 365 702	77 357 540	72 813 911	63 408 561	64 880 757
Netherlands	39 662 317	38 160 400	40 274 160	44 976 426	40 342 992
Austria	7 532 649	6 158 356	5 358 960	5 906 643	6 205 712
Bulgaria	* 12 500 000	* 12 500 000	* 12 500 000	* 12 500 000	...
Czechoslovakia	18 500 000	17 300 000	17 100 000	17 200 000	...
Finland	10 774 257	9 699 907	10 303 753	9 343 190	9 827 751
German Democratic Republic	22 734 000	21 745 000	22 648 000	23 236 000	22 802 000
Hungary	7 754 183	8 775 705	8 863 853	8 815 537	7 253 254
Norway	3 899 913	3 014 340	1 758 493	2 025 324	1 507 190
Poland	13 510 000	13 223 000	14 074 000	13 612 000	13 712 000
Portugal	7 467 653	7 553 258	7 247 627	7 546 090	...
Romania	12 915 000	10 924 000	12 395 000	13 534 000	...
Soviet Union	* 5 000 000	* 8 000 000	* 13 000 000	* 15 000 000	* 10 000 000
Spain	40 348 159	37 789 437	36 809 954	36 808 184	43 758 000
Sweden	14 685 000	13 273 939	14 857 526	13 791 116	14 366 621
Switzerland	3 241 634	3 636 660	4 046 305	3 973 667	3 810 036
Turkey	11 601 750	14 162 083	14 259 426	15 466 759	15 505 000
Yugoslavia	9 353 863	8 490 444	9 397 515	9 690 063	8 600 000
Canary Islands	5 427 477	4 516 127	5 498 185	4 973 235	...
Ethiopia	749 340	749 828	733 050	730 674	...
Ghana	978 344	1 043 000	* 1 050 000	* 1 040 000	...
Ivory Coast	1 520 979	1 433 774	1 062 192	846 518	1 489 727
Kenya	2 556 771	2 232 533	1 849 725	1 874 257	...
Liberia	388 943	351 192	* 350 000	* 360 000	...
Madagascar	162 934	355 222	500 153	197 104	297 457
Morocco	4 476 243	4 408 065	4 157 646	4 581 284	5 024 916
Mozambique	377 600	635 700	88 216	...	...
Senegal	684 784	723 814	930 016	1 045 618	...
Sierra Leone	40 962	* 215 000	224 425	* 235 000	...
Somalia	* 410 000	* 420 000	* 395 000	* 350 000	...
South Africa	* 17 000 000	* 17 500 000	* 18 000 000	* 17 500 000	...
Sudan	809 590	736 512	718 486	579 949	...
Tanzania	541 270	480 417	298 197	* 300 000	...
Togo	* 300 000	* 350 000	* 320 000	...	...
Tunisia	1 521 800	370 390	400	—	22 793
Zaire	* 160 000	125 282	179 062	870 171	...
Zambia	751 000	* 700 000	* 710 000	582 750	...
Bahamas	28 702 066	19 478 860	15 962 682	13 212 183	7 505 512
Barbados	176 947	153 453	125 461	122 055	113 981
Canada	28 052 880	17 944 468	13 321 612	13 546 153	14 470 304
Costa Rica	477 783	402 395	377 634	366 407	428 291
Cuba	6 355 000	6 247 000	6 861 000	7 235 000	...
Dominican Republic	1 612 837	1 360 624	1 569 881	1 454 086	1 390 285
El Salvador	741 599	798 568	731 480	...	...
Guatemala	615 071	625 875	430 434	1 639 201	1 557 643
Honduras	246 792	47 353	337 307	* 440 000	...
Jamaica	796 013	908 707	1 119 837	653 408	974 052
Martinique	48 780	155 742	315 372	335 466	245 529
Netherlands Antilles	25 072 000	* 26 500 000	21 945 000	19 257 000	...
Nicaragua	1 769 627	576 462	500 440	439 000	...
Panama	1 492 014	1 640 769	1 650 405	1 442 745	1 241 975
Trinidad & Tobago	6 928 339	3 668 903	99 045	50	197 141
USA	250 578 675	201 826 026	183 885 542	187 567 864	179 181 652
Argentina	1 169 439	666 558	0	0	...
Brazil	42 209 325	39 766 369	36 451 896	32 243 757	...
Chile	2 673 485	1 327 000	2 007 000	2 100 000	2 195 000
Colombia	1 530 673	849 546	2 034 343	1 489 240	...
Paraguay	250 538	222 849	173 413	162 877	...
Uruguay	1 758 619	1 731 545	1 235 504	1 282 000	1 073 624

Imports of Crude Petroleum

tonnes

Country	1981	1982	1983	1984	1985
Bahrain	10 638 000	7 518 000	* 6 583 000	* 8 081 000	...
Bangladesh	1 305 000	1 178 000	1 030 000	1 003 938	992 492
Cyprus	623 950	543 772	511 928	640 411	502 240
India	15 528 267	17 327 000	15 552 000	14 620 000	...
Indonesia	2 690 592	4 331 889	3 371 276	5 607 778	...
Israel	6 887 000	8 266 000	7 326 000	7 053 000	...
Japan	202 897 396	190 019 797	186 845 724	192 528 887	176 369 002
Jordan	2 159 972	2 572 769	2 545 246	2 442 436	2 264 435
Korea, Republic of	24 529 305	24 808 174	25 307 519	26 758 353	27 072 058
Lebanon	* 1 521 000	* 487 000	* 500 000	* 760 000	...
Malaysia	3 551 916	2 539 982	3 071 072	2 553 703	2 252 298
Pakistan	3 954 967	4 478 376	4 018 741	4 108 039	4 364 701
Philippines	8 694 957	7 706 454	8 504 954	7 932 194	6 803 088
Singapore	31 730 998	30 311 873	30 875 283	32 381 136	29 753 982
Sri Lanka	1 698 503	1 940 543	19 453 439	1 918 070	1 658 094
Syria	4 954 216	5 224 110	6 076 426	6 223 190	...
Taiwan	17 183 443	15 900 414	18 711 695	17 696 377	16 255 485
Thailand	8 759 983	7 841 296	7 978 734	7 258 687	6 999 820
Yemen, People's Dem. Rep. of	488 899	547 045	343 172	* 400 000	...
Australia	10 079 169	12 640 695	7 994 736	7 690 965	3 014 902
New Zealand (a)	2 675 467	2 257 447	1 307 138	1 734 032	1 683 713

(a) Years ended 30 June of that stated

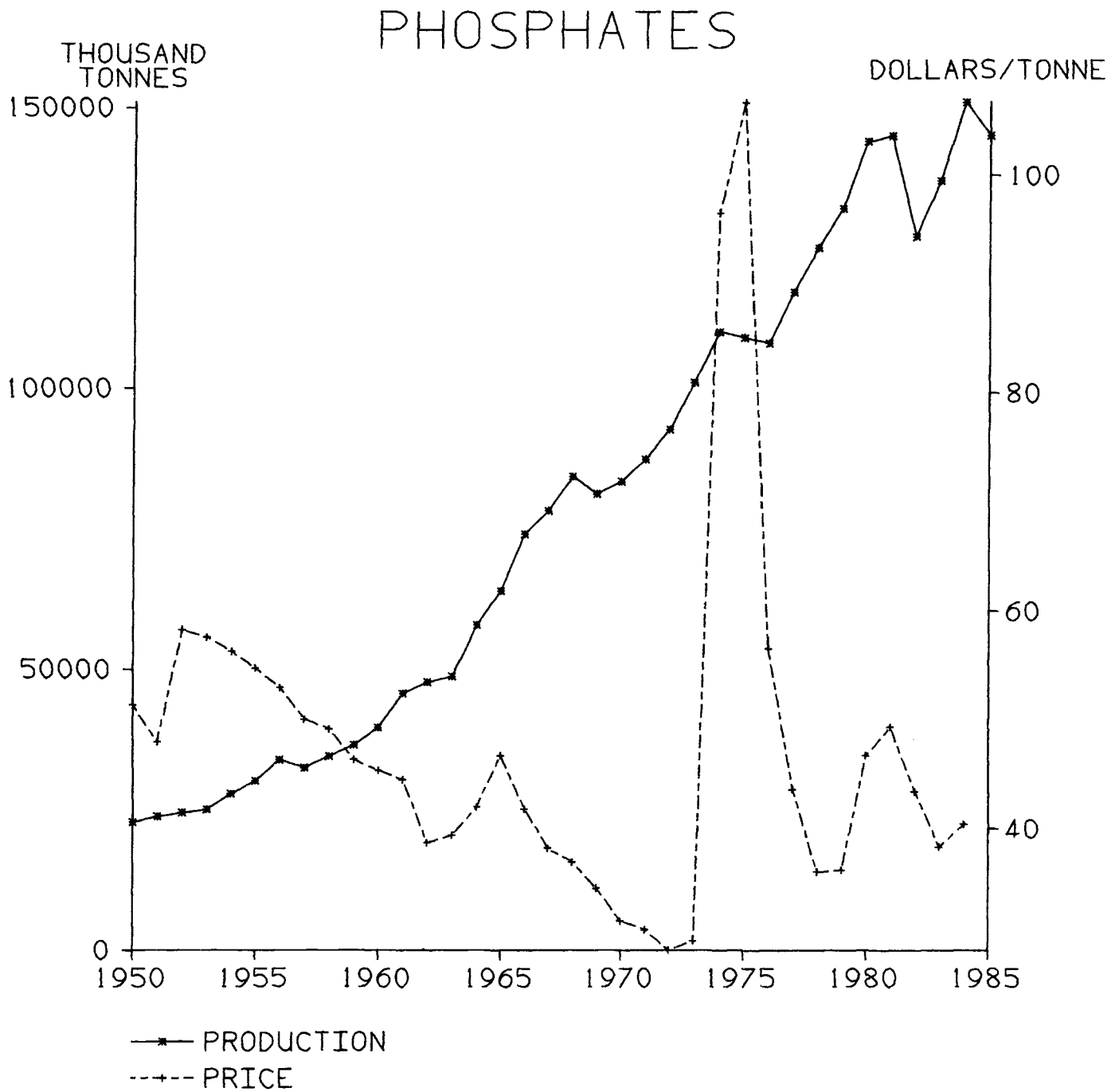


Figure 15 World production of phosphate rock from 1950 to 1985 compared with the yearly average price of Moroccan phosphate f.a.s. Casablanca expressed in constant 1980 US dollars.

Trend line analysis of the production data indicates a growth rate of approximately 6% per annum over 36 years.

Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Production of Phosphate Rock

Country	1981	1982	1983	1984	1985
France	28 700	24 400	—	—	—
Finland	227 964	233 053	381 216	477 300	511 500
Soviet Union	* 30 700 000	* 31 300 000	* 31 600 000	* 31 900 000	* 32 200 000
Sweden	113 000	128 017	106 636	132 700	193 000
Turkey	43 000	26 345	50 350	99 608	37 400
Algeria	916 000	947 000	892 800	1 000 200	1 207 000
Egypt (d)	737 000	691 000	783 000	946 000	1 074 000
Morocco	20 150 000	17 834 900	19 842 300	21 351 000	20 844 725
Senegal					
Phosphate rock	1 878 090	901 400	1 255 209	1 932 000	1 813 719
Aluminium phosphate (a)	199 218	279 181	251 274	279 000	355 266
Seychelles					
Guano (b)	1 440	—	—	...	...
South Africa	3 036 273	3 161 141	2 887 034	2 496 038	2 433 375
Togo	2 215 363	2 035 400	2 080 674	2 695 600	2 542 000
Tunisia	4 924 000	4 729 391	5 924 000	5 385 000	4 505 000
Zimbabwe	122 235	121 608	132 911	134 447	135 061
Mexico	503 252	653 050	785 038	652 651	786 500
Netherlands Antilles (b)	8 208	...	3 525	20 219	...
USA	53 624 000	37 414 000	42 573 000	49 197 000	50 835 000
Brazil	2 710 604	* 2 800 000	3 240 603	3 827 223	4 214 000
Colombia	17 329	20 393	16 944	28 000	23 000
Peru	11 938	2 911	2 510	12 700	12 200
Venezuela	52 000	...	8 216	...	...
China	10 862 000	11 728 000	11 630 000	14 210 000	7 000 000
Christmas Island (b)(c)	1 357 838	1 345 462	1 036 081	1 257 576	1 187 225
India	565 277	631 082	790 804	883 258	900 000
Indonesia	* 5 000	* 5 000	* 6 000	* 2 000	* 5 000
Israel	1 918 700	2 147 800	1 965 700	2 064 500	2 195 300
Jordan	4 243 643	4 390 343	4 745 931	6 119 591	6 067 139
Kampuchea, Democratic	* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
Korea, Dem. P.R. of	* 500 000	* 500 000	* 500 000	* 500 000	* 500 000
Philippines					
Phosphate rock	8 413	5 944	4 135	6 680	* 5 000
Guano	2 055	15 259	610	508	* 1 000
Sri Lanka	15 294	13 993	15 726	13 685	17 295
Syria	1 319 000	1 461 000	1 231 000	1 515 000	1 224 000
Thailand	2 610	4 265	5 158	3 075	4 072
Vietnam	* 181 000	* 110 000	* 200 000	* 200 000	* 300 000
Australia	21 997	211 463	4 868	10 945	10 000
Nauru (b)	1 479 900	1 333 300	1 684 000	1 358 520	1 508 200
World total	145 000 000	127 000 000	137 000 000	151 000 000	145 000 000

(a) Including lime phosphates

(b) Exports

(c) Including phosphate dust

(d) Years ended 30 June of that stated

Phosphates

Exports of Phosphate Rock

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	785	966	10 393	20 253	607
Belgium-Luxembourg	14 779	10 379	28 715	19 287	26 761
France	3 441	3 804	4 953	1 931	4 239
Germany, Federal Republic of	1 959	1 602	1 925	2 446	9 824
Netherlands	26 250	23 926	39 478	32 944	57 174
Soviet Union (c)	* 4 829 000	* 4 394 000	* 4 413 000	* 4 165 000	* 3 606 000
Sweden	92 575	81 414	77 198	91 286	98 426
Algeria	677 309	641 031	559 586	547 230	820 700
Egypt	55 817	174 320	200 802	205 000	112 000
Morocco	15 635 480	13 976 076	13 976 192	14 951 346	14 789 875
Senegal					
Calcium phosphate	1 206 539	1 102 411	1 268 529	1 449 668	1 246 678
Aluminium phosphate	50 819	52 166	69 072	64 347	64 367
Seychelles					
Guano	1 440	—	—	...	...
South Africa	21 521	124 180	251 214	471 723	694 824
Togo	2 212 495	2 059 000	2 007 744	2 761 000	2 444 800
Tunisia	951 028	1 115 147	1 090 900	1 140 360	1 114 864
Mexico	8 000	34 428	21 846	—	353
Netherlands Antilles	8 208	...	3 525	20 219	...
USA	10 553 611	9 735 025	12 197 310	11 319 562	5 530 563
Christmas Island (a)	1 357 838	1 345 462	1 036 081	1 257 576	1 187 225
Israel (b)	1 215 523	1 664 339	1 916 879	2 071 012	2 219 084
Jordan	3 529 381	3 569 701	3 701 053	4 695 015	4 609 710
Singapore	29 988	23 791	14 395	5 095	3 499
of which: Re-exports	27 812	20 374	12 298	4 723	3 021
Syria	955 497	705 279	1 002 104	951 055	694 246
Australia	—	33 974	4 618	26 300	...
Nauru	1 479 900	1 333 300	1 684 000	1 358 520	* 1 420 000

(a) Including phosphate dust

(b) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

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

Imports of Phosphate Rock

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	1 456 130	1 312 124	1 489 067	1 340 133	1 159 512
Belgium-Luxembourg	2 251 950	2 088 573	2 316 777	2 472 435	2 482 188
Denmark	338 153	260 205	286 185	315 972	328 663
France	4 551 522	4 455 205	4 516 315	4 652 290	4 254 323
Germany, Federal Republic of	2 210 349	1 930 572	2 031 054	1 933 425	1 943 064
Greece	218 771	359 341	126 193	379 040	202 829
Irish Republic	36 859	9 669	3 405	7 369	7 239
Italy	1 377 281	1 161 597	1 553 599	1 448 556	1 295 729
Netherlands	2 137 710	1 949 370	2 158 927	2 366 108	2 388 066
Austria	421 341	351 615	442 367	470 133	424 530
Bulgaria (b)	* 387 200	* 286 100	* 291 200	* 306 300	* 328 900
Czechoslovakia (a)	271 000	280 000	281 000	276 000	282 000
Finland	410 231	495 418	443 613	387 694	383 000
German Democratic Republic (a)	416 100	420 100	418 800	425 200	424 000
Hungary	674 150	567 966	648 880	645 820	575 883
Norway	402 098	461 447	414 847	507 213	452 112
Poland	2 938 000	3 280 000	3 176 000	2 965 000	3 261 000
Portugal	342 560	396 953	301 863	364 752	259 000
Romania (a)	951 200	820 800	989 000	* 910 000	* 890 000
Spain	2 399 392	2 391 303	2 484 904	2 887 721	2 775 079
Sweden	618 932	678 932	724 394	774 193	749 688
Switzerland	9 799	7 344	5 873	6 423	6 247
Turkey	1 268 261	625 537	922 641	727 758	682 049
Yugoslavia	1 057 978	1 265 072	1 801 832	1 438 167	1 312 471
Ivory Coast	6 100	8 785	7 575	4 882	7 793
Mozambique	6 000	2 000	3 000	3 000	...
Nigeria	32 000	21 000	14 000	17 000	11 000
Tanzania	7	32 053	15 557	...	15 000
Zimbabwe	7 881	14 396	27 758	7 971	...
Canada	3 245 430	2 477 187	2 625 389	3 142 654	2 637 671
Mexico	1 181 437	1 035 723	1 115 000	1 250 758	1 038 488
USA	16 801	31 336	8 811	23 223	35 049
Brazil	466 308	234 643	5	9 449	38 000
Colombia	37 849	67 286	51 444	37 425	39 000
Uruguay	50 560	29 860	18 856	35 967	42 000
Venezuela	54 290	74 898	34 463	54 000	72 000
Bangladesh	111 000	100 000	145 000	93 000	123 000
China	301 000	427 000	579 000	619 000	286 000
India	1 371 000	1 552 000	1 396 000	1 680 000	1 867 000
Indonesia	260 593	294 731	361 759	636 509	* 800 000
Japan	2 255 714	2 216 490	2 437 819	2 322 869	2 413 608
Korea, Dem. P.R. of	159 000	109 000	167 000	41 000	50 000
Korea, Republic of	1 136 814	1 505 459	1 591 814	1 651 629	1 137 212
Lebanon	322 000	5 000	—	—	—
Malaysia	219 165	208 008	274 539	284 629	374 644
Pakistan (c)	115 454	183 321	237 076	280 621	246 979
Philippines	5	12	10 588	13 574	306 130
Singapore	20 250	27 129	16 149	9 528	5 219
Sri Lanka	13 300	17 767	9 406	20 110	24 025
Taiwan	314 016	288 081	228 636	367 089	308 858
Australia	1 961 897	1 975 348	2 198 005	1 606 414	1 810 000
New Zealand (c)	1 024 671	1 025 368	915 071	898 605	924 638

(a) P₂O₅ content

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

(c) Years ended 30 June of that stated

Mine Production of Platinum Group Metals

kilograms (metal content)

Country	1981	1982	1983	1984	1985
Finland (a)	112	274	139	67	70
Soviet Union	* 104 000	* 109 000	* 112 000	* 115 000	* 117 000
Yugoslavia					
Platinum (a)	15	13	6	13	3
Palladium (a)	97	90	91	108	87
Ethiopia (c)	—	1	* 4	* 4	* 4
South Africa	* 96 700	* 91 803	* 83 606	* 106 557	* 120 000
Zimbabwe					
Platinum	72	53	53	24	19
Palladium	162	86	74	38	30
Canada (b)	11 902	7 105	6 965	10 369	10 534
USA	228	250	195	455	* 100
Colombia	460	370	320	314	355
Japan					
Platinum (a)	327	479	667	607	691
Palladium (a)	800	867	1 155	1 051	1 359
Australia					
Platinum	65	74	52	66	95
Palladium	401	416	449	523	476
World total	215 000	211 000	206 000	235 000	251 000

Notes:

- 1 Wherever possible, figures relate to quantities of platinum group metals thought to be recovered from ores originating in the country stated. 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
 - 2 In addition to the countries listed, Bulgaria, China, Indonesia, Papua New Guinea and Philippines are also believed to produce platinum group metals
- (a) Metal production
(b) Platinum metals content of concentrates (produced from Ni-Cu ores), residues and matte exported
(c) Years ended 6 July of that stated

Exports of Platinum Group Metals

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom					
Platinum	26 165	27 232	29 933	31 137	30 605
Palladium	13 544	11 515	11 828	16 530	16 374
Other platinum metals	2 890	3 645	5 199	5 589	7 005
Waste & scrap	104	1 781	80	7 003	2 188
Belgium-Luxembourg					
Platinum	1 592	1 674	30 952	2 239	1 931
Platinum metals	4 214	4 828	6 200	6 757	7 206
Waste & scrap	£2 494 000	£2 913 000	£6 681 000	£3 774 000	£2 719 000
Denmark					
Platinum	148	368	128	76	75
Waste & scrap	2 388	1 768	1 319	918	907
France					
Platinum	2 865	12 560	20 639	33 513	6 248
Platinum metals	1 196	1 911	2 241	2 742	3 219
Waste & scrap	1 222	3 070	6 507	3 146	28 900
Germany, Federal Republic of					
Platinum	7 431	7 378	7 004	9 287	8 654
Palladium	2 941	4 461	3 584	5 057	5 823
Other platinum metals	2 334	2 822	3 179	4 477	5 028
Waste & scrap	137	211	212	43	44 573
Irish Republic					
Platinum & platinum metals	593	1 388	930	415	414
Italy					
Platinum	1 687	1 552	3 853	95 527	1 537
Platinum metals	747	233	1 066	766	904
Netherlands					
Platinum	735	1 010	1 234	1 719	1 672
Platinum metals	255	562	721	717	556
Waste & scrap	2 000	4 000	7 000	14 000	4 000
Austria					
Platinum & platinum metals	288	335	357	13 295	413
Finland					
Platinum & platinum metals	42	26	80	36	15
Norway					
Platinum & platinum metals	1 060	1 033	1 270	1 385	1 549
Portugal					
Platinum & platinum metals	127	64	34	192	...
Soviet Union					
Platinum & platinum metals (a)	* 46 500	* 53 200	* 53 400	* 57 900	* 46 800
Spain					
Platinum & platinum metals	593	7 285	15 457	325	...
Sweden					
Platinum & platinum metals	£2 041 400	£1 321 600	£2 708 500	£1 382 700	£954 300
Switzerland					
Platinum	29 233	24 816	24 053	38 988	31 057
South Africa					
Platinum & platinum metals (a)	* 87 600	* 79 800	* 73 900	* 91 100	* 95 300
Waste & scrap (a)	* 400	* 1 000	* 2 200	* 500	* 1 000
Canada					
Ores & concentrates (b)	10 094	7 172	5 757	8 465	7 174
Platinum metals	1 001	954	3 151	4 260	6 016
of which: Re-exports	0	8	276	353	243
Waste & scrap	3 394	1 583	1 219	5 110	3 078
USA					
Ores & concentrates (b)	296	303	1 096	1 331	195
Platinum	10 459	7 612	7 597	5 651	6 376
of which: Re-exports	278	3 706	3 276	133	700
Palladium	5 393	5 828	5 748	6 350	7 173
of which: Re-exports	734	622	908	667	466
Other platinum metals	2 729	2 902	2 447	5 774	2 987
of which: Re-exports	184	264	230	623	258
Waste & scrap	6 398	12 529	24 139	17 535	12,219

Exports of Platinum Group Metals

kilograms

Country	1981	1982	1983	1984	1985
Colombia					
Platinum	37	—	75	908	...
China					
Platinum & platinum metals (a)	* 150	* 200	* 500	* 150	* 250
Hong Kong					
Platinum & platinum metals (Re-exports)	124	193	272	431	829
Japan					
Platinum	1 884	1 632	1 017	1 192	1 481
Platinum metals	1 388	3 405	3 918	2 449	2 484
Australia					
Platinum & platinum metals	146	895	296	...	...

Note: In this table the term 'Platinum' and/or 'Platinum metals' as used here includes unwrought, partly worked and alloys

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

(b) Platinum metals content

Imports of Platinum Group Metals

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates (a)	* £169 072 000	* £90 722 000	* £185 481 000	* £202 429 000	* £162 998 000
Platinum	4 643	11 209	5 658	6 084	13 009
Palladium	4 464	6 636	3 609	3 995	6 361
Other platinum metals	1 203	1 145	998	2 127	2 981
Waste & scrap	15 560	56 188	67 137	15 709	17 034
Belgium-Luxembourg					
Platinum	2 008	1 989	1 558	1 564	1 420
Platinum metals	838	858	497	525	445
Waste & scrap	£2 258 000	£3 611 000	£4 204 000	£5 370 000	£7 626 000
Denmark					
Platinum & platinum metals	612	609	664	840	629
France					
Platinum	5 568	6 401	3 582	10 863	6 241
Platinum metals	9 858	18 330	22 378	5 150	5 547
Waste & scrap	3 479	1 536	1 467	1 830	18 000
Germany, Federal Republic of					
Platinum	13 475	24 180	15 300	17 144	19 553
Palladium	9 022	26 553	11 123	17 656	19 333
Other platinum metals	3 012	3 013	5 305	8 410	4 609
Waste & scrap	23 064	38 547	49 951	41 868	74 551
Greece					
Platinum & platinum metals	£288 000	£262 000	£359 000	£911 000	£1 100 000
Irish Republic					
Platinum & platinum metals	552	367	866	1 249	350
Italy					
Platinum	2 392	2 130	2 489	2 502	3 003
Platinum metals	2 977	3 368	2 775	3 372	3 291
Waste & scrap	34 335	2 646	305	514	600
Netherlands					
Platinum	1 059	1 318	1 643	1 653	1 384
Platinum metals	545	798	1 098	1 213	1 454
Austria					
Platinum & platinum metals	687	893	513	453	1 262
Bulgaria					
Platinum & platinum metals (e)	* 300	* 200	* 400	* 500	* 800
Czechoslovakia					
Platinum & platinum metals (e)	* 150	* 50	* 50	* 20	* 250
Finland					
Platinum & platinum metals	55	88	73	106	96
German Democratic Republic					
Platinum & platinum metals (e)	* 300	* 1 000	* 500	* 700	* 1 900
Hungary					
Platinum & platinum metals (e)	* 500	* 600	* 300	* 300	* 300
Norway					
Platinum & platinum metals	237	339	456	786	679
Poland					
Platinum & platinum metals (e)	* 50	* 500	* 200	* 400	* 300
Portugal					
Platinum & platinum metals	243	133	157	249	...
Romania					
Platinum & platinum metals (e)	* 400	* 100	* 50	* 150	* 50
Spain					
Platinum & platinum metals	8 245	1 362	15 186	617	...
Sweden					
Platinum & platinum metals	2 000	3 000	3 000	2 000	3 000
Switzerland					
Platinum	26 348	30 474	37 949	55 501	37 247
Turkey					
Platinum & platinum metals	1 348	63	6 441	244	...
Yugoslavia					
Platinum	...	1 000	1 000	1 000	...

Imports of Platinum Group Metals

kilograms

Country	1981	1982	1983	1984	1985
Algeria					
Platinum & platinum metals	103	305	194	132	...
Nigeria					
Platinum & platinum metals	822	93	...	107	—
South Africa					
Platinum & platinum metals	810	1 901	1 451	2 940	2 310
Canada					
Platinum & platinum metals (c)	2 058	1 742	2 191	2 238	2 044
Costa Rica					
Platinum & platinum metals	562	350	278	332	198
Mexico					
Platinum	1	3	3	5	6
Palladium	58	90	33	69	39
Other platinum metals	101	121	13	2	80
Trinidad & Tobago					
Platinum & platinum metals	15	52	65	34	37
USA					
Ores & concentrates (d)	93	48	194	10	255
Platinum	33 288	25 100	34 933	50 292	48 640
Platinum metals —					
Palladium	38 285	34 214	41 437	60 776	46 075
Iridium, osmium & osmiridium	669	855	811	695	813
Rhodium	2 347	2 176	4 081	4 842	6 253
Ruthenium	5 612	4 162	5 089	6 167	5 066
Unspecified	1 120	499	591	275	321
Waste & scrap	17 940	10 547	12 984	16 384	16 506
Argentina					
Platinum	22	22	27	...	...
Palladium	227	26	60	...	...
Other platinum metals	46	46	81	...	...
Brazil					
Platinum	143	35	61	124	...
Palladium	334	561	478	357	...
China					
Platinum & platinum metals (e)	* 200	* 200	* 100	* 150	* 500
Hong Kong					
Platinum & platinum metals	2 448	2 264	335	1 226	1 367
India (g)					
Platinum	252	239	...	...	...
Indonesia					
Platinum & platinum metals	497	15	325	4	...
Iran (f)					
Platinum & platinum metals	£897 500	£655 000	£65 000	£37 000	...
Israel					
Platinum metals	£320 000	£403 000	£683 000	£915 000	£820 000
Japan					
Platinum	38 078	34 673	29 869	37 452	40 494
Platinum metals	32 000	35 380	37 509	43 748	39 072
Waste & scrap	347	343	579	1 710	2 664
Jordan					
Platinum	20	—	3 050	4 593	38
Korea, Republic of					
Platinum & platinum metals	56 339	829	635	3 385	399
Malaysia					
Platinum & platinum metals	685	1 853	1 734	1 969	553
Singapore					
Platinum	3 963	990	283	56	1 065

Imports of Platinum Group Metals

kilograms

Country	1981	1982	1983	1984	1985
Taiwan					
Platinum & platinum metals	3 541	2 998	1 763	2 482	2 133
Thailand					
Platinum & platinum metals	5	40	47	865	6
Australia					
Platinum metals	23 422	3 831	1 904	894	...
New Zealand (b)					
Platinum & platinum metals	93	71	37	116	144

Note: In this table the term 'Platinum' and/or 'Platinum metals' as used here includes unwrought, partly worked and alloys

- (a) Values shown refer to imports of 'ores and concentrates of silver, platinum and platinum metals'; it is assumed that the imports of silver ores and concentrates are negligible
- (b) Years ended 30 June of that stated
- (c) Derived from Canadian ores and concentrates exported for treatment
- (d) Platinum metals content
- (e) BGS estimates, based on known exports from certain countries
- (f) Years ended 20 March following that stated
- (g) Years ended 31 March following that stated

POTASH

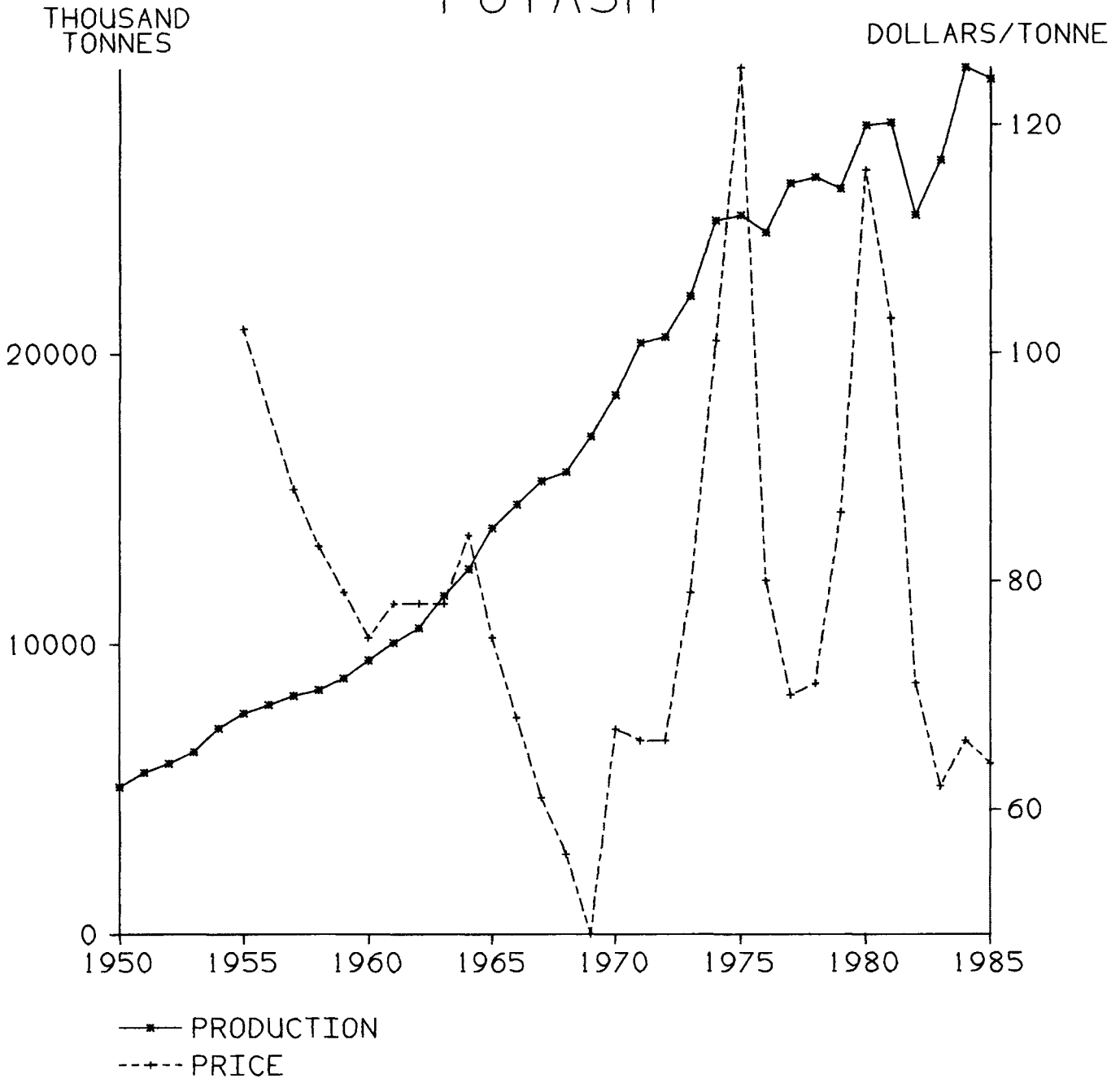


Figure 16 World production of potash (K_2O) from 1950 to 1985 compared with the annual price (Vancouver) expressed in constant 1980 US dollars from 1955. Trend line analysis of the production data indicates a growth rate of approximately 5½% per annum over 36 years. *Constant commodity prices derived from those quoted in International Financial Statistics Yearbook (1986), using the CPI for the USA from the same source.*

Production of Potash

tonnes (K₂O content)

Country	1981	1982	1983	1984	1985
United Kingdom					
Chloride	294 150	252 936	318 213	335 440	354 496
France					
Potassic salts	1 969 000	1 824 000	1 651 000	1 873 000	1 750 000
Germany, Federal Republic of					
Potassic salts	2 592 000	2 057 000	2 419 000	2 645 000	2 583 000
Italy					
Potassic salts	155 958	160 598	184 175	177 772	204 177
German Democratic Republic					
Potassic salts	3 460 000	3 434 000	3 431 000	3 465 000	3 465 000
Soviet Union	8 449 000	8 079 000	9 294 000	9 776 000	10 367 000
Spain					
Potassic salts	860 891	822 695	773 174	791 082	761 057
Canada					
Chloride	7 146 629	5 351 786	5 931 000	7 794 000	7 000 000
USA					
Potassic salts	2 156 000	1 784 000	1 429 000	1 564 000	1 296 000
Chile					
Nitrate	* 21 400	* 21 800	* 21 300	* 18 500	* 19 000
China	* 20 000	* 26 000	* 29 000	* 40 000	* 40 000
Israel					
Chloride	839 000	1 004 000	* 1 000 000	* 1 100 000	1 130 000
Jordan	—	9 000	172 000	295 000	* 550 000
World total	28 000 000	24 800 000	26 700 000	29 900 000	29 500 000

Exports of Potash

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Sulphate	1 237	1 093	288	2 305	1 132
Chloride	91 216	76 552	145 704	96 633	78 547
Potassic chemicals	900	1 258	1 398	6 116	4 874
Belgium-Luxembourg					
Fertiliser salts (a)	713	112	137	293	120
Sulphate (a)	291 287	(b)* 153 500	(b)* 191 500	(b)* 190 600	(b)* 246 600
Chloride (a)	5 849	15 367	13 781	12 446	8 362
Potassic chemicals	2 113	3 279	2 051	3 131	2 845
France					
Fertiliser salts	8 807	11 892	11 088	3 378	7 888
Chloride	345 239	447 959	433 980	425 826	411 129
Other potassic fertilisers	21 825	17 604	22 527	32 049	22 594
Potassic chemicals	21 655	22 152	2 497	1 749	3 165
Germany, Federal Republic of					
Fertiliser salts	39 882	38 562	38 254	42 459	47 006
Potassic fertilisers	2 348 198	1 996 789	2 193 135	2 595 451	2 322 673
Potassic chemicals	38 012	37 656	37 212	42 548	43 278
Greece					
Potassic fertilisers	18 800	4 500	—	22 739	33 110
Italy					
Sulphate	40 426	39 789	86 143	126 802	111 027
Other potassic fertilisers	323	109	1 682	3 085	390
Potassic chemicals	20 656	25 941	5 183	5 364	2 025
Netherlands					
Sulphate (a)	5	3	520	97	1 331
Chloride (a)	3 456	2 330	2 209	1 421	2 372
Potassic chemicals	1 912	1 505	1 750	2 708	3 414
Czechoslovakia					
Potassic chemicals (b)	* 29 100	* 28 600	* 25 000	* 17 100	* 20 400
German Democratic Republic					
Fertiliser salts (a)	2 860 000	2 834 000	2 905 000	2 776 000	2 791 000
Poland					
Potassic chemicals	...	2 365	...	3 026	4 476
Portugal					
Sulphate	—	196	0	—	...
Other potassic fertilisers	—	196	0	2	...
Soviet Union					
Fertiliser salts	5 244 747	4 956 288	4 512 795	5 435 118	5 455 746
Spain					
Sulphate	95 436	66 766	66 529	68 502	61 075
Chloride	512 038	668 424	662 595	518 391	501 184
Potassic chemicals	6 313	8 266	11 872	10 190	...
Sweden					
Chloride	8	56	179	2	4
Potassic chemicals	3 719	4 821	5 260	5 650	4 632
Switzerland					
Potassic chemicals	211	148	308	1 376	1 684
Yugoslavia					
Potassic chemicals	2 611	3 892	2 728	2 135	...
Canada					
Chloride	10 068 019	7 221 497	9 411 941	11 493 880	9 802 543
USA					
Sulphate	99 363	99 758	98 027	78 363	55 339
Chloride	712 887	717 970	395 523	623 184	423 754
Other potassic fertilisers	279 607	288 074	235 989	246 067	62 947
Potassic chemicals	27 206	8 901	10 120	10 513	13 389
Chile					
Fertiliser salts	...	102 758	125 669	100 509	...
China					
Potassic chemicals (b)	* 2 900	* 2 300	* 1 400	* 1 000	* 1 100
Hong Kong					
Potassic chemicals (Re-exports)	846	891	426	555	234
India					
Potassic chemicals (c)	641	363	...	...	...

Exports of Potash

Potash

tonnes

Country	1981	1982	1983	1984	1985
Israel					
Chloride (b)	...	...	* 1 052 400	* 1 191 200	* 1 011 700
Other potassic fertilisers (b)	...	...	* 172 400	* 223 100	* 92 300
Potassic chemicals (b)	* 76 500	* 157 900	* 86 800	* 101 700	* 106 200
Japan					
Sulphate	4 300	1 020	2	0	—
Chloride	3 918	55	56	576	82
Potassic chemicals	5 433	6 421	8 001	4 751	7 780
Jordan					
Fertiliser salts	—	—	2 555	458 232	844 773
Korea, Republic of					
Sulphate	—	—	8 419	24 156	22 544
Other potassic fertilisers	2 500	2 000	1 970	4 310	4 917
Potassic chemicals	10	2 664	4 300	6 573	4 871
Singapore					
Sulphate	737	2 005	4 519	4 553	5 022
of which: Re-exports	737	1 979	4 519	4 553	5 022
Chloride	4 553	5 354	8 102	6 485	16 755
of which: Re-exports	3 852	5 054	8 002	6 405	16 754
Other potassic fertilisers	261 224	182 649	192 808	157 790	152 238
of which: Re-exports	261 090	182 539	192 759	157 675	151 635
Taiwan					
Potassic fertilisers	5 589	13 037	10 250	6 600	12 600
Potassic chemicals	685	516	1 256	693	997

Note: So far as possible the term 'potassic chemicals', as used in this table, relates to items 522. 54,523. 1 and 2 of the Standard International Trade Classification (Revision 2) and includes caustic potash, carbonate, chlorate, nitrate and sulphate

(a) K₂O content

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

(c) Years ended 31 March following that stated

Imports of Potash

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Fertiliser salts	25 011	22 492	25 720	36 038	30 424
Sulphate	12 664	14 126	11 821	12 951	7 728
Chloride	467 011	481 542	472 538	509 166	574 494
Potassic chemicals	18 221	22 505	23 303	25 530	26 975
Belgium-Luxembourg					
Fertiliser salts (a)	7 388	5 925	5 548	5 837	6 741
Sulphate (a)	13 024	13 862	7 963	13 983	16 075
Chloride (a)	569 324	518 526	587 359	630 109	639 574
Other potassic fertilisers (a)	3 311	4 962	7 134	5 547	8 316
Potassic chemicals	7 338	10 027	11 345	11 263	13 725
Denmark					
Fertiliser salts	875	1 775	1 275	2 750	3 351
Sulphate	68 020	35 752	30 467	42 405	54 633
Chloride	179 635	198 684	231 526	245 684	233 849
Potassic chemicals	4 192	4 971	4 629	5 970	6 989
France					
Sulphate	154 368	143 318	146 296	160 925	170 005
Chloride	197 175	212 627	705 431	702 795	767 871
Potassic chemicals	15 281	23 971	22 492	21 957	21 856
Germany, Federal Republic of					
Chloride	172 867	171 274	82 992	79 962	75 965
Potassic chemicals	13 744	21 783	15 159	26 055	27 712
Greece					
Sulphate	5 076	2 317	3 597	39 823	37 544
Potassic chemicals	4 223	4 685	6 789	10 380	10 011
Irish Republic					
Sulphate	8 204	9 250	7 354	9 917	8 524
Chloride	311 562	248 368	295 984	322 772	318 289
Other potassic fertilisers	20	402	10	126	1 657
Italy					
Fertiliser salts	12 719	11 341	11 687	10 757	9 090
Sulphate	50 904	27 502	32 664	44 735	44 454
Chloride	480 139	461 404	563 626	612 727	587 945
Other potassic fertilisers	21 220	21 998	18 852	13 756	15 296
Potassic chemicals	15 248	26 242	28 853	31 995	38 883
Netherlands					
Fertiliser salts (a)	175	462	322	209	297
Sulphate (a)	37 928	28 541	37 736	45 294	47 149
Chloride (a)	166 019	184 046	164 677	175 810	183 428
Potassic chemicals	25 695	26 196	30 297	33 470	40 090
Austria					
Fertiliser salts	13 531	10 963	16 598	11 628	12 868
Sulphate	28 913	33 283	19 866	24 001	28 152
Chloride	260 144	224 644	221 256	225 143	226 825
Other potassic fertilisers	2 151	3 948	4 502	6 536	17 500
Potassic chemicals	5 489	5 795	6 325	6 437	6 799
Bulgaria					
Fertiliser salts (c)	* 206 900	* 245 100	* 132 500	* 144 100	* 163 000
Czechoslovakia					
Fertiliser salts (a)	639 100	639 000	580 000	556 000	556 000
Finland					
Sulphate	30 339	187	171	311	384
Chloride	262 794	302 511	374 727	405 553	...
Other potassic fertilisers	5 018	6 305	0	0	—
Potassic chemicals	2 204	3 294	3 521	2 985	4 296
Hungary					
Fertiliser salts	2 719	3 131	2 906	4 135	3 349
Potassic fertilisers	1 396 505	1 189 723	1 416 228	1 272 665	1 286 440
Potassic chemicals	961	1 634	757	942	1 103
Iceland					
Sulphate	2 687	3 450	2 851	4 528	1 803
Chloride	5 697	5 579	8 182	5 831	8 194
Norway					
Sulphate	103 185	67 872	78 776	82 057	87 473
Chloride	184 502	215 797	233 462	292 775	255 038
Other potassic fertilisers	376	687	1 480	820	1 182
Potassic chemicals	2 432	3 256	2 087	2 158	2 753

Potash

tonnes

Imports of Potash

Country	1981	1982	1983	1984	1985
Poland					
Fertiliser salts	2 865 000	2 377 000	1 685 000	2 444 000	2 357 000
Chloride	13 409	17 796	...	16 736	18 228
Potassic chemicals	7 046	6 838	...	6 131	5 875
Portugal					
Sulphate	4 350	5 895	3 636	1 000	...
Chloride	86 507	61 490	71 050	58 710	...
Potassic chemicals	2 896	3 294	2 668	3 820	...
Romania					
Fertiliser salts (a)	226 300	314 000	337 600	371 000	388 900
Spain					
Potassic chemicals	14 774	11 542	9 044	9 367	...
Sweden					
Fertiliser salts	1 026	1 323	1 701	1 863	2 175
Potassic fertilisers	418	893	660	1 098	823
Potassic chemicals	2 583	2 090	3 094	3 798	3 404
Switzerland					
Fertiliser salts	85 990	86 356	96 524	111 788	81 381
Potassic chemicals	8 175	8 652	9 907	12 042	12 603
Turkey					
Sulphate	51 381	39 941	6 990	9 994	11 946
Other potassic fertilisers	2	16 990	31 392	50 533	11 259
Potassic chemicals	3 563	...	...	5 750	...
Yugoslavia					
Sulphate	13 850	14 508	13 440	18 841	) 621 868
Chloride	431 091	436 709	533 936	506 950)
Potassic chemicals	194 298	188 244	206 261	153 109	...
Algeria					
Sulphate	78 468	30 611	39 612	93 228	...
Potassic chemicals	318	338	352	521	...
Cameroon					
Potassic fertilisers	35 172	47 472	20 160	...	...
Canary Islands					
Potassic chemicals	2 400	1 179	2 769	1 698	...
Egypt					
Potassic fertilisers	24 814	5 003	25 047	* 38 700	* 27 300
Gabon					
Fertiliser salts	569	444	1 863	128	399
Potassic fertilisers	1 540	1 693	1 053	1 207	1 339
Ivory Coast					
Sulphate	8 150	5 000	8 000	5 547	8 282
Chloride	35 327	39 070	33 059	43 407	44 866
Kenya					
Potassic fertilisers	5 855	20 951	15 260	2 989	...
Liberia					
Potassic fertilisers	139	55	5	890	235
Libya					
Potassic fertilisers	8 860	16	...	...	...
Madagascar					
Potassic fertilisers	678	8 278	8 123	6 441	5 133
Malawi					
Potassic fertilisers	6 637	7 524	...	...	...
Mauritius					
Potassic fertilisers	23 198	22 764	21 432	21 632	26 367
Morocco					
Sulphate	43 141	47 226	41 533	43 180	43 748
Chloride	31 216	24 620	34 803	41 129	54 467
Potassic chemicals	1 577	1 610	1 809	946	990
Mozambique					
Potassic fertilisers	5 898	2 999	2 400	...	...
Potassic chemicals	1 981	3 694	3 460	...	...
Nigeria					
Potassic fertilisers	5 092	63 677	...	37 451	2 334
Senegal					
Potassic fertilisers	17 230	4 002	9 141	14 925	* 20 000

Potash

Imports of Potash

tonnes

Country	1981	1982	1983	1984	1985
South Africa					
Potassic fertilisers	272 883	209 679	230 354	294 470	272 359
Potassic chemicals	4 285	5 529	4 704	5 102	5 763
Sudan					
Potassic chemicals	...	11	779	59	...
Tanzania					
Potassic fertilisers	4 525	...	...	...	...
Tunisia					
Potassic fertilisers	5 638	5 522	...	4 665	10 865
Zaire					
Potassic fertilisers	...	140	...	227	...
Zimbabwe					
Sulphate	20 428	16 817	10 931	12 751	...
Chloride	24 171	31 311	18 760	32 858	...
Belize					
Potassic fertilisers	377	335	671	660	71
Canada					
Sulphate	18 288	20 045	15 411	15 644	30 837
Chloride	8 596	1 881	2 277	1 772	707
Other potassic fertilisers	52 956	57 651	47 367	68 185	33 687
Potassic chemicals	7 078	6 964	8 834	8 079	8 295
Costa Rica					
Potassic fertilisers	49 625	42 537	36 250	29 663	43 293
Cuba					
Sulphate	22 683	22 419	24 706	19 673	...
Chloride	330 195	311 345	315 502	333 733	...
Dominican Republic					
Sulphate	8 302	1 818	) 20 194	...	...
Other potassic fertilisers	25 963	9 405	)	...	...
El Salvador					
Potassic fertilisers	80	17 195	240	11	...
Guadeloupe					
Potassic fertilisers	3 211	2 346	* 2 200	...	120
Guatemala					
Potassic fertilisers	20 740	6 976	6 889	27 454	12 186
Honduras					
Potassic fertilisers	8 550	4 108	5 845	...	...
Jamaica					
Potassic fertilisers	13 687	8 477	6 726	15 048	183
Martinique					
Potassic fertilisers	14 586	10 966	18 514	21 322	19 854
Mexico					
Sulphate	18 454	20 028	33 975	41 164	37 173
Chloride	149 868	95 895	124 482	171 177	170 095
Potassic chemicals	3 384	1 983	...	...	...
Nicaragua					
Potassic fertilisers	20 971	3 297	34 955	...	...
Panama					
Potassic fertilisers	1 480	7 501	6 289	8 600	6 444
St. Kitts-Nevis-Anguilla					
Potassic fertilisers	499	481	1 383	2 591	...
Trinidad & Tobago					
Potassic fertilisers	6 511	1 540	973	8 230	669
USA					
Fertiliser salts	38 789	23 068	33 605	35 106	41 948
Sulphate	36 756	12 147	61 409	55 104	48 788
Chloride	7 803 130	6 489 641	7 144 557	7 775 921	7 468 432
Other potassic fertilisers	137	33	167	150	99
Potassic chemicals	14 786	11 750	16 370	...	...
Argentina					
Sulphate	5 172	8 168	4 252	4 562	...
Chloride	4 040	5 632	6 867	12 685	...
Potassic chemicals	5 161	5 091	3 827	...	...

Imports of Potash

Potash

tonnes

Country	1981	1982	1983	1984	1985
Brazil					
Sulphate	50 647	68 334	28 490	48 824	...
Chloride	1 222 908	1 425 443	1 188 262	1 745 156	...
Potassic chemicals	15 572	12 389	4 977	11 296	...
Chile					
Sulphate (c)	5 600	* 3 300	* 10 000	* 12 300	* 5 000
Chloride (c)	* 20 000	* 21 100	* 40 000	* 44 000	* 36 300
Colombia					
Sulphate	8 142	13 003	9 233	11 657	...
Chloride	89 034	148 770	123 366	153 306	...
Potassic chemicals	1 910	2 437	1 769	1 730	...
Ecuador					
Chloride	6 808	18 862	...	...	...
Other potassic fertilisers	1 271	5 218	...	...	...
Guyana					
Potassic fertilisers	2 024	2 251	1 846	...	...
Peru					
Sulphate	4 489	3 167	—	...	...
Chloride	16 523	6 304	5 253	...	...
Potassic chemicals	635	850	929	...	...
Uruguay					
Sulphate	1 500	—	310	—	110
Chloride	6 028	3 134	4 539	5 030	6 229
Potassic chemicals	113	22	67	108	115
Venezuela					
Potassic fertilisers	74 790	6 949	...	...	...
Potassic chemicals	...	2 337	...	...	...
China					
Potassic fertilisers (c)	* 762 000	* 230 400	* 712 000	* 817 000	* 350 000
Cyprus					
Potassic fertilisers	671	2 144	271	1 164	1 001
Hong Kong					
Potassic fertilisers	—	—	—	4 525	15 000
Potassic chemicals	1 621	1 336	859	979	764
India (b)					
Sulphate	46 122	10 342	...	...	...
Chloride	780 378	532 559	...	...	...
Other potassic fertilisers	130 904	164 252	...	...	...
Potassic chemicals	282	303	...	...	...
Indonesia					
Sulphate	32 631	19 022	6 601	2 300	...
Chloride	27 509	77 867	182 775	163 640	...
Other potassic fertilisers	153 537	126 879	66 125	110 490	...
Potassic chemicals	1 424	1 304	3 189	1 982	...
Japan					
Sulphate	190 651	201 623	223 754	238 242	197 876
Chloride	978 037	1 049 094	1 059 323	1 032 574	1 138 094
Other potassic fertilisers	40 275	49 341	55 572	74 929	39 460
Potassic chemicals	12 461	15 340	21 191	5 080	3 902
Jordan					
Potassic fertilisers	274	1 117	348	18	753
Korea, Dem. P.R. of					
Potassic fertilisers (c)	* 81 700	* 53 200	* 99 000	* 67 500	* 110 100
Korea, Republic of					
Sulphate	11 926	24 801	1 999	—	6 955
Chloride	217 104	365 366	308 604	358 851	482 105
Other potassic fertilisers	40 548	—	22 920	1	—
Potassic chemicals	5 631	2 937	2 738	2 281	1 594
Malaysia					
Fertiliser salts	2 055	313	367	244	287
Sulphate	9 607	5 486	7 018	11 183	16 890
Chloride	81 656	146 634	86 645	196 322	178 762
Other potassic fertilisers	163 441	178 337	258 643	281 964	314 658
Pakistan (d)					
Potassic chemicals	—	1 852	1 313	1 329	2 083

Imports of Potash

tonnes

Country	1981	1982	1983	1984	1985
Philippines					
Sulphate	8 365	10 300	6 988	6 058	32 471
Chloride	79 175	88 391	40 993	42 963	24 174
Other potassic fertilisers	1 436	1 490	16 235	2 393	1 624
Potassic chemicals	1 439	1 734	1 433	1 600	2 458
Saudi Arabia					
Sulphate	798	1 577	3 998	36 773	23 843
Other potassic fertilisers	2 154	6 359	23 749	44 134	34 496
Singapore					
Sulphate	8 225	2 000	11 510	3 501	22 312
Chloride	14 814	39 411	64 955	10 783	216
Other potassic fertilisers	234 276	220 091	192 670	158 402	166 838
Sri Lanka					
Chloride	61 701	51 038	32 563	26 716	48 287
Other potassic fertilisers	10 650	19 720	36 801	38 615	43 076
Syria					
Potassic fertilisers	2 992	12 917	11 673	19 765	...
Taiwan					
Chloride	247 244	138 206	152 833	186 908	130 064
Potassic chemicals	7 361	4 807	7 911	8 749	8 645
Thailand					
Sulphate	12 005	11 600	13 015	750	4 050
Chloride	22 278	8 985	424	1 039	3 878
Other potassic fertilisers	200	30 379	59 280	39 882	34 089
Potassic chemicals	5 674	10 356	3 599	10 519	3 876
Australia					
Sulphate	22 172	7 613	8 647	11 873	10 000
Chloride	178 467	227 844	197 244	247 616	193 000
Other potassic fertilisers	725	1 014	7	139	900
Potassic chemicals (d)	9 419	6 135	10 942	13 545	12 443
Fiji					
Potassic fertilisers	4 389	3 592	2 289	5 835	1 792
New Zealand (d)					
Sulphate	1 418	817	1 717	973	1 611
Chloride	198 806	168 381	123 142	150 811	209 957
Other potassic fertilisers	4 933	1 821	13 654	28 251	31 899
Potassic chemicals	632	1 163	941	2 041	1 726

Note: So far as possible the term 'potassic chemicals', as used in this table, relates to items 522. 54,523.1 and 2 of the Standard International Trade Classification (Revision 2) and includes caustic potash, carbonate, chlorate, nitrate and sulphate

- (a) K₂O content
- (b) Years ended 31 March following that stated
- (c) BGS estimates, based on known exports from certain countries
- (d) Years ended 30 June of that stated

Production of Rare Earth Minerals

tonnes

Country	1981	1982	1983	1984	1985
Madagascar					
Bastnaesite	* 23	* 23	* 25	* 25	...
Zaire					
Monazite	35	32	15	2	—
USA					
Bastnaesite (a)	17 082	17 501	17 083	25 311	13 428
Monazite (a)	* 850	* 950	* 1 000	* 1 500	* 2 000
Brazil					
Monazite	2 460	1 814	5 256	3 622	* 6 000
India					
Monazite (d)	3 704	* 4 000	* 4 000	* 4 000	* 4 000
Malaysia					
Monazite (b)	320	582	1 034	1 095	2 215
Xenotime (b)	24	76	10	68	150
Sri Lanka					
Monazite	* 60	368	292	147	* 200
Thailand					
Monazite	107	162	257	298	245
Xenotime	45	46	38	28	24
Australia					
Monazite	13 282	9 562	15 141	17 032	* 15 000
Xenotime	52	46	24	36	...
World total (c)	50 000	47 500	56 200	71 000	53 600
World total (REO content)	* 29 900	* 28 400	* 33 700	* 42 500	* 32 000

Notes:

- 1 With the exception of the data for USA, figures in this table refer to gross tonnage of rare earth concentrates
- 2 Rare earth minerals are also believed to be produced in China and the Soviet Union (about 2 300 tonnes REO per annum) and possibly, on a small scale, in Indonesia, Democratic P.R. of Korea and South Africa

(a) REO content

(b) Exports

(c) Expressed as weight of concentrates produced; USA production has been grossed up to concentrate equivalent on the assumption that both its bastnaesite and monazite concentrates contain 60% REO

(d) Years ended 31 March following that stated

Rare Earths

Exports of Rare Earths

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ferro-cerium & other pyrophoric alloys	9	25	19	12	13
Metals	34	65	41	26	57
Belgium-Luxembourg					
Ferro-cerium & other pyrophoric alloys	47	24	—	1	0
Denmark					
Ferro-cerium & other pyrophoric alloys	2	241	131	107	0
France					
Ferro-cerium & other pyrophoric alloys	82	56	127	108	109
Metals	24	18	59	* 110	81
Germany, Federal Republic of					
Cerium compounds	1 712	880	218	157	183
Other rare earth compounds	66	53	13	29	9
Ferro-cerium & other pyrophoric alloys	55	54	50	63	61
Metals	147	253	170	22	34
Italy					
Ferro-cerium & other pyrophoric alloys	—	15	7	0	—
Metals	10	7	43	34	39
Austria					
Metals	275	378	385	675	712
Soviet Union					
Rare earth compounds (b)	* 350	* 400	* 600	* 500	* 900
Spain					
Ferro-cerium & other pyrophoric alloys	9	23	0	0	10
South Africa (a)					
Rare earth compounds	£1 200	—	£540	£10 400	£1 400
USA					
Ores & concentrates	9 587	4 836	5 102	8 033	7 712
Ferro-cerium & other pyrophoric alloys	10	27	66	33	26
Brazil					
Cerium compounds	15	310	875	79	0
Ferro-cerium & other pyrophoric alloys	235	174	290	284	182
Metals	70	68	124	102	233
China					
Rare earth compounds (b)	* 1 100	* 800	* 1 000	* 2 500	* 5 200
Ferro-cerium & other pyrophoric alloys (b)	* 80	* 90	* 100	* 60	* 100
Hong Kong					
Ferro-cerium & other pyrophoric alloys (Re-exports)	60	108	109	85	103
Japan					
Ferro-cerium & other pyrophoric alloys	89	59	79	54	30
Metals	—	377	261	281	292

Exports of Rare Earths

tonnes

Country	1981	1982	1983	1984	1985
Malaysia					
Ores & concentrates	344	658	1 044	1 163	2 365
Thailand					
Ores & concentrates	76	120	82	1 992	1 350
Australia					
Ores & concentrates	14 028	15 251	17 670	18 124	...

Notes:

- 1 Trade in rare earth compounds has been omitted from this table in those cases where it is not separately distinguished from the trade in compounds of thorium and uranium, as under the Standard International Trade Classification (Revision 2), item 524.92
- 2 Rare earths are here taken to include yttrium and scandium; the term 'metals' includes intermixtures and interalloys thereof

(a) Values shown are for the common customs area

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

Imports of Rare Earths

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ferro-cerium & other pyrophoric alloys	26	15	6	5	29
Metals	33	11	24	28	88
Belgium-Luxembourg					
Cerium compounds	97	81	104	77	75
Other rare earth compounds	5	61	11	18	15
Ferro-cerium & other pyrophoric alloys	14	23	5	26	26
Metals	1	10	15	18	64
Denmark					
Rare earth compounds	2	2	3	6	1
Ferro-cerium & other pyrophoric alloys	2	2	1	1	11
France					
Cerium compounds	46	264	524	590	946
Other rare earth compounds	653	787	845	897	2 103
Ferro-cerium & other pyrophoric alloys	70	73	124	90	76
Metals	64	76	75	162	235
Germany, Federal Republic of					
Cerium compounds	509	587	546	599	1 036
Other rare earth compounds	188	193	220	455	816
Ferro-cerium & other pyrophoric alloys	30	11	13	16	13
Metals	76	74	129	135	107
Italy					
Ferro-cerium & other pyrophoric alloys	13	50	4	14	10
Metals	37	136	68	54	16
Netherlands					
Cerium compounds	1 354	2 160	2 984	3 758	2 108
Other rare earth compounds	335	2 526	2 671	2 904	1 588
Metals	0	1	81	1	11
Austria					
Metals	3	149	91	59	147
Portugal					
Ferro-cerium & other pyrophoric alloys	2	4	4	4	...
Spain					
Rare earth compounds	208	165	216	248	...
Ferro-cerium & other pyrophoric alloys	25	23	644	36	544
Metals	14	12	24	24	...
Switzerland					
Ferro-cerium & other pyrophoric alloys	4	0	3	3	3
Metals	1	2	4	5	5
South Africa					
Rare earth compounds (a)	£79 000	£58 000	£100 000	£67 000	£156 000
USA					
Ores & concentrates	7 469	6 799	4 027	5 661	5 694
Cerium compounds	178	33	30	710	7
Other rare earth compounds	203	177	609	935	203
Ferro-cerium & other pyrophoric alloys	83	86	104	138	114
Metals	188	96	56	149	191
Argentina					
Cerium compounds	14	8	23	...	...
Other rare earth compounds	8	6	7	...	...
Ferro-cerium & other pyrophoric alloys	4	1	0	...	...
Metals	1	7	21	...	...

Imports of Rare Earths

tonnes

Country	1981	1982	1983	1984	1985
Brazil					
Cerium compounds	29	91	100	104	...
Other rare earth compounds	10	16	15	15	...
Metals	26	53	0	0	...
Venezuela					
Ferro-cerium & other pyrophoric alloys	...	5	...	...	...
Hong Kong					
Ferro-cerium & other pyrophoric alloys	75	145	149	122	143
Indonesia					
Metals	28	395	12	35	...
Japan					
Cerium compounds	62	58	53	57	149
Other rare earth compounds	5 694	3 969	3 975	6 996	9 829
Ferro-cerium & other pyrophoric alloys	10	16	23	21	31
Metals	8	9	26	131	59
Korea, Republic of					
Cerium compounds	38	85	100	77	67
Malaysia					
Ores & concentrates	320	1 590	523	2 046	2 476
Singapore					
Ferro-cerium & other pyrophoric alloys	—	—	28	24	36
Thailand					
Ferro-cerium & other pyrophoric alloys	52	86	70	59	84

Notes:

- Trade in rare earth compounds has been omitted from this table in those cases where it is not separately distinguished from the trade in compounds of thorium and uranium, as under the Standard International Trade Classification (Revision 2), item 524.92
- Rare earths are here taken to include yttrium and scandium; the term 'metals' includes intermixtures and interalloys thereof

(a) Values shown are for the common customs area

Salt

Production of Salt

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Rock salt	1 350 000	2 209 000	1 316 000	1 569 000	2 030 000
Brine salt	1 454 204	1 554 000	1 394 000	1 423 000	1 552 000
Salt in brine (a)	3 915 824	3 874 000	3 601 000	4 134 000	3 563 000
Denmark	397 578	399 280	451 855	522 892	573 939
France					
Rock salt	749 000	925 000	694 000	1 030 000	1 177 000
Salt in brine	3 870 300	3 711 000	4 239 000	4 417 000	4 167 000
Sea salt	1 392 000	1 539 000	1 354 000	1 381 000	1 422 000
Germany, Federal Republic of					
Rock salt	8 212 000	7 044 000	6 119 000	7 010 000	7 512 000
Brine salt	836 000	842 000	743 000	815 000	885 000
Salt in brine	4 461 585	4 296 827	4 404 455	4 945 991	5 055 285
Greece	130 591	105 436	147 665	* 133 000	...
Italy					
Rock salt & brine salt	3 600 846	3 603 580	3 453 817	3 255 421	3 175 734
Sea salt	* 960 000	* 1 000 000	* 1 100 000	* 1 000 000	* 1 000 000
Netherlands	3 578 000	3 191 000	3 124 000	3 674 000	4 154 000
Albania	* 66 500	* 66 500	* 70 000	* 70 000	* 70 000
Austria					
Rock salt	1 330	1 085	1 288	1 124	1 363
Salt in brine	264 000	214 000	141 000	* 145 000	...
Evaporated salt	462 485	433 557	359 118	418 707	437 584
Bulgaria	* 86 000	* 86 000	* 86 000	* 86 000	* 86 000
Czechoslovakia	409 436	436 489	343 356	343 760	349 174
German Democratic Republic	3 111 800	3 115 400	3 126 300	3 133 400	3 137 700
Poland					
Rock salt	1 313 000	1 338 000	1 131 000	1 185 000	1 198 000
Other salt	2 960 000	2 991 000	3 195 000	3 526 000	3 667 000
Portugal					
Rock salt	406 699	407 034	429 934	455 272	462 962
Sea salt	255 936	247 815	208 652	163 023	...
Romania	5 033 000	4 756 000	4 596 000	* 4 500 000	* 4 500 000
Soviet Union	* 15 200 000	* 15 800 000	* 16 200 000	* 16 500 000	* 17 000 000
Spain					
Rock salt	2 300 175	2 211 592	2 008 109	2 155 765	2 160 356
Sea salt	1 393 033	1 076 598	1 121 582	1 197 715	1 027 383
Other salt	27 972	25 988	27 780	34 867	52 010
Switzerland					
Evaporated salt	29 902	34 557	31 753	42 900	42 083
Other salt	355 406	282 307	240 131	328 900	332 046
Turkey	1 396 422	1 313 719	1 261 383	1 290 202	1 189 421
Yugoslavia					
Rock salt	192 579	198 500	191 886	146 552	149 151
Sea salt	36 185	37 883	38 474	44 151	67 897
Other salt	191 112	191 746	194 709	188 839	193 197
Algeria					
Brine salt & sea salt	128 000	140 000	* 150 000	175 000	168 000
Angola	20 000	21 900	7 900	—	6 000
Egypt (j)	858 000	883 000	918 000	865 000	1 061 000
Ethiopia (d)	144 178	* 125 000	* 125 000	* 135 000	...
Ghana	* 50 000	* 50 000	* 50 000	* 50 000	* 50 000
Kenya	27 796	24 411	83 427	100 825	64 348
Libya	* 10 000	* 10 000	* 12 000	* 12 000	* 12 000
Madagascar	27 919	29 629	* 30 000	10 440	40 199
Mali	* 4 500	* 4 500	* 4 500	* 4 500	* 4 500
Mauritius (c)	5 000	4 500	6 196	7 000	6 000
Morocco	55 197	56 556	69 853	70 100	92 263
Mozambique	86 400	33 700	35 000	18 600	...
Namibia	193 000	184 000	136 900	84 900	146 500
Senegal	* 140 000	159 700	170 000	165 000	160 000
Somalia	* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
South Africa	550 801	632 812	744 295	615 531	722 982
Sudan	72 649	27 927	150 000	16 000	65 000

Production of Salt

tonnes

Country	1981	1982	1983	1984	1985
Tanzania	27 400	32 100	29 700	29 900	31 600
Tunisia (c)	462 000	421 000	375 000	415 000	382 000
Bahamas	970 000	816 000	862 000	870 000	...
Canada					
Rock salt	4 371 314	5 223 073	5 846 994	7 030 664	6 491 413
Other salt (e)	2 871 280	2 717 258	2 755 389	3 204 735	3 507 759
Costa Rica	* 39 000	110 000	* 109 000	* 109 000	* 110 000
Cuba	161 059	198 000	179 800	183 600	...
Dominican Republic	33 017	47 692	50 425	47 647	* 48 000
El Salvador (c)	* 2 000	* 2 000	* 2 000	* 2 000	* 2 000
Guatemala (c)	23 000	27 600	34 500	34 500	...
Honduras	* 32 000	* 32 000	* 32 000	* 32 000	* 32 000
Mexico	7 953 263	5 561 187	5 703 030	6 166 705	6 467 140
Netherlands Antilles	* 400 000	* 400 000	* 200 000	* 210 000	* 200 000
Nicaragua (c)	* 18 000	* 18 000	* 18 000	* 15 000	* 10 000
Panama (c)	14 562	11 051	38 778	18 585	16 101
USA (f)					
Rock salt	10 769 000	12 250 000	9 018 000	12 109 000	12 600 000
Salt in brine	18 901 000	16 407 000	17 193 000	17 843 000	18 000 000
Evaporated salt	5 625 000	5 720 000	5 153 000	5 633 000	5 400 000
Argentina					
Rock salt	623	1 191	828	* 900	* 1 000
Other salt	936 961	593 737	677 106	* 650 000	* 650 000
Brazil					
Rock salt	838 879	835 750	929 269	953 000	995 000
Sea salt	2 766 319	2 887 803	3 259 291	3 578 090	1 734 000
Chile	290 279	674 002	714 598	625 760	753 427
Colombia					
Rock salt	316 250	300 534	265 919	273 000	) * 644 500
Sea salt	398 686	201 587	291 361	469 000)
Peru	506 000	485 000	490 000	* 500 000	* 500 000
Venezuela (c)	280 060	329 677	360 589	* 365 000	...
Afghanistan (g)	30 400	* 35 000	* 35 000	* 35 000	* 35 000
Bangladesh (j)	269 058	560 000	243 022	671 870	489 000
Burma (b)(c)(h)	256 000	269 000	280 000	301 000	320 000
China	18 320 000	16 380 000	16 130 000	16 420 000	14 446 000
Cyprus	9 299	9 857	—	7 399	10 013
India					
Rock salt	4 326	4 123	4 565	4 254	* 4 000
Other salt	8 928 000	7 308 000	7 008 000	7 725 000	* 7 500 000
Indonesia	286 000	800 000	619 000	* 700 000	...
Iran (g)	* 600 000	* 700 000	* 750 000	* 750 000	* 750 000
Iraq	80 000	* 80 000	* 80 000	* 80 000	* 70 000
Israel	132 250	148 200	145 000	145 000	* 150 000
Japan (i)	1 002 000	1 020 000	* 1 200 000	* 1 180 000	* 1 200 000
Jordan (b)	24 200	8 763	34 000	21 680	32 192
Kampuchea, Democratic	24 000	38 000	* 40 000	* 40 000	* 40 000
Korea, Dem. P.R. of	* 570 000	* 570 000	* 570 000	* 570 000	* 570 000
Korea, Republic of	602 000	864 000	481 000	* 500 000	...
Kuwait	18 931	19 342	19 673	22 239	21 000
Laos	* 20 000	8 949	* 10 000	* 10 000	* 10 000
Lebanon	* 20 000	* 10 000	* 5 000	* 5 000	* 5 000
Mongolia	* 15 000	* 15 000	* 16 000	* 16 000	* 16 000
Pakistan					
Rock salt	511 582	539 697	570 072	598 810	556 000
Sea salt	181 907	187 182	176 740	198 700	312 000
Philippines	355 289	364 420	381 912	401 008	421 058
Sri Lanka	104 344	176 437	128 471	123 157	75 919
Syria	85 000	102 000	88 000	38 000	106 000
Taiwan	351 330	262 103	79 188	218 491	173 898
Thailand					
Rock salt	11 000	11 100	5 679	9 850	12 786
Other salt	* 160 000	* 160 000	* 160 000	* 160 000	* 160 000

Salt

Production of Salt

tonnes

Country	1981	1982	1983	1984	1985
Vietnam	* 403 000	* 650 000	* 890 000	* 800 000	* 800 000
Yemen Arab Republic	* 65 000	* 57 000	* 140 000	* 145 000	* 140 000
Yemen, People's D.R. of	28 000	58 000	66 000	* 70 000	* 70 000
Australia	6 716 221	4 811 185	5 169 900	5 537 000	* 5 400 000
New Zealand	55 500	70 000	81 000	57 000	51 500
World total	172 000 000	164 600 000	160 100 000	172 600 000	170 800 000

Notes:

- 1 This table does not include production of refined salt
- 2 Salt is known to have been produced in many countries for which statistics are not available. Among these are Martinique, Mauritania and Nigeria

- (a) Used for purposes other than salt-making
- (b) Brine salt
- (c) Sea salt
- (d) Years ended 6 July of that stated
- (e) Including salt in brine
- (f) Sold or used by producers
- (g) Years ended 20 March following that stated
- (h) Years ended 31 March following that stated
- (i) Government licensed plants
- (j) Years ended 30 June of that stated

Exports of Salt

Country	1981	1982	1983	1984	1985
United Kingdom	426 479	484 659	378 865	484 511	402 946
Belgium-Luxembourg	107 219	124 875	170 973	227 720	205 256
Denmark	121 400	114 188	191 695	232 814	237 286
France	235 312	493 741	448 765	606 316	740 229
Germany, Federal Republic of	2 047 691	1 941 571	1 793 005	2 116 175	2 359 839
Italy	394 646	474 594	262 651	314 778	428 591
Netherlands	2 297 827	2 011 004	2 193 162	2 593 710	2 863 178
Austria	645	1 443	1 014	925	1 506
German Democratic Republic	1 272 000	1 387 000	1 390 000	1 501 000	1 604 000
Norway	2 982	5 173	3 523	4 091	2 413
Poland	240 966	337 396	376 675	370 418	380 110
Portugal	371	724	5 511	9 029	...
Romania	1 001 000	(e)* 651 000	(e)* 566 000	(e)* 588 000	(e)* 673 000
Soviet Union	452 843	460 815	338 931	375 181	398 970
Spain	335 600	580 694	474 244	537 170	893 972
Sweden	4 313	3 798	6 668	5 342	2 063
Switzerland	278	698	548	102	49
Turkey	1 944	28 634	6 258	29 343	16 342
Algeria	600	3 589	—	3 744	...
Cape Verde Islands	9 300	...	...	9 670	...
Egypt	19 500	4 864	12 670	...	...
Ethiopia	28 500	11 000	5 010	15 153	...
Kenya	100	58	569	25	...
Madagascar	2 239	837	2 181	7 827	11 150
Senegal	154 034	155 807	152 157	186 731	137 676
South Africa	68 708	67 397	103 262	89 731	93 175
Sudan	4 002	19 391	78	16	...
Tanzania	19 316	5 225	3 273	...	...
Tunisia	368 823	329 356	285 020	261 337	314 566
Bahamas	793 144	911 980	856 334	975 205	1 224 632
Canada	1 507 768	1 734 059	1 915 597	2 546 688	2 289 273
El Salvador	10 733	16 555	12 823	12 857	...
Honduras	4 236	1 531	1 937	...	...
Jamaica	2 405	3 969	2 558	3 260	1 925
Mexico	5 019 654	4 688 281	3 942 108	4 629 809	4 561 576
Netherlands Antilles	240 898	...	202 137	357 019	...
Nicaragua	6 074	2 180	304	...	...
USA	946 194	908 421	469 139	744 275	834 036
Argentina	12 134	19 856	20 423	14 172	...
Brazil	141 861	186 180	243 225	348 114	144 580
Chile (e)	* 69 500	* 454 000	* 346 000	* 461 000	* 317 000
Colombia	5 250	7 500	25 250	—	...
China	1 110 000	910 000	960 000	1 040 000	1 070 000
Hong Kong (Re-exports)	357	2 955	6 496	1 519	1 039
India (b)	62 856	224 655	...	...	...
Iran (c)	1 171	836	2 319	233	...
Israel (a)	...	...	(e)* 9 700	(e)* 7 600	(e)* 19 300
Japan	1 173	1 609	1 292	1 250	1 414
Jordan	7 072	1 674	306	—	222
Korea, Republic of	11 711	172	3 193	1 647	6 412
Kuwait	2 064	2 364	967	...	...
Malaysia	740	1 387	343	599	604
Pakistan (d)	5 659	8 484	8 052	13 150	8 479
Saudi Arabia	6 646	3 818	5 608	5 609	...

Salt

Exports of Salt

tonnes

Country	1981	1982	1983	1984	1985
Singapore	14 033	9 272	17 458	20 523	13 817
of which: Re-exports	13 473	8 937	17 228	20 016	12 995
Sri Lanka	16 512	24 363	86 150	37 153	1 000
Taiwan	3 065	1 000	672	1 239	1 472
Thailand	101 483	65 109	47 483	52 971	61 548
Yemen, People's D.R. of	34 163	25 504	50 451	...	...
Australia	3 963 949	4 143 824	4 535 174	4 782 933	5 166 000
New Zealand (d)	3 083	1 998	2 021	4 862	2 490

(a) Figures may be incomplete as value only given in Israeli trade return for exports to some countries

(b) Years ended 31 March following that stated

(c) Years ended 20 March following that stated

(d) Years ended 30 June of that stated

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

Imports of Salt

Country	1981	1982	1983	1984	1985
United Kingdom	97 923	183 607	93 957	115 152	333 373
Belgium-Luxembourg	1 168 848	1 073 256	1 101 805	1 133 678	1 346 543
Denmark	206 369	289 805	143 085	189 271	274 112
France	160 776	169 353	162 837	154 850	151 571
Germany, Federal Republic of	701 547	801 054	749 322	765 110	826 942
Greece	26 226	23 959	16 635	24 435	48 873
Irish Republic	74 849	88 964	79 218	90 400	102 967
Italy	176 485	313 431	378 105	706 712	943 874
Netherlands	66 711	86 813	134 917	222 924	412 093
Austria	116	164	232	153	134
Bulgaria (a)	* 50 100	* 47 700	* 42 000	...	...
Czechoslovakia (a)	* 190 100	* 177 300	* 120 300	* 120 300	* 140 000
Faeroe Islands	36 413	23 719	25 655	32 556	30 820
Finland	721 283	639 386	495 618	662 659	598 805
Greenland	5 203	6 233	3 256	3 769	4 678
Hungary	768 006	755 482	572 569	578 011	672 310
Iceland	77 810	69 699	80 733	48 797	71 526
Malta	£123 300	£102 100	£134 800	£90 000	£81 600
Norway	518 189	518 177	505 514	554 410	561 315
Portugal	51 564	43 018	20 817	205	...
Soviet Union	* 100 000	* 110 000	* 110 000	* 110 000	* 110 000
Spain	1 271	869	875	669	620
Sweden	1 055 559	947 392	1 103 475	1 227 833	1 256 059
Switzerland	1 755	1 775	2 004	2 084	1 932
Yugoslavia	337 155	294 720	241 104	83 976	320 813
Algeria	2 140	27 572	17 623	412	...
Botswana	4 769	7 819	7 749	7 871	6 092
Burkina	18 985	20 733	16 600	16 100	...
Burundi	12 904	18 524	207	9 181	9 930
Cameroon	6 720	10 584	4 644	...	...
Canary Islands	293	729	514	444	...
Congo	3 317	4 625	3 548	5 990	5 495
Gabon	7 876	9 051	6 779	5 145	5 029
Ivory Coast	46 158	45 039	45 101	42 882	42 950
Kenya	28 476	2 395	103	10 856	...
Liberia	5 180	2 919	4 259	...	3 157
Malawi	8 965	13 453	...	...	...
Mauritius	804	539	1 663	230	...
Morocco	10 258	6	8	46	32
Niger	14 718	29 343	...	...	...
Nigeria	458 530	1 052 209	...	217 162	3 117 989
Reunion	2 690	2 610	1 754	3 299	2 224
Rwanda	17 711	16 482	...	...	...
Seychelles	309	392	317	409	196
Sierra Leone	10 428	...	7 966	...	...
South Africa	25 667	1 998	43 550	50 525	2 106
Togo	3 193	...	...	...	...
Uganda	356	16 947	23 687	...	...
Zaire	* 5 600	16 069	141 971	15 759	...
Zambia	76 062	22 467	...	138 213	...
Zimbabwe	111 902	53 315	57 080	88 874	...
Bahamas	3 905	2 111	5 977	2 898	3 480
Belize	518	575	746	595	566
Canada	1 254 985	1 526 873	777 310	1 053 211	1 255 505
Costa Rica	6 726	2 278	221	96	249
Dominica	384	529	457	379	429
Grenada	527	472	...	...	...
Guadeloupe	1 975	2 170	2 482	2 099	2 451
Guatemala	31 331	16 053	14 808	6 366	11 732
Honduras	811	222	316	...	...
Jamaica	38 237	45 063	18 108	46 496	25 058
Martinique	2 444	2 427	2 658	2 547	2 373
Mexico	2 263	1 106	456	572	583
Nicaragua	32 795	14 037	42 055	...	...
Panama	6 949	8 713	945	1 294	1 037
St Kitts-Nevis-Anguilla	197	317	324	189	...

Salt

Imports of Salt

tonnes

Country	1981	1982	1983	1984	1985
St Lucia	875	605	838	704	830
St Vincent	446	...	...	...	...
Trinidad & Tobago	7 437	18 354	34 781	55 632	15 351
USA	4 512 676	4 944 627	5 440 388	6 844 710	* 6 000 000
Colombia	87	4 476	1 666	73	...
French Guiana	442	475	368	396	504
Guyana	4 556	2 018	3 218	...	...
Paraguay	20 363	16 145	26 186	20 824	...
Peru	362	2 250	537	...	...
Suriname	1 541	1 969	...	...	...
Uruguay	24 876	13 250	67 144	43 275	52 036
Abu Dhabi	3 074	2 140	1 965	5 116	3 438
Bahrain	1 886	1 589	1 991	1 455	2 330
Bangladesh (b)	...	770 548	338 950	522 122	209 281
Brunei	4 620	1 056	1 133	1 341	...
Cyprus	673	719	742	1 030	847
Dubai	12 741	17 079	20 596	8 277	8 448
Hong Kong	31 921	79 955	101 053	92 620	106 599
India (c)	* 5 000	8 439	...	...	...
Indonesia	389	668	943	1 050	...
Japan	6 509 749	6 269 116	6 380 780	6 458 125	6 832 531
Jordan	1 965	528	1 314	1 306	1 442
Korea, Republic of	970 242	662 062	757 371	757 954	800 109
Kuwait	13 606	12 005	6 452	...	...
Malaysia	134 799	131 504	155 142	129 872	146 470
Oman	7 042	8 883	6 133	11 724	10 259
Philippines	44 679	130 587	109 633	65 420	71 131
Qatar	3 232	2 377	2 305	3 368	...
Saudi Arabia	14 639	18 049	20 665	16 880	16 158
Singapore	41 477	41 704	50 472	43 160	36 102
Taiwan	481 271	382 147	584 903	711 505	805 115
Thailand	345	45 169	21 149	10 324	846
Australia	7 321	6 596	6 235	6 447	...
Fiji	3 821	2 598	3 125	3 425	2 769
New Caledonia	440	679	523	745	624
New Zealand (b)	65 209	98 042	79 124	50 235	98 669
Solomon Islands	2 114	942	796	2 733	1 071
Vanuatu	303	297	292	317	...
Western Samoa	591	598	499	...	...

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

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

Production of Sillimanite Minerals

Country	1981	1982	1983	1984	1985
France					
Andalusite	40 000	36 600	41 900	50 100	56 600
Soviet Union					
Kyanite (a)	* 70 000	* 80 000	* 100 000	* 100 000	* 100 000
Spain					
Andalusite & kyanite	6 151	5 105	4 486	3 000	2 800
South Africa					
Andalusite	181 272	153 231	116 576	143 305	194 693
Sillimanite	15 504	10 060	815	1 311	1 337
Zimbabwe					
Kyanite	870	2 207	—	874	1 676
USA					
Kyanite (b)	* 115 000	* 100 000	* 100 000	* 100 000	* 100 000
Brazil					
Kyanite (d)	1 590	423	526	1 290	* 1 000
China	* 2 500	* 2 500	* 2 500	* 2 500	* 2 500
India					
Andalusite	146	536	2 730	706	504
Kyanite	36 583	37 954	41 958	38 254	30 472
Sillimanite	12 273	12 463	8 496	15 519	17 095
Korea, Republic of					
Andalusite	90	33	289	209	42
Australia					
Kyanite	...	80	445	1 255	818
Sillimanite (c)	331	783	121	507	* 500
World total	482 000	442 000	421 000	459 000	510 000

Note: In addition to the countries listed above as producing sillimanite minerals, synthetic mullite is known to have been produced in Denmark, France, Hungary, Japan, Yugoslavia, United Kingdom and the USA

(a) May include other sillimanite minerals

(b) Includes related minerals

(c) Excluding sillimanite clay

(d) Includes beneficiated and directly shipped material

Sillimanite

Exports of Sillimanite Minerals

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Sillimanite minerals	2 809	2 326	2 502	5 334	5 172
Belgium-Luxembourg					
Sillimanite minerals—					
Crude	829	113	588	—	—
Other	135	66	39	46	21
Denmark					
Sillimanite minerals	529	1	20	157	13
France					
Sillimanite minerals—					
Crude	8	—	0	17	93
Other	310	78	166	34	86
Germany, Federal Republic of					
Sillimanite minerals—					
Crude	2 039	1 001	1 305	2 400	716
Calcined	11 534	7 789	4 250	6 300	7 297
Italy					
Sillimanite minerals—					
Crude & calcined	22	6	22	48	—
Other	155	58	24	754	—
Netherlands					
Sillimanite minerals—					
Crude	4	152	498	1 775	1 901
Other	543	789	489	396	263
Austria					
Sillimanite minerals	135	383	12 713	20 039	15 122
Czechoslovakia					
Sillimanite minerals (b)	* 24 700	* 17 800	* 14 600	* 14 100	* 16 400
German Democratic Republic					
Sillimanite minerals (b)	* 1 000	* 800	* 600	* 800	* 1 400
South Africa					
Andalusite	60 047	75 429	69 264	91 574	141 882
Sillimanite	8 982	6 309	2 560	1 340	1 467
USA					
Kyanite & related minerals (a) (b)	* 65 000	* 58 500	* 66 400	* 77 400	* 73 500
Brazil					
Kyanite	50	3	—	20	381
India (d)					
Kyanite	—	1 134	...	...	...
Sillimanite	500	150	...	...	...
Japan					
Sillimanite minerals, chamotte & dinas earth	15 281	12 400	8 439	9 238	11 946
New Zealand (c)					
Sillimanite minerals	5 442	6 560	10 129	13 410	14 039

Note: In this table 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite

(a) May include some chamotte and dinas earth

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

(c) Years ended 30 June of that stated

(d) Years ended 31 March following that stated

Imports of Sillimanite Minerals

Country	1981	1982	1983	1984	1985
United Kingdom					
Sillimanite minerals	35 098	35 141	35 618	52 708	49 452
Belgium-Luxembourg					
Sillimanite minerals—					
Crude	365	230	1 978	391	1 220
Other	516	3 561	851	1 264	1 274
Denmark					
Sillimanite minerals	136	422	270	415	641
France					
Sillimanite minerals—					
Crude	604	1 707	1 283	2 376	2 263
Other	1 284	1 480	2 458	1 845	1 187
Germany, Federal Republic of					
Sillimanite minerals—					
Crude	15 536	26 417	14 070	13 181	39 360
Calcined	54 936	55 636	58 219	75 721	70 813
Greece					
Sillimanite minerals	12	633	171	1 711	201
Italy					
Sillimanite minerals—					
Crude	7 011	18 639	12 261	22 763	31 245
Other	20 529	17 576	11 452	13 594	9 914
Netherlands					
Sillimanite minerals—					
Crude	1 514	3 038	864	4 870	8 659
Other	397	986	813	2 903	3 159
Austria					
Sillimanite minerals	90 975	78 793	73 637	75 372	85 497
Norway					
Sillimanite minerals, chamotte & dinas earth	1 090	526	380	915	689
Spain					
Sillimanite minerals	2 039	2 643	2 887	3 253	...
Mexico					
Mullite	1 038	3 407	1 281	1 544	1 583
Argentina					
Sillimanite minerals	33	35	700	...	...
Japan					
Sillimanite minerals	28 280	26 627	17 675	27 515	28 413
Mullite, chamotte & dinas earth	47 371	34 613	23 847	22 289	17 981
Korea, Republic of					
Sillimanite minerals	1 581	1 007	1 307	1 704	3 166
Mullite	2 955	3 936	2 047	2 975	4 206
Macao					
Sillimanite minerals	...	...	15 414	14 832	14 577
Australia					
Sillimanite minerals & dinas earth	659	342	212	2 402	...

Note: In this table 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite

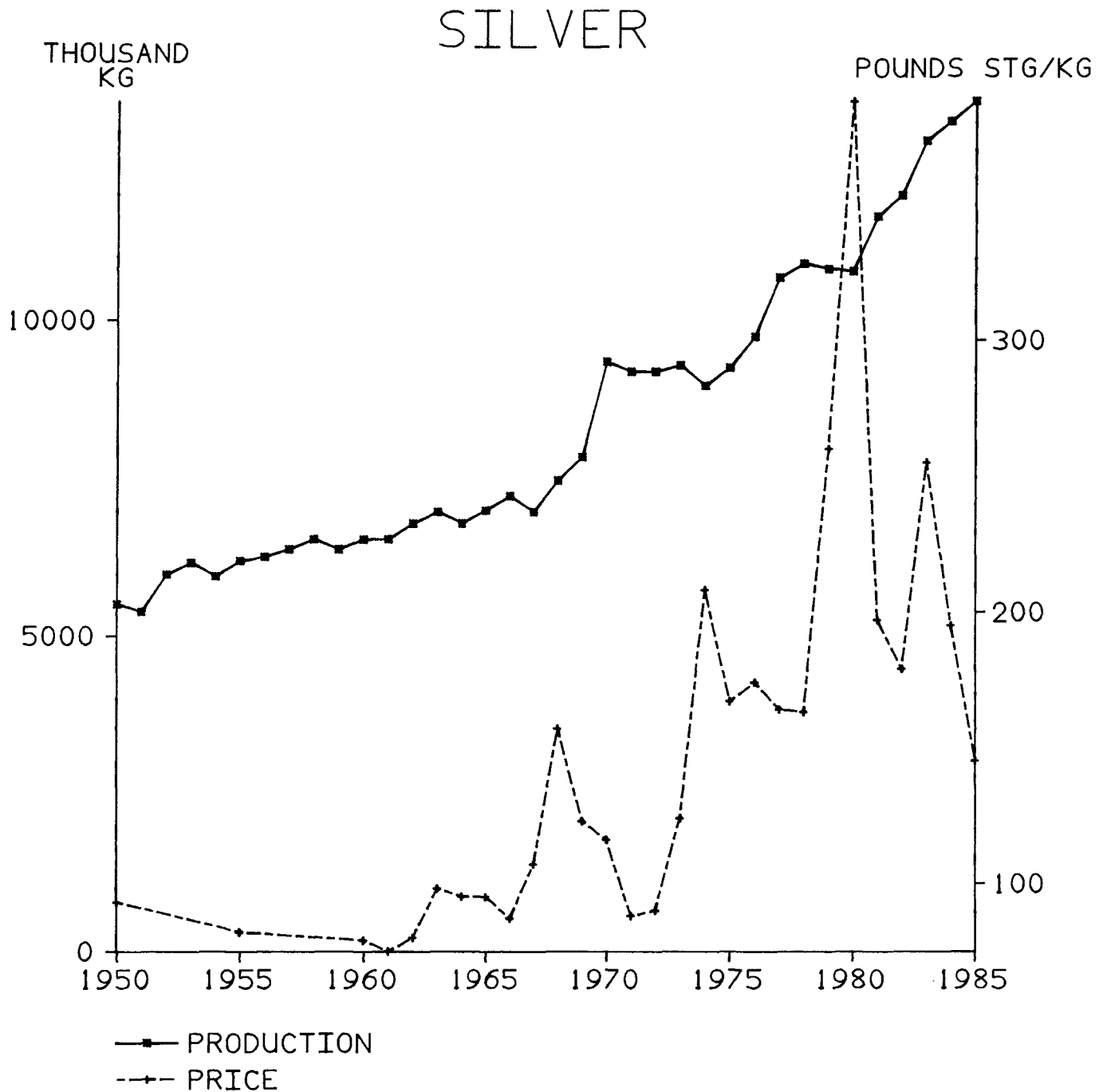


Figure 17 World mine production of silver from 1950 to 1985 compared with the average annual spot price of 999 bar expressed in constant 1984 pounds sterling.

Trend line analysis of the production data indicates a growth rate of approximately 2½% per annum over 36 years.

Constant commodity prices derived from those quoted by Metal Bulletin, using the RPI for the UK obtained from the Economics Division of the Bank of England and post-1971 from the Annual Abstract of Statistics (1987) published by HMSO.

Mine Production of Silver

kilograms (metal content)

Country	1981	1982	1983	1984	1985
United Kingdom	3 278	3 280	2 635	2 558	1 720
France	53 059	30 768	22 990	24 009	25 902
Germany, Federal Republic of	39 300	39 700	36 300	38 100	33 900
Greece	60 500	49 200	55 900	57 000	50 700
Irish Republic	28 000	3 600	9 900	8 670	8 600
Italy (a)	55 344	55 737	73 450	48 338	71 572
Bulgaria	23 000	25 000	25 000	26 000	26 000
Czechoslovakia	* 35 000	* 33 000	* 30 000	* 32 000	* 32 000
Finland	61 702	42 402	45 008	52 610	31 000
German Democratic Republic	* 45 000	* 45 000	* 43 000	* 40 000	* 41 000
Greenland	15 200	15 000	12 300	10 300	10 400
Hungary	* 1 000	* 500	* 500	* 500	* 500
Poland	640 000	657 000	678 000	744 000	831 000
Portugal	714	732	631	694	625
Romania	* 25 000	* 25 000	* 25 000	* 24 000	* 25 000
Soviet Union	* 1 580 000	* 1 595 000	* 1 600 000	* 1 600 000	* 1 620 000
Spain	218 089	116 176	214 940	289 624	366 939
Sweden	184 504	184 511	204 046	235 262	* 220 000
Turkey	* 8 600	* 8 700	* 6 800	* 7 000	* 7 000
Yugoslavia (a)	137 516	103 976	123 903	128 000	156 000
Algeria	* 3 400	* 3 400	* 3 700	* 3 700	* 3 700
Morocco	83 600	81 700	103 000	104 000	108 000
Namibia	107 500	87 500	109 900	101 200	105 800
South Africa	236 963	218 943	203 211	219 529	209 367
Tunisia	2 621	3 562	2 803	1 660	804
Zaire	80 119	59 176	39 501	37 780	47 300
Zambia	22 219	27 599	29 027	24 736	18 873
Zimbabwe	26 655	28 552	29 081	27 837	24 851
Canada	1 129 394	1 313 630	1 197 031	1 326 720	1 197 000
Dominican Republic	63 255	68 357	41 342	37 557	49 184
El Salvador	4 261	2 666	684	677	* 700
Honduras	56 697	52 221	77 600	80 700	83 300
Mexico	1 654 829	1 550 221	1 910 839	1 986 690	2 152 959
Nicaragua	4 359	2 350	1 977	* 1 600	* 1 600
USA	1 265 418	1 251 895	1 350 397	1 382 280	1 224 174
Argentina	78 326	83 489	77 767	61 500	62 000
Bolivia	205 332	170 195	187 399	141 840	111 352
Brazil	19 300	23 625	15 112	25 792	48 891
Chile	361 107	382 188	468 276	490 365	517 333
Colombia	4 440	4 232	4 118	4 773	5 200
Ecuador	1 000	313	98	* 100	...
Peru (b)	1 387 200	1 692 100	1 792 400	1 772 900	1 895 000
Burma	24 100	16 400	17 400	17 900	17 700
China	* 65 000	* 70 000	* 80 000	* 90 000	* 95 000
India	17 298	14 405	15 792	24 886	25 375
Indonesia	23 368	32 039	32 430	33 320	35 431
Japan	270 800	294 674	296 557	323 575	339 485
Korea, Dem. P.R. of	* 275 000	* 280 000	* 300 000	* 285 000	* 270 000
Korea, Republic of	84 137	76 623	66 557	76 353	68 926
Malaysia	14 708	16 202	15 092	14 653	16 249
Oman	—	—	—	2 800	1 900
Philippines	62 943	61 724	56 696	48 956	52 840
Taiwan	6 683	15 679	10 739	11 330	11 386
Australia	743 557	906 863	1 042 828	970 590	1 055 000
Fiji	260	576	412	520	442
Papua New Guinea	42 562	43 363	47 597	45 608	51 967
World total	11 643 000	11 971 000	12 838 000	13 148 000	13 469 000

(a) Smelter and/or refinery production

(b) Recoverable

Silver

Exports of Silver

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	1 642 087	2 571 398	3 373 284	1 678 700	563 779
Waste & scrap	137 812	97 883	691 011	176 602	574 675
Belgium-Luxembourg					
Metal	883 939	947 881	1 069 356	820 581	1 172 995
Denmark					
Metal	33 595	51 252	34 344	46 060	45 553
of which: Re-exports	22 890	27 734	28 996	42 314	...
France					
Metal	556 192	348 136	1 291 718	632 765	453 933
Waste & scrap	227 930	406 029	347 571	360 306	329 100
Germany, Federal Republic of					
Metal	1 115 685	1 364 636	1 487 183	1 345 629	1 485 977
Waste & scrap	366 738	396 058	655 945	629 033	406 956
Greece					
Metal	45 626	1 777	...	42 207	59 000
Italy					
Metal	95 232	56 491	129 534	81 651	168 100
Netherlands					
Metal	116 196	178 390	159 244	120 668	133 149
Austria					
Metal	31 008	58 478	52 972	50 128	53 566
Waste & scrap	2 478	693	2 224	1 352	333
Finland					
Metal	56 000	85 000	34 000	34 000	37 000
German Democratic Republic					
Metal (d)	* 154 900	* 326 300	* 200 200	* 284 300	* 290 900
Norway					
Metal	32 950	29 973	31 405	26 897	28 872
Poland					
Metal	397 000	370 000	405 000	478 000	549 000
Portugal					
Metal	4 510	3 223	1 757	68	...
Spain					
Metal	304 000	129 363	191 980	154 073	166 000
Sweden					
Metal	197 000	181 000	210 000	242 000	197 000
Switzerland					
Metal	718 473	724 035	367 455	484 390	543 835
Yugoslavia					
Metal	48 000	77 000	90 000	61 000	93 000
Waste & scrap	...	1 000	...	* 400	...
Morocco					
Metal	31 361	52 029	80 591	73 723	86 407
South Africa					
Metal	217 868	238 072	210 419	215 717	218 100
Tunisia					
Metal	...	2 700	...	1 375	—
Canada					
Ores & concentrates (b)	551 202	603 089	439 927	423 967	331 341
Metal	916 781	1 137 295	1 051 415	1 095 929	1 342 551
Dominican Republic					
Metal (c)	77 610	82 255	52 322	48 079	59 387
El Salvador					
Metal	4 324	2 672	852	...	...
Honduras					
Concentrates (b)	49 020	37 667	50 669	62 893	...
Mexico					
Metal	1 205 763	1 190 651	1 386 307	1 473 880	1 854 920
Nicaragua					
Metal (a)	3 000	...	14 180	...	...
USA					
Ores & concentrates (b)	6 634	1 459	2 093	20 231	8 394
Metal	493 915	423 046	458 190	360 478	398 540
Waste & scrap	390 855	390 892	566 110	406 216	403 897

Exports of Silver

Country	1981	1982	1983	1984	1985
Argentina					
Metal	8 202	12	—	...	...
Bolivia					
Ores & concentrates (b)	203 660	150 856	157 832	79 645	51 634
Chile					
Metal	218 165	295 677	280 276	292 879	312 738
Peru					
Metal	895 000	808 700	1 017 100	(d)* 951 000	(d)* 685 000
China					
Metal (d)	* 12 900	* 3 700	* 17 000	* 40 400	* 70 700
Hong Kong					
Metal	40 208	22 459	11 602	37 663	18 999
of which: Re-exports	39 879	21 183	8 212	32 857	15 260
Waste & scrap	311 596	95 220	419 139	421 507	408 507
of which: Re-exports	211 343	35 288	35 632	18 802	281
Japan					
Metal	148 447	128 995	220 011	132 745	93 413
Waste & scrap	...	1 000	...	...	...
Korea, Republic of					
Ores & concentrates	2 652 000	3 149 000	792 000	86 000	—
Metal	15 302	49 332	59 451	51 830	42 180
Malaysia					
Metal	57 258	47 150	23 220	9 549	3 732
Philippines					
Metal	408	3 776	18 545	2 972	15 376
Singapore					
Metal	8 344	6 807	11 108	3 768	1 852
of which: Re-exports	5 521	2 873	6 442	3 023	784
Taiwan					
Metal	—	151	700	274	950
Waste & scrap	18 216	22 000	8 093	712	—
Thailand					
Metal	31 410	62 436	103 024	5 638	75
Australia					
Silver-lead bullion	333 498	432 711	420 435	354 334)
Silver in all ores, concentrates etc.	109 664	171 069	221 581	194 139	) 737 225
Metal	90 228	234 468	222 480	163 620)
Fiji					
Metal	264	550	396	513	460
New Zealand (e)					
Metal	606	448	2 160	881	1 046
Papua New Guinea					
Metal	42 562	43 363	47 597	45 608	51 967

Notes:

- 1 This table excludes silver coin but includes silver shipped for minting
 - 2 In this table the term 'metal' as used here includes both unwrought and partly worked silver and alloys
- (a) Including waste and scrap
(b) Ag content
(c) Officially described as 'dore' (Au/Ag alloy), but contains a higher proportion of silver
(d) BGS estimates, based on known imports into certain countries
(e) Years ended 30 June of that stated

Silver

Imports of Silver

kilograms

Country	1981	1982	1983	1984	1985
United Kingdom					
Metal	1 941 051	1 433 971	2 476 676	1 644 617	1 304 497
Waste & scrap	982 040	1 360 722	402 741	361 752	643 500
Belgium-Luxembourg					
Metal	1 166 728	1 321 789	1 599 738	920 915	1 468 886
Denmark					
Metal	72 801	82 871	74 372	100 636	112 748
France					
Metal	663 630	630 123	539 071	600 777	517 180
Waste & scrap	33 937	31 651	155 163	27 930	24 800
Germany, Federal Republic of					
Metal	798 049	1 270 477	1 109 742	1 046 696	1 102 366
Waste & scrap	471 841	724 065	717 436	1 228 567	1 428 206
Greece					
Metal	12 160	7 354	13 000	11 133	28 000
Italy					
Metal	531 641	575 776	318 484	392 542	275 000
Netherlands					
Metal	143 676	144 859	134 548	141 455	117 298
Austria					
Metal	181 374	218 962	135 242	165 752	184 899
Waste & scrap	6 451	94	15	23	—
Bulgaria					
Metal (f)	* 1 200	* 150	* 1 700	* 1 400	* 2 100
Czechoslovakia					
Metal (f)	* 22 400	* 8 200	* 11 200	* 16 100	* 16 900
Finland					
Metal	86 000	67 000	67 000	84 000	86 000
German Democratic Republic					
Metal (f)	* 275 200	* 542 800	* 345 300	* 439 800	* 483 200
Iceland					
Metal	1 007	707	570	412	1 000
Malta					
Metal	1 177	321	414	1 596	831
Norway					
Metal	70 120	83 527	42 262	47 401	61 513
Portugal					
Metal	31 588	29 085	34 465	27 779	...
Spain					
Metal	54 000	31 901	46 367	16 344	23 000
Sweden					
Metal	417 000	244 000	168 000	173 000	167 000
Switzerland					
Metal	901 160	1 139 623	1 172 851	1 097 993	903 449
Turkey					
Metal (b)	2 206	9 465	1 741	4 566	6 000
Yugoslavia					
Metal	9 000	19 000	17 000	24 000	32 000
Algeria					
Metal	5 943	14 374	21 178	35 900	...
Egypt					
Metal	1 846	1 258	15	...	...
Gabon					
Metal	899	578	156	128	505
Ivory Coast					
Metal	1 252	2 711	839	980	2 930
Libya					
Metal	1 060	24 993	...	...	...
Madagascar					
Metal	1 615	138	136	76	443
Morocco					
Metal	5 536	1 100	810	732	876
Mozambique					
Metal	833	1 069	646	20	...
Nigeria					
Metal	360	114	...	52	1
Senegal					
Metal	209	222	99	145	...

Imports of Silver

Country	1981	1982	1983	1984	1985
South Africa					
Metal	25 689	27 764	24 148	25 430	10 125
Tunisia					
Metal	...	814	...	2 694	1 354
Zaire					
Metal	411	1 013	1 084	237	...
Canada					
Metal	327 291	484 186	339 439	215 193	573 095
Costa Rica					
Metal	425	385	377	414	856
Guatemala					
Metal	734	41	78	13	46
Jamaica					
Metal	979	626	* 500	321	952
Nicaragua					
Metal (a)	...	1 000	...	...	...
Panama					
Metal (a)	866	755	1 035	2 961	10 290
Trinidad & Tobago					
Metal	761	1 838	1 476	2 465	391
USA					
Ores & concentrates (c)	515 431	592 450	604 614	755 487	670 055
Metal	2 563 755	3 187 475	5 139 137	2 910 000	4 274 000
Waste & scrap	108 187	137 529	87 078	84 947	117 389
Argentina					
Metal	34 299	22 734	14 040	...	...
Brazil					
Metal	56 060	89 496	99 704	85 191	...
Colombia					
Metal	9 415	6 028	2 074	1 324	...
Ecuador					
Metal	489	2 835	...	...	...
Peru					
Metal	581	1 638	504	...	...
Uruguay					
Metal	100	56	25	—	0
Venezuela					
Metal	...	26 244	...	...	...
Abu Dhabi					
Metal	82	—	195	2 257	1 072
Brunei					
Metal	344	2 485	210	434	...
Cyprus					
Metal	4 001	5 837	4 022	4 389	6 957
Dubai					
Metal	30 839	133 830	294 985	14 466	3 015
Hong Kong					
Metal	15 304	24 009	25 576	53 779	43 118
Waste & scrap	812	5 925	2 567	675	440
India (g)					
Metal	129	565	...	...	...
Indonesia					
Metal	44	48	308	290	...
Iran (d)					
Metal	10 644	9 499	(f)* 24 700	28 710	(f)* 12 600
Israel					
Metal (f)	* 12 700	* 12 100	* 8 300	* 11 700	* 14 500
Japan					
Ores & concentrates	—	—	—	—	68 000
Metal	440 385	517 605	422 451	502 919	570 787
Jordan					
Metal	182	1 244	57	2 215	271
Korea, Republic of					
Metal	4 955	5 132	5 659	6 697	14 713
Malaysia					
Metal	9 605	26 321	31 601	69 315	52 878

Silver

Imports of Silver

kilograms

Country	1981	1982	1983	1984	1985
Philippines Metal	687	325	833	203	38
Saudi Arabia Metal	13 399	3 256	758	2 746	12 723
Singapore Metal	68 610	33 036	22 617	27 733	39 890
Taiwan Metal	21 858	26 446	39 308	177 927	47 135
Thailand Metal	191 551	13 001	11 949	46 638	93 871
Australia Metal	1 306	149	8 720	1 467	...
New Zealand (e) Metal	43 046	41 971	40 708	41 950	39 867

Notes:

- 1 This table excludes silver coin but includes silver shipped for minting
- 2 In this table the term 'metal' as used here includes both unwrought and partly worked silver and alloys

(a) Including waste and scrap

(b) Including gilt

(c) Ag content

(d) Years ended 20 March following that stated

(e) Years ended 30 June of that stated

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

(g) Years ended 31 March following that stated

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country		1981	1982	1983	1984	1985
United Kingdom						
Recovered (a)(c)		42 000	51 000	51 000	58 000	54 000
Recovered (d)		75 000	59 000	55 000	75 000	80 000
Belgium						
Recovered (c)(d)		* 270 000	* 270 000	* 250 000	* 240 000	* 260 000
Denmark						
Recovered (d)		5 575	7 421	7 291	10 859	7 376
France						
Recovered (d)		1 927 000	1 811 400	1 810 700	1 752 600	1 561 400
Germany, Federal Republic of						
Pyrites (45%)		213 000	229 000	—	—	—
Recovered (c)		400 000	* 400 000	* 400 000	* 350 000	* 320 000
Recovered (d)		1 024 000	1 092 000	827 000	* 1 090 000	* 1 200 000
Recovered (e)		* 95 000	* 100 000	* 95 000	* 90 000	* 85 000
Greece						
Pyrites (45%)		74 162	51 592	64 997	74 224	79 329
Recovered (d)		* 11 000	* 105 000	* 120 000	* 125 000	* 125 000
Irish Republic						
Pyrites (47%)		10 500	6 000	—	—	—
Italy						
Pyrites (43%)		261 636	268 786	262 361	192 121	299 631
Recovered (d)		* 230 000	* 210 000	* 210 000	* 200 000	* 200 000
Sulphur ore		22 120	20 435	9 397	4 747	1 130
Netherlands						
Recovered (c)(d)		* 145 000	* 165 000	* 205 000	* 195 000	* 180 000
Austria						
Recovered		36 994	47 747	41 429	38 455	35 000
Anhydrite		25 143	27 102	26 122	26 449	26 000
Bulgaria						
Pyrites (42%)		* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Recovered		* 70 000	* 70 000	* 70 000	* 70 000	* 70 000
Czechoslovakia						
Pyrites (42%)		* 60 000	* 60 000	* 60 000	* 60 000	* 62 000
Recovered		* 10 000	* 10 000	* 10 000	* 10 000	41 866
Sulphur ore		* 5 000	* 5 000	* 5 000	* 5 000	* 6 000
Finland						
Pyrites (44%)		134 000	146 000	85 800	94 160	109 340
Recovered (c)		268 000	270 000	264 000	261 000	257 000
Recovered (d)		48 443	40 162	45 006	44 735	* 45 000
German Democratic Republic						
Pyrites (42%)		* 10 000	—	—	—	—
Recovered		* 350 000	* 360 000	* 360 000	* 350 000	* 330 000
Norway						
Pyrites (50%)		218 562	212 233	178 901	214 791	190 489
Recovered (c)(d)		* 46 000	* 46 000	* 50 000	* 50 000	* 80 000
Poland						
Frasch (g)		4 773 000	4 935 000	4 999 000	4 990 000	4 876 000
Recovered (c)		* 180 000	* 160 000	* 170 000	* 170 000	* 170 000
Recovered (d)		* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Anhydrite		* 20 000	* 20 000	* 20 000	* 20 000	* 20 000
Portugal						
Pyrites (44%)		124 681	115 867	123 742	146 120	156 428
Romania						
Pyrites (42%)		* 300 000	* 200 000	* 200 000	* 200 000	* 200 000
Recovered		* 150 000	* 150 000	* 150 000	* 150 000	* 150 000
Soviet Union						
Frasch		* 800 000	* 800 000	* 800 000	* 800 000	* 850 000
Pyrites (46%)		* 3 600 000	* 3 500 000	* 3 400 000	* 3 300 000	* 3 350 000
Recovered (c)		* 425 000	* 425 000	* 450 000	* 450 000	* 475 000
Recovered (d)		* 3 075 000	* 3 125 000	* 3 200 000	* 3 250 000	* 3 350 000
Sulphur ore		* 2 000 000	* 1 900 000	* 1 800 000	* 1 800 000	* 1 700 000
Spain						
Pyrites (47%)		1 118 386	1 029 386	1 073 336	1 292 310	1 231 302
Recovered (c)(d)		* 150 000	* 138 000	* 131 000	* 137 000	* 126 000

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country		1981	1982	1983	1984	1985
Sweden						
Pyrites	(48%)	201 134	204 587	206 589	200 535	* 225 000
Recovered (c)(d)		* 136 000	* 133 000	* 145 000	* 157 000	* 155 000
Sulphur ore		38 194	22 505	20 441	26 324	...
Turkey						
Pyrites	(45%)	30 000	2 380	1 881	—	—
Recovered		118 270	126 444	131 660	151 338	159 566
Sulphur ore		28 645	31 335	31 174	41 352	37 500
Yugoslavia						
Pyrites	(42%)	274 014	340 200	291 404	255 780	323 000
Recovered (c)(d)		* 204 000	* 204 000	* 183 000	* 163 000	* 173 000
Algeria						
Recovered (d)		15 000	15 000	15 000	* 20 000	* 20 000
Egypt						
Recovered (d)		10 000	5 000	10 000	2 000	10 000
Libya						
Recovered (d)		* 11 000	* 12 000	* 14 000	* 14 000	* 16 000
Morocco						
Pyrites	(48%)	22 105	—	—	—	—
Namibia						
Pyrites		8 361	58 209	80 719	104 454	* 100 000
South Africa						
Pyrites	(48%)	502 460	466 811	473 568	463 378	477 321
Recovered (d)		* 27 000	* 25 000	* 32 000	* 30 000	* 35 000
Recovered (c)		51 886	50 867	48 515	95 102	89 593
Zaire						
Recovered (c)		* 25 000	* 25 000	* 36 000	* 37 000	* 36 000
Zambia						
Pyrites	(43%)	5	1 239	25 513	18 172	28 288
Recovered		90 154	83 870	79 525	80 000	* 105 000
Zimbabwe						
Pyrites	(42%)	27 190	24 260	12 115	23 934	24 105
Recovered		* 5 000	* 5 000	* 5 000	* 5 000	* 5 000
Canada						
Pyrites	(45%)	5 000	9 000	—	—	—
Recovered (c)		783 000	627 000	678 286	844 276	822 000
Recovered (d)		5 613 761	5 231 136	5 726 000	5 331 000	* 5 000 000
Cuba						
Pyrites	(40%)	14 000	20 000	5 000	—	—
Mexico						
Frasch		1 651 607	1 390 522	1 224 856	1 363 870	1 550 803
Recovered (c)		* 100 000	* 100 000	* 100 000	* 160 000	* 160 000
Recovered (d)		425 510	424 925	377 170	461 093	474 928
Netherlands Antilles						
Recovered (d)		90 000	* 90 000	87 000	63 000	25 000
Trinidad & Tobago						
Recovered (d)		9 050	11 620	8 795	* 7 000	* 5 000
USA						
Frasch		6 348 000	4 210 000	3 202 000	4 193 000	5 011 000
Pyrites	(40%)	307 000	265 000	230 000	250 000	253 000
Recovered (c)		1 231 000	908 000	1 133 000	1 245 000	1 285 000
Recovered (d)		4 259 000	4 404 000	4 955 000	5 214 000	5 313 000
Bolivia (f)						
Sulphur ore		10 202	5 914	3 010	1 878	2 741
Brazil						
Recovered (c)(e)		57 771	72 991	119 943	141 386	170 082
Recovered (d)		41 507	69 580	65 462	71 287	54 591
Chile						
Recovered (c)		28 000	31 828	32 364	32 135	30 073
Sulphur ore (b)		114 624	104 987	98 748	53 964	78 747
Colombia						
Recovered (d)		2 764	3 096	5 658	* 5 000	* 5 000
Sulphur ore		26 300	32 601	31 476	36 245	* 35 000
Ecuador						
Recovered (d)		* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Sulphur ore		20 000	2 968	* 5 000	* 5 000	* 4 000
Venezuela						
Recovered (d)		* 85 000	84 000	82 000	120 000	120 000

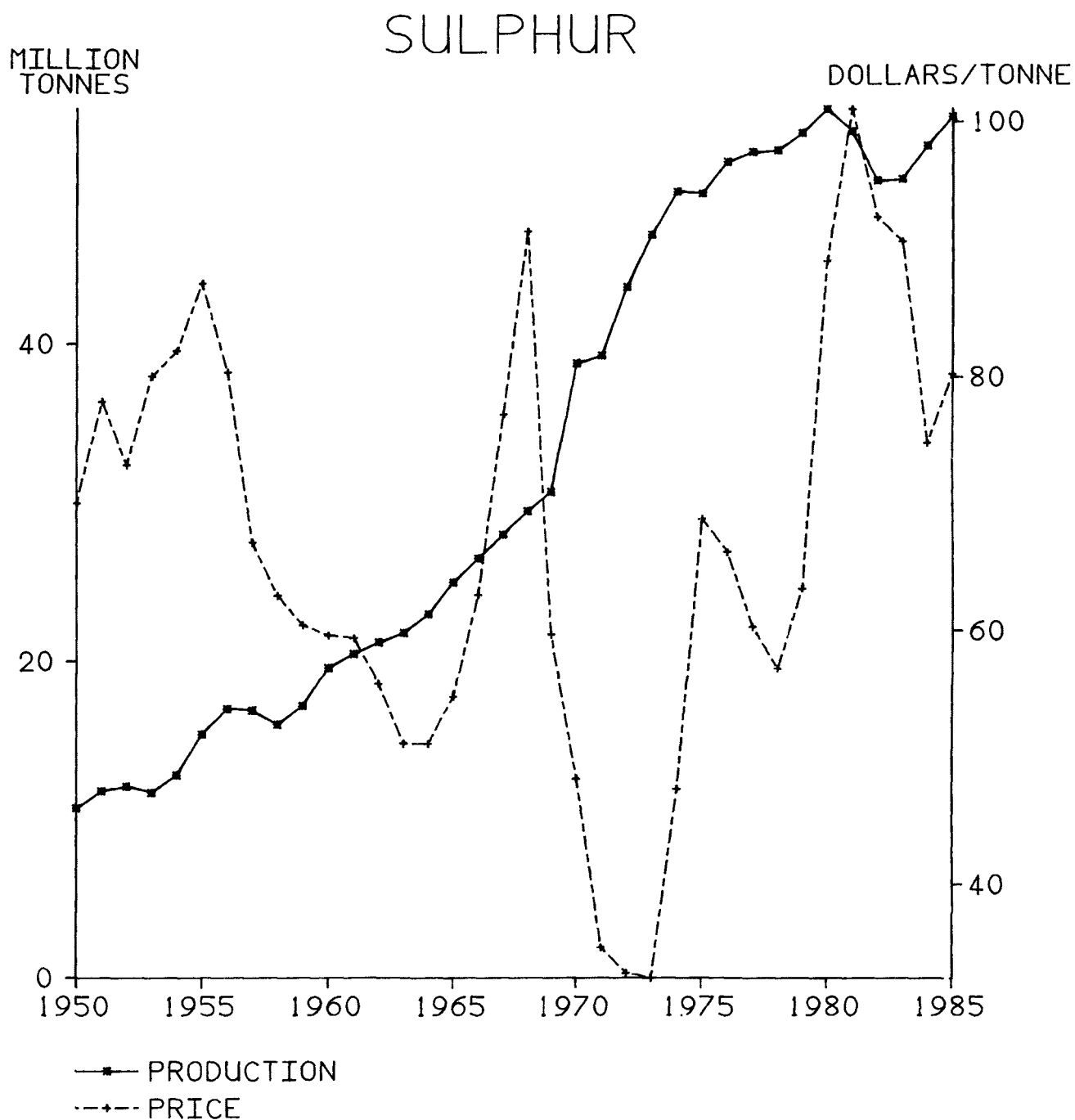


Figure 18 World production of sulphur in all forms from 1950 to 1985 compared with the average annual US producer price for elemental sulphur f.o.b. mine expressed in constant 1980 US dollars.

Trend line analysis of the production data indicates a growth rate of approximately 5½% per annum over 36 years.

Constant commodity prices derived from those quoted by USBM in Mineral Facts and Problems (1960 et seq.) and Mineral Commodity Summaries (1984–86), using the CPI for the USA taken from International Financial Statistics Yearbook (1986).

Sulphur and Pyrites

Production of Sulphur and Pyrites

tonnes (sulphur content)

Country		1981	1982	1983	1984	1985
Abu Dhabi						
Recovered (d)		—	* 5 000	10 000	15 000	292 000
Bahrain						
Recovered (d)		40 000	34 000	49 000	* 50 000	* 50 000
China						
Pyrites (45%)		* 1 800 000	* 1 800 000	* 2 300 000	* 2 100 000	* 2 200 000
Recovered		* 300 000	* 300 000	* 350 000	* 350 000	* 400 000
Sulphur ore		* 200 000	* 200 000	* 200 000	* 200 000	* 300 000
Cyprus						
Pyrites (44%)		7 268	26 419	21 279	10 411	30 970
India						
Pyrites (37%)		26 743	20 882	19 661	13 862	* 16 000
Recovered (c)		* 92 000	* 100 000	* 110 000	* 115 000	* 120 000
Recovered (d)		4 159	5 189	3 554	2 197	* 2 000
Iran						
Recovered (d)		* 6 000	* 10 000	* 25 000	* 30 000	* 180 000
Sulphur ore		* 50 000	* 10 000	* 20 000	* 30 000	* 30 000
Iraq						
Frasch		200 000	* 300 000	* 300 000	* 500 000	* 500 000
Recovered (d)		* 40 000	* 40 000	* 40 000	* 70 000	* 70 000
Israel						
Recovered (d)		* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Japan						
Pyrites (49%)		293 000	276 000	272 000	259 000	253 000
Recovered (c)(g)		1 236 000	1 268 000	1 239 000	1 191 000	1 192 000
Recovered (d)		1 080 000	1 051 000	1 102 000	1 142 000	1 065 000
Korea, Dem. P.R. of						
Pyrites (40%)		* 225 000	* 200 000	* 200 000	* 200 000	* 200 000
Recovered (c)		* 30 000	* 30 000	* 30 000	* 30 000	* 30 000
Korea, Republic of						
Recovered (c)		* 54 000	* 54 000	* 54 000	* 54 000	* 55 000
Recovered (d)		* 36 000	* 36 000	* 36 000	* 36 000	* 35 000
Kuwait						
Recovered (d)		108 929	140 644	147 038	147 461	198 000
Oman						
Pyrites		—	—	* 11 000	* 31 000	* 31 000
Pakistan						
Recovered		* 14 000	* 19 000	* 26 000	* 26 000	* 26 000
Philippines						
Pyrites (46%)		45 021	29 695	28 917	34 876	* 107 000
Recovered (c)		—	—	* 57 000	* 95 000	* 100 000
Qatar						
Recovered (d)		9 000	13 000	19 000	33 000	28 000
Saudi Arabia						
Recovered (d)		900 000	900 000	782 000	1 055 000	* 1 200 000
Singapore						
Recovered (d)		10 378	15 188	3 666	5 557	* 5 000
Taiwan						
Recovered		9 849	20 080	26 936	28 705	42 949
Australia						
Recovered (c)		355 844	430 191	454 637	387 066	...
Recovered (d)		14 321	17 496	12 897	13 058	13 000
Total Frasch		13 800 000	11 600 000	10 550 000	11 900 000	12 800 000
Total Pyrites		10 200 000	9 900 000	9 950 000	9 800 000	10 200 000
Total Recovered		26 900 000	26 500 000	27 700 000	28 600 000	29 100 000
Total Sulphur ore		2 500 000	2 300 000	2 200 000	2 200 000	2 200 000
World total (all forms)		53 400 000	50 300 000	50 400 000	52 500 000	54 300 000

Note: Pyrites: nominal sulphur content is shown in parentheses

- (a) 'Spent Oxide'
- (b) Includes 'caliche' at 45% S content
- (c) From smelter gases
- (d) From petroleum refining and/or natural gas
- (e) Other
- (f) Exports
- (g) Includes S content of 'sulphur ore'

Exports of Sulphur and Pyrites

Country	1981	1982	1983	1984	1985
United Kingdom					
Sulphur—					
Crude	1 095	1 201	1 685	3 025	1 929
Sublimed & precipitated	128	295	177	247	127
Belgium-Luxembourg					
Pyrites	193	1 223	1 051	73	46
Sulphur—					
Crude	9 129	7 136	7 479	8 787	7 511
Sublimed & precipitated	87	117	79	79	213
Denmark					
Sulphur	222	80	3 429	3 368	3 242
France					
Sulphur—					
Crude	889 321	685 985	677 396	717 405	536 711
Refined	309	1 789	1 524	1 813	1 162
Sublimed	2 000	2 192	2 494	5 908	5 145
Precipitated	115	78	109	53	32
Germany, Federal Republic of					
Pyrites	2 089	2 031	1 041	1 302	1 217
Sulphur—					
Crude	448 041	602 559	461 821	509 636	667 953
Sublimed & precipitated	454	280	314	450	502
Greece					
Sulphur	5 758	442	4 884	10 187	13 571
Italy					
Pyrites	30 521	3 733	3 626	5 005	4 778
Sulphur—					
Crude	3 073	4 967	7 301	4 714	14 455
Sublimed & precipitated	195	152	65	82	21
Netherlands					
Sulphur—					
Crude	13 689	13 650	15 100	26 415	22 288
Sublimed & precipitated	6	1	20	3	8
Albania					
Pyrites (c)	* 31 600	* 34 600	* 59 500	* 31 500	* 24 600
Finland					
Pyrites	69 538	69 387	157 180	(c)* 110 800	(c)* 88 300
Norway					
Pyrites	210 459	171 883	186 867	167 974	169 308
Sulphur—					
Crude	4 405	2 753	7 525	4 307	3 722
Sublimed & precipitated	1 919	0	0	1 904	1 317
Poland					
Sulphur	3 817 000	3 973 000	4 034 000	4 078 000	3 906 000
Portugal					
Sulphur	120	60	48	11	...
Soviet Union					
Pyrites	536 000	359 000	362 000	273 000	294 000
Sulphur (c)	* 55 400	* 25 500	* 37 200	* 34 000	* 34 000
Spain					
Pyrites	378 678	347 438	347 656	386 088	312 088
Sulphur—					
Crude	2 143	1 476	1 285	1 105	145
Sublimed & precipitated	10 486	5 026	2 508	135	35
Sweden					
Pyrites	60 571	31 177	97	13 452	30
Sulphur—					
Crude	22 888	1 310	1 641	1 588	1 502
Sublimed & precipitated	—	22	12	116	25
Switzerland					
Sulphur—					
Crude	19	8 249	6 260	8 151	4 634
Sublimed & precipitated	8	5	3	3	27
Yugoslavia					
Pyrites	14 428	20 954	95 764	359 202	156 132
Sulphur	2 039	...	...	...	...

Sulphur and Pyrites

Exports of Sulphur and Pyrites

tonnes

Country	1981	1982	1983	1984	1985
South Africa					
Sulphur	69 646	34 133	14 203	13 781	8 465
Zimbabwe					
Pyrites	6 122	—	—	—	...
Canada					
Pyrites	£56 000	£111 000	£41 000	£25 000	£68 000
Sulphur	7 309 309	6 111 606	5 670 813	7 327 177	7 848 628
Mexico					
Sulphur	1 199 879	889 536	1 933 649	1 520 176	871 149
Netherlands Antilles					
Sulphur	91 250	...	87 471	69 476	...
USA					
Sulphur	1 392 169	993 992	994 754	1 348 404	1 401 511
Bolivia					
Sulphur	10 202	5 914	3 010	1 878	2 741
Colombia					
Sulphur	1 704	5 858	1 869	3 419	...
Bahrain					
Sulphur	—	3 993	17 268	44 286	26 453
Cyprus					
Pyrites	35 670	1 099	11 031	31 044	65 423
Iran (a)					
Sulphur	(c)* 58 400	...	...	...	(c)* 13 100
Japan					
Sulphur—					
Crude	231 326	299 451	239 025	274 095	165 981
Sublimed & precipitated	174	200	371	358	382
Korea, Republic of					
Sulphur	880	1 978	2 238	2 456	2 953
Kuwait					
Sulphur	127 285	90 335	461 757	130 000	166 000
Saudi Arabia					
Sulphur	—	515 946	1 547 418	1 723 341	* 1 300 000
Singapore					
Sulphur—					
Crude	9 006	12 999	28 997	24 269	7 338
Sublimed & precipitated	20 060	8 126	8 570	14 743	7 051
Taiwan					
Sulphur—					
Crude	817	1 553	1 728	2 783	1 497
Sublimed & precipitated	444	430	105	219	75
Australia					
Zinc concentrates (b)	118 000	145 700	196 400	...	...

(a) Years ended 20 March following that stated

(b) Recoverable sulphur

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

Imports of Sulphur and Pyrites

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Pyrites	13 273	15 690	21 961	19 638	15 909
Sulphur—					
Crude	886 018	849 549	842 801	810 963	806 358
Sublimed & precipitated	636	842	457	418	524
Belgium-Luxembourg					
Pyrites	207 379	235 540	276 252	286 067	276 967
Sulphur—					
Crude	444 699	358 718	399 067	535 236	492 262
Sublimed & precipitated	1 936	1 071	1 505	982	1 352
Denmark					
Pyrites	581	25	112	74	80
Sulphur—					
Crude	73 069	63 585	60 906	63 460	72 939
Sublimed & precipitated	119	143	103	76	122
France					
Pyrites	775	1 429	1 028	1 553	1 177
Sulphur—					
Crude	552 694	458 442	537 557	552 170	623 421
Refined	430	900	430	1 004	929
Sublimed & precipitated	254	111	68	178	78
Germany, Federal Republic of					
Pyrites	57 735	71 472	80 190	149 274	187 042
Sulphur—					
Crude	277 808	287 861	327 349	328 090	252 380
Sublimed & precipitated	507	635	891	929	1 154
Greece					
Pyrites	46 582	112 798	67 452	76 044	41 354
Sulphur—					
Crude	61 889	142 252	43 294	82 617	46 750
Sublimed & precipitated	102	58	59	48	42
Irish Republic					
Sulphur—					
Crude	473	443	493	271	327
Sublimed & precipitated	89	178	90	47	45
Italy					
Pyrites	252 991	109 155	262 813	186 607	167 574
Sulphur—					
Crude	476 015	375 588	464 907	376 160	399 494
Sublimed & precipitated	1 010	1 238	961	1 364	1 215
Netherlands					
Pyrites	164	163	223	311	204
Sulphur—					
Crude	456 933	383 418	299 006	373 997	377 044
Sublimed & precipitated	165	328	280	396	603
Austria					
Pyrites	582	650	804	775	854
Sulphur—					
Crude	102 818	84 658	93 489	113 304	98 589
Sublimed & precipitated	28	96	248	53	336
Bulgaria					
Pyrites (a)	* 295 600	* 257 000	* 262 000	* 249 000	* 238 000
Sulphur (a)	* 95 100	* 74 900	* 60 000	* 68 000	* 50 100
Czechoslovakia					
Sulphur	537 000	503 000	525 000	469 000	505 000
Finland					
Sulphur—					
Crude	52 824	68 825	54 460	84 902	78 377
Sublimed & precipitated	19	12	19	10	514
German Democratic Republic					
Pyrites	...	* 8 700	...	...	...
Sulphur (a)	* 167 000	* 166 000	* 157 600	* 135 000	* 135 000
Hungary					
Pyrites	89 237	49 575	80 067	4 174	37 568
Sulphur	183 164	163 701	174 692	168 066	171 503
Malta					
Sulphur	93	220	217	127	45

Imports of Sulphur and Pyrites

tonnes

Country	1981	1982	1983	1984	1985
Norway					
Sulphur—					
Crude	3 002	2 570	3 886	5 599	4 117
Sublimed & precipitated	27	12	16	420	61
Portugal					
Sulphur	117 876	113 481	28 694	18 473	...
Romania					
Pyrites (a)	...	...	...	* 48 900	* 70 300
Sulphur (a)	* 396 300	* 295 900	* 164 200	* 203 100	* 198 600
Soviet Union					
Sulphur (a)	* 947 800	* 1 047 100	* 998 100	* 1 065 600	* 1 162 400
Spain					
Sulphur—					
Crude	112 949	91 331	63 818	46 595	71 255
Sublimed & precipitated	537	530	620	462	60
Sweden					
Pyrites	21 588	85	168	14 749	21 970
Sulphur—					
Crude	23 250	8 645	4 919	14 995	6 318
Sublimed & precipitated	4 515	2 012	5 962	9 525	12 004
Switzerland					
Pyrites	4 924	118	156	154	84
Sulphur—					
Crude	29 735	36 391	39 336	46 043	48 577
Sublimed & precipitated	188	127	198	138	206
Turkey					
Pyrites	117 695	70 427	89 995	166 070	95 324
Sulphur—					
Crude	91 289	114 696	76 868	20 998	111 006
Sublimed & precipitated	121	90	140	4 844	95
Yugoslavia					
Pyrites	49 232	11 750	...	156	61 081
Sulphur—					
Crude	12 222	16 718	73 145	70 486	) 162 724
Refined	47 353	52 340	48 434	45 419)
Sublimed & precipitated	479	740	1 868	404	585
Algeria					
Sulphur—					
Crude	13 098	40 668	73 796	42 508	* 80 000
Sublimed & precipitated	8 535	7 003	2 507	3 505	...
Egypt					
Pyrites	55 155	36 500	48 694	...	...
Sulphur	59 428	56 276	141 934	* 220 000	* 170 000
Ethiopia					
Sulphur	1 159	483	1 820	403	...
Gabon					
Sulphur	4 937	7 849	9 157	206	5 250
Ivory Coast					
Sulphur	7 797	4 023	6 554	2 085	58
Kenya					
Sulphur—					
Crude	1 500	538	6 019	666	6 000
Sublimed & precipitated	1 374	350	415	511	...
Morocco					
Sulphur	810 435	1 026 751	1 349 554	1 418 685	1 469 308
Nigeria					
Sulphur	1 368	2 905	...	1 662	3 485
Senegal					
Sulphur	20 581	13 050	14 396	109 686	86 000
South Africa					
Pyrites	5 090	171	108	69	38
Sulphur—					
Crude	764 885	590 201	383 414	597 145	463 443
Sublimed & precipitated	2 177	137	111	223	54
Tanzania					
Sulphur	83	10 000	10 000	9 000	10 000
Tunisia					
Sulphur	836 700	963 980	978 900	997 536	556 487

Imports of Sulphur and Pyrites

tonnes

Country	1981	1982	1983	1984	1985
Zaire					
Sulphur	3 873	12 444	19 349	2 815	...
Zimbabwe					
Sulphur	25 529	24 454	28 654	38 950	...
Canada					
Sulphur	4 633	2 159	2 365	3 019	3 167
Cuba					
Sulphur	167 664	169 353	184 618	142 427	...
El Salvador					
Sulphur	0	17	2 481	3 181	...
Guatemala					
Sulphur	416	709	42	362	1 437
Jamaica					
Sulphur —					
Crude	8 542	24	19	34	28
Sublimed & precipitated	108	301	2 962	3 002	2 947
Mexico					
Sulphur —					
Crude	20 799	542	324	493	23 215
Sublimed & precipitated	378	364	179	361	139
Nicaragua					
Sulphur	397	709	395	...	...
Trinidad & Tobago					
Sulphur	39	52	3 062	56	37
USA					
Pyrites	11 343	20 539	870	13 040	3 299
Sulphur	2 522 000	1 905 188	1 694 919	2 557 429	2 288 304
Argentina					
Sulphur	75 960	81 020	100 532	129 310	...
Brazil					
Sulphur —					
Crude	817 072	882 540	953 789	1 174 132	...
Sublimed & precipitated	472	479	538	499	...
Chile					
Sulphur (a)	* 83 000	* 58 000	* 72 000	* 84 000	* 109 000
Colombia					
Sulphur —					
Crude	21 907	31 783	26 377	38 003	...
Sublimed & precipitated	130	136	85	187	...
Peru					
Sulphur	8 672	920	3 802	...	...
Suriname					
Sulphur	1 265	1 516	...	...	...
Uruguay					
Sulphur	11 651	6 315	5 872	13 561	11 975
Venezuela					
Sulphur —					
Crude	155	168	126	...	...
Sublimed & precipitated	...	29	...	...	...
China					
Sulphur	260 534	337 698	357 082	286 811	163 247
Cyprus					
Sulphur	1 583	1 901	3 140	2 513	2 561
Hong Kong					
Sulphur —					
Crude	1 218	1 189	696	644	530
Sublimed	1	13	273	308	58
India (d)					
Sulphur —					
Crude	681 965	781 488	...	920 000	1 022 000
Sublimed	119	2 417	...	...	...
Indonesia					
Sulphur —					
Crude	10 399	3 413	3 121	1 975	...
Sublimed & precipitated	89 527	82 805	102 564	212 487	267 000
Iran (c)					
Sulphur	243	210	420	180	...

Imports of Sulphur and Pyrites

tonnes

Country	1981	1982	1983	1984	1985
Israel					
Sulphur	135 425	137 341	164 358	203 581	245 455
Japan					
Sulphur	467	5	7	4	4
Jordan					
Sulphur—					
Crude	990	31 595	113 148	126 426	169 300
Sublimed & precipitated	948	27 409	42 494	102 469	15 682
Korea, Republic of					
Sulphur—					
Crude	386 430	440 660	448 076	567 836	592 867
Sublimed & precipitated	321	368	706	1 292	1 025
Malaysia					
Sulphur—					
Crude	6 737	4 888	5 907	6 766	12 290
Sublimed & precipitated	7 036	6 237	7 512	8 447	10 798
Pakistan (b)					
Sulphur—					
Crude	20 857	29 458	25 605	11 483	39 194
Sublimed & precipitated	—	69	120	1 343	445
Philippines					
Sulphur—					
Crude	497	1 564	1 719	917	309
Sublimed & precipitated	19 007	22 615	17 884	16 245	20 382
Singapore					
Sulphur—					
Crude	219	57	69	84	34
Sublimed & precipitated	3 273	262	159	281	127
Sri Lanka					
Sulphur—					
Crude	125	433	405	707	322
Sublimed & precipitated	335	115	163	508	309
Syria					
Sulphur—					
Crude	25 623	41	46 427	17 477	...
Sublimed & precipitated	97	40	220	1 357	...
Taiwan					
Sulphur—					
Crude	75 887	25 358	48 380	63 374	74 955
Sublimed & precipitated	264 015	156 287	205 885	243 935	158 334
Thailand					
Sulphur—					
Crude	12 333	18 745	27 409	39 941	50 753
Refined	12 195	12 997	3 581	1 439	4 104
Sublimed & precipitated	193	201	257	288	136
Australia					
Sulphur	555 517	459 934	392 581	470 795	392 343
New Zealand (b)					
Sulphur—					
Crude	247 597	179 494	209 962	207 380	209 696
Sublimed & precipitated	235	194	291	282	333

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

(b) Years ended 30 June of that stated

(c) Years ended 20 March following that stated

(d) Years ended 31 March following that stated

Talc

tonnes

Production of Talc

Country	1981	1982	1983	1984	1985
United Kingdom	18 312	19 000	16 000	19 413	20 000
France	313 000	313 000	316 000	320 000	311 000
Germany, Federal Republic of	15 400	14 300	14 300	17 300	15 000
Greece	2 697	2 166	1 666	1 712	1 725
Italy	163 708	163 973	158 976	142 728	129 614
Austria	116 425	117 092	122 128	134 011	131 454
Finland	307 915	325 298	318 430	327 472	318 547
Hungary	4 409	3 328	2 440	3 223	1 756
Norway	86 376	* 85 000	* 87 000	65 124	...
Portugal	3 512	4 940	7 325	6 822	4 998
Romania	* 60 000	* 60 000	* 60 000	* 65 000	* 65 000
Soviet Union	* 500 000	* 510 000	* 510 000	* 520 000	* 520 000
Spain	69 068	62 686	69 467	72 237	88 776
Sweden	15 581	17 753	21 056	17 882	* 14 000
Yugoslavia	...	16 482	23 757	28 547	27 500
Egypt	5 723	8 291	4 519	12 213	* 12 000
South Africa					
Talc	9 464	9 743	7 617	10 561	10 220
Wonderstone (pyrophyllite)	5 662	4 070	3 575	3 851	4 227
Zambia	921	271	1 313	367	449
Zimbabwe	386	270	552	285	437
Canada	82 715	70 523	97 030	122 992	127 000
Mexico	13 733	12 270	11 032	8 900	29 900
USA					
Talc	1 121 000	952 000	889 000	945 000	1 078 000
Pyrophyllite	97 000	79 000	79 000	77 000	73 000
Argentina					
Talc	33 741	24 716	23 379	* 23 000)
Pyrophyllite	1 026	2 687	4 925	* 4 000	) * 26 000
Steatite	1 452	1 490	1 387	* 1 300)
Brazil					
Talc (b)	325 191	308 644	326 145	348 915	) * 425 000
Pyrophyllite (b)	178 464	76 624	42 967	64 432)
Chile	665	283	637	422	1 299
Colombia	6 050	6 240	6 639	6 785	* 6 700
Paraguay	150	150	120	150	130
Peru	* 9 100	* 8 600	* 8 600	* 8 000	* 8 000
Uruguay	1 589	1 145	685	* 1 200	* 1 000
Burma (a)	146	165	128	128	132
China	* 900 000	* 950 000	* 950 000	* 950 000	* 1 000 000
India					
Steatite	355 000	327 533	284 020	346 038	336 000
Pyrophyllite	41 681	43 602	63 948	84 570	* 70 000
Japan					
Talc	119 931	105 759	87 692	85 798	78 616
Pyrophyllite	1 025 721	977 306	986 294	* 1 000 000	1 023 809
Korea, Dem. P.R. of	* 170 000	* 170 000	* 170 000	* 170 000	* 170 000
Korea, Republic of					
Talc	169 401	124 793	171 214	192 208	194 174
Pyrophyllite	395 216	466 324	460 922	656 442	738 304
Nepal (c)	71	3 000	15 263	7 595	* 10 000
Pakistan	24 997	20 498	15 960	15 568	18 867
Philippines	446	1 008	878	401	* 1 000
Taiwan	24 774	30 661	27 053	18 680	17 560
Thailand	12 035	21 998	20 148	28 479	43 478
Australia					
Talc	74 840	143 325	167 009	234 427	...
Pyrophyllite	8 146	9 467	9 569	6 851	...
World total	6 900 000	6 700 000	6 700 000	7 200 000	7 500 000

(a) Years ended 31 March following that stated

(b) Includes beneficiated and directly shipped material

(c) Years ended mid-July of that stated

Talc

Exports of Talc

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	6 902	3 572	4 270	3 583	4 842
Belgium-Luxembourg	28 267	24 184	27 510	38 566	41 241
France	73 897	75 785	82 480	94 011	103 457
Germany, Federal Republic of	3 772	4 158	4 663	5 657	8 534
Greece	525	105	566	174	108
Italy	52 180	46 082	49 545	41 864	41 987
Netherlands	14 902	13 926	17 551	10 791	7 762
Austria	110 322	98 656	104 252	114 085	110 150
Czechoslovakia (a)	* 6 400	* 6 800	* 6 200	* 7 200	* 6 500
Finland	60 314	53 099	42 912	47 904	52 634
Norway	53 203	50 032	50 693	48 830	44 435
Spain	7 439	9 165	28 484	33 123	31 195
Sweden	6 378	8 393	13 768	14 619	12 305
Switzerland	152	113	137	126	95
Turkey	1 401	987	677	1 202	1 739
Yugoslavia	630	905	942	3	54
Egypt	660	493	660	...	...
USA	282 330	210 109	197 689	232 670	214 711
Brazil	498	175	1 295	3 141	4 135
China	386 045	521 166	534 378	513 446	521 423
Hong Kong (Re-exports)	7 663	11 852	14 121	13 881	13 471
India (b)	10 395	11 241	...	...	...
Japan	1 923	2 032	4 058	4 838	4 792
Jordan	1 508	5 347	2 889	5 222	7 310
Korea, Dem. P.R. of (a)	* 30 500	* 40 100	* 28 900	* 34 500	* 20 400
Korea, Republic of	50 444	41 836	45 898	40 650	37 987
Singapore	1 222	909	981	536	832
of which: Re-exports	1 142	902	947	522	816
Taiwan	1 706	1 114	1 823	1 007	509
Thailand	2 384	3 511	5 153	8 343	2 887
Australia	82 641	80 512	131 914	163 370	...

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

(b) Years ended 31 March following that stated

Talc

tonnes

Imports of Talc

Country	1981	1982	1983	1984	1985
United Kingdom	55 838	58 508	59 847	67 615	(e) 59 135
Belgium-Luxembourg	45 491	58 750	34 390	35 610	58 735
Denmark	8 958	7 427	8 465	9 605	9 964
France	20 811	18 908	23 217	20 976	16 144
Germany, Federal Republic of	122 478	121 699	141 789	143 494	139 082
Greece	1 602	1 612	1 738	2 067	2 036
Irish Republic	2 492	2 538	2 725	2 414	2 143
Italy	25 810	20 479	22 943	26 066	24 963
Netherlands	37 771	39 015	45 455	37 751	42 241
Albania (d)	* 1 100	* 1 500	* 900	* 900	...
Austria	1 674	2 623	1 729	3 609	2 732
Czechoslovakia (d)	* 600	* 200	* 700	* 900	* 1 400
Finland	573	682	671	5 515	577
German Democratic Republic (d)	* 3 900	* 5 200	* 2 000	* 2 100	* 2 500
Hungary	4 162	4 828	4 201	6 168	3 751
Norway	5 608	4 549	5 675	8 127	8 046
Poland	12 818	15 226	16 662	25 646	20 944
Portugal	4 098	5 139	4 773	5 808	...
Soviet Union (d)	* 12 900	* 11 000	* 2 500	* 2 000	* 1 000
Spain	10 300	9 124	9 391	9 338	11 683
Sweden	34 852	26 133	22 315	24 581	26 349
Switzerland	13 255	12 684	11 991	13 368	13 421
Turkey	248	227	321	585	420
Yugoslavia	3 642	3 616	4 037	6 129	4 378
Algeria	2 439	1 302	1 532	1 267	...
Cameroon	* 500	...	...	* 500	...
Egypt	526	2 523	1 345	...	...
Ivory Coast	1 375	1 161	886	1 591	2 736
Kenya	4 539	3 292	3 266	2 738	...
Libya	5 554	613	...	...	...
Morocco	822	974	1 209	1 552	1 060
Senegal	152	—	—	—	...
South Africa	2 676	2 503	2 557	3 198	2 550
Tunisia	1 928	1 472	...	1 536	1 371
Zaire	52	72	51	233	...
Canada	30 322	34 521	35 390	38 816	41 131
Costa Rica	708	667	969	913	809
Dominican Republic	770	1 217	...	...	...
El Salvador	202	297	390	426	...
Guatemala	425	402	219	412	266
Honduras	229	106	281	...	...
Jamaica	286	287	505	390	463
Mexico					
Pyrophyllite	285	142	1	60	15
Other	163 970	93 534	75 545	102 595	100 266
Nicaragua	323	127	84	...	...
Panama	551	176	233	241	204
Trinidad & Tobago	1 034	592	2 413	1 172	621
USA	24 497	24 044	39 912	40 509	42 542
Argentina	391	337	728	341	...
Brazil	86	35	36	18	...
Colombia	2 128	2 732	2 193	1 618	...
Ecuador	346	590	...	...	...
Peru	783	715	427	...	...
Venezuela	8 034	9 437	5 156	...	...
Cyprus	144	270	412	428	265
Dubai	—	515	437	466	622
Hong Kong	9 607	12 807	15 526	15 258	15 972
Indonesia	12 880	17 338	20 304	17 292	...
Iran (a)	606	16	79	548	...
Israel (c)	1 455	...	(d)* 1 250	(d)* 900	(d)* 1 400
Japan	441 604	584 281	615 182	619 260	573 901
Korea, Republic of	1 789	12 486	5 225	20 981	29 742
Malaysia	7 613	5 073	6 551	5 966	5 473
Pakistan (b)	870	1 955	23 135	56 447	988

Talc

Imports of Talc

tonnes

Country	1981	1982	1983	1984	1985
Philippines	9 779	8 666	9 709	5 011	5 620
Saudi Arabia	954	927	1 876	5 379	2 370
Singapore	9 000	7 659	8 119	8 382	3 986
Sri Lanka	1 069	1 297	703	1 310	1 789
Syria	3 602	1 119	3 130	442	...
Taiwan	4 694	6 356	6 662	9 915	10 744
Thailand	13 409	13 931	19 160	17 474	18 891
Australia	329	253	147	215	...
New Zealand (b)	2 047	3 523	5 826	2 806	2 495

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

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

(e) Excludes a small quantity which is suppressed by Customs and Excise

Production of Tantalum and Niobium (Columbium) Minerals

tonnes

Country		1981	1982	1983	1984	1985
Portugal						
Columbite-tantalite	(25%, 25%)	9	6	3	* 3	...
Spain						
Tantalite	(— , 25%)	58	54	47	32	18
Mozambique						
Tantalite	(10%, 45%)	34	22	14	7	4
Microlite	(5%, 50%)	43	29	23	10	6
Nigeria						
Columbite	(43%, 6%)	380	169	80	126	101
Rwanda						
Columbite-tantalite	(30%, 23%)	57	62	50	52	28
Zaire						
Columbite-tantalite	(27%, 27%)	80	53	51	100	* 160
Zimbabwe						
Columbite-tantalite	(11%, 28%)	45	36	35	59	40
Canada						
Pyrochlore	(45%, —)	4 568	4 748	2 685	4 257	5 077
Tantalite	(3%, 30%)	283	160	—	—	107
Brazil						
Pyrochlore	(42%, —)	29 886	19 593	16 828	30 087	32 000
Columbite-tantalite	(20%, 30%)	299	201	264	170	180
Djalmaite	(1%, 50%)	13	4	7	14	* 10
Malaysia						
Columbite	(40%, 14%)	23	8	67	50	76
Struverite	(— , 10%)	—	—	—	99	120
Thailand						
Columbite-tantalite	(17%, 25%)	49	39	549	477	268
Struverite	(— , 6%)	44	10	275	30	—
Australia						
Columbite-tantalite	(20%, 33%)	264	166	117	* 200	* 190
World total concentrates		36 000	25 000	21 000	36 000	38 000
Nb content		* 15 000	* 10 500	* 8 500	* 14 800	* 16 000
Ta content		* 400	* 300	* 400	* 300	* 300

Notes:

- 1 Niobium and tantalum minerals are believed to have been produced also in the Soviet Union and China, and minor quantities in Argentina, Burundi, Namibia and Zambia
- 2 The figures in this table refer to gross tonnage of tantalum and niobium concentrates. Estimated average niobium and tantalum contents of these are given in the form (Nb%, Ta%) for each country and each mineral, relating where possible to the later years
- 3 Niobium and tantalum are also recovered from tin slags. This source is particularly important in the case of tantalum and in recent years is believed to have accounted for over 60% of all tantalum recovered. No detailed information on the production of tantalum bearing tin slags is available but the major producers are Thailand and Malaysia, with small amounts from Australia, Brazil, Nigeria, Portugal, South Africa and Zaire

Exports of Tantalum and Niobium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Tantalum	28	9	29	18	20
France					
Tantalum	22	23	12	10	32
Germany, Federal Republic of					
Niobium & tantalum ores	1 862	1 424	1 328	1 347	1 895
Tantalum	42	76	87	112	117
Niobium	50	45	97	93	82
Italy					
Tantalum	7	54	13	1	2
Netherlands					
Niobium & tantalum ores	—	243	29	74	154
Tantalum	4	4	9	1	1
Austria					
Tantalum	9	10	12	12	17
Nigeria					
Columbite	581	62	...	70	257
Rwanda					
Columbite-tantalite	52	60	...	...	...
Zaire					
Columbite-tantalite	* 70	* 80	* 20	...	...
Canada					
Niobium & tantalum ores & concentrates (a)	* 3 700	* 4 200	* 2 700	* 4 500	* 4 900
USA					
Tantalum ores & concentrates	45	110	55	71	52
Tantalum	208	238	155	228	303
Niobium	* 70	* 45	* 45	* 45	* 55
Brazil					
Columbite-tantalite	290	166	115	233	270
Japan					
Tantalum	27	9	9	10	12
Malaysia					
Columbite & tantalite	64	29	99	81	45
Tin slags	16 090	12 696	3 801	10 183	9 709
Singapore					
Tantalum ores & concentrates	123	58	29	20	3
of which: Re-exports	123	28	29	20	3
Tin slags	2 326	1 244	1 856	781	1 012
of which: Re-exports	2 111	970	1 422	489	97
Taiwan					
Tantalum	453	11	84	22	22
Thailand					
Columbite & tantalite	134	93	125	274	88
Tin slags	2 043	2 444	1 577	1 516	330
Australia					
Tantalite-columbite	158	183	229	241	...

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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

tonnes

Imports of Tantalum and Niobium

Country	1981	1982	1983	1984	1985
United Kingdom					
Tantalum	36	31	51	53	38
Niobium	13	12	18	12	25
Belgium-Luxembourg					
Niobium & tantalum ores	2 679	1 685	997	1 378	1 949
Tantalum	—	—	17	43	20
Niobium	6	3	1	1	13
France					
Tantalum	33	55	31	48	48
Niobium	3	20	26	37	73
Germany, Federal Republic of					
Niobium & tantalum ores	553	185	370	641	506
Tantalum	115	102	125	157	174
Niobium	32	24	41	31	34
Italy					
Tantalum	2	2	2	4	4
Niobium	1	1	4	64	3
Netherlands					
Niobium & tantalum ores	26	193	5	59	93
Tantalum	3	1	0	2	5
Austria					
Tantalum	19	29	12	29	41
USA					
Tantalum concentrates	836	588	231	997	334
Niobium concentrates	903	413	657	1 479	1 295
Tantalum	68	76	68	104	97
Niobium	4	7	2	9	4
Tin slags (a) —					
Ta content	406	261	...	...	...
Nb content	382	288	...	...	...
Japan					
Niobium minerals	1 367	2 050	740	2 042	1 974
Tantalum ores & concentrates	38	20	121	275	221
Tantalum	26	32	48	75	79
Malaysia					
Tantalum	46	—	1	—	—
Singapore					
Tantalum ores & concentrates	307	147	162	112	68
Tin slags	9 343	10 083	2 762	9 261	8 481

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Ta and Nb content is approximately 10% and 7%, respectively, of gross weight

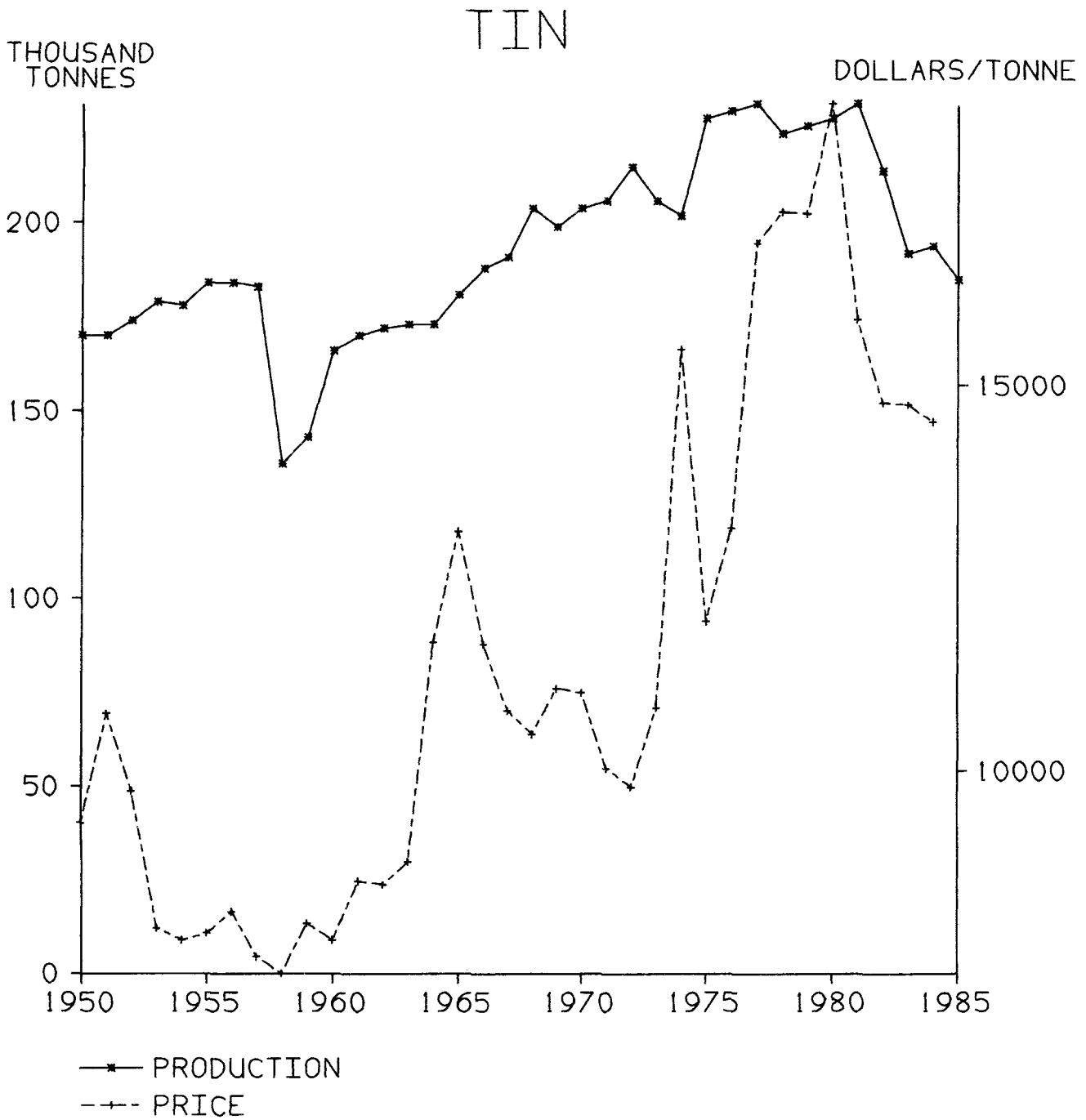


Figure 19 World mine production of tin from 1950 to 1985 compared with the yearly average price on the New York Market of Straits pig ex-dock major US port expressed in constant 1980 US dollars.
Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.

Mine Production of Tin

tonnes (metal content)

Country	1981	1982	1983	1984	1985
United Kingdom	3 729	4 208	4 000	5 216	5 204
Czechoslovakia	300	200	250	250	* 250
German Democratic Republic	* 1 600	* 1 800	* 2 000	* 2 500	* 2 800
Portugal	356	411	375	320	263
Soviet Union	* 16 000	* 16 000	* 17 000	* 17 000	* 16 000
Spain	564	518	444	438	637
Cameroon	* 24	* 24	* 24	* 24	* 24
Namibia	* 800	* 800	* 800	906	987
Niger	71	52	* 50	* 85	* 84
Nigeria	2 416	1 822	1 560	1 338	963
Rwanda	1 788	1 655	1 526	1 561	1 161
South Africa	2 811	3 035	2 668	2 301	2 153
Uganda	12	35	25	69	* 30
Zaire	2 452	2 320	2 163	2 708	3 009
Zimbabwe	1 157	1 196	1 235	1 209	1 207
Canada (a)	239	135	140	209	120
Mexico	28	27	60	64	41
USA	* 100	* 100	* 100	* 100	* 100
Argentina	413	342	291	274	454
Bolivia	29 830	26 773	25 278	19 911	16 136
Brazil	8 297	8 218	13 275	19 957	26 514
Peru (b)	1 519	1 672	2 368	2 991	3 807
Burma	1 438	1 681	1 642	2 029	1 751
China	* 16 000	* 16 000	* 17 000	* 17 500	* 18 000
Indonesia	35 391	33 806	26 553	23 225	22 413
Japan	562	539	545	500	510
Laos	200	225	* 265	315	* 500
Malaysia	59 938	52 342	41 367	41 307	36 884
Thailand	31 474	26 109	19 942	21 960	16 864
Australia	12 267	12 126	(c) 9 275	(c) 7 939	(c) 6 357
World total	232 000	214 000	192 000	194 000	185 000

(a) Sn in concentrates exported and in tin-lead alloys produced

(b) Recoverable

(c) Excludes content of copper-tin concentrate

Tin

Smelter Production of Tin

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	6 863	8 164	6 467	7 105	7 548
Germany, Federal Republic of	562	—	—	—	—
Netherlands	* 3 500	2 757	5 398	6 517	6 033
Czechoslovakia	289	295	307	425	507
German Democratic Republic	* 2 000	* 2 200	* 2 600	* 3 000	* 3 300
Portugal	400	503	443	432	426
Soviet Union	* 16 000	* 17 000	* 18 500	* 18 500	* 18 200
Spain	3 100	2 700	3 500	2 900	3 300
Nigeria	2 489	1 808	1 244	1 334	1 079
South Africa	2 602	2 884	2 685	1 592	1 366
Zaire	450	353	201	170	85
Zimbabwe	1 157	1 197	1 235	1 209	1 207
Mexico	866	971	1 276	1 595	1 533
USA	2 000	3 500	2 500	4 000	3 000
Argentina	* 200	* 200	* 200	* 200	* 200
Bolivia (a)	19 937	18 980	14 164	15 842	12 103
Brazil	7 789	9 298	12 741	18 115	24 701
Burma	—	500	500	700	500
China	* 16 000	* 16 500	* 16 500	* 17 000	* 19 000
Indonesia	32 429	29 755	28 390	22 493	20 418
Japan	1 313	1 296	1 260	1 354	1 391
Korea, Republic of	200	—	400	1 200	1 600
Malaysia	69 169	62 836	53 338	44 416	45 500
Singapore	4 000	4 000	1 800	3 500	4 000
Thailand	32 636	25 479	18 467	19 729	17 996
Vietnam	—	* 475	* 520	* 475	* 570
Australia	4 286	3 105	2 913	2 899	2 683
World total	230 000	217 000	198 000	197 000	198 000

(a) Refined, including alloys

Exports of Tin

Country	1981	1982	1983	1984	1985
United Kingdom					
Concentrates	4 306	1 866	1 601	3 092	2 641
Unwrought	6 264	5 417	993	11 073	7 292
Unwrought alloys	1 436	1 193	907	1 993	1 605
Scrap	143	356	373	932	456
Belgium-Luxembourg					
Unwrought	781	306	219	339	240
Unwrought alloys	44	106	941	1 309	2 289
Scrap	102	86	107	50	68
Denmark					
Unwrought	17	133	678	964	1 101
Unwrought alloys	393	540	549	857	240
Scrap	0	21	7	67	180
France					
Concentrates	35	19	27	7	7
Unwrought	722	243	317	218	347
Unwrought alloys	124	192	26	51	99
Scrap	655	472	328	287	352
Germany, Federal Republic of					
Unwrought	3 659	2 179	1 562	1 457	1 158
Unwrought alloys	1 126	1 846	2 794	2 781	2 660
Scrap	106	133	230	144	87
Irish Republic					
Scrap	163	192	858	1 374	1 366
Italy					
Unwrought (a)	112	345	461	141	197
Scrap	121	51	57	94	60
Netherlands					
Concentrates	—	—	344	324	—
Unwrought	2 081	593	2 400	3 038	1 116
Unwrought alloys	867	863	1 011	1 116	1 012
Scrap	258	440	177	225	224
Austria					
Unwrought	17	20	49	56	17
Czechoslovakia					
Concentrates	47	* 150	* 140	...	...
Norway					
Scrap	50	51	52	30	21
Spain					
Unwrought	2	9	20	245	) 203
Unwrought alloys	245	74	74	154)
Scrap	91	53	122	99	57
Sweden					
Unwrought	95	42	32	37	60
Unwrought alloys	67	13	24	27	103
Switzerland					
Unwrought	158	218	196	179	198
Scrap	72	110	76	43	90
Niger					
Concentrates (b)	54	36	* 15	—	* 10
Nigeria					
Unwrought (a)	1 746	1 465	* 1 150	1 280	400
Rwanda					
Concentrates	1 865	* 300	—	—	* 50
South Africa					
Concentrates (b)	546	671	690	714	703
Unwrought (a)	733	1 075	1 170	828	449
Zaire					
Concentrates	2 569	2 798	2 853	3 633	* 3 300
Unwrought	303	350	209	—	* 15
Canada					
Concentrates (b)	517	608	381	317	393
Jamaica					
Scrap	535	414	479	428	538

Tin

Exports of Tin

tonnes

Country	1981	1982	1983	1984	1985
USA					
Unwrought (a)	6 081	9 357	3 540	3 184	2 875
of which: Re-exports	3 719	3 588	2 200	1 755	1 397
Scrap	3 901	4 837	5 591	20 958	26 185
Argentina					
Tin-silver ore	5 883	1 260	2 634	...	...
Bolivia					
Concentrates (b)	5 525	3 238	2 509	4 663	4 434
Unwrought	18 726	18 654	13 532	15 614	11 424
Brazil					
Unwrought (a)	4 747	4 346	8 820	14 602	20 042
Peru					
Concentrates	1 029	620	...	...	...
Burma					
Concentrates (c)	2 436	2 535	2 100	3 300	2 400
China					
Unwrought (a)	5 614	3 068	3 643	2 641	7 249
Hong Kong					
Unwrought	1 160	1 027	627	766	5 570
of which: Re-exports	934	787	441	458	5 287
Indonesia					
Concentrates	1 044	1 473	1 342	2 789	* 3 500
Unwrought (a)	32 128	28 610	24 950	22 568	* 22 000
Scrap	750	—	—	70	...
Japan					
Unwrought (a)	37	94	161	117	96
Laos					
Concentrates (b)	13	564	1 284	—	—
Malaysia					
Unwrought	66 437	48 584	57 140	39 600	57 400
Scrap	341	448	1 167	430	495
Singapore					
Concentrates	3 318	4 048	10 604	11 253	9 728
of which: Re-exports	3 234	3 596	10 582	10 852	9 215
Unwrought	15 335	17 909	20 754	17 870	20 339
of which: Re-exports	13 239	15 871	17 216	15 324	14 684
Unwrought alloys	877	708	—	—	—
of which: Re-exports	289	282	—	—	—
Scrap	440	186	551	465	137
of which: Re-exports	223	116	191	87	98
Thailand					
Unwrought	30 074	24 889	17 724	18 455	17 963
Unwrought alloys	204	654	1 152	1 083	1 674
Australia					
Concentrates (b)	7 305	7 075	6 202	6 144	5 266
Unwrought (a)	1 458	678	494	470	412

Note: In this table the term 'unwrought' tin corresponds to item 687.1 of the Standard International Trade Classification (Revision 2) and comprises ingots, pigs, unwrought bars, sticks, etc

(a) Including alloys

(b) Sn content

(c) Years ended 31 March following that stated

Imports of Tin

Country	1981	1982	1983	1984	1985
United Kingdom					
Concentrates	38 407	20 386	22 407	21 055	20 713
Unwrought	6 354	5 184	4 802	4 492	3 924
Unwrought alloys	1 798	2 446	2 549	2 506	3 424
Scrap	1 006	1 533	2 915	1 664	563
Belgium-Luxembourg					
Concentrates	126	151	2 692	2 944	556
Unwrought	2 550	2 195	2 034	2 036	1 562
Unwrought alloys	194	201	252	275	2 291
Scrap	187	62	98	172	404
Denmark					
Unwrought	90	69	8	6	47
Unwrought alloys	20	195	511	745	315
Scrap	143	68	364	120	3
France					
Unwrought	8 852	8 356	7 900	7 976	6 648
Unwrought alloys	58	201	144	211	477
Scrap	23	29	75	41	15
Germany, Federal Republic of					
Concentrates	3 229	1 766	2 166	1 365	2 351
Unwrought	15 925	15 016	15 171	16 745	17 313
Unwrought alloys	1 127	1 325	1 446	2 029	1 825
Scrap	344	448	282	284	224
Greece					
Unwrought	416	298	375	259	417
Irish Republic					
Unwrought (a)	21	9	38	57	7
Italy					
Unwrought	4 507	4 657	5 432	5 559	5 135
Unwrought alloys	319	410	333	403	501
Netherlands					
Concentrates	6 053	4 738	8 910	* 3 000	10 677
Unwrought	5 330	3 772	2 037	1 702	2 271
Unwrought alloys	1 023	1 250	716	552	899
Scrap	242	215	186	368	455
Austria					
Unwrought	410	455	438	509	501
Czechoslovakia					
Unwrought (a)	3 646	3 088	2 933	2 896	3 058
Finland					
Unwrought (a)	191	194	132	224	112
Hungary					
Unwrought & semi-manufactures	1 369	1 772	2 038	1 654	1 277
Norway					
Unwrought	500	381	324	402	342
Unwrought alloys	57	79	72	70	141
Poland					
Unwrought	2 223	4 601	4 352	3 634	3 029
Portugal					
Concentrates	111	37	81	80	...
Unwrought (a)	442	367	408	396	...
Soviet Union					
Concentrates (e)	* 400	* 2 200	* 2 200	* 1 300	* 2 200
Unwrought (e)	* 11 500	* 4 700	* 7 200	* 11 500	* 11 100
Spain					
Concentrates	4 070	2 884	3 784	4 351	4 262
Unwrought (a)	37	325	97	84	254
Sweden					
Unwrought	268	264	296	372	502
Unwrought alloys	45	60	51	68	75
Switzerland					
Unwrought	926	866	890	791	977
Turkey					
Unwrought (a)	713	651	995	853	1 006

Tin

Imports of Tin

tonnes

Country	1981	1982	1983	1984	1985
Yugoslavia					
Unwrought (a)	959	1 188	1 121	1 122	1 387
Algeria					
Unwrought (a)	96	168	114	618	...
Egypt					
Unwrought & scrap	53	160	358	* 100	...
Morocco					
Unwrought (a)	189	176	114	132	156
South Africa					
Unwrought	276	41	18	39	8
Tunisia					
Unwrought & scrap	32	52	...	31	37
Canada					
Unwrought	3 791	3 235	3 769	4 106	3 697
Mexico					
Concentrates	2 747	973	1 974	3 553	5 081
Unwrought	451	454	463	73	29
Scrap	212	405	270	453	156
USA					
Concentrates (b)	232	1 962	969	3 517	1 639
Unwrought	45 874	27 939	34 048	41 241	33 830
Unwrought alloys	805	1 421	2 146	2 607	3 377
Scrap	2 430	2 786	1 153	1 157	737
Argentina					
Unwrought	612	997	874	914	444
Brazil					
Concentrates	301	—	—	—	...
Chile					
Unwrought	307	151	531	517	647
Colombia					
Unwrought (a)	378	375	242	299	286
Peru					
Unwrought (a)	68	154	278	302	605
Venezuela					
Unwrought (a)	262	216	257	683	716
Hong Kong					
Unwrought	1 769	1 452	1 675	1 907	3 983
India (f)					
Unwrought (a)	2 971	1 477	...	...	...
Scrap	2 465	1 379	...	...	...
Iran (d)					
Unwrought	755	503	717	370	...
Japan					
Unwrought	30 223	26 185	29 333	30 470	28 297
Unwrought alloys	67	48	433	1 425	1 983
Korea, Republic of					
Concentrates	151	17	574	1 749	2 687
Unwrought (a)	2 056	2 093	2 216	2 402	1 603
Malaysia					
Concentrates	21 267	24 208	25 554	16 364	13 634
Unwrought (a)	594	1 038	1 068	854	795
Philippines					
Unwrought (a)	6 339	429	681	690	360
Singapore					
Concentrates	1 996	3 041	3 674	6 504	8 315
Unwrought	1 380	1 062	1 508	2 347	1 119
Unwrought alloys	358	406	—	—	—
Scrap	1 503	627	2 630	436	337

Imports of Tin

tonnes

Country	1981	1982	1983	1984	1985
Taiwan					
Unwrought	1 062	945	1 557	2 265	1 724
Australia					
Unwrought	102	63	103	105	136
New Zealand (c)					
Unwrought (a)	205	194	134	167	153

Note: In this table the term 'unwrought' tin corresponds to item 687.1 of the Standard International Trade Classification (Revision 2) and comprises ingots, pigs, unwrought bars, sticks, etc

- (a) Including alloys
- (b) Sn content
- (c) Years ended 30 June of that stated
- (d) Years ended 20 March following that stated
- (e) BGS estimates, based on known exports from certain countries
- (f) Years ended 31 March following that stated

Titanium

Production of Titanium Minerals

tonnes

Country	1981	1982	1983	1984	1985
Finland					
Ilmenite	161 500	167 800	163 900	167 000	53 000
Norway					
Ilmenite	659 604	551 764	555 947	651 834	735 310
Portugal					
Ilmenite	334	472	247	164	227
Soviet Union					
Ilmenite	* 430 000	* 430 000	* 435 000	* 440 000	* 445 000
Rutile	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Sierra Leone					
Rutile	50 795	46 576	71 801	91 289	80 611
South Africa (e)	267 545	241 930	292 616	328 228	329 000
Canada (a)					
Ilmenite (d)	2 008 117	1 735 000	940 000	1 160 000	1 350 000
USA					
Ilmenite (b)	492 018	238 944	* 235 000	* 250 000	* 290 000
Brazil					
Ilmenite	19 889	13 181	30 452	40 945	76 354
Rutile	205	225	463	412	713
China					
Ilmenite	* 135 000	* 135 000	* 140 000	* 140 000	* 140 000
India					
Ilmenite	188 828	177 053	134 476	* 140 000	* 170 000
Rutile	8 752	7 866	5 500	* 6 000	* 7 000
Malaysia (c)					
Ilmenite	176 432	77 159	207 297	224 042	249 218
Sri Lanka					
Ilmenite	80 011	68 282	80 486	102 048	114 954
Rutile	13 301	7 212	8 386	6 467	8 605
Thailand					
Leucoxene	—	—	—	388	488
Australia					
Ilmenite	1 321 137	1 149 212	892 570	1 493 171	1 316 373
Rutile	230 817	220 697	163 374	170 424	207 566
Leucoxene	19 261	19 739	13 358	32 110	16 965
World total					
Ilmenite (Wt. of concs)	6 500 000	5 400 000	4 700 000	5 800 000	5 900 000
Rutile (Wt. of concs)	373 000	346 000	324 000	357 000	387 000
All forms (TiO ₂ content)	* 3 598 000	* 3 071 000	* 2 654 000	* 3 251 000	* 3 333 000

Notes:

- The figures in this table refer to gross tonnage of titanium concentrates
 - Some ilmenite is converted to synthetic rutile in Australia, India, Japan, Taiwan and USA
- (a) Canada produces some ilmenite which is sold as such and not processed into slag, but tonnages are small
- (b) Includes a mixed product containing ilmenite, leucoxene and rutile
- (c) Exports
- (d) Processed into slag. In 1985, Canada produced 845 000 tonnes (80% TiO₂)
- (e) Ti content of titanium minerals and slag

Exports of Titanium

Country	1981	1982	1983	1984	1985
United Kingdom					
Ilmenite	20	4	0	27	1 125
Metal	...	...	...	...	2 512
Oxides	89 409	96 549	119 012	117 190	120 134
Belgium-Luxembourg					
Metal	103	113	137	185	173
Oxides	66 727	55 834	64 101	62 784	68 898
France					
Titanium minerals	1 070	105	235	95	247
Metal	1 185	700	969	1 188	1 715
Oxides	126 407	118 413	141 958	148 788	155 077
Germany, Federal Republic of					
Ilmenite	5 186	2 026	16	788	7 556
Other titanium minerals	3 545	3 351	6 636	7 551	7 520
Metal	2 132	1 817	2 300	2 325	1 868
Oxides	215 703	208 495	210 506	209 287	220 838
Italy					
Titanium minerals	54	1 174	536	990	1 906
Metal	63	134	182	200	130
Oxides	31 895	(b)* 11 100	(b)* 14 000	(b)* 17 900	(b)* 17 700
Netherlands					
Ilmenite	1 919	657	617	769	739
Other titanium minerals	19 827	21 520	40 983	46 890	29 925
Metal	154	101	36	115	73
Oxides	31 776	26 584	29 624	32 863	35 060
Czechoslovakia					
Oxides (b)	* 800	* 2 600	* 3 700	* 2 700	* 2 300
Finland					
Oxides	(b)* 32 000	(b)* 30 000	61 959	(b)* 44 700	(b)* 43 300
Norway					
Titanium minerals	619 329	470 223	519 611	599 214	641 910
Oxides (c)	1 110	1 179	2 996	2 474	3 245
Soviet Union					
Metal (b)	* 1 500	* 1 300	* 1 200	* 700	* 1 200
Spain					
Oxides	21 991	42 716	39 124	46 813	(c) 10 816
Sweden					
Titanium minerals	47	9	34	76	5
Metal	603	428	510	628	430
Oxides	184	303	438	671	568
Yugoslavia					
Oxides	12 560	12 847	13 867	16 173	12 302
Sierra Leone					
Rutile	27 375	38 000	69 100	91 600	91 815
South Africa					
Titanium minerals & slag (a)	186 871	189 596	180 988	220 547	225 000
Canada					
Titanium slag	* 700 000	* 600 000	* 550 000	* 650 000	* 750 000
Metal (d)	1 899	643	702	370	328
Oxides (d)	14 252	19 878	23 190	23 779	14 799
USA					
Titanium minerals	7 004	19 725	4 369	7 867	25 183
Metal	8 816	7 433	7 198	6 727	9 468
Oxides	56 661	61 910	84 904	98 340	93 640
China					
Oxides (b)	* 1 900	* 2 500	* 1 900	* 2 300	* 3 700
Hong Kong					
Oxides (Re-exports)	2 554	1 814	2 055	1 926	2 743
India (e)					
Ilmenite	49 702	40 167	...	...	...
Japan					
Metal	10 005	7 503	6 044	9 700	7 330
Oxides	45 491	58 241	60 351	59 923	61 662
Malaysia					
Ilmenite	176 432	77 159	207 297	224 042	249 218

Titanium

Exports of Titanium

tonnes

Country	1981	1982	1983	1984	1985
Sri Lanka					
Ilmenite	32 816	14 144	11 190	96 066	134 550
Taiwan					
Oxides	113	234	7 971	81	29
Australia					
Ilmenite	907 810	879 317	816 933	1 172 986	1 151 921
Rutile	216 048	199 296	217 662	191 507	211 687
Leucoxene	15 055	14 016	9 276	30 959	16 779
Oxides (b)	* 19 800	* 19 800	* 24 700	* 27 700	* 24 300

Notes:

1 So far as possible, the term 'oxides', as used in this table, includes oxides and oxide based pigments classified under Standard International Trade Classification (Revision 2) items 522.46 and 533.1

2 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Ti content

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

(c) Excluding oxide based pigments

(d) Exports to the USA only

(e) Years ended 31 March following that stated

Imports of Titanium

Country	1981	1982	1983	1984	1985
United Kingdom (a)					
Ilmenite	225 772	258 955	188 708	248 110	277 971
Other titanium minerals	62 929	95 918	92 691	72 792	88 900
Titanium slag	...	...	...	...	36 607
Metal	(b)* 6 200	(b)* 7 100	(b)* 6 900	(b)* 7 900	7 959
Oxides	36 685	36 072	39 309	34 248	34 400
Belgium-Luxembourg					
Ilmenite	78 510	37 020	63 501	43 251	71 237
Other titanium minerals	41 435	34 281	40 626	48 251	51 062
Metal	914	1 015	790	463	1 313
Oxides	21 146	22 530	25 497	29 124	29 808
Denmark					
Oxides	8 338	7 482	8 370	9 926	10 554
France					
Ilmenite	90 755	80 118	116 251	90 513	124 164
Other titanium minerals	70 072	73 741	62 070	77 338	108 891
Metal	3 348	2 896	1 774	2 397	2 699
Oxides	44 860	43 707	44 079	48 828	46 700
Germany, Federal Republic of					
Ilmenite	516 503	379 513	373 776	425 444	467 169
Other titanium minerals	22 465	29 899	29 956	30 242	19 193
Titanium slag	250 545	203 370	195 938	214 318	246 179
Metal	4 843	3 189	2 046	4 223	3 976
Oxides	70 260	67 402	73 730	76 783	81 916
Greece					
Oxides	9 278	8 051	8 484	8 770	9 547
Irish Republic					
Oxides	3 655	3 017	2 289	3 419	3 071
Italy					
Ilmenite	43	1 199	2 102	17 386	141 419
Other titanium minerals	3 874	5 206	4 212	4 996	4 760
Titanium slag	83 915	46 022	63 006	42 043	83 333
Metal	1 965	1 850	1 991	2 806	3 010
Oxides	49 987	48 299	53 236	54 769	55 216
Netherlands					
Ilmenite	3 628	200	639	9 850	4 816
Other titanium minerals	20 658	22 048	53 063	42 018	35 014
Titanium slag	61 413	53 746	41 055	45 419	36 594
Metal	394	171	244	253	215
Oxides	24 467	21 116	23 102	27 333	29 312
Austria					
Oxides	8 894	9 001	9 640	10 637	11 915
Bulgaria					
Titanium minerals (b)	* 5 200	* 4 500	* 4 100	* 3 100	* 2 300
Oxides (b)	* 2 700	* 1 400	* 1 400	* 1 900	* 3 400
Czechoslovakia					
Oxides (b)	* 5 600	* 3 800	* 3 000	* 2 900	* 3 800
Finland					
Titanium minerals	10 375	20 961	31 435	(b)* 30 400	...
Oxides	953	1 147	2 125	2 261	2 498
German Democratic Republic					
Oxides (b)	* 21 000	* 19 000	* 17 200	* 20 700	* 17 900
Norway					
Oxides	4 189	4 373	5 086	4 924	6 609
Poland					
Titanium minerals	500	57 426	—	34 666	—
Portugal					
Oxides	9 101	9 473	8 727	10 371	...
Romania					
Titanium minerals (b)	* 7 600	* 10 700	* 2 700	* 4 500	* 6 400
Oxides (b)	* 9 500	* 5 000	* 5 500	* 5 800	* 6 300
Soviet Union					
Titanium minerals (b)	* 131 900	* 47 000	* 91 700	* 110 700	* 89 200
Oxides (b)	* 4 100	* 4 600	* 2 800	* 2 500	* 9 800
Spain					
Ilmenite	145 166	138 016	130 137	185 060	...
Other titanium minerals	1 632	540	1 912	2 729	...
Metal	280	1 390	1 354	1 094	...
Oxides	10 128	12 660	11 608	10 622	...

Titanium

Imports of Titanium

tonnes

Country	1981	1982	1983	1984	1985
Sweden					
Titanium minerals	2 050	3 730	2 233	3 200	4 636
Metal	1 737	1 033	1 145	802	634
Oxides	17 385	18 213	22 887	22 752	23 899
Switzerland					
Oxides	1 826	2 020	2 134	2 290	2 348
Turkey					
Titanium minerals	2 996	2 773	3 721	...	...
Oxides	1 173	1 746	2 250	2 387	2 782
Yugoslavia					
Rutile	47 232	48 070	53 470	47 209	...
Oxides	5 686	4 199	3 142	3 026	1 080
Algeria					
Titanium minerals	390	—	0	—	...
Oxides	6 647	10 047	6 334	6 946	...
Egypt					
Oxides	1 995	2 239	1 264	...	...
Kenya					
Oxides	1 141	1 530	314	261	...
Morocco					
Oxides	2 538	3 200	2 097	3 145	3 293
South Africa					
Oxides	2 830	1 447	3 592	4 176	1 104
Canada					
Metal	552	504	275	356	587
Oxides	7 300	6 106	18 768	25 557	25 129
Mexico					
Ilmenite	50 820	41 994	76 157	95 518	29 567
Rutile sand (f)	3 218	2 563	2 297	2 506	2 507
USA					
Ilmenite	225 425	322 380	237 186	373 374	460 548
Rutile (c)	206 953	162 930	101 221	163 754	162 988
Titanium slag	220 511	224 842	125 834	190 363	264 742
Metal	10 794	3 400	4 368	7 164	5 283
Oxides	113 367	126 039	161 260	174 425	177 672
Argentina					
Titanium minerals	1 125	1 930	2 402	...	...
Brazil					
Ilmenite	69 408	59 510	21 020	35 729	...
Rutile	2 421	3 052	1 972	2 496	...
Oxides	24 067	14 918	10 362	3 701	...
Chile					
Oxides (b)	* 3 000	* 2 000	* 2 600	* 3 400	* 2 500
Colombia					
Oxides	4 967	7 397	6 245	7 833	...
Uruguay					
Oxides	2 210	1 532	2 001	2 986	2 580
Venezuela					
Oxides	...	11 723	...	...	...
China					
Oxides (b)	* 12 000	* 21 400	* 12 000	* 9 200	* 23 500
Hong Kong					
Oxides	6 246	5 103	6 108	6 633	7 492
India (d)					
Oxides	9 917	9 349	...	...	...
Indonesia					
Oxides	12 021	14 343	14 885	12 589	...
Iran					
Oxides (b)	* 6 500	* 7 800	* 13 100	* 7 400	* 2 100
Israel (g)					
Oxides	3 229	2 658	2 213	1 807	1 537
Japan					
Titanium minerals	323 057	367 500	411 047	645 972	604 044
Titanium slag	66 086	91 625	63 118	62 697	95 476
Oxides	27 230	30 018	38 087	37 141	39 212

Imports of Titanium

Country	1981	1982	1983	1984	1985
Jordan					
Oxides	1 338	1 135	1 593	2 173	1 921
Korea, Republic of					
Titanium minerals	21 376	29 080	32 447	39 259	34 300
Rutile sand	4 652	4 375	5 252	4 812	5 270
Metal	936	391	367	361	111
Oxides	14 235	15 502	19 333	21 861	22 651
Malaysia					
Oxides	5 720	5 941	7 426	7 302	7 623
Pakistan (e)					
Oxides	181	1 803	1 994	2 140	2 437
Philippines					
Titanium minerals	676	1 099	973	713	487
Oxides	5 448	6 338	9 111	6 239	5 483
Saudi Arabia					
Oxides	2 876	3 184	4 277	6 637	4 700
Singapore					
Titanium minerals	85	779	—	—	—
Oxides	4 099	4 636	6 365	9 236	6 854
Taiwan					
Oxides	17 292	21 406	28 910	34 115	32 536
Thailand					
Rutile	955	1 225	1 235	781	1 867
Oxides	602	757	846	1 135	1 828
Australia					
Oxides	682	1 094	852	1 566	1 202
New Zealand					
Oxides (e)	5 246	5 958	5 268	6 562	6 626

Notes:

- 1 Significant quantities of titanium slag are traded, but it is not always possible to identify this material in national trade accounts
 - 2 So far as possible, the term 'oxides', as used in this table, includes oxides and oxide based pigments classified under Standard International Trade Classification (Revision 2) items 522.46 and 533.1
 - 3 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) United Kingdom is known to import about 70 000 tonnes per annum of titanium slag
- (b) BGS estimates, based on known exports from certain countries
- (c) Includes synthetic rutile
- (d) Years ended 31 March following that stated
- (e) Years ended 30 June of that stated
- (f) Micronised for use as an opacifier
- (g) Figures may be incomplete as value only given in Israeli trade return for imports from some countries

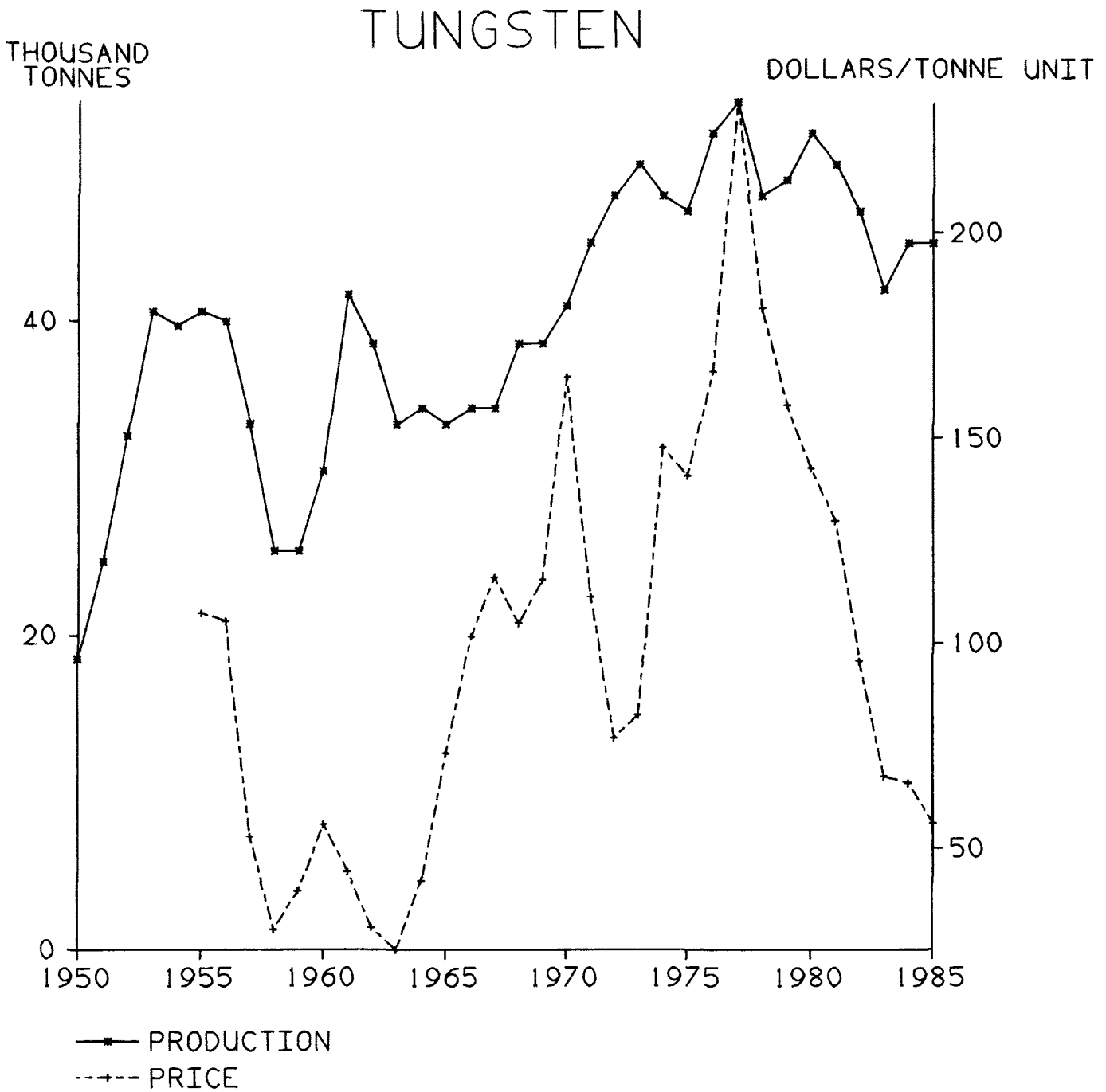


Figure 20 World mine production of tungsten from 1950 to 1985 compared with the annual average UK price from 1955 of 65% WO₃ concentrate c.i.f. European ports expressed in US dollars per metric tonne unit (post-1978, weighted average International Tungsten Indicator price).
Constant commodity prices derived from Tungsten Statistics (1971 et seq.) published by the United Nations, using the CPI for the USA taken from International Financial Statistics Yearbook (1986).

Mine Production of Tungsten

tonnes (metal content)

Country	1981	1982	1983	1984	1985
United Kingdom	(b)* 40	—	—	—	—
France	591	724	800	745	735
Austria	1 322	1 699	1 405	1 911	1 967
Czechoslovakia	* 50	* 50	* 50	* 50	* 50
Portugal (c)	1 395	1 359	1 186	1 505	1 765
Soviet Union	* 8 850	* 9 000	* 9 100	* 9 100	* 9 200
Spain	437	545	517	565	458
Sweden	394	423	460	485	402
Turkey	284	404	291	394	* 350
Rwanda	248	286	204	229	310
Uganda	1	4	7	15	* 20
Zaire (d)	46	38	44	30	* 20
Zimbabwe	60	35	23	55	14
Canada (a)	1 995	2 403	1 220	3 327	3 197
Mexico	263	194	186	274	282
USA	3 605	1 521	980	1 203	996
Argentina	11	17	41	37	36
Bolivia	2 735	2 534	2 449	1 893	1 643
Brazil (a)	1 574	1 524	1 026	1 037	1 090
Peru	521	692	723	754	870
Burma (d)	845	865	950	1 114	* 1 000
China	* 13 500	* 12 500	* 11 500	* 12 500	* 12 500
India	20	28	16	30	28
Japan	548	854	820	477	526
Korea, Dem. P.R. of	* 2 200	* 2 200	* 1 000	* 1 000	* 1 000
Korea, Republic of	2 739	2 421	2 480	2 703	2 580
Malaysia	35	37	49	23	21
Mongolia	* 1 000	* 1 500	* 1 500	* 1 500	* 1 500
Thailand	1 210	856	563	742	586
Australia (c)	3 517	2 618	2 015	1 772	1 956
New Zealand	10	7	6	7	7
World total	50 000	47 000	42 000	45 000	45 000

(a) Mainly scheelite

(b) BGS estimates

(c) Wolframite and scheelite

(d) Including tin-wolframite concentrates

Tungsten

Exports of Tungsten

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Tungsten ore	662	1 364	219	275	184
Metal	436	411	543	579	833
Carbide	739	708	551	799	900
Belgium-Luxembourg					
Metal	142	128	99	139	253
France					
Tungsten ore	760	930	818	522	483
Metal	432	291	398	372	496
Carbide	120	111	134	201	246
Germany, Federal Republic of					
Tungsten ore	182	—	76	—	2
Metal	1 038	712	860	1 129	1 322
Italy					
Metal	93	65	85	100	186
Netherlands					
Tungsten ore	344	793	629	451	1 166
Metal	300	269	398	460	523
Austria					
Tungsten ore	—	0	73	25	0
Metal	1 243	663	874	1 050	1 485
Portugal					
Tungsten ore	2 284	1 727	1 669	2 506	* 2 600
Spain					
Tungsten ore	601	686	673	870	715
Metal	22	39	4	2	4
Sweden					
Tungsten ore	691	404	644	498	193
Metal	46	99	44	111	194
Carbide	172	158	87	70	131
Switzerland					
Metal	49	68	45	70	63
Turkey					
Tungsten ores & concentrates	35	—	180	453	521
Metal	115	30	305	0	—
Rwanda					
Tungsten ores & concentrates	542	596	420	490	* 560
Uganda					
Wolframite ore	* 100	...	...	...	...
Zaire					
Tungsten ore	103	89	113	* 120	* 120
Zimbabwe					
Tungsten ore	130	52	24	72	* 60
Canada (a)	* 1 800	* 2 600	* 300	* 3 400	* 3 000
Mexico					
Tungsten ores & concentrates	402	607	546	847	1 073
USA					
Tungsten ores & concentrates	281	332	28	129	175
Metal	1 921	1 309	900	1 839	2 845
Ammonium paratungstate (a)	1	11	6	8	72
Carbide	550	552	330	448	683
Bolivia					
Tungsten ore (a)	3 091	3 272	2 584	2 471	1 644
Brazil					
Tungsten ore	1 741	1 860	1 482	970	514
Peru					
Tungsten ores & concentrates	943	1 170	960	* 1 300	* 1 500
Burma (b)					
Tungsten ores & concentrates	767	1 983	1 558	...	...

Exports of Tungsten

Country	1981	1982	1983	1984	1985
China					
Tungsten ores & concentrates	26 839	11 188	24 990	18 860	21 267
Metal	600	183	65	79	156
Hong Kong					
Tungsten ore (Re-exports)	2 197	4 740	—	—	1 717
Israel					
Metal	—	—	—	669	515
Japan					
Metal	242	286	147	195	235
Korea, Dem. P.R. of (a)	* 800	* 800	...	...	...
Korea, Republic of					
Tungsten ore	6 360	1 005	1 061	859	747
Metal	656	385	277	301	364
Carbide	311	282	303	428	543
Malaysia					
Tungsten ore	71	80	40	346	30
Singapore					
Tungsten ore	971	630	875	1 695	1 438
of which: Re-exports	775	629	777	1 654	1 420
Metal	173	72	91	105	68
of which: Re-exports	103	1	23	32	39
Thailand					
Tungsten ore	1 991	1 463	1 207	1 885	1 142
Australia					
Wolframite ores & concentrates	2 093	1 750	1 532	1 741	1 335
Scheelite ores & concentrates	4 254	3 189	2 355	1 419	1 965

Notes:

- 1 Significant, and possibly increasing, amounts of tungsten are traded in the forms of ammonium paratungstate (APT) and carbide. Though statistics are included where available, most countries do not separately distinguish these forms in their trade accounts
- 2 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) W content

(b) Years ended 31 March following that stated

Tungsten

Imports of Tungsten

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Tungsten ore	3 309	1 768	693	896	627
Metal	162	243	213	415	632
Carbide	448	510	442	495	554
Belgium-Luxembourg					
Metal	253	155	188	176	263
Carbide	176	257	259	356	574
Denmark					
Carbide	186	268	317	241	205
France					
Tungsten ore	1 159	818	277	2 632	351
Metal	258	365	321	183	330
Carbide	224	189	251	231	241
Germany, Federal Republic of					
Tungsten ore	2 698	2 855	3 841	7 296	3 843
Metal	1 132	841	946	1 242	1 314
Carbide	280	317	286	380	437
Italy					
Tungsten ore	83	36	54	157	181
Metal	84	100	85	78	130
Carbide	148	169	158	262	377
Netherlands					
Tungsten ore	121	739	1 317	674	1 145
Metal	428	307	490	342	451
Austria					
Tungsten ore	3 425	2 413	3 090	3 920	3 810
Metal	357	316	428	640	1 141
Finland					
Metal	27	17	20	20	18
Poland					
Tungsten concentrates	806	2 461	2 000	1 120	1 150
Soviet Union					
Tungsten concentrates	* 7 000	* 7 000	* 6 900	* 7 000	* 7 200
Metal (d)	* 60	* 60	* 40	* 130	* 40
Spain					
Metal	17	24	17	381	481
Sweden					
Tungsten ore	2 417	1 700	682	813	1 150
Metal	29	84	163	154	42
Carbide	327	361	395	294	117
Switzerland					
Metal	79	40	43	75	98
Yugoslavia					
Metal	13	14	27	37	17
South Africa					
Tungsten ores & concentrates	400	388	507	363	544
Metal	39	13	34	32	25
Carbide	64	65	42	65	80
Mexico					
Metal	114	50	10	59	108
USA					
Tungsten ore	10 961	8 798	7 220	* 12 500	* 10 300
Metal	4 433	1 282	769	1 599	821
Ammonium paratungstate (a)	461	989	654	1 172	1 351
Carbide	367	431	231	451	422
Hong Kong					
Tungsten ore	4 185	2 254	—	47	3 799
India (e)					
Tungsten ore	594	566	...	...	...
Metal	43	...	...	...	...
Israel					
Metal (c)	1 193	708	97	467	804
Japan					
Tungsten ore	2 256	2 297	3 214	2 905	2 869
Metal	187	143	178	294	350

Imports of Tungsten

Country	1981	1982	1983	1984	1985
Korea, Republic of					
Metal	19	33	150	34	34
Malaysia					
Metal	74	56	63	84	42
Singapore					
Tungsten ore	1 925	971	1 211	2 430	1 699
Metal	23	28	94	82	100
Taiwan					
Metal	37	29	36	48	46
Australia (b)					
Metal	5	12	11	13	17

Notes:

- 1 Significant, and possibly increasing, amounts of tungsten are traded in the forms of ammonium paratungstate (APT) and carbide. Though statistics are included where available, most countries do not separately distinguish these forms in their trade accounts.
- 2 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
 - (a) W content
 - (b) Years ended 30 June of that stated
 - (c) Figures may be incomplete as value only given in Israeli trade return for imports from some countries
 - (d) BGS estimates, based on known exports from certain countries
 - (e) Years ended 31 March following that stated

Vanadium

Mine Production of Vanadium

tonnes (metal content)

Country	1981	1982	1983	1984	1985
Finland	3 113	3 148	3 190	3 066	2 132
Norway	* 340	* 100	—	—	—
Soviet Union	* 9 500	* 9 500	* 9 500	* 9 500	* 9 500
South Africa	12 618	11 714	8 834	12 518	14 021
USA	4 650	3 718	1 969	1 467	* 1 500
Chile	* 130	—	—	—	—
China	* 4 500	* 4 500	* 4 500	* 4 500	* 4 500
World total	35 000	32 700	28 000	31 100	31 700

Note: This table includes vanadium in slag products but excludes vanadium recovered as a byproduct of the refining and burning of heavy oils

Exports of Vanadium

Country	1981	1982	1983	1984	1985
United Kingdom					
Pentoxide	102	56	182	483	80
Metal	0	17	73	62	12
Belgium-Luxembourg					
Vanadiferous residues	4 775	1 884	1 163	4 477	4 685
Pentoxide	134	35	83	598	451
Vanadium-titanium pig-iron	23	8	27	33	91
Metal	32	186	15	139	337
Denmark					
Vanadium-titanium pig-iron	49	23	122	0	—
France					
Vanadiferous residues	112	56	40	100	181
Pentoxide	52	26	6	12	10
Vanadium-titanium pig-iron	23	26	149	10	20
Metal	54	23	98	237	120
Germany, Federal Republic of					
Vanadiferous residues	2 175	889	1 486	2 005	4 296
Metal	193	135	192	197	393
Italy					
Vanadiferous residues	1 726	1 484	1 956	2 534	1 901
Netherlands					
Vanadiferous residues	8	51	20	87	52
Vanadium-titanium pig-iron	6	—	60	2	29
Finland					
Pentoxide (a)	* 2 000	* 1 500	* 4 000	* 4 300	* 3 200
Soviet Union					
Vanadiferous residues	* 12 000	* 12 500	* 11 800	* 12 000	* 12 000
South Africa					
Pentoxide (c)	22 142	17 347	15 925	21 798	22 018
USA					
Ores & concentrates (b)	90	92	105	20	4
Pentoxide	318	1 509	2 385	3 156	1 385
China					
Vanadiferous residues (a)	* 5 000	* 2 600	* 5 100	...	...
Pentoxide (a)	* 2 000	* 3 000	* 3 700	* 2 100	* 3 000

Notes:

- 1 In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any
- 2 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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

(b) V₂O₅ content

(c) Includes V₂O₅ content of vanadiferous residues

Vanadium

Imports of Vanadium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Pentoxide	1 075	745	1 929	660	260
Vanadium-titanium pig-iron	—	75	184	—	—
Metal	133	41	142	358	129
Belgium-Luxembourg					
Vanadiferous residues	9 350	6 905	3 137	13 579	18 091
Pentoxide	1 542	2 964	4 062	4 797	4 049
Metal	64	69	27	208	350
Denmark					
Vanadium-titanium pig-iron	111	306	—	7	0
France					
Pentoxide	1 513	1 223	1 126	2 501	2 215
Vanadium-titanium pig-iron	77	25	20	0	8
Metal	45	85	29	52	141
Germany, Federal Republic of					
Vanadiferous residues	36 685	29 878	27 826	35 611	31 635
Pentoxide	2 223	2 360	1 455	1 714	1 870
Vanadium-titanium pig-iron	625	250	2 274	61	—
Italy					
Vanadiferous residues	2 747	2 646	1 923	1 511	2 508
Pentoxide	194	124	106	135	69
Vanadium-titanium pig-iron	242	266	—	—	—
Metal	1	26	23	6	35
Netherlands					
Vanadiferous residues	308	1	—	396	1 028
Pentoxide	33	321	25	10	7
Vanadium-titanium pig-iron	25	125	9	—	—
Spain					
Pentoxide	84	316	545	540	...
Sweden					
Pentoxide	141	16	0	0	0
Mexico					
Pentoxide	309	145	...	...	...
USA					
Vanadiferous residues	15 094	7 007	212	* 400	...
Pentoxide	573	228	661	241	130
Brazil					
Pentoxide	578	487	633	685	...
Japan					
Pentoxide	3 943	4 846	2 957	4 602	3 786

Notes:

- 1 In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any
- 2 Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

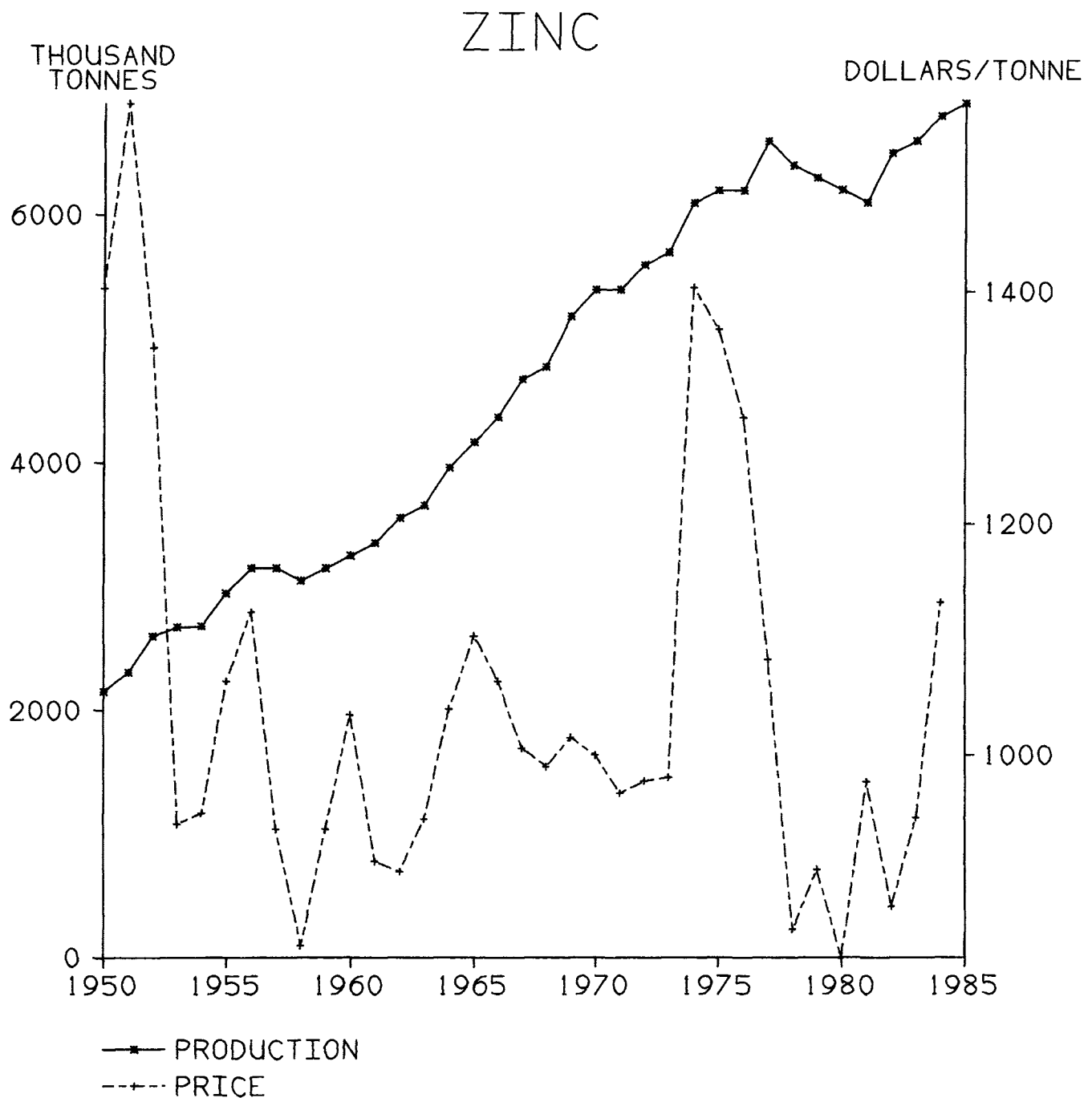


Figure 21 World mine production of zinc from 1950 to 1985 compared with the yearly average domestic producer price on the New York Market of Prime Western Grade delivered New York expressed in constant 1980 US dollars. Trend line analysis of the production data indicates a growth rate of approximately 3½% over 36 years. *Constant commodity prices taken from Commodity Trade and Price Trends (1986) published by the Johns Hopkins University Press for the World Bank.*

Mine Production of Zinc

tonnes (metal content)

Country	1981	1982	1983	1984	1985
United Kingdom	10 855	10 186	8 879	7 159	5 043
France	37 430	37 427	34 493	36 425	40 600
Germany, Federal Republic of	110 700	105 782	113 481	113 000	117 600
Greece	25 369	20 459	22 063	22 550	21 107
Irish Republic	117 000	167 000	186 000	206 000	191 700
Italy	42 700	38 600	43 400	42 300	45 438
Austria	20 544	21 938	22 688	23 797	24 259
Bulgaria	65 000	66 000	68 000	65 000	68 000
Czechoslovakia	6 614	6 555	6 665	7 200	7 500
Finland	58 618	58 865	60 777	65 285	60 600
Greenland	79 800	79 900	79 200	71 300	70 300
Hungary	2 693	1 538	2 306	1 920	1 606
Norway	29 742	31 860	32 356	28 513	27 783
Poland	201 500	183 500	189 000	190 700	190 900
Romania	* 40 000	* 37 000	* 40 000	* 39 000	* 40 000
Soviet Union	* 1 010 000	* 1 020 000	* 1 025 000	* 980 000	* 1 000 000
Spain	182 045	167 137	175 757	230 378	234 695
Sweden	192 069	178 592	214 367	217 254	216 400
Turkey	30 769	33 543	32 417	50 423	37 400
Yugoslavia	88 640	83 813	86 767	85 800	89 300
Algeria	10 700	11 100	12 100	14 600	13 500
Morocco	7 950	12 120	7 890	10 730	14 662
Namibia	36 400	35 700	33 200	30 600	31 200
South Africa	87 172	91 516	109 981	106 107	96 943
Tunisia	7 800	8 400	7 500	6 700	5 600
Zaire	66 568	82 065	73 970	73 955	67 925
Zambia	42 170	51 117	54 634	38 793	31 900
Canada	1 096 257	1 189 129	1 069 709	1 207 098	1 206 683
Honduras	19 065	24 381	38 000	41 500	44 000
Mexico	211 629	231 910	257 444	290 236	275 412
USA (a)	312 418	303 160	275 294	252 768	226 545
Argentina	35 150	36 635	36 586	34 900	36 200
Bolivia	47 029	45 667	47 132	37 770	38 110
Brazil	96 582	111 882	119 843	113 691	123 811
Chile	1 516	5 656	5 993	19 168	22 288
Peru (a)	496 707	507 100	553 100	568 300	582 600
Burma	3 556	5 382	4 536	5 321	4 400
China	* 160 000	* 160 000	* 160 000	* 190 000	* 200 000
India	34 200	32 000	36 500	43 700	53 000
Iran	35 000	40 000	39 500	47 100	50 000
Japan	242 042	251 356	255 712	252 700	253 021
Korea, Dem. P.R. of	* 130 000	* 130 000	* 140 000	* 150 000	* 185 000
Korea, Republic of	56 198	58 175	55 980	49 232	45 746
Philippines	5 289	3 003	2 275	2 189	1 740
Thailand	2 900	4 000	3 000	39 000	68 300
Vietnam	10 000	10 000	10 000	10 000	10 000
Australia	518 297	664 800	699 032	676 532	737 233
World total	6 100 000	6 500 000	6 600 000	6 800 000	6 900 000

(a) Recoverable

Production of Slab Zinc

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	81 651	79 278	87 651	85 604	74 278
Belgium (a)	250 406	240 851	275 845	285 319	289 562
France	257 131	243 700	249 500	258 514	247 260
Germany, Federal Republic of	366 100	333 600	356 300	356 300	366 900
Italy	180 904	158 248	155 596	166 751	210 075
Netherlands	177 363	186 022	187 519	209 657	201 712
Austria	23 404	20 599	19 699	21 000	20 496
Bulgaria	90 000	92 000	93 000	93 000	90 000
Finland	139 835	143 882	155 336	158 819	160 560
German Democratic Republic	* 16 000	* 17 000	* 16 500	* 17 000	* 17 000
Norway	80 279	72 016	90 668	94 248	92 693
Poland	167 118	165 352	170 300	176 000	180 000
Portugal	4 600	4 200	3 800	6 400	5 900
Romania	45 217	44 000	42 000	47 800	* 45 000
Soviet Union	* 1 060 000	* 1 050 000	* 1 060 000	* 1 050 000	* 1 050 000
Spain	179 500	181 800	189 900	207 400	213 300
Turkey	18 100	14 900	14 300	19 900	22 200
Yugoslavia	96 370	86 767	88 049	92 649	83 398
Algeria	27 000	28 500	31 200	35 000	35 700
South Africa	80 940	79 700	82 426	90 303	93 704
Zaire	57 638	64 425	62 535	66 087	66 100
Zambia	33 298	39 186	37 882	29 177	22 766
Canada	618 650	511 870	617 033	683 156	692 406
Mexico	126 890	127 359	174 991	167 034	175 354
USA	396 755	302 464	305 084	331 245	311 551
Argentina	26 800	28 900	32 000	27 700	30 400
Brazil	110 830	110 434	110 958	114 449	120 737
Peru	126 159	160 733	154 030	148 579	162 800
China	* 160 000	* 175 000	* 185 000	* 190 000	* 215 000
India	57 434	52 571	54 147	55 356	70 947
Japan	670 162	662 380	701 291	754 445	739 624
Korea, Dem. P.R. of	* 105 000	* 110 000	* 110 000	* 130 000	* 180 000
Korea, Republic of	83 915	99 211	107 860	108 460	111 653
Thailand	—	—	—	4 000	62 108
Vietnam	10 000	10 000	10 000	10 000	10 000
Australia	300 352	295 890	303 018	306 440	292 864
World total	6 200 000	6 000 000	6 300 000	6 600 000	6 800 000

(a) Including alloys

Exports of Zinc

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	26 297	18 576	7 537	955	108
Unwrought	24 168	10 777	20 318	8 094	8 060
Unwrought alloys	9 009	6 730	6 168	6 566	8 556
Scrap	8 441	11 034	14 596	15 246	17 846
Belgium-Luxembourg					
Ore	41 367	18 409	41 821	23 282	17 433
Unwrought	123 458	126 231	156 383	167 720	157 077
Unwrought alloys	25 094	24 962	33 767	29 387	32 433
Scrap	11 500	12 471	13 165	14 585	12 302
Denmark					
Unwrought	2	99	216	251	35
Unwrought alloys	163	144	114	35	7
Scrap	3 772	3 635	3 666	4 322	4 078
France					
Ore	50 642	58 633	98 338	117 188	102 097
Unwrought	56 554	48 994	50 711	93 016	68 651
Unwrought alloys	5 555	2 369	1 930	2 172	2 407
Scrap	7 861	11 407	11 908	11 456	11 502
Germany, Federal Republic of					
Ore	* 103 000	* 141 500	* 155 400	* 178 100	* 191 300
Unwrought	112 956	103 663	122 425	109 313	114 628
Unwrought alloys	13 049	9 797	10 637	16 235	18 498
Scrap	7 502	8 623	14 889	17 523	16 181
Greece					
Ores & concentrates	42 100	35 700	57 500	39 450	43 300
Scrap	398	1 262	339	359	373
Irish Republic					
Ores & concentrates	254 132	343 770	356 219	403 706	370 754
Italy					
Ore	579	7 866	4 320	18 938	25 283
Unwrought	14 292	20 712	31 714	42 456	43 762
Unwrought alloys	6 279	4 743	4 080	2 678	2 010
Scrap	3 432	2 927	3 278	3 755	4 512
Netherlands					
Unwrought	152 920	160 187	173 605	176 927	173 861
Unwrought alloys	9 947	8 015	10 473	9 270	7 539
Scrap	14 840	10 603	9 509	11 500	10 544
Austria					
Unwrought	2 193	2 835	4 861	4 520	4 371
Scrap	703	558	448	832	1 123
Bulgaria					
Unwrought (a)(b)	* 10 600	* 12 900	* 18 000	* 24 900	* 23 600
Czechoslovakia					
Ore (b)	* 13 600	* 12 700	* 14 900	* 14 500	* 15 700
Finland					
Ore	—	—	14 913	5 190	—
Unwrought	113 807	110 967	120 991	122 793	127 056
Unwrought alloys	2 262	7 842	10 568	13 444	13 308
Scrap	2 427	1 498	636	1 528	436
Greenland					
Ores & concentrates	147 790	142 841	152 599	134 696	121 621
Hungary					
Scrap	2 900	3 942	3 743	3 755	3 824
Norway					
Ore	18 349	23 627	25 658	10 989	10 959
Unwrought	57 742	54 040	71 764	74 852	71 757
Unwrought alloys	7 965	9 593	8 217	7 039	6 883
Scrap	525	410	327	395	308
Poland					
Unwrought	22 161	22 519	27 774	26 838	28 050
Soviet Union					
Unwrought (a)(b)	* 23 400	* 27 500	* 25 200	* 24 900	* 23 400
Spain					
Ore	44 375	27 086	12 019	83 756	119 509
Unwrought (a)	88 203	94 107	96 900	106 004	127 215
Scrap	—	1 069	818	2 657	—

Zinc

Exports of Zinc

tonnes

Country	1981	1982	1983	1984	1985
Sweden					
Ore	360 341	362 436	368 720	427 582	426 511
Unwrought (a)	1 113	900	1 077	613	1 104
Scrap	3 707	3 543	3 640	3 067	2 457
Switzerland					
Unwrought	9	12	249	118	137
Scrap	1 264	983	1 618	1 184	1 182
Yugoslavia					
Concentrates	6 047	1 181	3 404	5 485	...
Unwrought (a)	21 905	22 809	25 022	24 038	14 882
Algeria					
Unwrought	26 140	8 124	31 011	18 735	...
Morocco					
Ore	16 476	15 862	14 149	24 072	30 816
South Africa					
Ores & concentrates (c)	19 493	34 223	15 357	35 644	12 840
Unwrought	581	546	507	1 373	7 658
Tunisia					
Ore	17 073	10 819	23 200	13 026	4 705
Zaire					
Unwrought	69 900	55 700	67 400	45 500	59 000
Zambia					
Unwrought	18 559	24 268	25 000	29 340	21 100
Canada					
Ore (c)	516 216	457 757	626 178	550 216	409 741
Unwrought	459 196	472 731	500 609	529 728	555 618
Scrap	29 307	73 611	17 996	19 552	18 083
Honduras					
Ores & concentrates (c)	15 049	14 692	23 185	31 253	...
Mexico					
Ores & concentrates	154 460	157 245	121 624	171 863	214 657
Unwrought	22 156	14 554	79 337	84 431	69 115
USA					
Ore (c)	46 539	77 289	67 474	30 579	23 264
Unwrought (a)	756	1 439	1 221	1 448	5 274
Scrap (c)	30 361	17 086	20 942	29 223	38 615
Argentina					
Ores & concentrates	15 987	10 430	20	470	...
Unwrought	2 002	4 489	—	—	...
Bolivia					
Ores (c)	44 681	44 543	41 352	36 868	33 941
Chile					
Concentrates	1 763	6 851	13 370	29 385	36 765
Peru					
Concentrates	711 206	654 498	797 615	799 076	746 680
Unwrought (a)	112 890	132 603	151 310	108 984	113 760
Burma (e)					
Concentrates	7 867	6 402	7 419	...	...
China					
Unwrought (a)	17 474	10 181	2 051	1 454	2 368
Hong Kong					
Unwrought (a) (Re-exports)	3 154	1 954	2 714	3 436	4 495
Iran (d)					
Ore	2 063	15 700	28 890	31 900	...
Japan					
Unwrought	51 278	40 767	49 217	45 191	33 427
Unwrought alloys	1 909	2 546	6 042	4 276	1 814
Scrap	821	938	618	1 823	1 436
Korea, Dem. P.R. of					
Ores & concentrates (b)	* 64 000	* 60 200	* 17 100	* 19 200	* 11 800
Unwrought (a)(b)	* 26 500	* 29 400	* 21 600	* 20 200	* 34 600

Exports of Zinc

Zinc
tonnes

Country	1981	1982	1983	1984	1985
Korea, Republic of					
Unwrought (a)	8 393	6 250	0	40	533
Malaysia					
Scrap	754	492	762	661	690
Philippines					
Concentrates	11 873	3 989	4 590	5 258	4 487
Scrap	370	115	171	120	179
Singapore					
Unwrought	4 699	4 139	3 927	4 685	2 955
of which: Re-exports	4 519	4 085	3 599	4 362	2 535
Scrap	1 344	886	1 050	758	662
Australia					
Ores & concentrates	461 032	569 054	767 437	824 526	836 324
Unwrought	176 091	231 682	232 651	220 953	214 549
New Zealand (f)					
Scrap	786	796	457	755	521

Note: In this table the term 'unwrought' zinc corresponds to item 686.1 of the Standard International Trade Classification (Revision 2) and comprises blocks, pigs, slabs, etc

- (a) Including alloys
- (b) BGS estimates, based on known imports into certain countries
- (c) Zn content
- (d) Years ended 20 March following that stated
- (e) Years ended 31 March following that stated
- (f) Years ended 30 June of that stated

Imports of Zinc

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Ores & concentrates	131 799	166 084	167 171	196 100	185 406
Unwrought	112 509	119 945	115 160	116 308	130 705
Unwrought alloys	7 433	8 723	7 931	4 685	4 763
Scrap	524	2 065	1 817	2 237	996
Belgium-Luxembourg					
Ore	420 328	422 736	572 584	577 076	568 469
Unwrought (a)	45 598	42 604	53 148	49 352	51 546
Scrap	6 756	7 150	10 978	9 159	10 081
Denmark					
Unwrought	12 031	10 181	9 136	10 640	12 229
Unwrought alloys	2 247	1 970	3 155	2 664	2 322
Scrap	128	73	92	248	52
France					
Ore	459 981	476 239	583 938	558 386	540 116
Unwrought	62 466	58 406	55 306	64 881	61 543
Unwrought alloys	22 393	20 398	24 038	25 008	27 691
Scrap	8 876	5 433	7 154	6 345	5 589
Germany, Federal Republic of					
Ore	506 148	556 903	542 406	594 353	592 709
Unwrought	125 541	145 757	150 003	167 807	156 436
Unwrought alloys	12 422	10 619	11 960	11 648	11 377
Scrap	23 968	16 552	17 565	18 875	19 823
Greece					
Unwrought (a)	18 328	14 250	12 792	13 413	17 364
Irish Republic					
Unwrought (a)	2 098	1 814	1 939	1 442	1 298
Scrap	365	251	184	310	152
Italy					
Ore	264 585	234 872	201 564	291 425	395 978
Unwrought	46 042	70 668	84 207	90 946	63 325
Unwrought alloys	4 050	8 650	11 509	14 360	15 025
Scrap	6 520	6 908	11 001	13 073	10 563
Netherlands					
Ore	348 713	452 439	381 329	422 732	444 706
Unwrought	19 285	18 459	18 028	20 162	21 332
Unwrought alloys	1 961	697	498	515	897
Scrap	6 398	10 401	13 074	13 764	12 290
Austria					
Ore	7 721	9 323	6 649	11 804	10 793
Unwrought	4 461	4 114	6 139	9 626	8 686
Scrap	251	291	265	321	198
Bulgaria					
Ore (i)	* 44 200	* 48 900	* 27 900	* 31 600	* 38 900
Czechoslovakia					
Unwrought	63 000	57 000	56 000	59 000	58 000
Finland					
Ore	135 547	207 835	205 579	167 309	183 143
Unwrought (a)	453	462	1 188	105	103
German Democratic Republic					
Ore (i)	* 49 500	* 63 300	* 73 500	* 73 600	* 77 300
Unwrought (a)(i)	* 1 400	* 27 700	* 19 500	* 18 400	* 21 900
Hungary					
Unwrought (g)	26 660	19 291	26 904	27 995	20 543
Iceland					
Unwrought (a)	84	89	73	63	75
Malta					
Unwrought (a)	174	139	105	140	134
Norway					
Ore	109 986	93 619	87 894	115 477	104 461
Unwrought (a)	448	1 123	877	928	819
Scrap	3 123	4 540	3 966	5 278	5 551
Poland					
Unwrought	4 116	5 417	5 787	4 615	5 254
Portugal					
Unwrought (a)	11 767	10 774	10 682	9 385	...
Scrap	51	174	397	1 030	...

Imports of Zinc

Country	1981	1982	1983	1984	1985
Soviet Union					
Ore (i)	* 77 300	* 61 900	* 82 500	* 98 000	* 82 900
Unwrought (a)(i)	* 37 300	* 44 100	* 29 500	* 24 100	* 24 000
Spain					
Ore	54 275	69 449	81 454	72 157	34 951
Unwrought (a)	753	3 810	3 844	230	1 731
Scrap	407	296	96	564	250
Sweden					
Unwrought	28 048	33 138	32 650	35 538	32 153
Unwrought alloys	2 461	2 654	3 384	2 780	3 035
Switzerland					
Unwrought	21 316	18 243	20 330	21 441	26 363
Scrap	1	41	342	466	24
Turkey					
Unwrought	5 231	5 974	7 910	18 374	9 633
Yugoslavia					
Concentrates	56 385	58 597	29 383	26 912	58 669
Unwrought (a)	15 818	13 864	27 894	24 682	39 281
Algeria					
Ores & concentrates	45 104	18 491	35 630	0	...
Egypt					
Unwrought	7 545	5 509	6 519	...	...
Ivory Coast					
Unwrought (b)	5 244	4 843	2 042	2 251	3 753
Kenya					
Unwrought (a)	5 146	3 460	5 013	6 327	...
Libya					
Unwrought	2	400	...	...	...
Morocco					
Unwrought (a)	2 568	2 649	2 628	2 944	3 373
Mozambique					
Unwrought	...	525	12	...	...
Nigeria					
Unwrought (a)	11 819	12 473	...	3 204	4 965
South Africa					
Unwrought	8 287	3 851	3 149	2 846	3 685
Scrap	1 160	520	242	417	263
Sudan					
Unwrought	98	408	106	1 529	...
Tanzania					
Unwrought (a)	2 568	1 927	3 230	...	...
Tunisia					
Unwrought (b)	871	1 266	...	1 562	1 674
Canada					
Ores & concentrates (b)(c)	59 960	29 492	78 325	40 455	17 585
Unwrought	8 474	1 305	9 964	6 757	1 814
Costa Rica					
Unwrought (a)	3 670	1 304	3 910	4 435	4 217
Dominican Republic					
Unwrought	1 400	1 724	...	...	...
Guatemala					
Unwrought (a)	4 198	3 221	2 948	2 905	2 352
Honduras					
Unwrought (a)	717	743	1 086	...	...
Jamaica					
Unwrought	373	935	918	1 043	548
Nicaragua					
Unwrought (a)	302	470	562	...	...
Panama					
Unwrought (a)	370	398	478	399	384
Trinidad & Tobago					
Unwrought	296	115	1	152	605

Zinc

Imports of Zinc

tonnes

Country	1981	1982	1983	1984	1985
USA					
Ore (c)	117 737	49 344	62 210	95 569	91 393
Unwrought (a)	602 695	447 443	613 368	632 179	610 768
Scrap	5 782	2 653	3 900	6 259	3 247
Argentina					
Unwrought	1 218	567	86	3 735	...
Brazil					
Ores & concentrates	49 578	55 672	58 695	60 098	...
Unwrought	27 364	7 462	3 598	5 268	...
Chile					
Unwrought (a)	7 100	2 500	4 000	8 800	...
Colombia					
Unwrought (a)	13 654	15 180	13 113	15 698	...
Uruguay					
Unwrought	1 122	959	847	1 167	1 014
Venezuela					
Unwrought	) 18 669	13 721	) 9 672	15 900	15 400
Unwrought alloys	)	1 579)		
Burma (d)					
Unwrought (a)	466	14	...	...	...
China					
Unwrought (a)	12 409	108 084	228 708	230 178	268 628
Cyprus					
Unwrought (a)	50	280	4	206	13
Hong Kong					
Unwrought (a)	35 593	22 983	33 467	31 803	32 713
Scrap	19	39	46	29	178
India (d)					
Ores & concentrates	35	20 511	...	...	...
Unwrought	67 568	84 482	...	...	...
Unwrought alloys	15 630	18 426	...	...	...
Scrap	3 153	1 219	...	...	...
Indonesia					
Unwrought (a)	65 376	65 626	68 937	45 080	...
Scrap	1 050	167	432	120	...
Iran (e)					
Unwrought	3 649	13 528	13 195	8 627	...
Israel (h)					
Unwrought	5 269	3 735	5 588	4 643	4 941
Japan					
Ore	877 995	813 408	759 924	954 676	856 648
Unwrought	31 133	45 002	42 087	57 032	64 970
Unwrought alloys	1 797	1 136	3 031	3 765	5 579
Scrap	1 562	253	248	464	345
Korea, Republic of					
Ores & concentrates	90 323	79 176	114 399	103 172	162 946
Unwrought	2 072	1 568	5 417	18 703	11 399
Scrap	10 146	9 252	8 577	11 867	10 572
Malaysia					
Unwrought	11 512	8 501	11 387	10 755	10 243
Unwrought alloys	5 718	7 218	8 352	7 068	7 987
Pakistan (f)					
Unwrought	12 805	8 638	13 162	7 096	15 357
Philippines					
Unwrought (a)	19 476	21 704	24 669	17 933	13 000
Singapore					
Unwrought	16 738	20 409	15 986	12 290	9 372
Scrap	530	292	479	211	415
Sri Lanka					
Unwrought (a)	290	209	740	607	1 031
Syria					
Unwrought (b)	622	610	1 015	1 147	...

Imports of Zinc

Country	1981	1982	1983	1984	1985
Taiwan					
Unwrought	43 394	45 424	47 783	39 827	39 410
Unwrought alloys	—	—	17 376	11 758	15 013
Scrap	33 397	29 654	43 701	13 322	19 837
Thailand					
Unwrought	37 598	33 272	35 680	44 279	13 352
Unwrought alloys	1 098	586	578	687	616
New Zealand (f)					
Unwrought (a)	19 296	22 265	18 407	19 852	24 675

Note: In this table the term 'unwrought' zinc corresponds to item 686.1 of the Standard International Trade Classification (Revision 2) and comprises blocks, pigs, slabs, etc

- (a) Including alloys
- (b) Including scrap
- (c) Zn content
- (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) Including semi-manufactures
- (h) Figures may be incomplete as value only given in Israeli trade return for imports from some countries
- (i) BGS estimates, based on known exports from certain countries

Production of Zirconium Minerals

tonnes

Country	1981	1982	1983	1984	1985
Soviet Union	* 72 600	* 81 600	* 81 600	* 81 600	* 86 000
South Africa (a)	119 494	105 464	162 281	153 123	160 533
USA	* 50 000	* 50 000	* 50 000	* 60 000	* 70 000
Brazil (b)	6 937	5 365	7 431	7 019	12 748
China	* 15 000	* 15 000	* 15 000	* 15 000	* 15 000
India	15 000	12 000	11 395	* 12 000	* 13 600
Malaysia (c)	1 258	2 270	2 662	2 344	11 652
Sri Lanka	3 266	5 789	5 923	3 708	4 061
Thailand	104	196	199	290	878
Australia	434 246	462 476	382 005	454 534	440 000
World total	718 000	740 000	718 000	790 000	814 000

Note: In this table the term 'zirconium minerals' is understood to mean zircon, unless otherwise stated

(a) Includes baddeleyite (ZrO₂)

(b) Includes caldasite, a mixture of zircon and baddeleyite

(c) Exports

Exports of Zirconium

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom					
Concentrates	748	539	596	434	491
Belgium-Luxembourg					
Concentrates	16	83	30	163	102
France					
Concentrates	97	18	188	61	175
Germany, Federal Republic of					
Concentrates	12 372	16 379	14 461	18 885	15 051
Metal	64	64	86	102	88
Italy					
Concentrates	2 925	5 305	5 094	5 112	5 073
Netherlands					
Concentrates	24 414	23 690	22 699	39 582	40 008
Spain					
Concentrates	75	23	50	307	...
Zirconium sand (a)	2 748	790	1 116	2 072	...
Sweden					
Metal	33	72	81	114	79
South Africa					
Concentrates	92 586	104 938	132 765	140 726	161 339
USA					
Concentrates	10 603	10 032	12 007	8 655	15 334
Metal	667	811	718	745	1 122
of which: Re-exports	49	15	40	11	77
Malaysia					
Concentrates	1 258	2 270	2 662	2 344	2 499
Australia					
Concentrates	444 186	405 215	379 975	437 770	495 891

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Micronised for use as an opacifier

Imports of Zirconium

Country	1981	1982	1983	1984	1985
United Kingdom					
Concentrates	27 615	36 792	37 404	43 077	48 827
Metal	113	81	141	113	103
Belgium-Luxembourg					
Concentrates	4 793	6 039	3 818	4 476	5 954
Metal	191	169	135	151	174
France					
Concentrates	44 762	32 115	34 935	36 624	51 304
Metal	174	65	109	165	166
Germany, Federal Republic of					
Concentrates	69 444	67 648	68 622	75 486	78 929
Metal	169	399	355	327	489
Italy					
Concentrates	55 853	66 919	75 035	71 099	84 627
Netherlands					
Concentrates	34 108	23 149	26 076	45 424	40 856
Bulgaria					
Concentrates (a)	* 1 800	* 2 600	* 1 800	* 1 300	* 1 700
Czechoslovakia					
Concentrates (a)	* 1 900	* 2 200	* 2 100	* 1 700	* 2 300
Finland					
Concentrates	60	86	946	1 046	2 495
Portugal					
Concentrates	...	...	1 554	1 623	...
Soviet Union					
Concentrates (a)	* 4 000	* 4 000	* 8 100	...	...
Spain					
Concentrates	37 585	17 380	17 638	34 909	...
Sweden					
Concentrates	1 151	888	3 984	3 272	3 113
Metal	200	224	290	176	256
Turkey					
Concentrates	119	216	174	263	...
Algeria					
Concentrates	16	160	100	100	...
South Africa					
Concentrates	140	75	1	—	—
Canada					
Metal	289	243	191	227	239
Mexico					
Zirconium sand (b)	7 773	4 173	6 114	4 749	4 574
USA					
Concentrates	82 652	62 110	40 358	60 271	39 725
Metal	507	392	347	513	408
Argentina					
Concentrates	739	495	878	...	...
Brazil					
Concentrates	5 146	5 420	6 519	8 301	...
Zirconium sand (b)	10 151	1 754	1 004	—	...
Japan					
Concentrates	157 733	196 453	198 224	217 648	238 321
Metal	421	458	526	627	638
Korea, Republic of					
Concentrates	3 123	2 370	2 514	7 097	5 928
Malaysia					
Concentrates	76	147	299	425	518
Singapore					
Concentrates	2 081	2 931	—	—	—
Taiwan					
Zirconium sand (b)	1 289	2 079	1 509	1 911	1 053

Note: Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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

(b) Micronised for use as an opacifier

Other Mineral Commodities

Production of Beryl

tonnes

Country	1981	1982	1983	1984	1985
Portugal	18	12	3	10	2
Soviet Union	* 1 800	* 1 850	* 1 900	* 1 900	* 1 900
Madagascar	7	68	70	46	130
Mozambique	7	8	6	7	* 7
Rwanda	59	69	32	44	27
South Africa	122	58	21	1	5
Zimbabwe	42	52	48	19	38
Argentina	7	6	24	15	* 15
Brazil (a)	811	1 063	943	1 021	878

Note: In addition to the countries listed, China is believed to produce a significant quantity of beryl and Namibia a small amount

(a) Exports

Production of Borates

tonnes

Country	1981	1982	1983	1984	1985
Finland	1 457	1 548	2 286	6 974	...
Soviet Union	* 200 000	* 200 000	* 200 000	* 200 000	* 200 000
Turkey	1 528 477	1 409 940	1 241 400	1 412 736	1 543 000
USA (a)	1 344 000	1 119 000	1 182 000	1 240 000	1 151 000
Argentina	125 617	123 492	113 123	142 400	* 140 000
Chile	3 277	291	1 301	3 985	4 773
Peru	* 16 000	* 14 000	* 10 000	* 10 000	* 10 000
China	* 27 000	* 27 000	* 27 000	* 27 000	* 27 000

Note: In addition to the countries listed, the Federal Republic of Germany and Iran are also believed to produce borates

(a) Sold or used by producers

Production of Germanium Metal

tonnes

Country	1981	1982	1983	1984	1985
France	13	...	...	...	...
Austria	4	4	6	5	5
Soviet Union	* 15	* 17	* 17	* 17	* 17
USA (a)	* 28	* 26	* 20	* 20	* 22
Japan	11	7	7	8	10

Note: Significant quantities of germanium are also believed to be recovered from imported or domestic material in Belgium, China, Federal Republic of Germany and to a lesser extent in Italy

(a) Includes production of secondary metal

Production of Primary Magnesium Metal

tonnes

Country	1981	1982	1983	1984	1985
France	7 263	9 723	11 075	12 972	13 873
Italy	10 800	9 943	9 799	8 184	7 862
Norway	47 455	35 922	29 844	49 301	54 704
Soviet Union	* 76 000	* 77 000	* 80 000	* 85 000	* 85 000
Yugoslavia	3 859	4 216	4 676	5 138	4 918
Canada	8 548	7 630	5 980	* 8 000	* 7 000
USA	139 509	92 712	104 717	144 430	135 728
Brazil	—	310	519	1 195	2 615
China	* 7 000	* 7 500	* 8 500	* 8 500	* 9 000
Japan	5 667	5 555	6 026	7 144	8 400

Production of Nepheline Syenite

tonnes

Country	1981	1982	1983	1984	1985
Norway	216 885	212 409	219 565	225 731	227 599
Soviet Union	* 2 500 000	* 2 500 000	* 2 500 000	* 2 500 000	* 2 500 000
Canada	588 000	550 480	523 249	520 640	467 000

Production of Perlite

tonnes

Country	1981	1982	1983	1984	1985
Greece	412 110	397 609	358 483	451 931	400 929
Italy	* 85 000	* 80 000	* 75 000	* 70 000	* 70 000
Czechoslovakia (a)	42 336	45 667	44 019	* 44 000	* 44 000
Hungary	95 190	89 975	92 530	94 360	94 460
Soviet Union	* 360 000	* 360 000	* 360 000	* 360 000	* 360 000
Turkey	5 650	19 229	32 909	64 920	7 723
Mexico	56 731	32 425	41 377	31 515	37 261
USA	644 000	565 000	552 000	592 000	615 000
Japan	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Philippines	7 530	3 582	2 020	15 641	* 2 700
Australia	1 476	1 148	2 856	3 708	* 2 000
New Zealand	999	2 163	1 008	0	—

Note: In addition to the countries listed, Algeria, Bulgaria, China, Iceland, Mozambique and Yugoslavia are also believed to produce perlite

(a) Expanded

Production of Selenium Metal

tonnes

Country	1981	1982	1983	1984	1985
Belgium	* 60	* 60	* 60	* 60	* 60
Finland	24	10	11	26	14
Sweden	44	27	42	68	* 65
Yugoslavia	36	42	44	45	44
Zambia	22	23	18	21	13
Canada (a)	350	234	352	467	458
Mexico	12	29	24	44	42
USA	252	243	354	254	195
Chile	34	23	44	25	* 25
Peru	22	21	20	21	22
Japan	428	410	433	465	497

Note: In addition to the countries listed, Australia, Federal Republic of Germany and Soviet Union are also believed to produce selenium metal

(a) Includes production of secondary metal

Production of Strontium Minerals

tonnes

Country	1981	1982	1983	1984	1985
United Kingdom	14 545	17 955	12 054	16 079	23 039
Italy	6 700	3 272	414	—	4 611
Spain	33 120	32 108	31 740	24 840	39 100
Turkey	25 000	* 15 000	39 000	* 35 000	* 35 000
Algeria	* 5 400	* 5 400	* 5 400	* 5 400	* 5 400
Mexico	41 344	31 676	37 506	31 991	32 320
Argentina (a)	310	776	673	400	* 500
Iran	26 000	30 000	21 000	23 000	20 000
Pakistan	288	465	135	564	681

Note: In addition to the countries listed, China, Federal Republic of Germany, Poland and Soviet Union are also believed to produce strontium minerals

(a) May contain unbeneficiated material

Production of Tellurium Metal

tonnes

Country	1981	1982	1983	1984	1985
Belgium	...	...	...	90	70
Canada (a)	21	17	24	14	19
USA	* 70	* 70	...	* 100	* 80
Peru	22	21	17	14	15
Japan	62	63	55	65	63

Note: In addition to the countries listed, Australia, Federal Republic of Germany and Soviet Union are also believed to produce tellurium metal

(a) Includes production of secondary metal

Mine Production of Uranium

tonnes (metal content)

Country	1981	1982	1983	1984	1985
Belgium	41	44	43	* 47	* 47
France	2 554	2 872	3 132	3 117	3 182
Germany, Federal Republic of	36	34	* 48	* 33	* 40
Portugal	90	100	93	114	118
Spain	151	155	175	191	201
Yugoslavia	—	—	—	40	* 50
Gabon	1 023	970	1 007	917	939
Namibia	3 970	3 777	3 713	3 600	3 701
Niger	4 367	4 257	3 426	3 276	3 181
South Africa	6 135	5 794	6 045	5 734	4 877
Canada	7 507	7 643	6 823	10 272	10 441
USA	14 800	10 300	7 900	5 700	4 300
Argentina	187	572	114	129	186
Brazil	5	243	194	117	85
India	103	99	103	100	100
Australia	2 922	4 422	3 211	4 390	3 252
World total	43 900	41 300	36 000	37 800	34 700
World total (U ₃ O ₈ equivalent)	51 800	48 700	42 500	44 600	40 900

Note: In addition to the countries listed, China, Czechoslovakia, Israel and Soviet Union are also believed to produce uranium

Production of Vermiculite

tonnes

Country	1981	1982	1983	1984	1985
Egypt	725	280	300	325	488
Kenya	2 353	1 556	876	872	1 515
South Africa	190 601	182 641	153 034	173 759	184 070
Mexico	596	522	399	505	430
USA (a)	290 000	287 000	256 000	286 000	285 000
Argentina	3 227	3 354	3 951	4 451	* 4 000
Brazil (b)	14 307	14 059	9 877	9 157	* 9 000
India	3 477	2 089	2 476	1 934	* 2 000
Japan	* 17 000	* 17 000	* 17 000	* 17 000	* 17 000

Note: In addition to the countries listed, Malawi is also believed to produce vermiculite

(a) Sold or used by producers

(b) Includes beneficiated and directly shipped material

Production of Wollastonite

tonnes

Country	1981	1982	1983	1984	1985
Finland	13 690	14 962	15 402	14 669	16 917
Mexico	14 602	15 599	10 784	9 251	13 512
USA	* 87 000	* 86 000	* 83 000	* 96 000	* 96 000
India	15 915	20 724	16 857	27 004	26 040

Note: In addition to the countries listed, Japan, Namibia and Turkey are also believed to produce wollastonite

APPENDIX

A brief explanation of the tables in the following pages is given in the *Explanatory Notes* at the beginning of this volume (page iv). However, it must be stressed that the totals, arrived at in the trade reconstructions, are necessarily conservative, since country breakdown details are not released by every trading partner. Each table, therefore, shows only the data that can be extracted from published sources and no estimates are made for countries that suppress information.

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	45 824	43 786	35 206	50 991	26 350
Belgium-Luxembourg	5 454	3 058	8 422	7 548	5 712
Denmark	20 249	-	-	-	708
France	19 053	20 644	27 350	60 731	29 987
Germany, Federal Republic of	58 025	44 469	55 494	126 193	106 307
Greece	-	-	-	-	986
Irish Republic	-	-	1 000	1 002	2 071
Italy	81 747	48 586	25 020	31 874	45 003
Netherlands	5 487	3 134	2 609	6 206	3 436
Finland	-	-	-	58	70
Spain	3 641	11 854	17 398	22 560	20 701
Sweden	1 500	2 000	5 360	7 090	5 509
Turkey	-	-	-	-	8 503
Yugoslavia	13 479	11 060	13 367	8 900	8 693
Morocco	-	-	-	-	20
Canada	22	3 057	14 803	56 531	51 497
Mexico	-	189	63	-	-
USA	176 485	94 745	65 069	111 585	220 099
Argentina	2 961	18 000	16 300	17 500	
Hong Kong	11 602	10 154	17 504	18 380	18 773
Indonesia	50	-	-	-	
Japan	38 616	53 348	37 030	43 100	51 319
Malaysia	1 500	500	500	1 200	1 000
Philippines	-	1 200	696	900	-
Singapore	19	-	200	-	200
Thailand	1 350	285	807	5 690	4 248
Australia	7 625	2 077	2 427	226	-
New Zealand	200	400	153	-	-
Total	494 889	372 546	346 778	578 265	611 192

Alumina

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
United Kingdom	8	-	-	144	0
Germany, Federal Republic of	-	-	173	-	
Netherlands	-	-	65	-	
Finland	9 216	3 013	2 099	3 249	1 903
Sweden	-	-	-	-	1 500
Sudan	-	15	11	5	
Canada	-	-	50	51	-
USA	288	-	-	-	665
Argentina	800				
Abu Dhabi	-	-	-	-	3
Bahrain	-	2	-	-	-
Hong Kong	2 071	3 500	2 234	243	1 750
Indonesia	3 950	3 030	2 900	663	
Japan	750	683	149	917	861
Macao			21		50
Malaysia	100	50	414	560	516
Pakistan		349	452	927	1 159
Philippines	150	-	650	1 550	100
Singapore	5 270	3 094	1 400	1 805	1 200
Syria	-	50			
Thailand	7 383	6 021	3 877	3 754	1 605
Australia	1 071	952	136	-	
New Zealand	-	50	14	39	70
Total	31 057	20 809	14 645	13 907	11 382

Unwrought aluminium & alloys

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
France	-	-	-	101	-
Nigeria	9				
Hong Kong	12 771	13 385	2 445	56	18
Indonesia	3 302	1 099	-	-	
Japan	21 557	30 789	10 579	482	17
Malaysia	161	127	11	-	-
Pakistan		123	119	3	-
Philippines	415	50	-	-	-
Qatar	-	-	-	4	
Saudi Arabia	-	-	25	60	-
Singapore	779	198	-	-	-
Syria	10	-	-	-	
Thailand	1 988	3 021	1 267	-	680
Australia	102	1 295	-	-	4 641
Total	41 094	50 087	14 446	706	5 356

Antimony ore

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
Belgium-Luxembourg	-	100	-	500	109
France	50	184	50	2 957	6 658
Germany, Federal Republic of	123	502	700	964	1 550
Austria	-	-	-	-	72
Yugoslavia	2 516	2 137	458	589	
USA	70	-	-	262	4 024
Brazil	-	-	3		
Japan	749	698	1 356	2 641	1 785
Thailand	-	-	-	-	55
Total	3 508	3 621	2 567	7 913	14 253

Antimony oxide

China Exports

					tonnes
Importing Countries	1981	1982	1983	1984	1985
United Kingdom	-	-	-	-	90
Belgium-Luxembourg	-	-	20	-	15
France	-	-	-	58	103
Germany, Federal Republic of	-	56	406	971	759
Italy	-	-	8	15	10
Netherlands	-	10	52	20	22
Spain	-	-	-	20	
USA	1 891	1 867	1 108	5 428	3 118
Japan	514	570	1 014	1 075	1 103
Australia	85	71	107	171	154
Total	2 490	2 574	2 715	7 758	5 374

Antimony sulphide

China Exports

					tonnes
Importing Countries	1981	1982	1983	1984	1985
Austria	-	-	-	-	16
Japan	70	81	70	133	-
Total	70	81	70	133	16

Arsenic trioxide

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
United Kingdom	598	496	-	-	-
Italy	-	10	-	-	-
Finland	50	-	-	-	-
USA	431	1 280	17	-	105
Brazil	-	-	20	-	-
Hong Kong	75	157	46	238	99
Japan	-	147	67	18	4
Malaysia	53	570	310	-	-
Pakistan			6	20	30
Australia	148	37	16	104	44
Total	1 355	2 697	482	380	282

Metallic arsenic

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
France	10	10	-	-	3
USA	30	31	128	102	136
India	1	3			
Pakistan		3	-	-	
Total	41	47	128	102	139

Asbestos

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	35	18	-	-	19
Iceland	4	-	2	-	-
Nigeria	1 996	-	-	-	-
Bahrain	-	16	1	-	-
Hong Kong	3 240	1 272	88	28	150
Indonesia	3 449	1 925	1 205	306	* 1 000
Japan	-	20	460	749	-
Malaysia	1 623	1 333	1 151	1 125	403
Pakistan	-	170	5	10	225
Philippines	-	-	-	40	-
Singapore	825	457	1 212	321	-
Thailand	-	-	80	200	114
Total	11 172	5 211	4 204	2 779	1 911

Bentonite

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	-	-	-	1	15
Indonesia	-	15	-	-	-
Macao	-	-	60	39	44
Malaysia	337	171	262	299	215
Philippines	-	-	-	18	-
Singapore	330	219	460	150	-
Thailand	580	270	301	425	622
Total	1 247	675	1 083	932	896

Fuller's earth

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	991	700	600	-	-
Belgium-Luxembourg	-	-	-	3	-
Denmark	-	20	-	-	-
Germany, Federal Republic of	-	-	25	-	-
Netherlands	-	150	800	301	70
Malaysia	-	451	100	500	200
Pakistan	-	85	-	10	25
Singapore	-	732	400	400	200
Total	991	2 138	1 925	1 214	495

Cadmium metal

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
Belgium-Luxembourg	50	50	245	5	111
France	-	-	-	-	15
Germany, Federal Republic of	211	166	137	5	8
Netherlands	25	20	40	46	-
Czechoslovakia	40	20	-	-	-
USA	80	161	-	-	-
Total	406	417	422	56	134

Chromium ore

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
Irish Republic	-	-	3 273	-	-
Japan	7 910	1 148	-	-	-
Singapore	-	-	-	6	-
Total	7 910	1 148	3 273	6	

Chromium metal

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
Belgium-Luxembourg	-	-	24	38	36
France	-	-	11	-	40
Germany, Federal Republic of	-	68	163	196	73
Netherlands	-	-	-	183	10
Sweden	5	10	5	12	-
USA	103	164	323	678	379
India	1	1			
Total	109	243	526	1 107	538

Feldspar

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
Germany, Federal Republic of	-	-	-	-	5
Netherlands	-	-	-	-	325
Yugoslavia	-	516	-	-	
Hong Kong	14 227	14 440	16 267	21 542	23 375
Indonesia	4 810	4 548	4 155	8 799	
Japan	2 785	3 576	4 414	5 470	5 173
Malaysia	2 288	1 994	1 164	3 213	1 405
Pakistan	34	-	9	25	10
Philippines	250	390	300	167	134
Singapore	1 575	1 971	1 567	1 605	827
Thailand	50	-	1 000	-	500
Australia	-	-	-	-	200
New Zealand	36	110	74	91	
Total	26 055	27 545	28 950	40 912	31 954

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	2 140	4 980	4 659	5 138	9 089
Belgium-Luxembourg	-	-	25	25	15
Denmark	40	35	8	3	-
France	1 510	2 122	1 455	2 077	1 919
Germany, Federal Republic of	9 588	8 640	6 700	9 562	8 369
Greece	-	-	-	-	23
Italy	339	593	731	941	785
Netherlands	268	240	100	217	235
Austria	127	789	933	2 477	2 451
Portugal	20	20	-	-	-
Spain	395	823	487	397	404
Sweden	125	-	-	152	248
Turkey	-	-	-	16	15
Algeria	-	-	13	-	-
Tanzania	2	-	-	-	-
USA	5 968	8 594	9 205	13 818	13 078
Ecuador	1	-	-	-	-
Hong Kong	576	481	490	1 541	1 494
Indonesia	100	15	-	45	-
Japan	21 645	28 998	27 769	39 254	31 640
Jordan	-	-	-	-	32
Macao	-	-	-	-	1
Malaysia	35	20	72	42	27
Pakistan	1 852	789	811	1 166	728
Philippines	80	113	52	72	-
Singapore	290	243	186	335	-
Syria	12	665	420	-	-
Thailand	303	91	513	234	345
Australia	548	678	487	342	278
New Zealand	-	-	6	12	-
Total	45 964	58 929	55 122	77 866	71 176

Gypsum

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
Guinea-Bissau		-		1	
Brunei	-	1	19	0	
Hong Kong	1 524	2 681	4 974	2 160	2 418
Indonesia	498	1 301	555	657	
Japan	129	77	75	153	54
Macao	* 5 000	* 5 000	5 963	6 549	8 949
Malaysia	169	211	338	228	180
Oman		-	-	-	40
Philippines	100	20	100	50	-
Singapore	245	500	480	290	170
Sri Lanka	5	5	-	-	-
Thailand	55	41	108	42	80
New Zealand	-	-	-	1	-
Total	7 725	9 837	12 612	10 131	11 891

China Exports

Importing Countries	tonnes				
	1981	1982	1983	1984	1985
Germany, Federal Republic of	-	252	-	-	-
Nigeria	84	13	-	-	-
USA	-	15 527	-	-	1 785
Dubai	200	-	-	-	-
Hong Kong	22 509	11 689	7 797	240	64
India	97 666	182 709	-	-	-
Indonesia	15 238	27 346	9 249	-	-
Japan	793 986	777 929	38 300	-	-
Macao	-	-	111	-	-
Malaysia	5 266	3 340	3 549	-	-
Pakistan	33 927	-	-	-	-
Philippines	996	2 999	-	-	-
Singapore	10 112	49 685	500	-	-
Syria	-	1 250	2 287	-	-
Thailand	7 411	14 053	-	3 058	-
Fiji	30	-	-	-	-
Western Samoa	13	-	-	-	-
Total	987 438	1 086 792	61 793	3 298	1 849

Ferro-silicon

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
Hong Kong	610	1 586	600	-	
Indonesia	1 324	1 360	960	200	
Japan	50 432	33 196	2 933	2 550	1 397
Malaysia	175	121	150	-	-
Pakistan	895		12 040	1 101	106
Philippines	350	430	231	-	-
Singapore	1 250	992	305	-	-
Thailand	1 314	820	190	-	20
Australia	-	53	48	-	-
Total	56 350	38 558	17 457	3 851	1 523

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	-	-	-	-	29
Belgium-Luxembourg	15	-	-	-	2
France	-	-	-	33	249
Germany, Federal Republic of	54	12	-	23	300
Netherlands	-	-	-	-	72
Austria	-	-	-	51	100
Finland	15	-	-	-	23
Sweden	350	69	1	239	564
Turkey	-	-	-	304	-
Yugoslavia	20	30	-	20	-
Nigeria	1 592	316	-	-	-
Canada	100	-	-	-	-
Panama	58	-	-	-	-
USA	2 916	4 997	-	* 10	* 60
Dubai	-	-	-	-	23
Hong Kong	429	1 563	150	-	649
India	2	5	-	-	-
Indonesia	170	541	203	585	-
Japan	30 322	28 908	2 660	4 790	1 406
Jordan	-	-	5	-	-
Malaysia	30	30	5	1	-
Pakistan	2 610	98 960	2 780	11 818	1 493
Philippines	417	847	424	-	-
Saudi Arabia	35	-	-	-	-
Singapore	126	274	-	400	50
Syria	-	20	-	-	-
Thailand	140	583	71	30	-
Total	39 401	137 155	6 299	18 304	5 020

Iron & steel ingots, blooms, billets

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
Finland	-	-	-	21	-
Sweden	-	70	-	-	-
Nigeria	438	65	-	-	-
Bahrain	-	9	-	-	-
Brunei	7	-	-	-	-
Hong Kong	4 234	-	-	9	34
India	67 417	4 828	-	-	-
Indonesia	3 253	396	181	554	-
Japan	3 518	-	-	-	-
Jordan	-	1	-	-	-
Macao	-	-	-	4	-
Malaysia	12 468	17 195	-	-	-
Pakistan	3 233	47 745	1 897	583	-
Philippines	89 613	92 512	-	-	-
Saudi Arabia	1 001	-	-	62	-
Singapore	37 664	30 118	10 008	-	-
Sri Lanka	-	-	79	299	199
Syria	-	6	-	-	-
Thailand	10 194	4 997	-	-	-
Total	233 040	197 942	12 165	1 532	233

Iron & steel, waste & scrap

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
Argentina	-	-	-	10	
Hong Kong	57 973	38 942	14 072	9 244	5 231
India	-	1 086			
Indonesia	7 660	8 291	-	3 872	
Japan	74 418	50 478	13 391	10 086	13 070
Jordan	-	190	50	-	-
Macao			0	9	216
Malaysia	303	149	-	-	-
Pakistan		73	-	48	-
Saudi Arabia	109	-	-	200	-
Singapore	-	215	4 000	-	-
Syria	-	-	116	-	-
Thailand	6 062	4 005	5 049	-	-
Total	146 525	103 429	36 678	23 469	18 517

Kaolin

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
Denmark	10	8	-	-	-
France	-	-	-	-	330
Germany, Federal Republic of	760	-	-	-	-
Netherlands	153	-	-	-	-
Portugal	4	-	-	-	-
Spain	-	-	600	4	-
Yugoslavia	-	5	-	-	-
Hong Kong	21 924	19 359	11 912	41 351	38 185
Indonesia	322	461	890	2 803	-
Japan	9 996	10 258	11 672	13 888	10 569
Malaysia	10	100	50	95	30
Pakistan	721	623	599	469	664
Philippines	1 017	100	-	50	18
Singapore	-	400	-	-	-
Thailand	20	80	-	88	100
Total	34 937	31 394	25 723	58 748	49 896

Lithium oxides

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	15	139	47	-	-
Belgium-Luxembourg	-	20	20	-	-
France	142	172	145	86	23
Germany, Federal Republic of	-	51	63	192	252
Italy	50	20	20	-	-
Netherlands	75	200	27	-	-
Spain	-	-	85	20	
Morocco	-	11	-	5	20
Brazil	-	-	50	-	-
Japan	11	17	40	111	34
Australia	21	23	53	132	38
Total	314	653	550	546	367

Lithium carbonate

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	20	-	18	-	-
France	-	20	-	-	-
Germany, Federal Republic of	50	50	20	104	378
Netherlands	-	49	-	13	-
Spain	-	-	-	23	
Japan	146	310	266	306	273
Total	216	429	304	446	651

Magnesite

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	10 360	14 074	7 084	5 304	6 727
Belgium-Luxembourg	-	1 051	200	100	200
Denmark	903	999	2 700	3 637	1 688
France	6 022	4 784	4 313	5 656	4 253
Germany, Federal Republic of	42 459	43 517	36 831	51 479	50 056
Irish Republic	9 437	5 458	2 002	17 289	10 660
Italy	8 802	924	330	2 415	13 130
Netherlands	18 630	21 530	12 397	17 280	31 731
Austria	558	3 586	4 439	4 420	4 405
Finland	6 860	6 042	7 954	7 915	9 455
Norway	912	1 755	1 461	1 060	3 050
Portugal	100	-	-	-	-
Spain	526	504	-	-	2 027
Sweden	520	3 232	4 445	10 096	10 115
Yugoslavia	12 750	-	-	-	-
Algeria	-	60	-	-	-
Morocco	-	-	1	1	0
Canada	20	2 865	-	1 002	2 500
USA	2 238	15 617	7 687	29 149	45 726
Abu Dhabi	-	-	-	21	-
Dubai	-	203	-	-	-
Hong Kong	8 985	16 141	19 462	22 564	20 055
India	-	2 500	-	-	-
Indonesia	350	400	100	592	-
Japan	76 522	160 460	183 198	222 614	266 722
Malaysia	316	189	483	1 494	3 634
Pakistan	920	1 364	11 044	843	485
Philippines	1 150	1 199	1 250	1 005	2 757
Singapore	-	316	33	257	200
Sri Lanka	-	-	3	-	-
Thailand	1 220	1 550	3 542	2 439	-
Australia	-	-	307	1 569	-
New Zealand	546	751	1 180	3 428	4 874
Total	211 106	311 071	312 446	413 629	494 450

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	100	20	-	-	-
Germany, Federal Republic of	1 494	1 697	1 401	-	-
Italy	20	300	210	-	-
Finland	321	1 102	-	-	-
Spain	5	-	-	-	-
Yugoslavia	400	-	250	100	98
Hong Kong	-	5	204	135	243
Indonesia	50	-	-	145	-
Japan	19 616	17 136	20 643	12 443	3 808
Macao	-	-	56	20	17
Malaysia	30	30	30	10	40
Pakistan	339	15	-	30	146
Thailand	-	2 932	-	-	-
Total	22 375	23 237	22 794	12 883	4 352

Manganese metal

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	-	40	5	9	17
Belgium-Luxembourg	85	-	-	-	25
France	-	-	-	-	10
Germany, Federal Republic of	215	52	363	141	242
Italy	20	-	64	40	17
Netherlands	50	41	102	-	52
Sweden	31	-	6	-	30
Turkey	-	-	-	2	
Canada	224	150	300	-	225
Brazil	-	-	10	-	
India	21	132			
Singapore	-	10	-	-	-
Total	646	425	850	192	618

China Exports

kilograms

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	14 025	26 000	4 000	12 000	20 069
Belgium-Luxembourg	10 400	-	-	8 600	-
Denmark	500	-	-	1 600	-
France	26 000	28 000	19 000	2 000	18 200
Germany, Federal Republic of	124 200	58 100	9 100	7 100	19 800
Greece	* 200	* 300	-	-	-
Italy	22 977	-	-	5 100	-
Netherlands	15 000	7 000	-	-	1 000
Austria	-	3 500	-	-	1 700
Portugal	3 500	5 000	-	-	-
Sweden	12 000	-	-	-	-
Switzerland	-	1 313	-	-	5 003
Yugoslavia	-	5 000	11 000	-	-
Kenya	-	-	-	9	-
Mauritius	-	29	-	-	-
Morocco	5 002	4 002	-	-	-
Canada	1 361	1 724	-	-	-
USA	27 600	-	-	12 075	82 111
Brazil	-	-	1 725	5 175	-
Dubai	-	-	-	-	765
Hong Kong	95 652	65 858	88 707	15 211	97 260
India	121 569	70 916	-	-	-
Indonesia	16 356	8 257	900	690	-
Japan	15 628	32 982	36 915	17 940	14 180
Macao	-	-	10	-	-
Pakistan	-	38 500	37 963	37 015	7 382
Philippines	-	-	-	-	8 210
Singapore	11 178	38 295	13 766	1 380	2 415
Sri Lanka	-	-	-	519	950
Thailand	11 971	8 625	690	1 897	-
Australia	21 321	25 565	19 665	25 703	24 795
Total	556 440	428 966	243 441	154 014	303 840

Mica

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	6 869	8 513	10 263	10 316	10 430
Germany, Federal Republic of	1 076	2 011	1 595	1 372	3 380
Italy	150	100	25	-	18
Netherlands	-	-	-	105	-
Dubai	-	-	5	9	-
Indonesia	142	255	28	99	-
Japan	1 084	389	650	3 406	2 164
Malaysia	-	5	-	-	-
Philippines	-	80	4	-	-
Singapore	405	425	549	398	520
Thailand	21	20	-	40	-
Australia	416	-	-	200	151
Total	10 163	11 798	13 119	15 945	16 663

Platinum & platinum group metals

China Exports

kilograms

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	-	-	26	20	97
Germany, Federal Republic of	30	-	110	11	15
Switzerland	-	-	76	-	10
Nigeria	1	-	-	-	-
USA	115	188	206	74	78
Hong Kong	-	-	100	5	-
Japan	-	48	10	40	49
Total	146	236	528	150	249

China Exports

					tonnes
Importing Countries	1981	1982	1983	1984	1985
United Kingdom	50	-	-	-	-
Denmark	15	-	-	-	-
France	-	-	-	-	5
Finland	10	-	-	-	-
Portugal	-	6	-	-	-
Spain	10	-	-	-	-
Morocco	-	-	1	-	-
Nigeria	-	-	-	-	280
Canada	-	-	-	27	-
Guatemala	1	2	-	-	-
USA	116	-	-	-	-
Argentina	-	5	-	-	-
Colombia	35	-	-	-	-
Ecuador	5	-	-	-	-
Hong Kong	1 216	900	477	273	97
Indonesia	133	202	206	176	* 200
Japan	5	20	15	-	16
Macao	-	-	183	51	52
Pakistan	-	366	168	206	303
Philippines	147	35	60	-	17
Singapore	328	67	-	-	-
Thailand	704	709	140	80	86
Australia	152	-	103	85	85
New Zealand	-	20	15	106	0
Total	2 927	2 332	1 368	1 004	1 141

Rare earth compounds

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
France	-	-	-	6	12
Germany, Federal Republic of	2	10	-	-	1
Spain	-	-	-	20	
USA	-	1	20	4	4
Japan	1 136	771	936	2 511	5 134
Total	1 138	782	956	2 541	5 151

Ferro-cerium & other
pyrophoric alloys

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
United Kingdom	-	-	1	3	1
Spain	1	-	-	1	1
Turkey	-	-	-	4	
Yugoslavia	4	-	-	-	1
Indonesia	2	-	-	-	
Japan	-	1	8	5	1
Malaysia	27	-	-	-	
Philippines	-	4	-	-	-
Singapore	-	-	27	14	31
Thailand	50	82	64	30	79
Total	84	87	100	57	114

China Exports

kilograms

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	12	-	-	2	-
France	9 779	2 432	14 978	38 382	70 519
Germany, Federal Republic of	-	201	-	-	-
USA	623	-	-	-	-
Hong Kong	2 478	1 050	2 052	2 057	205
Japan	-	-	-	-	5
Total	12 892	3 683	17 030	40 441	70 729

Titanium oxides

China Exports

tonnes

Importing Countries	1981	1982	1983	1984	1985
United Kingdom	420	300	35	231	414
Belgium-Luxembourg	-	-	-	99	90
Denmark	10	-	-	-	-
France	377	344	143	164	216
Germany, Federal Republic of	55	92	-	99	60
Italy	124	70	-	-	223
Netherlands	-	-	-	-	206
Finland	-	5	-	-	-
Iceland	-	-	-	-	2
Portugal	2	-	-	-	-
Spain	49	21	-	-	30
Turkey	-	-	-	-	33
Algeria	-	-	2	-	-
Canada	-	-	123	35	88
USA	-	346	-	-	123
Hong Kong	266	562	820	824	849
Indonesia	-	3	16	55	-
Japan	521	489	606	650	1 016
Jordan	-	-	3	-	-
Macao	-	-	46	-	-
Malaysia	10	-	4	5	10
Pakistan	-	80	37	21	40
Philippines	60	-	-	18	-
Singapore	35	85	40	20	191
Sri Lanka	2	-	-	-	-
Syria	-	60	-	-	-
Thailand	-	6	3	29	60
Australia	15	-	36	70	53
Total	1 946	2 463	1 914	2 320	3 704

Vanadiferous residues

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
Germany, Federal Republic of	4 944	2 643	5 104	-	-

Vanadium oxides

China Exports

	tonnes				
Importing Countries	1981	1982	1983	1984	1985
United Kingdom	10	-	15	100	50
Belgium-Luxembourg	394	930	2 488	1 470	1 871
France	-	52	20	174	426
Germany, Federal Republic of	474	858	306	50	315
Italy	125	-	53	27	-
Netherlands	20	302	-	-	-
Spain	3	5	-	-	-
Mexico	26	-	-	-	-
USA	103	-	-	-	-
Argentina	-	20	-	-	-
Brazil	10	20	-	-	-
Japan	857	786	768	327	372
Total	2 022	2 973	3 650	2 148	3 034

Alumina

China Imports

tonnes

Exporting Countries	1981	1982	1983	1984	1985
United Kingdom	-	-	-	-	1
France	-	-	-	-	18
Germany, Federal Republic of	-	-	-	41	35
Netherlands	-	1	-	-	-
Hong Kong	-	-	-	-	61 572
Japan	10	31 071	73 580	69 963	8 625
Singapore	-	-	-	-	10 722
Total	10	31 072	73 580	70 004	80 973

Asbestos

China Imports

tonnes

Exporting Countries	1981	1982	1983	1984	1985
Greece	-	-	-	320	80
Canada	35	375	734	245	700
Hong Kong	29	-	14	1	55
Japan	68	103	86	24	4
Singapore	-	-	-	10	-
Australia	-	162	108	-	-
Total	132	640	942	600	839

Copper ore

China Imports

tonnes

Exporting Countries	1981	1982	1983	1984	1985
Sweden	-	-	-	10 129	-
Canada	-	-	* 8 400	* 26 900	* 53 400
Mexico	6 906	6 947	5 990	15 696	3 015
Philippines	29 607	54 597	26 974	20 888	14 674
Australia	-	-	-	-	2 447
Papua New Guinea	10 138	30 231	51 358	* 40 000	* 30 000
Total	46 651	91 775	92 722	113 613	103 536

Other diamonds

China Imports

carats

Exporting Countries	1981	1982	1983	1984	1985
United Kingdom	5 142	10 128	7 954	24 698	5 731
Belgium-Luxembourg	-	-	-	19 059	49 905
Germany, Federal Republic of	-	-	-	546	-
USA	-	11 864	10 613	17 784	8 120
Hong Kong	1 714	176	558	3 514	5 123
Thailand	34	-	-	-	-
Total	6 890	22 168	19 125	65 601	68 879

Pig-iron

China Imports

	tonnes				
Exporting Countries	1981	1982	1983	1984	1985
United Kingdom	-	-	-	20	-
Italy	-	17	-	-	-
Brazil	-	-	395 724	852 767	1 518 980
Hong Kong	-	-	9	-	1 946
Japan	-	-	293 124	166 258	1 003 889
Pakistan	-	-	40	126	36
Australia	85 417	-	-	-	-
Total	85 417	17	688 897	1 019 171	2 524 851

China Imports

Exporting Countries	tonnes				
	1981	1982	1983	1984	1985
United Kingdom	-	-	-	20	-
France	-	-	-	500	100
Germany, Federal Republic of	-	-	894	5 896	210
Italy	-	-	-	-	432
Netherlands	-	-	37	303	-
Norway	-	-	7 303	-	-
Spain	-	-	-	3 199	3 000
Turkey	-	-	1 000	2 000	-
USA	-	-	-	100	-
Brazil	-	-	8 540	2 500	410
Hong Kong	-	-	-	-	1
Japan	1 280	-	2 250	4 000	3 464
Macao	-	-	-	-	1
Total	1 280	-	20 024	18 518	7 618

Iron & steel, waste & scrap

China Imports

	tonnes				
Exporting Countries	1981	1982	1983	1984	1985
United Kingdom	-	-	-	-	21 999
Netherlands	-	-	-	30 617	60 797
Sweden	-	108	-	-	-
Nigeria	-	-	-	-	6
Canada	-	-	-	9 309	191
USA	-	606	347	206	351
Hong Kong	2 091	1 520	708	12 591	26 283
Japan	-	-	-	14 844	35 835
Kuwait	-	-	50	-	-
Macao	-	-	180	220	888
New Zealand	-	-	-	31	-
Total	2 091	2 234	1 285	67 818	146 350

Unwrought lead & alloys

China Imports

tonnes

Exporting Countries	1981	1982	1983	1984	1985
United Kingdom	-	90	-	10	-
Canada	500	-	999	16	-
Mexico	1 643	149	1 614	109	-
USA	-	8	2	8	-
Peru	7 900	-	1 301	150	200
Hong Kong	10	20	27	569	329
Japan	-	2	299	498	1 095
Australia	17 511	13 494	4 995	5 000	29
Total	27 564	13 763	9 237	6 360	1 653

Platinum group metals

China Imports

kilograms

Exporting Countries	1981	1982	1983	1984	1985
United Kingdom	124	15	5	0	201
Germany, Federal Republic of	19	-	4	-	6
USA	-	205	91	90	131
Hong Kong	4	1	-	9	33
Japan	13	1	5	47	165
Total	160	222	105	146	536

Potassic fertilisers

China Imports

					tonnes
Exporting Countries	1981	1982	1983	1984	1985
Belgium-Luxembourg	* 45 000	-	-	-	-
France	19 300	22 810	7 521	-	-
Germany, Federal Republic of	* 45 000	* 12 300	* 68 400	86 862	29 100
Greece	-	-	-	15 000	31 500
Spain	19 000	50 350	61 150	64 012	* 60 000
Canada	551 874	66 660	536 539	577 146	194 351
Chile	-	-	-	-	35 000
Hong Kong	-	-	-	-	300
Japan	3 908	-	-	-	-
Jordan	-	-	-	* 50 000	-
Singapore	78 330	78 292	38 085	24 130	121
Total	762 412	230 412	711 695	817 150	350 372

China Imports

tonnes

Exporting Countries	1981	1982	1983	1984	1985
United Kingdom	-	168	518	363	1 868
Belgium-Luxembourg	-	-	-	-	24
France	395	1 783	433	225	645
Germany, Federal Republic of	1 455	1 876	9	100	570
Italy	200	-	-	32	-
Spain	1 000	-	-	-	90
USA	709	777	734	718	2 645
Brazil	-	-	-	-	1 000
Hong Kong	233	248	146	335	1 417
Japan	8 001	16 527	10 164	7 469	15 211
Total	11 993	21 379	12 004	9 242	23 470

