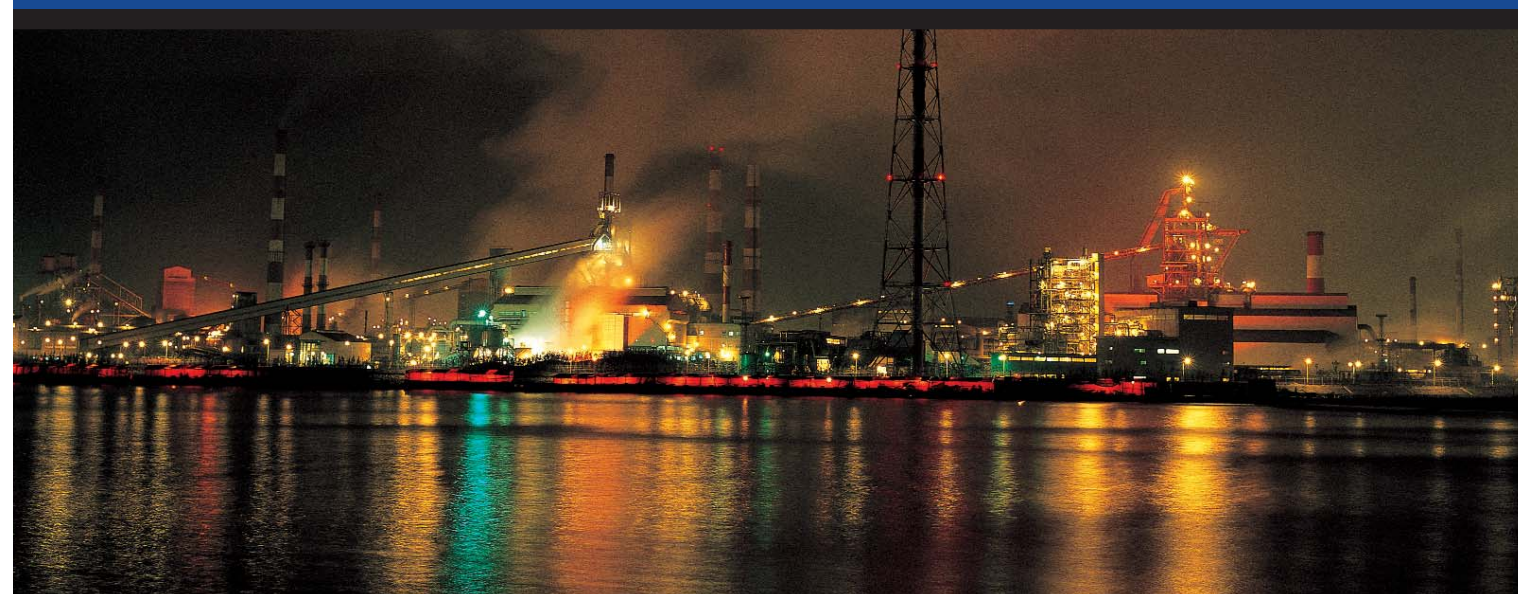


European Mineral Statistics



2000–04



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL



**Office of the
Deputy Prime Minister**

Creating sustainable communities

BRITISH GEOLOGICAL SURVEY

European Mineral Statistics 2000-04

A product of the World Mineral Statistics database

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Commentary

1. Introduction

Within Europe's relatively restricted land area there exists a remarkable geological variety. It includes ancient crystalline 'shields' and massifs, complex younger fold-belts penetrated by igneous intrusions, deep sedimentary basins containing coal and other minerals, and landscapes profoundly modified by a recent ice age. As a consequence Europe has a rich endowment of all the major groups of minerals. In the nineteenth century the continent's burgeoning industrial economies were built on its resources of metals and coal. The productive capacity of those resources was, with some exceptions, largely outgrown in the twentieth century but Europe continues to obtain a high proportion of its needs for industrial and construction minerals from within its own borders. In addition, a recent bonanza has been the discovery and exploitation of the offshore resources of petroleum and natural gas beneath the North Sea and other areas of the continental shelf.

During the industrial revolution of the eighteenth and nineteenth centuries the interest of sovereign states in their own economic and demographic performance led to the development of statism, that is, the direction and control of their internal affairs to a much greater degree than before. From statism came the concept of statistics – the numbers collected and compiled as the basis for such action by the state. Among many other things, almost all European countries compile annual statistics of national mineral production and trade and these form the basis of this European compilation¹.

For many countries, from antiquity, the ownership of precious metals has been vested in the state or the sovereign and for the majority of European countries state ownership extends to all metals and high-value industrial minerals. Chiefly as a result, in Europe and the world as a whole, there is a direct correspondence between the unit value of a mineral commodity and the amount and accuracy of official statistical information available on it. At the extreme high end of the value range this relationship tends to break down so that data on gemstones and precious metals is less straightforward than that on base metals. However, as a rule the state does not claim ownership of low-value construction minerals, such as crushed rock aggregate, sand & gravel and others. Partly as a consequence, the statistics for such minerals tend to be less comprehensive, less reliable and more difficult to compile and compare than those for other minerals. It is ironic that with modern environmental concerns and pressures on land-use in Europe it is precisely these less well-documented minerals – their occurrence, production, trade and consumption - that are of greatest concern to local and national governments.

So far as possible, the statistics of production compiled by the BGS are the official data for the countries concerned, whose government departments and agencies compile and publish them on the basis of returns from annual, or more frequent, inquiries in the form of mandatory questionnaires to producers. Trade statistics published by BGS are invariably compiled, directly or indirectly, from official publications.

Where official production data are not available, or where there is reasonable cause to doubt the accuracy or completeness of such data, information is sought from other sources such as geological survey organizations, chambers of mines, universities, trade associations and the primary producers themselves. Time and resources preclude double-checking in any but the most necessary of cases.

An increasing problem, particularly in Europe, is the invocation of rules that debar a government body from divulging national production data if there is only a small number of producers, the object being the maintenance of commercial confidentiality. However we often find in such cases that the primary producers themselves are willing to release the information for publication. A further problem lies in the

¹ For this compilation 'Europe' is defined as the 25 EU members (as of December 2005), the EU associates Norway and Switzerland and the EU applicant countries Bulgaria, Croatia, Romania and Turkey; this group of 31 countries is for convenience referred to as 'EU31'.

desire of governments, everywhere, to recover costs by asking for payment for official information – which is often marketed through an agent. This situation is coupled with an increasing apparent disregard for the value (as distinct from the price) of impartial mineral statistics and a conviction that their compilation should be funded entirely by the users of the data, or by the industrial sector concerned. It is true that no other industrial sector has a statistical operation wholly dedicated to its physical (as opposed to financial) activities. The reason is that no other industrial sector is at one and the same time so crucial to the maintenance of civilisation and so little understood by the population at large.

2. Construction minerals

The most important construction minerals² and their chief uses are summarised below (Table 1):

Table 1 Construction minerals and their principal uses

Aggregates, natural (sand and gravel):– crushed rock (limestone, sandstone, igneous rock etc.):–	<i>concrete, building sand and fill roadstone, fill, concrete</i>
Common clay and shale:–	<i>bricks, pipes, tiles and cement manufacture</i>
Gypsum:–	<i>plaster, plasterboard and cement</i>
Limestone and dolomite:–	<i>crushed-rock aggregate, cement, other industrial and agricultural uses</i>
Building stone (dimension stone) :–	<i>this comprises almost any competent rock-type that may be used in the form of shaped and/or sized blocks for either structural or decorative purposes. It normally includes roofing stone and slate</i>

2.1 Statistical problems of aggregate minerals

Aggregates suffer from the incompleteness of available production data and incompatibility of different countries' production statistics for this group. The European data for aggregates presented here represent an early attempt at compiling reliable data and we would welcome any comments, amendments and corrections that users may wish to make.

Other problems are related to the terminology used by different countries. These can include such categories as:

- 'gravel and crushed rock' with no distinction between types of aggregate minerals
- 'building stone' that incorporates both crushed-rock aggregate and dimension stone
- 'limestone' and other purely petrological descriptions with no indication of the construction/industrial use split
- 'sand' with no distinction between material for construction sand and special sand for industrial uses e.g. for glass

With the establishment of the European single market on 1st January 1993 a new statistical system was introduced across the Community to measure production for sale (Prodcom). It covers many activities, including mining and quarrying. Information is presented on the volume and value of sales and the headings are compatible with trade headings, the intention being to provide an assessment of the apparent consumption of a particular product. However, the data for minerals are of highly variable quality.

² Statistics for gypsum are complicated by the availability of large quantities of synthetic gypsum, which is not covered in this publication

2.2 European situation

The statistical tables in this volume show that it is possible to account in detail for at least 2653 million tonnes of primary aggregate production in the EU31 countries. The European Aggregates Association (UEPG) (www.uepg.org) estimates that the average annual production of primary aggregates in only nineteen European countries is 2800 million tonnes.

These totals easily exceed the total tonnage of all other minerals produced in the EU. This fact highlights the concerns expressed in many countries about the sustainability of the resource, both in terms of tonnage remaining and also the land-use and environmental issues that are raised by the implicit need for the expansion of quarries to maintain the level of output.

All European countries consume construction minerals, generally in proportion to the size of their individual economies. The majority of the EU member countries are self-sufficient in supply of aggregate minerals but while some, e.g. UK, produce approximately equal quantities of sand & gravel and crushed-rock aggregates others are, for obvious geological and topographic reasons, deficient in one or the other. For example, Netherlands lacks resources suitable for the production of hard-rock aggregates while Austria, landlocked and without broad alluvial lowlands, is a net importer of sand and gravel. Simple statistical analysis, especially if only 'gross' national trade positions are examined, can be misleading: aggregates are low-cost minerals 'ex-pit' and are, as a result, sensitive to transport costs. They may be imported via a short cross-border route at lower cost than if they were carried a much greater distance within national borders.

For countries bordering the North Sea production of marine-dredged sand and gravel is a significant part of supply. In the case of the UK this source amounts to approximately 18 million tonnes/year or 20 per cent of total UK sand and gravel production in 2004. Almost half of this tonnage is landed at foreign ports as exports. Crushed rock produced from onshore sites is also conveyed by sea from Norway and Scotland.

Recycled and secondary aggregates have become an increasingly important part of supply, in response to environmental constraints on the production of primary (quarried) material. Such statistics as are available suggest that the proportion of national supply contributed by secondary material is greatest in the geographically smaller European countries where transport distances are less. In England these materials account for 20-25 per cent of total supply.

3. Industrial (non-construction) minerals

These comprise a wide range of non-metallic, non-energy minerals used as feedstocks for manufacturing or industrial processing aids, exemplified by barytes, fluorspar, magnesite, kaolin (china clay), mica, and salt. The category includes metallic minerals used for non-metallic products, e.g. bauxite, chromite, ilmenite and also 'construction minerals' used for non-construction purposes, e.g. limestone. Unlike metals, where whatever the raw material the ultimate refined marketable material is produced to a few accepted standards for use in a variety of applications, industrial minerals depend to a great extent on their intrinsic 'as mined' physical and chemical qualities. Thus, for industrial minerals the two most significant variables are the grade of the deposit, that is, how much useful mineral it contains, and the quality of the mineral, that is, its suitability for specific end-uses. The quality may be a combination of physical properties such as particle size and shape, brightness, viscosity in suspension, specific gravity, hardness, strength and insulating properties. Several industrial minerals are valued purely for their chemical composition in that they form the basis for production of, for example, the essential plant nutrients potassium and phosphorus or the halogens chlorine and fluorine and many other elements used as chemical feedstocks.

It has been suggested that the point at which the value of a country's industrial mineral production (including construction minerals) overtakes that of its metal (mine) production marks its transition to a mature industrial economy. Certainly this point was attained long ago for the major economies of Europe: the value of metal production in France, Germany, Italy and the UK is negligible compared to the value of industrial minerals output.

A problem for the compiler of statistics on industrial minerals is that many of them cannot be precisely defined, but grade into one another. Thus, kaolin grades into kaolinitic clay, bauxite into high-alumina clay, dolomite into limestone, and this has implications for the comparability of statistics between deposits and countries. Many industrial minerals are produced and marketed in either a 'wet', 'dried' or 'calcined' forms; this can markedly affect the weight of the material. In this compilation every effort has been made to ensure comparability between countries in this respect. Some mineral-derived elements may be obtained by a number of mineral-based but different routes: sulphur is obtained, in Europe, as a by-product from oil refining, from sour gas, from base metal smelting and as a primary product from pyrites (iron sulphide). Some semi-processed materials³ can be obtained from completely different sources, for example magnesia (magnesium oxide), which is produced from both magnesite and a combination of sea-water and dolomite. Salt is a further example, being extracted as a solid (rock salt), as brine and by evaporation of sea water.

European production of industrial minerals⁴ supplies a fairly high proportion of the continent's requirements, in contrast to the position with metals. However, in the cases of several minerals, production is dominated by one country and the majority are still dependent on imports for all but a few of these minerals. The proportions of selected minerals produced by Europe is given in Table 2.

Table 2 EU31 production of selected industrial minerals as world percentages

<i>Industrial mineral</i>	<i>% of world</i>	<i>EU31 countries with >2% of world output in 2004</i>
Feldspar	49.0	Italy (19%), Turkey, France, Spain, Czech Republic, Poland
Magnesite	33.7	Turkey (16.7%), Slovakia, Austria, Spain, Greece
Kaolin	25.7	UK (8.6%), Germany, Czech Republic, Turkey
Gypsum	23.5	Spain (10.3%), France
Bentonite & fuller's earth	23.5	Greece (5.9%) Turkey, Spain, Italy, Germany
Talc	15.7	Finland (5.8%), France
Potash	14.7	Germany (11.3%)
Barytes	7.5	–
Fluorspar	7.2	Spain (3.1%), France

4. Metals

Until the middle of the nineteenth century the demands of industry in Europe were met by indigenous metal mines but thereafter it became clear that the resources of other continents would become an important source of supply, having, as they did, very large and rich ore bodies that could be worked at relatively low cost. Initially, ores and concentrates were transported to Europe for processing. Many high-volume ores, notably iron ore, still are imported but smelting and refining of base metal concentrates has

³In the case of several oxides, hydroxides and salts the yardstick for inclusion in this compilation is that the material should be the basis for a further transformation process although the compilers accept that this criterion has been applied in a flexible way.

⁴ The tabulated statistics show that availability of reported data is much lower for industrial minerals than for metals, with many estimated totals being shown.

been increasingly undertaken at or near the sites of the overseas mines. Europe as a whole is now heavily dependent on extra-European sources of virtually all metals although recycling makes an important contribution and, as the statistical tables show, several European countries still have significant mine production of one or more metals.

Certain European countries are major mine producers of particular metals, e.g. Poland for copper (3.7 per cent of the world total in 2004), Finland and Turkey for chromium (3.2 per cent and 2.4 per cent respectively) and Ireland for zinc (4.7 per cent), but the majority of European countries depend chiefly on imports from other continents. The overall European position with regard to mine production of the major non-ferrous metals in 2004 is shown in Table 3.

Table 3 EU31 mine production of selected metals as world percentages

<i>Metal</i>	<i>% world</i>	<i>EU31 countries with >1% of world output in 2004</i>
Silver	10.0	Poland (7.0%), Sweden
Zinc	9.4	Ireland (4.7%), Sweden, Poland
Titanium	8.7	Norway (8.7%)
Lead	7.3	Ireland (2.1%), Poland, Sweden,
Copper	6.0	Poland (3.7%)
Chromium	5.6	Finland (3.2%), Turkey
Tungsten	4.0	Austria (2.6%), Portugal
Iron	2.2	Sweden (1.6%)
Aluminium (bauxite)	2.2	Greece (1.5%)
Mercury	2.0	Finland (2.0%)
Nickel	1.7	Greece (1.4%)
Gold	0.8	–
Manganese	0.6	–

EU31 consumption for each of the metals listed in Table 3 is between 20 and 35 per cent of total world consumption.

European smelting and refining of imported ores and concentrates provides the bulk of supply in the cases of iron, aluminium (bauxite), zinc, lead and the minor metals associated with these elements, and about half of total copper supply. Refining in Europe of semi-processed materials from other continents accounts for a large part of vanadium, nickel and cobalt supply but tin metal is now entirely imported. Ferro-alloys of a number of metals are produced in Europe but imports of the major types are an indispensable part of total supply.

The balance of metals supply is made up of imports of refined metal. It is emphasized that the situation of individual countries may vary widely from one to another, as the statistics show.

European producers and consumers were affected by the high prices for metals during 2004, a consequence of the strong demand from China. In 2004 China consumed around 20 per cent of the world total of refined aluminium, copper and lead, 11 per cent of nickel, 25.5 per cent of slab zinc and 28 per cent of refined tin and steel (World Bureau of Metal Statistics, International Iron and Steel Institute). Stocks of many minerals and metals, including copper, lead and zinc, were low.

5. Energy minerals

These comprise petroleum, natural gas, coal and uranium. Statistics for production and trade of petroleum and coal are fairly complete and present few problems to compilers. However the data for petroleum conceal the distribution of differing grades of crude oil. For example, although the UK is a net exporter of petroleum there is a significant import of heavy crude which is a necessary requirement that cannot be supplied by the North Sea and other offshore fields. In 2004 Norway produced 4.0 per cent of total world output of oil and the United Kingdom produced 2.3 per cent, these two countries being the seventh and fourteenth largest world producers respectively. No other European country produces more than 0.5 per cent of the world total. Europe (EU31) as a whole produced 7.5 per cent of the world total.

Before 1975, European production of both petroleum and natural gas was negligible but Europe produced 12.7 per cent of the world total for natural gas in 2004. Of this, 3.6 per cent was produced by the UK, 2.9 per cent by Netherlands and 2.8 per cent by Norway. The present compilation does not show trade for natural gas. Of the total EU25 members' supply, more than 25 per cent of gas and oil is from Russia.

Coal output in Europe has been declining steadily for many years as deep mines become increasingly uncompetitive with sources in other continents. In 1981 production from the present EU31 countries was 1351 million tonnes. In 2004 production from the same territories was 680 million tonnes of which half was provided by Germany (3.8 per cent of the world total) and Poland (2.9 per cent). While output from Germany (present territory) has declined by half in the period 1981-2002 and UK output by almost 80 per cent, production from Greece and Turkey has increased.

'Black coal' or 'hard coal' is normally taken to mean bituminous coal and anthracite. 'Brown coal' comprises sub-bituminous coal and lignite. Black coals have a higher calorific value and lower volatile content than brown coals, the use of which is almost confined to burning in electricity generating stations. Within black coals a fundamental division is made into 'steam coal', for power generation, and 'coking coal', used for metallurgical purposes, predominantly iron smelting in blast furnaces. An important distinction in mining methods is that between deep mines (with shafts or deep declines) and opencast or open pit mines. The latter have, as a rule, lower costs and are therefore more profitable. Both methods give rise to planning and social concerns.

Mine production of uranium in the EU31 countries in 2004 amounted to 710 tonnes U_3O_8 equivalent, or 1.5 per cent of the world total, chiefly attributable to the Czech Republic. The EU31 countries occupy the top five positions for nuclear share in electricity generation in 2004 (International Atomic Energy Agency, www.iaea.org/programmes/a2). These countries are France, Lithuania, Slovakia, Belgium and Sweden, with nuclear share ranging from 78.1 per cent to 51.8 per cent.

The overall European position with regard to production of energy minerals in 2004 is shown in Table 4.

Table 4 EU31 production of energy minerals as world percentages

<i>Mineral</i>	<i>% world</i>	<i>EU31 countries with > 1% of world output 2004</i>
Natural gas	12.7	UK (3.6%), Netherlands, Norway
Coal	12.3	Germany (3.8%), Poland, Czech Republic, Greece, Turkey
Petroleum	7.5	Norway (4.0%), UK
Uranium	1.5	Czech Republic (1.3%)

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Explanatory notes

The statistics in this publication are from the World Mineral Statistics database.

Coverage

European Mineral Statistics covers the majority of economically important, and internationally traded, mineral commodities. 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 held in the BGS files and is available for consultation.

Production

Metals Mine production of many metals is expressed in terms of metal content. This is clearly indicated adjacent to the commodity description. Unless otherwise specified, metal production statistics relate to metal recovered from both domestic and imported materials, whether primary or secondary, but exclude remelted material.

Trade

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.

Export statistics may 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 the following metals covered by Harmonised System Chapter 81 include under the term 'metal', unwrought and wrought forms, powder, alloys, waste and scrap, unless these are separately shown: antimony, bismuth, cadmium, chromium, cobalt, manganese, molybdenum, tantalum–niobium, titanium, tungsten, vanadium and zirconium. Trade tables of other metals include only unwrought forms under the term 'metal'.

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

Particular acknowledgement is made to the Mines Departments and other government agencies of many countries whose regular statements, yearbooks and other reports are worthy of direct consultations by readers in search of detail.

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

Supplementary information is also obtained from publications dealing with a wider range of commodities such as Société de l'Industrie Minérale, *Annuaire Statistique Mondial des Minerais et Métaux*; Mining Journal, *Mining Annual Review*; World Bureau of Metal Statistics, *World Metal Statistics*; World Bureau of Metal Statistics, UBS Warburg and Enron Metals Limited, *Metallstatistik*; publications of the

Interstate Statistical Committee of the CIS, the United States Geological Survey, and the United Nations Statistics Division and UN agencies.

In addition, information has been obtained from the websites of the following organisations, companies, statistical offices and government departments: United Nations; Kaolin & Plastic Clays Europe; International Iron and Steel Institute; Eurofer; World Nuclear Association; Eurostat; European Aggregates Association; Falconbridge Ltd; Inmet Mining; Aluminium de Grece; New Boliden; Eurozinc Mining Corporation; Vereinigung der Österreichischen Zementindustrie, Austria; Federation de l'Industrie Cimentiere Belge, Belgium; Statistics Belgium; Statistics Denmark; Geological Survey of Finland; Federation des Minerais, Mineraux Industrielles et Metaux non Ferreux, France; Comite Professionel de Petrole, France; Ministere de l'Economie, des Finances et de l'Industrie, France; Infociments, France; Statistisches Bundesamt Deutschland, Germany; National Statistical Service of Greece; Federacciai, Italy; Unione Petrolifera, Italy; Istituto Nazionale di Statistica, Italy; Statec, Luxembourg; Centraal Bureau voor de Statistiek, Netherlands; Staatstoezicht op de Mijnen, Netherlands; Statistisk Sentralbyra, Norway; Instituto Nacional de Estatistica, Portugal; Unesid, Spain; Sveriges Geologiska Undersokning, Sweden; Jernkontoret, Sweden; Statistiska Centralbyran, Sweden; Department of Trade and Industry, United Kingdom; The Crown Estate, United Kingdom.

Units

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

tonnes $\times$ 0.9842 = long tons

tonnes $\times$ 1.1023 = short tons

kilograms $\times$ 2.2046 = pounds

kilograms $\times$ 32.1507 = troy ounces

cubic metres $\times$ 35.3147 = cubic feet

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

1 flask mercury = 34.5 kilograms

1 metric ton unit = 10 kilograms

Conversion of national currencies to pounds sterling has been made using the annual 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

Table notes for country tables

Aggregates – production

(1) So far as possible, these statistics include construction sands; gravel, pebbles, shingle and flint; crushed stone used for concrete aggregates, roadstone and other construction use; granules, chippings and powders, listed under Prodcom codes 14211190, 14211210, 14211230, 14211250, 14211290

(2) Where official sources show more than one series for aggregates the higher series has generally been used in this compilation

(3) Where marine sands and gravels have been identified, these are included

(4) Information may be incomplete or absent due to reporting methods, confidentiality or lack of available information. All EU31 countries produce sand and gravel and crushed rock

(5) Production from many small operations are not officially compiled. The minimum number of employees for which establishments are required to report production varies between different countries and can also vary from year to year within a country

(6) Quantities of sand from sand and gravel operations may be discarded due to low demand. This may or may not be included in the statistics

Aggregates - exports and imports

(1) The figures in this table include construction sands, pebbles, gravel, shingle, flint, crushed rock, granules, chippings and powders covered by the Harmonised System codes 2505.90, 2517.10, 2517.41 and 2517.49

(2) Exports include marine dredged sand and gravel landed at foreign ports

Bauxite - production

(1) Including production of refractory bauxite

Alumina - production

(1) Where possible figures show the alumina equivalent (Al_2O_3) of total hydrate produced, whether or not calcined

Bauxite, alumina and aluminium - exports and imports

(1) Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate

(2) The term 'unwrought' aluminium corresponds to item 7601 of the Harmonised System and comprises ingots, blocks, unwrought bars, etc.

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

Antimony - mine production

(1) Including antimony content of antimonial lead alloys

White arsenic - production

(1) Including calculated trioxide equivalent of arsenic metal produced except where this would involve double counting

Arsenic - exports and imports

(1) Data relating to arsenic are not fully recorded by many countries

Barytes - production

(1) Small quantities of witherite may be included

Barytes - exports and imports

(1) Trade in barytes is reported under item 2511 of the Harmonised System and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

Production of Bentonite and Fuller's Earth

(1) Bentonites consist of montmorillonite (one of the smectite group of clay minerals) and occur in two main varieties, calcium bentonite, the most commonly

occurring, and sodium bentonite, industrially the more important

(2) Calcium bentonite can be converted to sodium bentonite by a sodium-exchange process

(3) In some countries, such as the United Kingdom, calcium bentonite is known as fuller's earth, a term which is also used to refer attapulgite, a mineralogically distinct clay mineral but exhibiting similar properties

Bentonite and Fuller's Earth - exports and imports

(1) See notes 1 - 3 under production

(2) The figures refer to natural and sodium-exchanged bentonite, and fuller's earth, Harmonised System 2508.10 and 2580.20

(3) Activated bentonite and fuller's earth, Harmonised System 3802.90 are excluded

(4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Harmonised System 3802.90, e.g. Italy

Bismuth - mine production

(1) In some instances the figures are derived from reported bismuth content of refined and impure metal plus recoverable in ores and concentrates exported

(2) Production for some countries may include bismuth produced from imported ores but it is thought that any resulting duplication is insignificant in the countries shown

Bismuth - exports and imports

(1) The compounds are bismuth carbonate and/or bismuth nitrate

Bromine - exports and imports

(1) Trade in bromine is not separately distinguished from other halogens by many countries

Cadmium - production

(1) Data exclude secondary metal unless otherwise stated

Chromium - exports and imports

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

Coal - production

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

Coal - exports

(1) Excludes bunker shipments

Cobalt - mine production

(1) There is frequently a considerable disparity between the cobalt content of ore raised and cobalt actually recovered

(2) Figures relate where possible to cobalt recovered

Cobalt metal - production

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

Copper - smelter production

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

Refined copper - production

(1) Figures relate to both primary and secondary refined copper, whether electrolytic or fire

- refined. Metal recovered from secondary materials by remelting alone is excluded
- Copper - exports and imports
- (1) The term 'unwrought' copper corresponds to items 7402, 7403 and 7405 of the Harmonised System and includes both unrefined (including blister) and refined copper
 - (2) The term 'unwrought', as used here, includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys
- Diamond - exports and imports
- (1) Carats have been used as the unit except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling
 - (2) See explanatory notes at the front of the volume regarding currency conversion
 - (3) The term 'Dust' corresponds to item 7105.10 of the Harmonised System and includes both natural and synthetic diamond dust
- Gold - mine production
- (1) In several countries substantial amounts of gold produced in small operations are not recorded in the official statistics
- Gold - exports and imports
- (1) The term 'metal' includes both unwrought and partly worked gold and alloys but excludes gold coin
- Graphite - production
- (1) Including all forms of amorphous and crystalline graphite but excluding synthetic material
- Graphite - exports and imports
- (1) Excluding synthetic graphite
- Gypsum - production
- (1) Some countries produce large quantities of synthetic gypsum. Where possible, this output is excluded
- Gypsum - exports & imports
- (1) The term 'crude' may include some anhydrite
- Pig iron - production
- (1) Sponge iron and direct reduced iron (DRI) are included where these have been separately identified
- Crude steel - production
- (1) Figures include production from scrap unless otherwise indicated
- Iron, steel and ferro-alloys - exports and imports
- (1) The term 'ingots, blooms, billets' corresponds to items 7206, 7207, 7218 and 7224 of the Harmonised System which includes those of alloy and high carbon steel
- Refined Lead - production
- (1) Figures relate to both primary and secondary refined lead and include the lead content of antimonial lead. Metal recovered from materials by remelting alone is excluded
- Lead - exports and imports
- (1) The term 'unwrought' lead corresponds to item 7801 of the Harmonised System and comprises base bullion, pigs, unwrought bars, etc
- Magnesite and magnesite - exports and imports
- (1) The term 'magnesia', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material
- Manganese - exports and imports
- (1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- Mercury - production
- (1) Several countries are believed to have unrecorded production of mercury from copper electrowinning processes and by recovery from effluents
- Mica - exports and imports
- (1) Data show unmanufactured mica and include sheet, block, splittings, ground and waste, unless these are separately specified. Mica powder is included under the term 'ground'
- Molybdenum - exports and imports
- (1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- Nickel - smelter/refinery production
- (1) Data relate to refined nickel plus the nickel content of ferro-nickel, nickel oxide and nickel salts
- Nickel - exports and imports
- (1) The term 'unwrought' nickel corresponds to item 7502 of the Harmonised System which excludes all electroplating anodes
 - (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- Crude petroleum - production
- (1) The figures include natural gas liquids
- Natural gas - production
- (1) Flared or reinjected gas is excluded as far as possible
- Platinum group metals - exports and imports
- (1) The term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys
- Rare earths - exports and imports
- (1) Rare earths are here taken to include yttrium and scandium
- Salt - production
- (1) Refined salt is excluded
- Sillimanite minerals - production
- (1) A number of other countries produce sillimanite minerals but details of output are not reported
- Sillimanite minerals - exports and imports
- (1) 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite
- Silver - exports and imports
- (1) Excluding silver coin but including silver shipped for minting
 - (2) The term 'metal' includes both unwrought and partly worked silver and alloys
- Tantalum and niobium - exports and imports
- (1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- Tin - exports and imports
- (1) The term 'unwrought' tin corresponds to item 8001 of the Harmonised System and comprises ingots, pigs, unwrought bars, sticks, etc
- Titanium minerals - production
- (1) The figures refer to gross tonnage of titanium concentrates

Titanium - exports and imports

- (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', includes oxides and oxide based pigments classified under Harmonised System items 2823 and 3206.10
- (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

Tungsten - exports and imports

- (1) Significant 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

Vanadium - exports and imports

- (1) 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

Zinc - exports and imports

- (1) The term 'unwrought' zinc corresponds to item 7901 of the Harmonised System and comprises blocks, pigs, slabs, etc

Zirconium - exports and imports

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

STATISTICAL TABLES BY COUNTRY

Austria

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel (c)	tonnes	25 712 457	23 102 333	28 758 261	27 287 331	28 586 199
Crushed rock (c)	tonnes	23 818 614	22 404 109	22 438 122	26 333 481	27 972 469
Cement, finished	tonnes	3 776 000	3 863 000	3 967 000	*4 000 000	4 040 000
Coal						
Brown coal & lignite	tonnes	1 254 605	1 193 970	1 411 824	1 152 389	235 397
Copper, refined	tonnes	73 873	66 154	64 900	65 100	74 200
Graphite (a)	tonnes	669	116	—	—	—
Gypsum						
Gypsum	tonnes	825 077	790 478	847 117	889 727	920 809
Anhydrite	tonnes	120 967	138 745	122 085	113 823	117 318
Iron ore (b)	tonnes	1 859 449	1 843 275	1 941 759	2 124 787	1 889 419
Pig iron	tonnes	4 332 786	4 392 878	4 607 000	4 676 742	4 846 740
Crude steel	tonnes	5 722 000	5 870 000	6 189 000	6 261 000	6 530 000
Ferro-alloys						
Ferro-molybdenum	tonnes	4 700	4 900	4 930	4 400	4 700
Ferro-nickel	tonnes	3 300	2 600	2 150	2 000	1 900
Ferro-vanadium	tonnes	5 900	5 800	5 500	5 300	5 800
Kaolin	tonnes	25 066	20 047	21 212	15 034	16 345
Lead, refined	tonnes	23 773	23 666	*23 000	*20 000	*26 000
Magnesite	tonnes	725 832	680 534	728 235	766 525	715 459
Mica	tonnes	...	...	...	5 646	5 832
Nickel, smelter/refinery	tonnes	1 300	1 300	*1 000	*1 500	*1 300
Crude petroleum	tonnes	1 056 183	1 050 355	1 032 204	1 014 716	981 588
Natural gas	million m ³	1 805	1 954	2 015	2 029	2 011
Salt						
Rock salt	tonnes	1 280	1 384	1 491	1 610	1 228
Salt in brine	tonnes	640 000	646 000	641 634	723 286	745 670
Sulphur and pyrites						
Recovered (d)	tonnes (sulphur content)	50 377	50 135	54 925	50 568	55 322
Talc	tonnes	133 060	137 776	138 195	137 596	136 305
Tungsten, mine	tonnes (metal content)	1 421	1 429	1 377	1 381	1 335

Note(s):-

(1) Austria is believed to produce arsenic and bentonite.

(a) Crude

(b) Including micaceous iron oxide

(c) Sales

(d) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	2 230 878	2 323 043	2 581 242	3 163 141	2 829 930
Aluminium and bauxite						
Unwrought	tonnes	7 666	12 071	14 271	16 150	13 341
Unwrought alloys	tonnes	84 770	89 985	94 594	87 528	122 693
Scrap	tonnes	54 104	55 565	57 505	52 564	71 362
Antimony						
Metal	tonnes	1	37	103	16	19
Barytes	tonnes	125	1 402	1 197	479	2 737
Bentonite and fuller's earth						
Bentonite	tonnes	2 881	8 142	10 394	9 246	8 242
Bismuth						
Metal	tonnes	10	24	0	8	8
Cement						
Cement clinkers	tonnes	23 014	60 212	47 401	54 375	58 262
Portland cement	tonnes	125 800	118 822	97 600	136 732	185 069
Other cement	tonnes	5 550	19 896	27 365	42 712	40 830
Chromium						
Ores & concentrates	tonnes	729	647	896	1 155	392
Metal	tonnes	3 198	2 858	4 506	5 485	7 194

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Cobalt						
Metal	tonnes	87	50	173	85	22
Copper						
Unwrought	tonnes	104 410	84 765	74 370	81 897	71 119
Unwrought alloys	tonnes	1 509	1 121	916	907	580
Scrap	tonnes	19 797	18 439	25 765	25 606	36 476
Diamond						
Unsorted	carats	...	168 000	...	...	...
Dust	carats	8 500 000	550 000	3 000 000	...	1 500 000
Diatomite	tonnes	7 177	5 802	5 071	4 650	5 347
Feldspar	tonnes	6 295	10 174	12 279	13 436	18 864
Fluorspar	tonnes	233	72	12	530	9
Gold						
Metal	kilograms	54 400	16 800	18 000	10 900	11 500
Waste & scrap	kilograms	1 600	44 900	5 600	2 500	2 900
Graphite	tonnes	3 655	3 631	3 384	4 574	5 094
Gypsum						
Crude	tonnes	51 999	54 034	46 524	21 562	22 732
Calcined	tonnes	87 510	72 827	82 493	97 840	100 444
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	3 310	6 154	16 390	17 202	5 999
Silicon metal	tonnes	71	140	470	751	598
Ingots, blooms, billets	tonnes	248 303	177 057	217 580	256 981	334 124
Scrap	tonnes	789 435	754 489	777 267	842 323	1 099 278
Kaolin	tonnes	3 235	2 998	3 105	1 870	2 277
Lead						
Unwrought	tonnes	4 519	6 375	7 831	8 988	14 504
Magnesite and magnesia						
Magnesite	tonnes	7 713	82	5 489	2 401	642
Magnesia	tonnes	33 490	54 021	44 729	50 263	73 037
Manganese						
Metal	tonnes	21 614	28 326	29 058	18 923	11 575
Mercury	kilograms	8 400	24 100	900	800	1 700
Mica	tonnes	2 629	2 951	3 512	3 767	3 917
Molybdenum						
Metal	tonnes	1 864	2 023	2 123	(a) *2 200	(a) *2 100
Oxides	tonnes	36	0	0	5	125
Nickel						
Mattes, sinters etc.	tonnes	99	153	288	47	9
Unwrought (b)	tonnes	908	532	570	206	297
Scrap	tonnes	307	495	377	440	1 520
Crude petroleum	tonnes	57 085	60 151	...	—	—
Phosphates	tonnes	1 397	1 320	906	1 280	802
Platinum metals						
Platinum & platinum metals	kilograms	£1 853 000	£2 785 000	£2 827 000	£4 556 000	£8 114 000
Rare earths						
Cerium compounds	tonnes	1 420	...	(a) *2 500	1 750	1 564
Other rare earth compounds	tonnes	5 714	...	(a) *7 000	6 144	6 415
Metals	tonnes	558	...	...	417	456
Salt	tonnes	...	...	...	253 791	183 850
Silver						
Metal	kilograms	50 900	116 900	101 000	87 800	77 400
Sulphur and pyrites						
Sulphur, sublimed & precipitated	tonnes	5 998	6 707	14 596	9 265	8 435
Talc	tonnes	129 226	162 302	142 879	174 590	151 022
Tantalum and niobium						
Tantalum	tonnes	118	98	43	...	—
Tin						
Unwrought (b)	tonnes	51	80	115	151	153
Scrap	tonnes	167	206	363	153	278
Titanium						
Metal	tonnes	204	298	300	340	397
Oxides	tonnes	2 487	2 876	3 000	2 404	2 640
Tungsten						
Metal	tonnes	1 062	967	813	...	...

Austria

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Zinc						
Unwrought (b)	tonnes	20 746	15 461	34 705	36 012	37 304
Scrap	tonnes	3 345	2 089	3 763	2 984	2 000

Note(s):-

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

(b) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	2 212 656	2 293 185	2 545 866	2 446 023	2 087 667
Aluminium and bauxite						
Bauxite	tonnes	24 404	25 581	21 354	31 082	36 791
Alumina	tonnes	50 969	43 134	41 141	43 318	23 636
Alumina hydrate	tonnes	5 612	5 937	6 538	7 779	6 372
Unwrought	tonnes	116 717	160 372	136 767	141 841	106 348
Unwrought alloys	tonnes	139 214	139 329	170 541	184 478	229 607
Scrap	tonnes	139 274	(a) *123 900	(a) *129 700	(a) *143 400	128 798
Antimony						
Metal	tonnes	174	205	270	120	53
Oxide	tonnes	252	146	190	207	316
Arsenic						
Metallic arsenic	tonnes	—	28	16	5	...
Barytes	tonnes	3 439	3 151	2 420	2 742	3 910
Bentonite and fuller's earth						
Bentonite	tonnes	52 361	55 291	54 441	47 358	53 871
Fuller's earth	tonnes	48	45	129	560	615
Bismuth						
Metal	tonnes	18	67	105	128	114
Bromine	kilograms	125 300	228 000	254 900	252 200	93 000
Cadmium						
Oxide	tonnes	44	5	1	1	1
Cement						
Cement clinkers	tonnes	302 996	314 407	314 864	444 535	443 956
Portland cement	tonnes	819 643	717 691	804 924	763 455	773 897
Other cement	tonnes	33 111	29 489	18 597	17 434	51 811
Chromium						
Ores & concentrates	tonnes	36 490	37 321	28 384	36 348	26 761
Metal	tonnes	2 050	1 713	1 808	2 337	3 731
Coal						
Hard coal (b)	tonnes	3 412 703	3 846 806	3 993 504	3 965 922	3 552 594
Brown coal	tonnes	38 117	52 745	61 439	59 077	38 833
Briquettes	tonnes	117 219	108 786	76 354	84 343	83 035
Cobalt						
Metal	tonnes	537	415	345	30	585
Copper						
Unwrought, unrefined	tonnes	5 419	—	—	—	15 203
Unwrought, refined	tonnes	36 391	35 845	24 707	29 479	18 429
Unwrought alloys	tonnes	4 435	3 164	2 555	3 103	2 460
Scrap	tonnes	81 509	59 281	80 512	82 015	87 807
Diamond						
Unsorted	carats	13 864	...	...	...	...
Gem	carats	14 137	...	...	...	...
Dust	carats	33 500 000	33 000 000	20 000 000	15 000 000	24 000 000
Diatomite	tonnes	22 891	21 396	24 364	12 946	13 178
Feldspar	tonnes	3 844	4 213	1 608	1 083	418
Fluorspar	tonnes	1 923	3 514	3 448	2 125	3 078
Gold						
Metal	kilograms	25 700	21 300	17 300	26 500	17 300
Waste & scrap	kilograms	1 400	400	1 200	200	200
Graphite	tonnes	7 611	5 521	6 004	4 971	7 229

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Gypsum						
Crude	tonnes	29 926	16 701	17 429	23 705	16 985
Calcined	tonnes	31 735	41 988	48 808	59 897	70 261
Iodine	kilograms	69 300	101 600	81 000	85 500	124 100
Iron ore	tonnes	5 425 923	...	...	5 691 360	5 783 359
Iron, steel and ferro-alloys						
Pig iron	tonnes	29 401	34 724	30 284	34 462	66 196
Sponge & powder	tonnes	11 258	10 385	14 873	12 042	10 917
Ferro-chrome	tonnes	31 129	33 710	24 412	32 874	43 438
Ferro-silico-magnesium	tonnes	969	829	877	969	627
Ferro-manganese	tonnes	18 565	24 511	37 772	34 748	39 026
Ferro-silico-manganese	tonnes	3 615	5 054	4 829	11 795	6 817
Ferro-molybdenum	tonnes	1 524	1 087	1 348	1 066	1 011
Ferro-niobium & ferro-niobium-tantalum	tonnes	361	543	781	1 669	934
Ferro-phosphorus	tonnes	1 876	990	1 023	1 645	1 433
Ferro-silicon	tonnes	18 929	20 884	23 493	36 918	47 223
Ferro-titanium & Fe-Si-Ti	tonnes	865	737	1 136	1 427	961
Ferro-tungsten & Fe-Si-W	tonnes	868	845	562	712	589
Ferro-vanadium	tonnes	1 575	622	571	643	587
Other ferro-alloys	tonnes	1 816	3 640	3 083	3 631	3 321
Silicon metal	tonnes	6 659	8 478	10 273	9 822	9 127
Ingots, blooms, billets	tonnes	183 202	163 944	120 409	99 393	156 796
Scrap	tonnes	695 834	833 909	865 061	936 512	1 017 497
Kaolin	tonnes	250 552	254 030	249 132	228 674	249 353
Lead						
Unwrought	tonnes	40 438	46 677	44 878	37 927	39 533
Scrap	tonnes	2 538	1 921	1 844	2 672	2 192
Lithium						
Carbonate	tonnes	118	114	113	118	115
Magnesite and magnesite						
Magnesite	tonnes	135 281	...	...	...	...
Magnesia	tonnes	30 013	26 220	20 545	9 325	181 050
Manganese						
Metal	tonnes	14 288	19 889	18 223	10 024	6 497
Mercury	kilograms	300	2 400	5 700	4 000	3 900
Mica	tonnes	483	570	599	899	645
Molybdenum						
Metal	tonnes	198	197	356	382	865
Nickel						
Mattes, sinters etc.	tonnes	197	552	737	401	369
Unwrought (c)	tonnes	7 296	5 150	4 554	5 251	6 772
Scrap	tonnes	620	540	641	520	632
Oxides	tonnes	765	853	609	430	293
Crude petroleum	tonnes	7 314 935	7 858 165	8 128 843	7 819 276	7 539 310
Phosphates	tonnes	...	...	...	237 605	210 010
Platinum metals						
Platinum & platinum metals	kilograms	1 600	600	2 900	9 400	9 400
Potash						
Fertiliser salts	tonnes	20 647	17 357	19 531	20 424	23 040
Chloride	tonnes	3 387	3 618	5 318	159 216	145 757
Other potassic fertilisers	tonnes	4 707	5 874	4 685	17 997	22 629
Rare earths						
Cerium compounds	tonnes	1 781	2 287	2 025	2 810	2 034
Other rare earth compounds	tonnes	3 188	5 534	3 128	3 062	3 973
Metals	tonnes	929	409	324	457	463
Salt	tonnes	122 300	59 742	92 209	206 355	350 903
Sillimanite	tonnes	1 471	3 531	2 499	2 660	1 981
Silver						
Metal	kilograms	136 700	138 500	100 900	109 300	127 600
Sulphur and pyrites						
Pyrites	tonnes	731	1 040	1 064	2 107	3 126
Sulphur	tonnes	15 346	22 055	44 365	64 198	58 218
Sulphur, sublimed & precipitated	tonnes	3 642	314	237	388	6 339
Talc	tonnes	25 441	50 199	46 833	30 831	49 930
Tantalum and niobium						
Tantalum	tonnes	2	12	3	54	64

Austria

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Tin						
Unwrought (c)	tonnes	875	838	906	702	765
Scrap	tonnes	136	186	208	174	170
Titanium						
Metal	tonnes	683	1 594	1 062	441	943
Oxides	tonnes	18 838	19 343	19 478	18 528	18 612
Tungsten						
Metal	tonnes	358	399	235	271	400
Carbide	tonnes	449	703	399	...	...
Vanadium						
Vanadiferous residues	tonnes	*27 000	*26 000	*25 000	*25 000	*27 000
Ores & concentrates	tonnes	506	527	488	459	467
Pentoxide	tonnes	2 206	1 477	1 042	(a) *400	(a) *1 000
Metal	tonnes	12	0	7	2	9
Zinc						
Unwrought	tonnes	45 015	54 380	51 331	58 968	47 866
Unwrought alloys	tonnes	16 126	22 617	23 414	24 621	31 444
Scrap	tonnes	891	1 233	1 774	1 643	2 035
Zirconium						
Concentrates	tonnes	1 684	1 127	1 526	1 206	1 486

Note(s):-

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

(b) Including anthracite

(c) Including alloys

Belgium

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel (a) (b)	tonnes	11 461 961	11 064 638	10 449 346	9 245 757	97 327 639
Crushed rock (a) (c)	tonnes	39 577 921	39 270 358	39 772 457	36 772 879	36 993 110
White arsenic	tonnes	*1 500	*1 000	*1 000	*1 000	*1 000
Cadmium	tonnes	1 148	1 236	117	—	—
Cement clinker	tonnes	1 138 528	1 121 656	1 301 790	...	...
Cement, finished	tonnes	7 510 000	7 241 000	7 103 000	6 550 000	6 216 000
Cobalt metal	tonnes	*1 110	*1 090	1 135	1 704	(d) 2 947
Copper, refined	tonnes	423 000	424 000	422 500	423 000	402 300
Pig iron	tonnes	8 471 214	7 732 111	7 988 396	7 812 593	8 224 000
Crude steel	tonnes	11 614 731	10 741 493	11 322 008	11 114 775	11 697 000
Ferro-alloys						
Ferro-vanadium	tonnes	2 194	926	1 492	...	...
Kaolin	tonnes	*300 000	*300 000	*300 000	*300 000	*300 000
Lead, refined	tonnes	119 000	100 000	88 000	65 000	62 000
Selenium metal	tonnes	*200	*200	*200	*200	*200
Sulphur and pyrites						
Recovered (e) (f)	tonnes (sulphur content)	410 000	368 000	359 000	383 000	371 000
Slab zinc	tonnes	263 800	256 400	238 700	244 400	272 500

Note(s):-

(a) Deliveries

(b) Includes silica sand

(c) Includes gravel, slag and tarred macadam

(d) Some metal production in China is recorded in Belgium

(e) From metal sulphide processing

(f) From petroleum refining and/or natural gas

Luxembourg

Production

Commodity	Units	2000	2001	2002	2003	2004
Cement clinker	tonnes	965 000	844 000	895 000	770 000	847 000
Cement, finished	tonnes	751 000	726 000	729 000	709 000	797 000
Crude steel	tonnes	2 571 243	2 724 679	2 736 000	2 675 000	2 684 000

Belgium-Luxembourg

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	17 109 102	15 784 851	15 340 439	13 562 764	13 208 283
Aluminium and bauxite						
Bauxite	tonnes	133 827	63 483	73 550	98 961	54 734
Alumina	tonnes	5 098	3 608	8 955	7 058	6 524
Unwrought	tonnes	29 754	142 931	234 880	157 800	266 682
Unwrought alloys	tonnes	31 821	41 445	52 402	40 919	42 010
Scrap	tonnes	142 861	161 980	151 468	133 871	137 374
Antimony						
Metal	tonnes	40	2	48	181	493
Oxide	tonnes	(a) *11 300	(a) *11 700	(a) *11 700	12 063	12 443
Arsenic						
Metallic arsenic	tonnes	12	29	62	27	10
Barytes	tonnes	6 177	6 707	1 781	1 424	3 646
Bentonite and fuller's earth						
Bentonite	tonnes	4 084	5 642	14 819	28 403	22 700

Belgium Luxembourg

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Bismuth						
Compounds	tonnes	1 262	1 415	...	...	...
Bromine	kilograms	25 565 000	21 200 000	21 462 800	17 930 400	21 275 800
Cadmium						
Metal	tonnes	1 956	1 525	607	1 018	746
Sulphide	tonnes	12	31	17	10	15
Cement						
Cement clinkers	tonnes	1 209 440	1 111 745	767 780	749 249	842 257
Portland cement	tonnes	1 489 343	1 432 246	1 854 749	1 815 882	1 598 742
Other cement	tonnes	788 844	840 274	687 836	592 657	616 066
Chromium						
Ores & concentrates	tonnes	16 307	17 051	9 510	5 491	2 433
Metal	tonnes	395	318	262	660	852
Coal						
Anthracite	tonnes	1 121 661	1 029 455	940 201	999 793	1 399 280
Other coal	tonnes	1 556 603	1 309 947	1 783 567	1 777 869	2 273 223
Briquettes	tonnes	18 869	15 955	43 484	19 122	...
Cobalt						
Ore	tonnes	92	104	145	381	1 064
Metal (a) (b)	tonnes	*3 300	*3 300	*3 600	*3 800	*5 000
Oxides (a) (b)	tonnes	*4 500	*3 200	*3 800	*6 900	*4 000
Copper						
Matte & cement	tonnes	2 166	631	15 222	...	493
Unwrought, unrefined	tonnes	17 675	12 322	3 537	10 521	19 942
Unwrought, refined	tonnes	199 088	240 995	201 367	336 637	169 556
Unwrought alloys	tonnes	24 856	20 265	14 815	21 710	13 556
Scrap	tonnes	152 934	136 612	127 668	152 584	169 397
Diamond						
Gem, rough	carats	125 000 000	122 500 000	...	131 000 000	154 000 000
Gem, cut	carats	3 500 000	4 500 000	8 000 000	6 500 000	6 000 000
Industrial	carats	11 500 000	8 000 000	8 000 000	10 500 000	7 000 000
Dust	carats	28 500 000	24 500 000	39 500 000	38 000 000	42 500 000
Diatomite	tonnes	1 850	3 575	3 174	1 512	1 856
Fluorspar	tonnes	1 569	298	219	22 639	4 208
Gold						
Metal	kilograms	5 100	3 200	2 000	500	1 200
Waste & scrap	kilograms	£770 000	£1 365 000	...	£1 316 000	...
Graphite	tonnes	4 848	4 878	5 653	9 097	581
Gypsum						
Crude	tonnes	76 246	104 842	59 688	64 538	91 110
Calcined	tonnes	4 859	3 998	3 628	2 556	175 496
Iodine	kilograms	1 570 900	1 908 400	2 351 000	4 904 400	3 646 100
Iron ore	tonnes	32 755	43 578	70 035	43 752	23 450
Iron, steel and ferro-alloys						
Pig iron	tonnes	180 780	116 359	172 175	227 815	225 486
Sponge & powder	tonnes	3 797	4 395	13 263	18 741	29 127
Ferro-chrome	tonnes	39 754	39 937	41 565	39 778	32 998
Ferro-silico-chrome	tonnes	...	...	3 593	10 381	7 214
Ferro-silico-magnesium	tonnes	3 271	1 171	38	79	39
Ferro-manganese	tonnes	21 737	24 367	23 985	16 246	9 621
Ferro-silico-manganese	tonnes	31 690	31 139	29 953	38 032	41 307
Ferro-molybdenum	tonnes	...	...	...	...	19 219
Ferro-silicon	tonnes	24 591	30 427	30 962	18 856	31 000
Ferro-titanium & Fe-Si-Ti	tonnes	244	29	7	6	7
Other ferro-alloys	tonnes	1 296	9 106	4 335	9 672	6 438
Silicon metal	tonnes	7 741	12 440	5 873	8 227	6 078
Ingots, blooms, billets	tonnes	615 783	498 122	548 174	395 499	368 589
Scrap	tonnes	1 974 795	1 799 938	1 821 636	2 310 658	2 851 040
Kaolin	tonnes	324 267	357 363	332 718	539 940	664 743
Lead						
Ores & concentrates	tonnes	126 905	96 613	104 187	84 545	109 580
Unwrought	tonnes	122 509	96 885	84 303	104 827	93 316
Scrap	tonnes	8 979	9 465	6 981	6 307	12 736
Lithium						
Oxides	tonnes	406	470	548	982	1 837
Carbonate	tonnes	3 549	3 392	3 935	4 000	10 053

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Magnesite and magnesite						
Magnesite	tonnes	883	276	440	7 061	512
Magnesia	tonnes	47 634	60 846	73 182	134 268	53 755
Manganese						
Ores & concentrates	tonnes	21 966	47 237	16 949	13 476	11 300
Metal	tonnes	1 652	4 129	3 216	3 091	1 377
Mercury	kilograms	...	54 100	15 900	17 000	1 300
Mica	tonnes	416	829	915	1 907	1 635
Molybdenum						
Ores & concentrates	tonnes	11 951	9 864	9 271	11 690	16 219
Metal	tonnes	802	543	199	314	221
Oxides	tonnes	132	242	1 621	820	571
Nickel						
Unwrought	tonnes	12 143	12 265	12 351	9 848	16 290
Unwrought alloys	tonnes	1 978	2 531	1 752	1 947	2 843
Scrap	tonnes	1 021	2 595	6 118	1 114	1 694
Oxides	tonnes	28	380	712	268	772
Crude petroleum	tonnes	1 417 209	328 893	2 319 755	2 263 897	2 967 608
Phosphates	tonnes	39 501	43 858	54 563	75 856	101 115
Platinum metals						
Platinum	kilograms	2 800	3 000	3 200	2 000	1 000
Platinum metals	kilograms	10 000	8 300	7 300	2 100	4 400
Waste & scrap	kilograms	517 100	762 100	319 342	239 700	245 596
Potash						
Fertiliser salts	tonnes	7 299	3 172	5 313	1 193	441
Sulphate (a)	tonnes	*346 800	*399 600	*444 600	*490 000	*521 000
Chloride	tonnes	183 220	184 145	211 383	142 227	140 950
Other potassic fertilisers	tonnes	4 537	4 561	5 803	4 756	7 993
Rare earths						
Rare earth compounds	tonnes	260	1 060	452	743	721
Ferro-cerium & other pyrophoric alloys	tonnes	37	9	7	2	0
Metals	tonnes	264	265	160	158	237
Salt	tonnes	40 176	68 728	129 726	117 806	105 680
Sillimanite	tonnes	6 081	6 368	5 783	22 825	49 319
Silver						
Ores & concentrates	kilograms	18 000	...	1 128 700	56 900	29 800
Metal	kilograms	8 600	27 300	67 500	47 600	24 100
Sulphur and pyrites						
Pyrites	tonnes	2 392	55	37	19	1
Sulphur	tonnes	12 427	41 761	44 882	40 984	36 824
Sulphur, sublimed & precipitated	tonnes	240	239	291	350	338
Talc	tonnes	86 536	81 767	86 924	92 350	128 120
Tin						
Unwrought	tonnes	8 031	7 897	8 883	7 538	8 803
Unwrought alloys	tonnes	433	338	138	171	184
Scrap	tonnes	108	116	28	601	607
Titanium						
Titanium minerals	tonnes	52 545	2 718	113 342	123 823	139 393
Metal	tonnes	986	1 348	1 296	1 214	1 031
Oxides	tonnes	312 795	286 659	314 469	348 005	397 481
Tungsten						
Metal	tonnes	255	448	259	374	404
Carbide	tonnes	31	26	21	35	39
Vanadium						
Vanadiferous residues	tonnes	5 281	4 408	3 414	3 129	...
Ores & concentrates	tonnes	...	...	218	748	1 456
Pentoxide	tonnes	49	26	46	22	9
Zinc						
Ores & concentrates	tonnes	531 616	332 101	101 157	232 845	384 652
Unwrought	tonnes	102 816	89 817	114 430	130 356	136 768
Scrap	tonnes	18 849	22 938	28 597	19 485	26 546
Zirconium						
Concentrates	tonnes	13 216	14 979	18 253	10 047	11 105
Metal	tonnes	365	193	233	163	170

Note(s):-

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

(b) Exports of cobalt are not separately recorded

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	23 372 210	23 173 017	17 771 910	19 492 423	20 219 032
Aluminium and bauxite						
Bauxite	tonnes	93 710	112 399	106 310	102 691	82 208
Alumina	tonnes	9 709	8 785	9 983	11 350	12 942
Alumina hydrate	tonnes	43 516	35 659	43 902	43 941	33 798
Unwrought	tonnes	245 989	448 703	473 246	382 266	513 835
Unwrought alloys	tonnes	185 915	151 061	196 413	217 309	235 761
Scrap	tonnes	193 631	185 465	157 885	146 723	157 812
Antimony						
Ores & concentrates	tonnes	66	6	491	6	13
Metal	tonnes	12 858	11 928	13 379	11 409	12 225
Oxide	tonnes	1 612	900	1 583	1 615	1 708
Arsenic						
Metallic arsenic	tonnes	149	73	75	90	95
Asbestos	tonnes	98	65	...	1	63
Barytes	tonnes	14 738	6 706	5 369	6 045	3 255
Bentonite and fuller's earth						
Bentonite	tonnes	23 876	24 730	27 239	33 129	35 509
Fuller's earth	tonnes	5 045	6 362	6 626	6 428	11 164
Bismuth						
Metal	tonnes	17	1	4	4	20
Bromine	kilograms	27 580 000	23 057 000	25 627 900	21 097 900	23 466 200
Cadmium						
Metal	tonnes	8 263	7 828	5 121	4 914	4 064
Sulphide	tonnes	0	46	4	18	—
Cement						
Cement clinkers	tonnes	94 978	133 317	64 453	256 355	553 911
Portland cement	tonnes	709 775	809 758	795 844	846 044	956 062
Other cement	tonnes	138 924	159 414	187 371	292 756	314 515
Chromium						
Ores & concentrates	tonnes	9 808	5 789	4 179	4 644	6 094
Metal	tonnes	557	629	664	765	821
Coal						
Anthracite	tonnes	1 040 686	1 138 122	3 412 532	3 439 165	4 134 160
Other coal	tonnes	9 702 654	9 829 971	8 263 921	8 342 288	9 728 235
Brown coal	tonnes	198 317	232 063	244 300	219 162	232 809
Briquettes	tonnes	20 372	52 887	53 715	14 717	3 924
Cobalt						
Ore	tonnes	89	50	—	67	455
Metal (a)	tonnes	*5 700	*4 600	*4 800	*7 200	*6 500
Oxides	tonnes	476	667	644	800	1 103
Copper						
Matte & cement	tonnes	74	16	—	9	4 799
Unwrought, unrefined	tonnes	215 056	148 800	209 172	291 190	291 111
Unwrought, refined	tonnes	41 047	44 050	36 907	58 266	17 318
Unwrought alloys	tonnes	3 683	3 657	1 659	1 641	1 510
Scrap	tonnes	265 246	245 104	261 567	225 822	256 504
Diamond						
Unsorted	carats	4 000 000	3 000 000	2 500 000	...	...
Gem, rough	carats	120 500 000	123 000 000	...	126 000 000	121 500 000
Gem, cut	carats	7 000 000	8 500 000	9 500 000	6 500 000	7 500 000
Industrial	carats	27 000 000	25 000 000	26 500 000	19 500 000	15 000 000
Dust	carats	62 500 000	56 500 000	72 000 000	21 000 000	26 500 000
Diatomite	tonnes	6 776	9 067	8 357	7 507	9 052
Feldspar	tonnes	25 329	25 250	24 632	30 225	30 969
Fluorspar	tonnes	10 246	13 662	11 565	33 622	10 571
Gold						
Metal	kilograms	800	2 300	3 200	9 100	12 400
Graphite	tonnes	9 847	9 948	10 638	12 414	3 301
Gypsum						
Crude	tonnes	800 514	701 760	719 403	524 938	713 502
Calcined	tonnes	350 278	329 502	322 930	290 348	366 504
Iodine	kilograms	1 501 800	2 006 900	2 357 000	4 817 700	3 419 800
Iron ore	tonnes	11 830 358	11 223 322	12 204 732	11 577 845	10 655 707

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	334 225	233 325	270 015	291 507	396 174
Sponge & powder	tonnes	47 970	8 425	13 234	26 084	107 639
Ferro-chrome	tonnes	178 130	155 561	176 217	198 691	215 638
Ferro-silico-chrome	tonnes	2 393	7 992	3 426	12 392	7 435
Ferro-silico-magnesium	tonnes	3 424	1 414	425	327	993
Ferro-manganese	tonnes	63 097	63 766	67 683	54 564	49 305
Ferro-silico-manganese	tonnes	58 256	58 555	56 769	54 676	56 622
Ferro-molybdenum	tonnes	2 748	2 355	3 573	5 141	4 317
Ferro-nickel	tonnes	32 285	36 455	42 337	32 673	51 796
Ferro-niobium	tonnes	701	849	720	719	712
Ferro-phosphorus	tonnes	816	604	769	1 124	1 237
Ferro-silicon	tonnes	59 406	67 460	73 251	63 474	93 591
Ferro-titanium & Fe-Si-Ti	tonnes	1 851	1 436	1 761	2 069	1 677
Ferro-vanadium	tonnes	241	331	182	412	568
Other ferro-alloys	tonnes	1 524	4 791	8 591	5 186	9 673
Silicon metal	tonnes	14 238	12 750	14 985	15 579	15 136
Ingots, blooms, billets	tonnes	3 530 375	2 631 575	2 383 948	3 894 592	2 814 705
Scrap	tonnes	2 727 227	2 740 480	3 146 151	3 896 924	4 413 160
Kaolin	tonnes	470 979	467 193	607 908	890 277	1 023 999
Lead						
Ores & concentrates	tonnes	117 528	101 613	115 471	80 203	117 597
Unwrought	tonnes	28 653	30 894	27 490	20 874	27 042
Scrap	tonnes	32 043	38 002	25 527	28 028	26 904
Lithium						
Oxides	tonnes	793	784	1 159	1 197	(a) *2 000
Carbonate	tonnes	5 542	5 136	5 879	5 086	6 108
Magnesite and magnesia						
Magnesite	tonnes	8 732	12 733	2 547	7 167	505
Magnesia	tonnes	67 637	90 663	73 514	151 590	65 125
Manganese						
Ores & concentrates	tonnes	78 179	106 749	72 216	79 645	73 953
Metal	tonnes	5 884	8 136	5 413	4 480	2 466
Mercury	kilograms	21 000	18 000	22 600	29 200	54 700
Mica						
Unmanufactured	tonnes	29	...	276	89	1 588
Ground	tonnes	1 138	1 033	1 359	3 223	4 311
Molybdenum						
Ores & concentrates	tonnes	19 268	19 527	24 746	36 903	45 922
Metal	tonnes	374	1 196	277	179	277
Oxides	tonnes	388	635	730	2 702	1 519
Nickel						
Mattes, sinters etc.	tonnes	213	33	216	61	162
Unwrought	tonnes	31 107	33 851	32 016	41 648	42 387
Unwrought alloys	tonnes	460	682	488	636	979
Scrap	tonnes	835	2 577	2 611	828	1 644
Oxides	tonnes	341	292	326	497	366
Crude petroleum	tonnes	32 114 347	38 628 736	37 490 772	42 731 484	34 210 727
Phosphates	tonnes	1 304 103	1 395 630	1 668 206	1 664 247	1 545 478
Platinum metals						
Platinum	kilograms	...	500	...	100	200
Platinum metals	kilograms	...	500	200	200	200
Waste & scrap	kilograms	£54 153 000	£129 469 000	...	...	...
Potash						
Fertiliser salts	tonnes	33 302	22 677	23 295	24 355	26 328
Sulphate	tonnes	179 570	183 131	203 971	213 779	212 176
Chloride	tonnes	1 105 179	1 014 654	1 175 981	1 163 936	1 276 732
Other potassic fertilisers	tonnes	20 398	18 801	19 044	21 700	22 357
Rare earths						
Cerium compounds	tonnes	572	831	639	843	615
Other rare earth compounds	tonnes	78	375	126	143	287
Ferro-cerium & other pyrophoric alloys	tonnes	55	89	30	6	7
Metals	tonnes	287	279	225	195	226
Salt	tonnes	3 675 526	3 285 692	3 411 148	1 895 987	1 236 192
Sillimanite	tonnes	13 899	10 972	10 499	29 333	53 146

Belgium Luxembourg

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Silver						
Metal	kilograms	928 500	875 300	652 200	735 100	476 800
Sulphur and pyrites						
Sulphur, crude	tonnes	182 044	162 134	155 665	152 598	152 830
Sulphur, refined	tonnes	207 656	277 195	218 830	241 917	305 518
Sulphur, sublimed & precipitated	tonnes	16 252	178	25	103	28
Talc	tonnes	104 074	105 971	115 112	124 455	135 046
Tantalum and niobium						
Tantalum	tonnes	121	1	7	41	20
Tin						
Unwrought	tonnes	983	1 050	1 223	490	1 686
Unwrought alloys	tonnes	2 128	2 208	2 464	2 737	3 421
Scrap	tonnes	4 186	3 312	4 756	4 816	5 726
Titanium						
Ilmenite	tonnes	18 612	71	9 889	11 632	...
Other titanium minerals	tonnes	115 497	56 785	132 921	164 624	165 288
Titanium slag	tonnes	29 418	44 909	41 594	...	...
Metal	tonnes	1 341	1 791	1 516	1 712	1 868
Oxides	tonnes	224 621	224 507	271 627	272 441	339 444
Tungsten						
Metal	tonnes	384	405	279	404	372
Carbide	tonnes	36	39	70	51	42
Vanadium						
Vanadiferous residues	tonnes	911	1 286	...	...	...
Ores & concentrates	tonnes	...	...	483	1 379	1 116
Pentoxide	tonnes	3 142	2 142	2 981	57	3
Metal	tonnes	18	32	501	238	32
Zinc						
Ores & concentrates	tonnes	879 412	824 825	864 008	1 189 103	1 410 560
Unwrought	tonnes	233 203	233 322	236 971	244 081	261 216
Unwrought alloys	tonnes	2 049	910	4 767	2 649	13 872
Scrap	tonnes	55 556	50 156	60 893	42 424	42 534
Zirconium						
Concentrates	tonnes	7 954	5 657	13 267	5 178	3 991
Metal	tonnes	477	670	483	533	534

Note(s):-

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

Bulgaria

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	*3 500 000	*3 500 000	*3 500 000	3 710 186	3 333 000
Asbestos	tonnes	66	—	—	—	—
Barytes	tonnes	*120 000	*120 000	*110 000	*90 000	*90 000
Bentonite and fuller's earth						
Bentonite	tonnes	173 534	171 092	211 500	145 500	224 900
Bismuth, mine	tonnes (metal content)	*40	*40	*40	*40	*40
Cadmium	tonnes	331	333	345	307	356
Coal						
Anthracite & bituminous	tonnes	118 200	115 000	122 000	53 000	170 000
Brown coal & lignite	tonnes	26 182 769	26 095 516	26 433 500	27 641 000	26 455 000
Cement, finished	tonnes	2 209 000	2 088 000	2 137 000	2 100 000	2 100 000
Copper, mine	tonnes (metal content)	93 200	97 100	84 400	80 240	79 600
Copper, smelter	tonnes	163 000	134 700	167 000	199 300	227 200
Copper, refined	tonnes	32 500	34 500	40 700	45 900	55 300
Feldspar	tonnes	22 000	23 000	*34 000	*35 000	*35 000
Fluorspar	tonnes	200	300	—	—	—
Gold, mine	kilograms (metal content)	1 720	1 700	2 612	2 270	2 431
Gypsum	tonnes	169 571	166 838	156 400	165 500	176 000
Iron ore	tonnes	588 800	324 800	373 000	466 100	83 000
Pig iron	tonnes	1 220 000	1 211 000	1 072 000	1 386 000	1 200 000
Crude steel	tonnes	2 022 000	1 972 000	1 860 000	1 950 000	2 106 000
Ferro-alloys						
Ferro-silicon	tonnes	*8 000	*8 000	*8 000	*8 000	*8 000
Kaolin	tonnes	*150 000	*140 000	*150 000	*120 000	*190 000
Lead, mine	tonnes (metal content)	13 700	18 500	19 800	19 950	18 970
Lead, refined	tonnes	84 100	83 000	71 000	74 000	69 000
Manganese ore	tonnes	—	1 515	4	4 200	27 800
Perlite	tonnes	16 700	12 300	10 500	16 800	8 500
Crude petroleum	tonnes	42 456	33 888	33 000	27 900	30 000
Natural gas	million m ³	12	21	11	11	333
Salt	tonnes	1 700 000	1 931 000	1 800 000	1 882 000	1 800 000
Silver, mine	kilograms (metal content)	54 534	56 806	60 000	*60 000	*60 000
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	209 000	203 000	245 000	260 000	118 000
Recovered (b)	tonnes (sulphur content)	30 000	30 000	30 000	30 000	25 000
Zinc, mine	tonnes (metal content)	10 100	10 600	12 900	13 000	15 548
Slab zinc	tonnes	84 000	88 000	83 000	86 800	101 500

Note(s):-

(1) Bulgaria is believed to produce chromite, fluorspar, magnesite and platinum group metals

(a) From metal sulphide processing

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	122 745	123 942	227 464	214 135	384 420
Aluminium and bauxite						
Unwrought (a)	tonnes	506	647	2 172	1 994	4 629
Scrap	tonnes	21 721	18 352	22 994	21 838	22 036
Asbestos	tonnes	...	36	9	0	83
Barytes	tonnes	125 440	131 137	123 224	91 215	75 393
Bentonite and fuller's earth						
Bentonite	tonnes	165 354	160 332	121 868	102 263	95 435
Cadmium						
Metal	tonnes	286	374	337	344	378
Cement						
Cement clinkers	tonnes	286 078	397 914	435 202	602 632	392 414
Portland cement	tonnes	752 124	643 158	485 972	568 083	460 281
Other cement	tonnes	1 665	240	2 729	22 625	50

Bulgaria

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Copper						
Ores & concentrates	tonnes	97 589	96 065	83 032	72 861	78 563
Matte & cement	tonnes	...	1 291	4 233	4 356	6 718
Unwrought	tonnes	(b) *223 800	151 681	173 720	218 482	219 415
Scrap	tonnes	(b) *10 200	8 736	9 459	9 507	9 480
Gypsum						
Crude & calcined	tonnes	...	2 841	2 406	1 868	2 231
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	2 779	4 225	5 088	8 045	5 646
Ingots, blooms, billets	tonnes	102 033	410 940	111 719	355 397	277 332
Scrap	tonnes	386 591	375 118	459 322	572 559	769 559
Kaolin	tonnes	155 429	115 257	113 538	124 396	114 399
Lead						
Unwrought	tonnes	72 777	68 749	58 789	61 799	54 686
Manganese						
Ores & concentrates	tonnes	21 104	832	...	6 402	42 122
Molybdenum						
Metal	tonnes	...	...	37	49	546
Platinum metals						
Waste & scrap (b)	kilograms	*34 500	*28 500	*35 800	*17 500	*24 000
Salt	tonnes	2 423	1 898	4 938	2 625	8 586
Sulphur and pyrites						
Sulphur	tonnes	10 862	17 274	25 306	21 478	20 103
Zinc						
Unwrought (a)	tonnes	(b) *89 700	73 362	70 967	74 801	89 287

Note(s):-

(a) Including alloys

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

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	10 339	13 069	17 160	24 578	20 303
Aluminium and bauxite						
Unwrought (a)	tonnes	13 105	19 069	22 890	28 194	35 515
Antimony						
Metal	tonnes	60	50	48	52	47
Asbestos	tonnes	139	271	160	50	196
Bentonite and fuller's earth	tonnes	...	550	653	511	1 089
Cement						
Cement clinkers	tonnes	...	...	3 088	3 815	23 048
Portland cement	tonnes	8 690	7 864	7 491	33 810	51 493
Coal						
Anthracite	tonnes	1 448 415	1 928 500	1 173 622	1 396 246	1 464 605
Other coal	tonnes	1 818 322	1 758 266	2 315 367	3 038 589	2 784 512
Copper						
Ores & concentrates	tonnes	244 823	316 840	281 687	454 875	561 613
Unwrought	tonnes	7 879	15 655	8 392	3 880	8 599
Scrap	tonnes	1 699	919	1 919	2 722	2 935
Diatomite	tonnes	1 141	1 198	8 478	1 139	1 292
Feldspar	tonnes	18 920	22 072	21 852	23 367	30 805
Fluorspar	tonnes	19 232	22 601	1 296	2 143	1 882
Graphite	tonnes	174	223	210	492	420
Gypsum						
Crude	tonnes	46 566	33 737	47 984	38 119	49 426
Calcined	tonnes	10 342	9 692	17 476	22 615	35 558
Iodine	kilograms	2 591	5 319	4 636	11 250	6 755
Iron ore						
Iron ore	tonnes	1 552 620	1 359 466	1 302 809	1 850 563	1 570 605
Burnt pyrites	tonnes	...	2 666	1 307	128 640	357 898

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	44 989	21 281	16 304	45 935	14 228
Ferro-manganese	tonnes	5 596	4 707	2 047	5 152	5 116
Other ferro-alloys	tonnes	6 531	7 256	4 440	9 232	7 441
Silicon metal	tonnes	...	...	137	232	663
Ingots, blooms, billets	tonnes	...	62 056	7 951	116 005	280 895
Scrap	tonnes	84 179	55 376	43 260	74 445	90 491
Kaolin	tonnes	26 072	26 805	28 486	36 360	75 425
Lead						
Ores & concentrates	tonnes	88 338	83 051	52 368	64 751	74 163
Unwrought	tonnes	...	2 252	2 218	1 759	5 558
Scrap	tonnes	...	1 714	2 800	816	441
Magnesite and magnesia	tonnes	6 905	5 463	6 544	5 815	6 354
Manganese						
Ores & concentrates	tonnes	315	8 612	1 125	234 401	46 768
Phosphates	tonnes	341 800	393 280	490 935	550 013	515 889
Potash						
Potassic fertilisers	tonnes	20 717	25 284	11 724	3 453	4 725
Salt	tonnes	125 322	105 676	125 613	116 840	138 631
Talc	tonnes	...	455	404	465	487
Titanium						
Oxides	tonnes	...	2 646	2 448	3 156	3 332
Zinc						
Ores & concentrates	tonnes	145 588	124 895	120 409	149 957	167 098
Unwrought (a)	tonnes	...	2 299	3 049	4 146	4 285

Note(s):-

(a) Including alloys

Croatia

Production

Commodity	Units	2000	2001	2002	2003	2004
Bentonite and fuller's earth						
Bentonite	tonnes	10 013	10 580	12 102	13 568	16 000
Gypsum	tonnes	150 765	130 861	145 000	166 340	148 000
Crude steel	tonnes	70 999	57 993	33 851	43 380	78 000
Ferro-alloys						
Ferro-chrome	tonnes	15 753	361	—	—	—
Crude petroleum	tonnes	907 154	1 120 797	1 108 434	1 052 121	1 005 000
Natural gas	million m ³	1 768	2 009	2 122	2 190	2 201
Salt	tonnes	33 668	32 585	30 483	32 533	23 000
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	9 000	7 000	7 069	7 471	9 000

Note(s):-

(a) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Aluminium and bauxite						
Bauxite	tonnes	21 015	5 981	3 869	1 478	566
Scrap	tonnes	8 033	8 311	10 187	10 914	12 024
Copper						
Scrap	tonnes	7 265	6 506	7 001	7 497	9 613
Gypsum						
Crude & calcined	tonnes	23 301	20 032	28 318	...	...
Iron, steel and ferro-alloys						
Ferro-chrome	tonnes	15 468	—	434	...	...
Scrap	tonnes	106 021	133 451	197 532	235 322	279 852
Kaolin	tonnes	3 080	2 620	5 319	4 362	351
Lead						
Scrap	tonnes	590	809	749	750	853
Crude petroleum	tonnes	5 685	15 001	1	...	20 000
Salt	tonnes	1 508	1 609	4 242	5 530	9 226
Sulphur and pyrites						
Sulphur	tonnes	7 152	6 386	7 150	7 505	8 505

Imports

Commodity	Units	2000	2001	2002	2003	2004
Aluminium and bauxite						
Bauxite	tonnes	62 267	76 243	42 464	71 335	48 302
Unwrought	tonnes	(a) 31 487	(a) 32 087	32 229	21 289	47 437
Unwrought alloys	tonnes	...	...	8 326	7 329	9 672
Asbestos	tonnes	2 586	2 666	3 274	1 958	3 251
Barytes	tonnes	299	111	1 803	1 053	1 878
Bentonite and fuller's earth						
Bentonite	tonnes	7 138	10 094	14 571	1 238	2 181
Chromium						
Ores & concentrates	tonnes	15 705	908	287	341	459
Metal	tonnes	...	6	160	200	279
Coal						
Hard coal	tonnes	806 241	642 574	281 298	1 034 849	1 218 407
Lignite	tonnes	80 303	84 520	34 807	69 679	79 921
Briquettes	tonnes	22 405	18 278	65 401	22 828	2 981
Diatomite	tonnes	631	1 232	928	809	703
Feldspar	tonnes	6 578	10 491	10 609	11 894	13 713

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Fluorspar	tonnes	161	155	164	152	204
Gold						
Metal	kilograms	...	...	1 316	5 034	1 193
Gypsum						
Crude	tonnes	2 066	25 633	28 326	35 732	14 974
Calcined	tonnes	18 294	20 046	29 147	33 419	37 499
Iron, steel and ferro-alloys						
Pig iron	tonnes	10 449	12 560	14 124	14 821	15 175
Ferro-alloys	tonnes	2 313	1 706	2 265	2 421	2 980
Silicon metal	tonnes	357	438	391	350	510
Ingots, blooms, billets	tonnes	23 638	22 673	13 527	18 523	3 562
Scrap	tonnes	8 099	7 569	3 937	5 361	7 156
Kaolin	tonnes	5 513	6 357	6 046	6 303	6 472
Lead						
Unwrought	tonnes	2 365	841	1 635	988	1 460
Magnesite and magnesia	tonnes	666	764	949	1 006	1 479
Manganese						
Metal	tonnes	49	58	57	50	93
Crude petroleum	tonnes	3 835 167	4 012 709	4 009 452	3 776 305	4 197 554
Phosphates	tonnes	233 427	173 144	177 728	181 534	245 224
Platinum metals						
Platinum & platinum metals	kilograms	649	2 989	604	...	839
Potash						
Chloride	tonnes	168 656	144 977	124 881	146 692	168 015
Salt	tonnes	85 873	84 219	139 989	164 046	165 277
Silver						
Metal	kilograms	4 292	4 573	4 000	*3 500	3 340
Sulphur and pyrites						
Sulphur	tonnes	65 234	53 025	39 190	46 017	63 606
Sulphur, sublimed & precipitated	tonnes	278	299	1 738	3 611	4 817
Talc	tonnes	1 055	1 397	1 587	1 531	1 726
Tin						
Unwrought (a)	tonnes	74	114	89	95	67
Titanium						
Oxides	tonnes	1 922	2 142	2 081	2 327	2 401
Zinc						
Unwrought (a)	tonnes	2 340	2 816	3 006	5 324	3 516

Note(s):-

(a) Including alloys

Cyprus

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Crushed rock	tonnes	8 800 000	9 300 000	10 500 000	10 700 000	11 600 000
Bentonite and fuller's earth						
Bentonite	tonnes	167 000	127 000	128 400	144 859	155 717
Cement clinker	tonnes	...	...	212 459	56 034	68 865
Cement, finished	tonnes	1 398 000	1 368 800	1 438 160	1 636 879	1 688 917
Copper, mine	tonnes (metal content)	5 200	4 600	3 700	2 500	—
Copper, refined	tonnes	5 088	4 604	3 695	2 552	1 344
Gypsum	tonnes	260 000	250 000	295 000	300 000	255 000

Exports

Commodity	Units	2000	2001	2002	2003	2004
Aluminium and bauxite						
Unwrought	tonnes	15 477	6 236	1 028	381	316
Scrap	tonnes	1 813	5 003	2 813	80	3 699
Bentonite and fuller's earth						
Bentonite	tonnes	71 060	80 714	81 388	71 460	81 596
Cement						
Cement clinkers	tonnes	121 080	96 709	245 656	200 461	31 215
Portland cement	tonnes	413 406	316 758	201 542	196 173	146 669
Copper						
Unwrought	tonnes	5 105	5 015	3 697	2 610	1 322
Scrap	tonnes	1 895	1 307	2 808	20 041	...
Gold						
Metal	kilograms	10	28	28	56	41
Gypsum						
Crude & calcined	tonnes	143 474	209 179	169 213	184 389	215 297
Iron, steel and ferro-alloys						
Scrap	tonnes	17 341	26 839	38 154	41 926	46 316
Lead						
Scrap	tonnes	2 371	1 965	1 874	2 073	1 711
Salt	tonnes	530	236	1 729	508	559

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	4 112	3 104	1 870	3 201	(a) *8 400
Aluminium and bauxite						
Unwrought alloys	tonnes	6 885	6 749	7 629	7 697	10 858
Bentonite and fuller's earth	tonnes	1 790	11 060	24 260	20 519	...
Cement						
Cement clinkers	tonnes	...	5 550	17 144	74 627	28 622
Portland cement	tonnes	685	1 636	2 926	2 496	2 092
Coal	tonnes	57 607	85 931	71 734	21	...
Fluorspar	tonnes	...	496	7 607	8 901	5
Gold						
Metal	kilograms	2 037	1 223	938	4 561	313
Iodine	kilograms	11 529	17 000	29 894	8 685	226
Kaolin	tonnes	3 712	369	380	487	299
Lead						
Unwrought	tonnes	1 927	2 359	2 367	918	317
Crude petroleum	tonnes	1 154 746	1 048 256	1 143 649	838 280	417 475
Platinum metals						
Platinum & platinum metals	kilograms	415	110	40	35	78
Salt	tonnes	9 002	11 616	10 530	14 053	8 650

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Silver						
Metal	kilograms	11 631	9 624	8 614	8 461	5 135
Sulphur and pyrites						
Sulphur	tonnes	1 300	1 222	939	1 370	1 226
Talc	tonnes	186	181	202	255	242
Titanium						
Oxides	tonnes	881	859	1 032	1 172	1 172

Note(s):-

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

Czech Republic

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	12 218 945	11 916 192	12 248 595	15 267 650	15 703 358
Crushed rock	tonnes	18 304 260	20 301 407	23 643 644	27 934 515	28 846 776
Bentonite and fuller's earth						
Bentonite	tonnes	280 000	224 000	174 000	199 000	201 000
Cement clinker	tonnes	3 540 600	2 441 353	2 102 275	...	...
Cement, finished	tonnes	4 092 820	3 590 689	3 249 155	3 502 103	3 828 677
Coal						
Bituminous	tonnes	17 028 000	14 808 000	14 097 000	13 382 000	14 648 000
Lignite	tonnes	453 000	507 000	501 000	470 000	450 000
Brown coal	tonnes	50 610 000	51 036 000	48 834 000	49 920 000	47 840 000
Diatomite	tonnes	6 800	6 000	5 600	3 800	3 800
Feldspar	tonnes	337 000	373 000	401 000	421 000	488 000
Graphite	tonnes	23 000	17 000	16 000	9 000	5 000
Gypsum	tonnes	82 000	24 000	108 000	104 000	71 000
Pig iron	tonnes	4 621 500	4 670 700	4 839 880	5 207 000	5 385 000
Crude steel	tonnes	6 215 800	6 315 900	6 511 970	6 783 000	7 033 000
Ferro-alloys						
Ferro-vanadium	tonnes	*2 500	*2 500	*3 000	*3 000	*3 500
Kaolin (a)	tonnes	564 000	562 000	562 000	582 000	639 000
Lead, refined	tonnes	28 700	30 500	*30 500	*30 000	*30 000
Crude petroleum	tonnes	168 000	178 000	253 000	310 000	299 000
Natural gas	million m ³	118	101	91	131	175
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	45 000	40 000	40 000	45 000	60 000
Uranium, mine	tonnes (metal content)	498	490	477	458	435

Note(s):-

(a) Beneficiated

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	584 161	555 449	417 503	464 898	344 850
Aluminium and bauxite						
Unwrought (a)	tonnes	47 454	38 362	34 611	43 045	48 698
Scrap	tonnes	26 241	30 520	33 636	33 410	43 223
Barytes	tonnes	566	535	986	895	616
Bentonite and fuller's earth						
Bentonite	tonnes	32 853	46 823	32 002	17 439	62 012
Cadmium						
Metal	tonnes	141	87	0	0	0
Cement						
Cement clinkers	tonnes	413 013	213 960	77 171	44 410	91 626
Portland cement	tonnes	1 027 462	618 868	350 341	506 588	576 531
Other cement	tonnes	53 298	33 244	38 341	11 476	3 216
Chromium						
Metal	tonnes	1	1	88	338	364
Coal						
Hard coal (b)	tonnes	5 885 403	5 712 522	5 680 003	5 668 451	5 706 798
Lignite	tonnes	2 732 595	2 977 065	1 770 888	1 082 961	1 072 275
Briquettes	tonnes	155 398	168 874	188 383	191 650	160 823
Copper						
Unwrought	tonnes	5 615	1 909	1 712	978	7 834
Scrap	tonnes	37 390	39 516	38 121	36 874	53 086
Diatomite	tonnes	5 976	5 493	5 288	5 083	4 734
Feldspar	tonnes	85 931	131 699	122 206	133 868	143 941
Fluorspar	tonnes	13 658	9 442	8 131	23 471	10 073
Gold						
Metal	kilograms	3 573	4 431	5 468	5 113	12 247
Waste & scrap	kilograms	811	1 373	2 453	24 224	31
Graphite	tonnes	2 712	2 621	3 487	4 058	3 924

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Gypsum						
Crude	tonnes	68 115	39 414	87 247	92 133	90 750
Calcined	tonnes	11 083	6 674	3 967	4 718	5 563
Iodine	kilograms	1 000	...	267	330	537
Iron, steel and ferro-alloys						
Pig iron	tonnes	32 820	25 352	28 844	50 125	55 687
Ferro-chrome	tonnes	1 190	2 300	287	77	1 016
Ferro-vanadium	tonnes	2 940	2 195	2 949	3 012	3 417
Other ferro-alloys	tonnes	3 165	2 412	4 445	6 630	12 098
Silicon metal	tonnes	915	816	859	778	4 488
Ingots, blooms, billets	tonnes	262 130	250 740	287 557	249 522	267 912
Scrap	tonnes	987 452	1 000 515	1 057 822	1 178 514	1 930 343
Kaolin	tonnes	442 934	455 089	443 674	441 545	483 636
Lead						
Unwrought	tonnes	9 200	6 786	5 724	7 112	7 230
Scrap	tonnes	4 152	3 750	3 346	2 926	3 059
Magnesite and magnesite	tonnes	(c) *4 400	702	59	1 924	3 790
Mercury	kilograms	19 000	12 000	16 542	9 970	22 172
Nickel						
Unwrought (a)	tonnes	71	42	211	186	967
Scrap	tonnes	218	237	219	417	525
Oxides	tonnes	231	126	159	358	296
Crude petroleum	tonnes	110 672	118 714	129 275	155 258	64 315
Platinum metals						
Platinum & platinum metals	kilograms	...	...	79 408	(c) *22 000	(c) *47 000
Waste & scrap	kilograms	(c) *34 000	(c) *86 900	2 818	5 316	4 158
Salt	tonnes	13 252	7 135	7 768	10 490	12 986
Silver						
Metal	kilograms	...	...	140 057	171 398	291 519
Sulphur and pyrites						
Sulphur	tonnes	4 294	2 398	7 410	10 087	9 787
Sulphur, sublimed & precipitated	tonnes	5 875	3 069	118	134	1 581
Tantalum and niobium						
Tantalum	tonnes	276	106	40	55	84
Tin						
Unwrought (a)	tonnes	20	38	20	66	191
Titanium						
Metal	tonnes	32	59	82	239	191
Oxides	tonnes	29 376	26 626	34 258	33 354	37 673
Tungsten						
Metal	tonnes	372	413	251	108	133
Zinc						
Unwrought (a)	tonnes	2 865	1 619	1 253	1 670	5 659
Scrap	tonnes	2 750	2 267	2 325	2 247	2 976

Note(s):-

(a) Including alloys

(b) Including anthracite

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

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	258 575	261 199	237 868	206 018	509 217
Aluminium and bauxite						
Bauxite	tonnes	12 013	15 212	15 391	13 871	20 922
Alumina	tonnes	17 095	24 771	22 117	23 142	26 898
Alumina hydrate	tonnes	10 935	9 960	11 981	12 767	17 215
Unwrought	tonnes	41 552	43 792	64 108	66 747	75 289
Unwrought alloys	tonnes	64 904	76 779	78 849	82 823	90 688
Scrap	tonnes	34 678	26 013	23 986	24 336	28 542
Antimony						
Metal	tonnes	2	53	76	45	14
Oxide	tonnes	429	548	626	365	557

Czech Republic

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Arsenic						
Metallic arsenic	tonnes	20	18	24	20	8
Asbestos	tonnes	1 402	2 322	785	1 464	2 891
Barytes	tonnes	9 230	10 594	10 754	8 448	8 782
Bentonite and fuller's earth						
Bentonite	tonnes	12 887	15 410	12 623	11 795	19 852
Fuller's earth	tonnes	637	595	547	702	564
Bismuth						
Metal	tonnes	35	26	42	56	64
Cadmium						
Sulphide	tonnes	21	36	11	20	19
Cement						
Cement clinkers	tonnes	144	147	6 792	76 152	167 711
Portland cement	tonnes	1 168 974	1 278 439	748 672	1 044 234	1 105 823
Other cement	tonnes	106 403	104 981	83 286	28 197	24 799
Chromium						
Ores & concentrates	tonnes	11 821	15 054	11 655	10 674	11 365
Metal	tonnes	35	12	14	66	60
Coal (b)	tonnes	1 094 508	1 202 901	1 216 954	1 280 903	1 694 815
Cobalt						
Metal	tonnes	34	41	35	54	81
Oxides	tonnes	32	37	32	25	33
Copper						
Unwrought	tonnes	14 288	18 434	12 110	6 326	5 644
Scrap	tonnes	3 133	2 759	1 656	2 080	5 601
Diamond						
Unsorted	carats	£245 000	£156 000	£128 000	£187 000	£791 000
Gem, rough	carats	£47 000	£141 000	£158 000	...	...
Gem, cut	carats	£398 000	£226 000	£382 000	£802 000	£626 000
Industrial	carats	£297 000	£430 000	£568 000	£360 000	£163 000
Dust	carats	£702 000	£943 000	£886 000	£858 000	£776 000
Diatomite	tonnes	1 895	1 695	1 647	1 562	1 969
Feldspar	tonnes	7 658	7 226	7 975	7 388	8 785
Fluorspar	tonnes	31 903	27 785	18 182	16 628	28 408
Gold						
Metal	kilograms	1 845	1 402	1 288	1 596	1 957
Waste & scrap	kilograms	360	392	175	338	1 911
Graphite	tonnes	975	1 518	1 476	2 765	3 663
Gypsum						
Crude	tonnes	8 628	9 523	14 790	20 266	29 328
Calcined	tonnes	22 307	23 410	23 899	32 810	43 894
Iodine	kilograms	21 000	24 000	18 819	29 637	31 428
Iron ore	tonnes	6 932 742	6 891 369	6 811 707	8 221 566	7 636 968
Iron, steel and ferro-alloys						
Pig iron	tonnes	66 334	91 906	90 568	72 151	88 014
Sponge & powder	tonnes	724	670	5 739	21 478	5 661
Ferro-chrome	tonnes	44 880	39 975	43 181	13 193	16 248
Ferro-manganese	tonnes	17 569	20 716	21 055	24 154	27 051
Ferro-silico-manganese	tonnes	22 291	25 660	26 130	55 989	59 361
Ferro-molybdenum	tonnes	898	1 157	1 054	1 346	1 710
Ferro-silicon	tonnes	20 666	20 640	20 570	26 721	34 812
Ferro-vanadium	tonnes	283	278	250	225	395
Other ferro-alloys	tonnes	6 638	8 092	7 851	8 745	9 817
Silicon metal	tonnes	4 099	2 832	2 713	4 095	8 401
Ingots, blooms, billets	tonnes	188 542	272 751	263 839	268 231	352 672
Scrap	tonnes	182 992	347 858	372 348	506 094	593 330
Kaolin	tonnes	17 649	19 514	12 791	15 466	14 034
Lead						
Unwrought	tonnes	52 886	58 777	56 941	55 699	73 472
Magnesite and magnesite						
Magnesite	tonnes	1 522	4 362	3 516	5 528	5 973
Magnesia	tonnes	34 156	33 375	32 090	34 377	42 226
Manganese						
Ores & concentrates	tonnes	10 436	7 314	11 507	11 966	11 663
Metal	tonnes	244	206	376	386	593
Mercury	kilograms	3 000	1 000	1 875	2 531	7 300
Mica	tonnes	707	890	926	764	879

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Molybdenum						
Metal	tonnes	39	45	29	42	66
Nickel						
Unwrought (a)	tonnes	1 758	2 231	1 825	2 158	2 574
Oxides	tonnes	251	177	236	465	712
Crude petroleum	tonnes	5 819 443	6 004 685	5 548 002	7 380 375	6 530 733
Phosphates	tonnes	45 473	48 539	27 955	24 299	24 282
Platinum metals						
Platinum & platinum metals	kilograms	...	...	1 147	5 249	51 832
Potash						
Potassic fertilisers	tonnes	98 553	92 242	83 492	78 801	111 694
Rare earths						
Rare earth compounds	tonnes	...	...	212	177	92
Salt	tonnes	649 768	602 712	622 455	681 134	909 966
Sillimanite	tonnes	4 049	3 785	2 673	3 480	3 779
Silver						
Metal	kilograms	...	...	173 805	238 756	422 971
Sulphur and pyrites						
Sulphur	tonnes	68 252	56 621	51 922	52 784	34 787
Sulphur, sublimed & precipitated	tonnes	46 615	45 665	39 772	49 164	70 159
Talc	tonnes	8 659	9 082	9 299	10 278	9 426
Tantalum and niobium						
Tantalum	tonnes	250	147	128	168	261
Tin						
Unwrought (a)	tonnes	556	592	531	635	550
Titanium						
Titanium minerals	tonnes	75 502	78 515	60 976	74 709	53 570
Metal	tonnes	189	111	372	620	800
Oxides	tonnes	3 970	4 394	4 307	5 462	6 773
Tungsten						
Metal	tonnes	184	136	65	73	116
Vanadium						
Pentoxide	tonnes	5 495	5 172	4 162	4 898	5 429
Metal	tonnes	40	...	0	0	0
Zinc						
Unwrought (a)	tonnes	27 724	27 142	26 929	28 748	34 205
Zirconium						
Concentrates	tonnes	3 459	3 480	2 911	2 105	1 605
Metal	tonnes	617	486	580	348	32

Note(s):-

(a) Including alloys

(b) Including anthracite

Denmark

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	59 000 000	55 200 000	53 300 000	50 800 000	57 300 000
Crushed rock	tonnes	400 000	330 000	390 000	380 000	372 000
Bentonite and fuller's earth						
Bentonite	tonnes	...	12 166	14 539	16 303	18 352
Cement clinker	tonnes	102 719	102 571	152 636	61 909	52 758
Cement, finished	tonnes	2 536 080	2 575 512	2 544 868	2 580 427	2 892 831
Diatomite						
Moler (a)	tonnes	189 000	192 000	211 000	221 000	188 000
Crude steel	tonnes	803 000	746 000	392 000	—	—
Crude petroleum	tonnes	18 175 000	17 378 000	18 494 000	18 341 000	19 448 000
Natural gas	million m ³	7 751	7 930	7 947	7 555	8 946
Salt	tonnes	586 500	587 000	*590 000	*600 000	*600 000
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	4 041	3 981	4 386	4 751	4 660

Note(s):-

(1) Denmark is believed to produce kaolin

(2) In addition to the countries producing sillimanite minerals, synthetic mullite is known to be produced in Denmark

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

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	959 352	1 112 789	880 032	736 820	795 330
Aluminium and bauxite						
Alumina	tonnes	4 141	3 481	4 520	4 556	7 112
Unwrought alloys	tonnes	23 333	26 092	23 363	17 538	14 019
Scrap	tonnes	34 292	48 753	45 342	36 738	55 407
Bentonite and fuller's earth						
Bentonite	tonnes	5 113	10 911	14 601	16 821	17 279
Cement						
Cement clinkers	tonnes	90 394	101 949	97 886	65 962	85 967
Portland cement	tonnes	1 152 612	1 220 484	1 259 988	1 164 923	1 127 638
Other cement	tonnes	12 766	17 458	12 697	11 947	13 535
Chromium						
Metal	tonnes	637	964	57	521	661
Coal						
Hard coal	tonnes	112 533	100 160	97 862	6 665	7 380
Copper						
Scrap	tonnes	38 978	39 979	37 058	39 487	38 573
Diatomite	tonnes	*85 000	*80 000	*90 000	*90 000	*90 000
Gold						
Metal	kilograms	1 297	854	4 979	894	...
Waste & scrap	kilograms	7 028	7 789	807	343	1
Gypsum						
Crude	tonnes	23 909	86 764	110 317	83 754	81 318
Calcined	tonnes	353 548	141 866	155 843	65 842	13 837
Iron, steel and ferro-alloys						
Ingots, blooms, billets	tonnes	143 030	59 258	21 432	8 119	16 223
Scrap	tonnes	658 353	770 311	1 058 048	1 310 175	1 564 469
Kaolin	tonnes	1 045	1 050	688	583	461
Lead						
Unwrought	tonnes	2 186	3 090	3 048	3 011	1 930
Scrap	tonnes	1 959	1 864	1 338	1 885	1 805
Mercury	kilograms	126	865	3 642	10 554	27 458
Nickel						
Scrap	tonnes	322	280	190	593	777
Crude petroleum	tonnes	11 393 325	11 645 846	13 073 624	13 015 898	14 324 704
Platinum metals						
Platinum & platinum metals	kilograms	295	751	115	208	...

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Salt	tonnes	367 871	327 344	340 177	376 794	350 587
Silver						
Metal	kilograms	12 445	17 229	13 532	...	...
Sulphur and pyrites						
Sulphur	tonnes	2 406	1 044	1 182	1 598	2 608
Tin						
Scrap	tonnes	113	94	90	110	178
Titanium						
Metal	tonnes	56	170	120	185	166
Oxides	tonnes	569	1 128	1 000	578	1 304
Tungsten						
Metal	tonnes	29	10	37	13	26
Vanadium						
Vanadium-titanium pig iron	tonnes	125	134	193	...	...
Zinc						
Scrap	tonnes	7 351	7 178	9 263	5 543	2 336

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	2 308 202	2 124 031	2 299 752	2 632 665	2 949 549
Aluminium and bauxite						
Bauxite	tonnes	11 178	20 077	6 140	11 297	13 801
Alumina	tonnes	17 027	18 897	20 228	17 896	23 666
Unwrought (a)	tonnes	45 418	48 723	61 538	65 386	75 233
Scrap	tonnes	20 371	163 573	52 460	41 373	39 949
Barytes	tonnes	33 413	46 013	53 153	39 341	36 133
Bentonite and fuller's earth						
Bentonite	tonnes	36 017	40 261	43 666	46 516	37 253
Fuller's earth	tonnes	228	183	41	40	107
Cement						
Cement clinkers	tonnes	2	10	4 033	23 222	22 506
Portland cement	tonnes	252 378	238 654	274 440	185 757	187 982
Other cement	tonnes	21 963	33 903	29 067	30 501	33 913
Chromium						
Ores & concentrates	tonnes	294	512	1 496	920	614
Metal	tonnes	64	19	63	106	90
Coal						
Anthracite	tonnes	89 167	81 874	120 888	92 434	77 502
Other coal	tonnes	6 435 687	6 916 611	6 087 316	9 126 099	7 487 269
Copper						
Unwrought	tonnes	2 825	2 600	2 560	2 324	2 065
Scrap	tonnes	10 673	12 798	12 564	18 332	16 446
Diatomite	tonnes	5 993	5 728	7 175	6 744	5 001
Feldspar	tonnes	3 740	5 753	4 698	3 904	3 878
Fluorspar	tonnes	2 144	1 238	6 971	12 406	16 005
Gold						
Metal	kilograms	2 729	911	796	...	...
Waste & scrap	kilograms	1 578	842	62	57	46
Graphite	tonnes	613	707	355	567	478
Gypsum						
Crude	tonnes	283 266	256 834	223 666	282 006	283 604
Calcined	tonnes	7 080	8 952	34 509	36 882	38 650
Iodine	kilograms	11 451	24 614	19 000	21 037	9 080
Iron ore						
Burnt pyrites	tonnes	59 326	47 038	60 659	52 806	81 071

Denmark

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	148 640	112 108	59 866	5 678	14 844
Sponge & powder	tonnes	1 436	1 943	14 155	6 471	103 479
Ferro-manganese	tonnes	3 735	3 497	1 674	16	38
Ferro-silico-manganese	tonnes	5 284	6 079	2 071	...	...
Ferro-silicon	tonnes	2 768	2 479	337	2 495	3 564
Other ferro-alloys	tonnes	2 522	13 822	784	459	712
Silicon metal	tonnes	2 410	1 686	2 179	1 521	1 061
Ingots, blooms, billets	tonnes	4 351	11 604	75 117	588 317	598 552
Scrap	tonnes	279 695	326 574	325 841	237 035	250 551
Kaolin	tonnes	18 505	19 369	34 441	20 987	13 056
Lead						
Unwrought	tonnes	3 364	3 447	2 073	816	2 072
Scrap	tonnes	2 032	1 535	2 489	2 237	2 366
Magnesite and magnesia						
Magnesite	tonnes	2 841	1 204	1 085	2 499	1 984
Magnesia	tonnes	4 803	4 770	3 731	2 297	2 575
Manganese						
Metal	tonnes	79	76	115	152	164
Mercury	kilograms	587	1 276	796	260	403
Mica	tonnes	254	241	408	305	369
Nickel						
Unwrought (a)	tonnes	157	202	114	96	112
Crude petroleum	tonnes	5 664 799	2 853 538	3 193 530	3 517 270	3 725 978
Phosphates	tonnes	76 537	44 643	57 813	80 114	30 425
Platinum metals						
Platinum & platinum metals	kilograms	740	381	530	...	1 324
Waste & scrap	kilograms	4	77	...	4	1
Potash						
Sulphate	tonnes	15 981	11 689	7 028	14 654	18 006
Chloride	tonnes	160 991	135 815	146 234	166 236	119 153
Other potassic fertilisers	tonnes	11 746	12 535	13 373	11 254	13 099
Salt	tonnes	245 086	255 671	317 692	376 122	440 020
Sillimanite	tonnes	2 842	3 518	2 726	3 414	2 274
Silver						
Metal	kilograms	23 506	19 137	13 512	*7 000	...
Sulphur and pyrites						
Sulphur	tonnes	8 000	9 358	8 616	8 210	7 883
Talc	tonnes	13 476	13 156	16 577	14 407	14 085
Titanium						
Metal	tonnes	823	891	737	745	778
Oxides	tonnes	20 517	20 799	23 967	21 022	22 269
Tungsten						
Metal	tonnes	109	5	15	5	103
Zinc						
Unwrought	tonnes	12 244	10 537	11 031	10 761	10 813
Unwrought alloys	tonnes	2 428	5 070	3 030	1 647	1 548
Scrap	tonnes	363	203	80	52	27

Note(s):-

(a) Including alloys

Estonia

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	2 100 000	2 300 000	1 650 400	1 973 700	2 344 900
Crushed rock	tonnes	2 300 000	1 800 000	4 571 100	4 082 700	5 426 600
Cement, finished	tonnes	329 100	404 600	465 900	506 200	614 600
Lead, refined	tonnes	—	—	—	—	3 000

Notes:

(1) Small amounts of steel are believed to be produced in Estonia

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	280 181	282 172	376 987	469 343	487 863
Aluminium and bauxite						
Unwrought (a)	tonnes	2 309	3 744	6 095	11 986	5 479
Scrap	tonnes	16 144	9 994	9 108	9 712	8 062
Cement						
Cement clinkers	tonnes	342 685	277 012	163 887	157 353	113 105
Portland cement	tonnes	123 965	183 156	176 923	172 223	209 168
Chromium						
Metal	tonnes	318	200	12	148	...
Coal						
Hard coal (b)	tonnes	48 021	33 648	37 954	5 875	...
Cobalt						
Metal	tonnes	58	49	—	143	12
Copper						
Scrap	tonnes	8 819	7 981	7 285	6 857	6 479
Gold						
Waste & scrap	kilograms	4 389	8 044	9 895	8 812	...
Iron, steel and ferro-alloys						
Pig iron (c)	tonnes	*65 500	*700	*500	...	...
Ferro-chrome	tonnes	18 804	2 283	—	5 695	...
Other ferro-alloys	tonnes	3 639	4 269	10 270	17 725	1 193
Silicon metal	tonnes	20 052	21	1	...	...
Scrap	tonnes	502 495	380 328	326 407	376 554	358 185
Lead						
Scrap	tonnes	278	459	437	520	1 414
Manganese						
Metal	tonnes	820	490	923	1 320	...
Mercury	kilograms	...	...	2 476	2 500	...
Molybdenum						
Metal	tonnes	106	76	1	47	1
Nickel						
Mattes, sinters etc.	tonnes	1 011	938	0	86	...
Unwrought (a)	tonnes	412	619	—	999	...
Scrap	tonnes	224	1 587	195	108	296
Crude petroleum (c)	tonnes	*555 000	*1 031 000	*648 000	*283 000	*321 000
Platinum metals						
Waste & scrap	kilograms	176 740	216 839	41 383	3 706	3 981
Rare earths						
Rare earth compounds	tonnes	27	784	4 156	2 129	1 064
Metals	tonnes	...	5	...	30	14
Silver						
Metal	kilograms	378	83	364	...	13
Tantalum and niobium						
Tantalum	tonnes	8	1	...	25	39
Tin						
Scrap	tonnes	592	54	18	8	7
Titanium						
Metal	tonnes	83	145	316	336	188
Tungsten						
Ores & concentrates	tonnes	224	71	2	127	...
Metal	tonnes	287	307	4	196	1

Estonia

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Zinc						
Scrap	tonnes	1 426	1 429	1 408	1 612	1 146
Zirconium						
Metal	tonnes	65	...	—	0	0

Note(s):-

(a) Including alloys

(b) Including anthracite

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

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	396 002	380 156	669 205	464 516	456 144
Aluminium and bauxite						
Alumina	tonnes	2 927	1 757	270	854	1 586
Unwrought (a)	tonnes	57 168	6 047	6 086	10 428	5 859
Asbestos	tonnes	180	58	61	...	...
Cement						
Portland cement	tonnes	33 161	44 989	31 847	36 438	16 827
Other cement	tonnes	2 878	572	451	634	3
Chromium						
Metal	tonnes	317	204	0	140	8
Coal						
Hard coal (b)	tonnes	149 092	126 569	59 183	60 731	44 399
Cobalt						
Metal	tonnes	42	30	0	138	17
Gold						
Metal	kilograms	110	...	58	2 570	74
Gypsum						
Crude & calcined	tonnes	15 852	13 236	20 355	23 314	80 834
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	16 033	12 273	9 905	16 840	2 132
Silicon metal	tonnes	19 378	649	946	1 827	574
Scrap	tonnes	265 312	28 995	17 142	35 654	85 689
Manganese						
Metal	tonnes	847	821	155	1 201	401
Molybdenum						
Metal	tonnes	128	102	0	43	4
Nickel						
Mattes, sinters etc.	tonnes	962	1 779	1 075	1 696	46
Unwrought (a)	tonnes	427	691	315	1 328	163
Scrap	tonnes	289	1 641	211	100	331
Platinum metals						
Waste & scrap	kilograms	5 040	8 171	8 790	7 250	...
Potash						
Potassic fertilisers	tonnes	16 660	24 891	*18 000	19 986	23 469
Rare earths						
Rare earth compounds	tonnes	0	3	609	1 734	3 208
Salt	tonnes	71 313	72 431	78 085	78 883	78 849
Silver						
Metal	kilograms	8 175	8 089	9 575	8 892	10 512
Tin						
Unwrought	tonnes	83	301	...	12	16
Titanium						
Metal	tonnes	47	57	302	234	113
Oxides	tonnes	1 085	1 273	1 090	1 082	235
Tungsten						
Ores & concentrates	tonnes	132	68	—	121	...
Metal	tonnes	277	408	2	130	3
Zinc						
Unwrought (a)	tonnes	528	498	...	10 578	17 468
Scrap	tonnes	5 449	6 568	5 245	4 473	191

Note(s):-

(a) Including alloys

(b) Including anthracite

Finland

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel (a)	tonnes	11 186 871	*12 000 000	9 772 057	13 123 935	16 008 858
Crushed rock (a)	tonnes	*36 000 000	*36 000 000	47 398 339	55 351 492	50 701 404
Cadmium	tonnes	683	604	400	—	—
Cement, finished (a)	tonnes	1 421 959	1 324 705	1 198 423	1 186 000	1 295 000
Chromium ores and concentrates	tonnes	628 414	575 126	566 090	549 000	580 000
Cobalt metal	tonnes	7 700	8 100	8 240	7 989	7 893
Copper, mine	tonnes (metal content)	11 500	11 600	14 400	14 900	15 500
Copper, smelter	tonnes	155 431	169 251	160 896	160 596	151 647
Copper, refined	tonnes	114 000	115 500	126 016	135 713	132 384
Feldspar	tonnes	38 609	36 145	39 552	59 362	44 495
Gold, mine	kilograms (metal content)	1 600	1 700	1 300	*1 000	*1 100
Pig iron	tonnes	2 982 787	2 851 821	2 828 275	3 092 051	3 036 566
Crude steel	tonnes	4 096 389	3 938 122	4 002 914	4 766 203	4 832 427
Ferro-alloys						
Ferro-chrome	tonnes	260 605	236 000	248 000	250 000	264 492
Lead, mine	tonnes (metal content)	380	—	—	—	—
Mercury	kilograms	76 100	71 200	50 600	25 000	23 500
Mica	tonnes	10 035	8 983	7 170	9 337	9 225
Nickel, mine	tonnes (metal content)	*4 300	*3 000	*3 500	*3 700	*4 000
Nickel, smelter/refinery	tonnes	54 429	54 600	55 348	50 989	49 580
Phosphate rock	tonnes	751 291	767 020	799 814	799 339	838 000
Selenium metal	tonnes	37	42	37	52	65
Silver, mine	kilograms (metal content)	*10 000	*11 000	*15 000	*20 000	*20 000
Sulphur and pyrites						
Pyrites	tonnes (sulphur content)	360 000	260 000	235 000	276 200	283 700
Recovered (b)	tonnes (sulphur content)	293 241	311 430	307 924	304 044	301 226
Recovered (c)	tonnes (sulphur content)	46 000	46 000	55 000	61 000	65 000
Talc	tonnes	502 000	476 620	477 229	501 658	528 943
Wollastonite	tonnes	17 000	18 399	17 400	17 300	16 763
Zinc, mine	tonnes (metal content)	16 100	20 100	34 100	38 800	37 200
Slab zinc	tonnes	222 900	248 800	235 300	265 900	284 525

Note(s):-

(1) Finland is believed to produce arsenic

(a) Sales

(b) From metal sulphide processing

(c) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	635 614	581 353	879 966	446 404	422 709
Aluminium and bauxite						
Unwrought (a)	tonnes	40 730	33 670	23 544	18 568	17 261
Scrap	tonnes	8 529	7 913	15 189	16 720	22 946
Bentonite and fuller's earth						
Bentonite	tonnes	21 923	15 891	10 286	1 132	188
Cadmium						
Metal	tonnes	834	682	34	0	...
Cement						
Portland cement	tonnes	4 412	872	633	837	11 449
Chromium						
Ores & concentrates	tonnes	282	354	281	612	708
Cobalt						
Metal	tonnes	3 976	(b) *3 600	(b) *3 900	(b) *4 100	(b) *5 200
Oxides	tonnes	3 256	(b) *3 500	(b) *3 700	(b) *3 400	(b) *2 100
Copper						
Unwrought, unrefined	tonnes	41 580	51 804	43 523	33 180	25 618
Unwrought, refined	tonnes	16 735	19 935	37 256	34 333	27 650
Unwrought alloys	tonnes	847	1 382	1 002	724	903
Scrap	tonnes	16 557	14 032	16 462	19 693	23 543

Finland

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Feldspar	tonnes	28 985	32 570	30 444	33 632	42 612
Gold						
Waste & scrap	kilograms	1 302	912	762	929	368
Gypsum						
Crude & calcined	tonnes	4 177	4 710	5 026	981	440
Iron, steel and ferro-alloys						
Ferro-chrome	tonnes	...	...	...	33 496	35 780
Ferro-chrome & ferro-silico-chrome	tonnes	43 887	82 590	80 026	33 499	*35 780
Ingots, blooms, billets	tonnes	144 538	130 066	186 989	501 945	624 170
Scrap	tonnes	394 218	362 373	359 153	374 778	315 977
Kaolin	tonnes	6 915	7 561	10 698	10 032	8 111
Lead						
Scrap	tonnes	12 653	811	338	159	884
Mercury	kilograms	82 808	77 627	54 859	25 530	23 462
Mica	tonnes	8 331	7 362	5 514	8 099	7 511
Nickel						
Ores & concentrates	tonnes	25 804	30 711	11 939	1 459	—
Unwrought	tonnes	28 504	36 815	39 367	37 416	36 458
Scrap	tonnes	218	50	118	...	26
Oxides	tonnes	1 664	...	(b) *2 000	(b) *600	(b) *700
Phosphates	tonnes	0	...	40	1 626	16 375
Potash						
Sulphate (b)	tonnes	*6 900	*14 000	*33 300	*51 300	*34 900
Other potassic fertilisers	tonnes	...	4 368	3 075	710	1 094
Silver						
Ores & concentrates	kilograms	571 820	220 037	530 720	357 250	507 350
Metal	kilograms	12 708	20 207	6 886	6 882	9 804
Sulphur and pyrites						
Pyrites (b)	tonnes	*288 100	*250 700	*282 000	*266 000	*276 000
Talc (b)	tonnes	*213 000	*135 000	*120 000	*227 000	*276 000
Tin						
Unwrought alloys	tonnes	17	91	33	9	46
Scrap	tonnes	173	83	104	126	86
Titanium						
Metal	tonnes	311	109	26	30	22
Oxides (b)	tonnes	*83 900	*128 700	*127 000	*84 000	*90 000
Tungsten						
Metal	tonnes	11	28	49	67	91
Zinc						
Unwrought	tonnes	176 366	175 402	186 916	212 125	235 735
Unwrought alloys	tonnes	360	206	105	97	436
Scrap	tonnes	6 668	8 159	7 324	5 195	2 281

Note(s):-

(a) Including alloys

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

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	43 312	44 785	29 163	47 702	75 016
Aluminium and bauxite						
Bauxite	tonnes	3 848	3 544	3 790	6 027	4 782
Alumina	tonnes	2 179	2 204	2 042	1 904	2 220
Alumina hydrate	tonnes	36 424	41 950	44 570	24 958	37 361
Unwrought	tonnes	20 721	21 586	13 704	3 534	3 295
Unwrought alloys	tonnes	31 299	28 948	24 253	33 174	37 999
Scrap	tonnes	30 155	29 829	30 310	23 445	18 901
Antimony						
Oxide	tonnes	215	269	238	238	248
Barytes	tonnes	2 644	2 537	3 070	3 119	3 559
Bentonite and fuller's earth						
Bentonite	tonnes	30 609	50 898	27 758	26 569	27 321
Fuller's earth	tonnes	42	60	207	212	322

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Bromine	kilograms	114 000	92 000	57 054	56 506	71 251
Cement						
Cement clinkers	tonnes	150 391	95 591	7 265	67 297	28 129
Portland cement	tonnes	342 793	333 868	382 160	438 363	423 958
Other cement	tonnes	24 434	8 722	8 669	9 654	9 344
Chromium						
Ores & concentrates	tonnes	6 288	7 174	4 294	6 050	6 092
Metal	tonnes	42	174	87	190	164
Coal						
Hard coal (b)	tonnes	5 072 701	6 174 441	5 788 973	10 145 037	8 283 891
Cobalt						
Ore	tonnes	66 618	61 785	64 274	41 707	80 202
Oxides	tonnes	—	1	4	45	126
Copper						
Ores & concentrates	tonnes	468 557	503 460	500 798	543 488	528 930
Unwrought, refined	tonnes	9 631	5 489	347	82	11
Unwrought alloys	tonnes	4 474	3 899	3 796	4 311	2 778
Scrap	tonnes	7 576	3 624	3 190	2 472	1 735
Diamond						
Unsorted	carats	0	35 000	...	...	55 000
Gem, cut	carats	105 000	160 000	...	...	235 000
Industrial	carats	125 000	20 000	...	...	...
Dust	carats	...	345 000	445 000	365 000	320 000
Diatomite	tonnes	2 738	2 996	5 871	6 981	5 881
Feldspar	tonnes	734	742	352	104	257
Fluorspar	tonnes	11 969	10 892	10 089	18 672	17 069
Gold						
Metal	kilograms	1 294	1 677	1 132	1 230	1 332
Waste & scrap	kilograms	...	...	46 928	90 780	67 582
Graphite	tonnes	649	411	281	197	168
Gypsum						
Crude	tonnes	281 183	292 833	286 347	231 517	278 645
Calcined	tonnes	31 374	7 725	7 682	7 066	7 010
Iodine	kilograms	4 928	4 491	9 000	4 879	27 020
Iron ore	tonnes	3 917 135	3 916 207	3 791 710	4 212 158	3 921 507
Iron ore						
Burnt pyrites	tonnes	0	56	13 132	26 163	63
Iron, steel and ferro-alloys						
Pig iron	tonnes	32 759	42 707	72 083	41 213	30 453
Sponge & powder	tonnes	16 983	12 235	16 335	28 412	16 906
Ferro-chrome	tonnes	3 828	5 073	5 690	9 395	6 562
Ferro-manganese	tonnes	12 840	13 199	12 744	16 237	15 805
Ferro-silico-manganese	tonnes	28 682	29 989	32 832	41 466	40 800
Ferro-molybdenum	tonnes	1 764	1 873	2 333	2 776	2 709
Ferro-nickel	tonnes	51 634	61 421	61 244	71 996	60 213
Ferro-niobium	tonnes	469	426	485	494	470
Ferro-phosphorus	tonnes	217	221	139	506	570
Ferro-silicon	tonnes	15 500	18 928	20 729	37 976	32 507
Ferro-titanium & Fe-Si-Ti	tonnes	833	1 271	1 271	1 632	2 063
Ferro-vanadium	tonnes	171	175	222	238	250
Other ferro-alloys	tonnes	2 521	4 767	3 162	3 640	4 448
Silicon metal	tonnes	3 622	3 007	2 397	1 601	2 097
Ingots, blooms, billets	tonnes	323 548	448 017	350 229	196 611	253 730
Scrap	tonnes	465 528	482 372	476 516	781 633	865 142
Kaolin	tonnes	1 493 786	1 355 460	1 207 343	1 305 240	1 301 806
Lead						
Unwrought	tonnes	3 425	1 825	3 032	2 753	2 582
Scrap	tonnes	181	287	137	139	41
Magnesite and magnesite						
Magnesia	tonnes	14 770	12 856	10 159	17 096	11 567
Manganese						
Ores & concentrates	tonnes	25 093	10 538	36 014	9 983	20 381
Metal	tonnes	4 896	259	997	717	547
Mercury	kilograms	77	177	158	214	554
Mica	tonnes	1 118	1 818	2 621	3 664	2 861
Molybdenum						
Ores & concentrates	tonnes	3 591	3 296	3 581	4 868	5 603

Finland

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Nickel						
Ores & concentrates	tonnes	217 154	250 973	178 968	146 122	169 170
Mattes, sinters etc.	tonnes	26 654	30 946	57 571	51 225	42 944
Unwrought (a)	tonnes	5 880	9 809	14 977	24 289	24 307
Scrap	tonnes	379	31	90	200	1 332
Oxides	tonnes	0	48	6 093	0	11
Crude petroleum	tonnes	11 616 731	10 951 956	11 745 754	12 019 477	12 249 366
Phosphates	tonnes	72 966	46 352	55 716	55 555	57 184
Platinum metals						
Platinum & platinum metals	kilograms	425	248	296	773	231
Potash						
Chloride (c)	tonnes	149 400	168 200	156 100	177 100	156 100
Salt	tonnes	427 247	366 217	447 703	395 727	408 367
Sillimanite	tonnes	168	298	338	299	302
Silver						
Metal	kilograms	87 460	89 015	87 543	56 470	75 350
Sulphur and pyrites						
Sulphur	tonnes	38 785	35 387	26 123	19 575	8 238
Talc	tonnes	4 881	4 027	3 251	3 971	1 827
Tin						
Unwrought (a)	tonnes	127	199	149	151	126
Titanium						
Metal	tonnes	250	112	84	107	258
Oxides	tonnes	8 808	9 007	10 335	11 390	13 163
Tungsten						
Metal	tonnes	100	119	113	169	119
Zinc						
Ores & concentrates	tonnes	448 698	422 274	433 196	436 345	479 603
Scrap	tonnes	2 424	1 882	2 030	2 511	395

Note(s):-

(a) Including alloys

(b) Including anthracite

(c) K₂O content

France

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	180 570 000	175 150 000	167 970 000	165 470 000	168 080 000
Crushed rock	tonnes	218 670 000	221 600 000	215 290 000	217 400 000	223 170 000
Bauxite	tonnes	185 000	174 000	170 000	168 000	168 000
Alumina	tonnes (Al ₂ O ₃ content)	508 000	*510 000	*500 000	*510 000	*510 000
Primary aluminium	tonnes	441 100	461 000	463 000	444 000	447 000
White arsenic	tonnes	*1 000	*1 000	*1 000	*1 000	*1 000
Barytes	tonnes	92 000	81 000	85 200	81 100	81 000
Bromine	kilograms	7 909 000	*8 000 000	*8 000 000	*8 000 000	*8 000 000
Cadmium	tonnes	160	176	154	*120	*120
Cement clinker	tonnes	16 323 000	16 503 000	16 479 000	16 313 000	17 157 000
Cement, finished	tonnes	19 720 000	19 839 000	19 437 000	19 655 000	20 962 000
Coal						
Anthracite & bituminous	tonnes	3 166 000	1 972 000	1 483 000	1 728 000	708 000
Lignite	tonnes	296 000	324 000	147 000	9 000	—
Diatomite	tonnes	*75 000	*75 000	*75 000	*75 000	*75 000
Feldspar	tonnes	642 000	720 000	659 000	654 000	628 000
Fluorspar	tonnes	114 400	123 000	122 000	90 000	70 000
Gold, mine	kilograms (metal content)	2 643	2 512	1 724	1 470	—
Gypsum	tonnes	*4 500 000	*4 500 000	*3 500 000	*3 500 000	*3 500 000
Iron ore	tonnes	31 319	36 587	21 367	—	—
Pig iron	tonnes	13 506 955	11 884 224	13 093 042	12 615 893	13 087 705
Crude steel	tonnes	20 742 738	19 190 552	20 258 473	19 757 864	20 770 252
Ferro-alloys						
Ferro-manganese & spiegeleisen	tonnes	409 169	414 200	416 569	*300 000	*106 000
Ferro-silico-manganese	tonnes	32 773	65 248	66 215	*107 000	*64 000
Ferro-silicon	tonnes	*110 000	*100 000	*100 000	*100 000	*100 000
Silicon metal	tonnes	94 127	89 896	84 768	*85 000	*85 000
Kaolin	tonnes	385 000	377 000	339 000	335 000	316 000
Lead, refined	tonnes	263 200	231 400	203 400	91 000	89 000
Primary magnesium metal	tonnes	16 500	4 800	2 000	—	—
Mica (a)	tonnes	21 000	15 000	17 000	18 000	19 000
Nickel, smelter/refinery	tonnes	12 300	13 036	11 444	11 370	12 103
Crude petroleum	tonnes	1 417 568	1 382 646	1 316 890	1 219 000	1 138 000
Natural gas	million m ³	1 883	1 809	1 751	1 523	1 325
Potash						
Potassic salts	tonnes (K ₂ O content)	321 000	244 000	128 000	—	—
Salt						
Rock salt	tonnes	536 000	596 000	434 000	320 000	406 000
Brine salt	tonnes	1 476 000	1 452 000	1 456 000	1 409 000	1 433 000
Salt in brine	tonnes	3 306 000	4 023 000	4 056 000	4 351 000	4 371 000
Sea salt	tonnes	1 294 000	1 536 000	848 000	1 302 000	1 365 000
Sillimanite minerals						
Andalusite	tonnes	63 000	61 000	59 000	62 000	68 000
Silver, mine	kilograms (metal content)	723	929	709	495	682
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	801 600	840 000	795 600	710 400	698 400
Recovered (c)	tonnes (sulphur content)	*250 000	*260 000	229 000	196 000	196 000
Talc	tonnes	409 000	417 000	359 000	394 000	402 000
Uranium, mine	tonnes (metal content)	319	194	12	—	—
Slab zinc	tonnes	318 100	328 900	333 300	257 000	260 000

Note(s):-

- (1) France may produce fuller's earth
- (2) In addition to the countries producing sillimanite minerals, synthetic mullite is known to be produced in France
- (3) Significant quantities of germanium are believed to be recovered from imported or domestic material

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

(b) From petroleum refining and/or natural gas

(c) Other

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	12 787 965	12 547 219	11 154 637	10 116 439	9 389 763
Aluminium and bauxite						
Bauxite	tonnes	25 619	4 157	14 013	253	2 985
Alumina	tonnes	129 376	166 329	167 309	188 951	232 762
Alumina hydrate	tonnes	68 272	117 496	103 258	125 437	144 331
Unwrought	tonnes	81 992	78 306	81 601	63 659	70 010
Unwrought alloys	tonnes	75 453	72 663	75 069	75 318	78 047
Scrap	tonnes	247 753	248 291	274 551	257 279	299 226
Antimony						
Metal	tonnes	292	60	104	8	79
Oxide	tonnes	5 156	3 715	3 391	4 352	4 540
Arsenic						
Metallic arsenic	tonnes	7	22	...	0	...
Asbestos	tonnes	46	59	...	5	31
Barytes (a)	tonnes	*61 200	*61 000	*30 200	*55 500	*74 500
Bentonite and fuller's earth						
Bentonite	tonnes	37 805	23 580	20 343	18 966	7 696
Fuller's earth	tonnes	2 609	267	34	—	10
Bismuth						
Compounds	tonnes	52	12	...	...	...
Metal	tonnes	31	28	26	46	28
Cadmium						
Metal	tonnes	2 533	3 614	1 232	794	604
Cement						
Cement clinkers	tonnes	395 426	491 760	555 646	479 952	460 364
Portland cement	tonnes	655 260	686 872	549 756	604 494	785 100
Other cement	tonnes	127 464	120 320	157 945	144 523	112 828
Chromium						
Ores & concentrates	tonnes	2 658	2 129	2 835	2 879	2 928
Metal	tonnes	5 990	6 634	5 056	4 498	7 182
Coal						
Anthracite	tonnes	1 240	15 698	26 834	9 324	1 077
Other coal	tonnes	87 494	69 544	94 865	74 343	93 265
Cobalt						
Metal	tonnes	...	733	516	502	675
Oxides	tonnes	209	114	64	69	221
Copper						
Unwrought	tonnes	12 421	27 912	15 723	32 947	60 745
Unwrought alloys	tonnes	13 776	11 581	9 283	6 585	11 940
Scrap	tonnes	203 291	190 041	192 020	180 294	243 074
Diamond						
Unsorted	carats	£990 000	£1 320 000	£283 000	£398 000	£274 000
Gem, cut	carats	£64 500 000	£80 140 000	£91 166 000	£44 616 000	£108 858 000
Industrial	carats	£1 084 000	£3 438 000	£2 554 000	£16 848 000	£20 000
Dust	carats	1 000 000	50 000	1 000 000	...	...
Diatomite	tonnes	35 585	28 149	27 647	30 199	26 043
Feldspar	tonnes	296 491	385 161	290 340	286 371	219 741
Fluorspar	tonnes	35 342	38 023	47 439	18 519	12 002
Gold						
Metal	kilograms	17 300	31 900	29 700	34 600	31 500
Waste & scrap	kilograms	47 100	77 800	40 800	33 700	70 500
Graphite	tonnes	614	178	...	167	122
Gypsum						
Crude	tonnes	463 092	478 877	427 138	335 780	324 894
Calcined	tonnes	276 847	282 629	286 568	297 326	311 437
Iodine	kilograms	27 100	74 900	107 000	30 900	30 500
Iron ore	tonnes	21 148	38 116	16 649	43 473	38 413

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	520	4 426	3 378	153	679
Sponge & powder	tonnes	7 864	6 895	5 983	6 231	5 221
Ferro-chrome	tonnes	5 965	2 478	3 747	1 456	1 074
Ferro-silico-magnesium	tonnes	5 929	5 714	6 521	5 262	5 521
Ferro-manganese	tonnes	19 275	26 049	26 302	28 094	14 360
Ferro-silico-manganese	tonnes	15 750	62 877	73 647	53 270	63 483
Ferro-molybdenum	tonnes	530	410	348	300	538
Ferro-nickel	tonnes	872	712	104	2	7
Ferro-niobium	tonnes	735	784	361	926	521
Ferro-silicon	tonnes	50 247	43 956	53 682	65 871	65 881
Ferro-titanium & Fe-Si-Ti	tonnes	1 123	1 842	1 434	1 463	1 305
Ferro-vanadium	tonnes	70	21	25	50	53
Other ferro-alloys	tonnes	36 008	45 650	35 746	37 534	34 781
Ingots, blooms, billets	tonnes	2 447 574	2 621 568	3 419 270	3 420 829	3 833 258
Scrap	tonnes	4 537 161	4 161 312	4 656 513	4 990 462	5 578 148
Kaolin	tonnes	348 868	290 332	325 323	1 613 484	484 554
Lead						
Unwrought	tonnes	76 757	62 680	60 095	12 868	6 182
Scrap	tonnes	20 275	21 979	23 473	27 789	27 003
Lithium						
Oxides	tonnes	90	19	10	7	4
Carbonate	tonnes	2 819	3 130	2 955	2 382	1 166
Magnesite and magnesite						
Magnesite	tonnes	11 743	9 561	14 126	23 037	37 930
Manganese						
Ores & concentrates (b)	tonnes	303 274	382 914	413 461	332 067	272 815
Metal	tonnes	431	261	168	424	745
Mercury	kilograms	11 400	12 500	7 100	6 800	93 800
Mica	tonnes	4 649	2 836	4 387	114 464	14 323
Molybdenum						
Metal	tonnes	161	93	65	15	436
Oxides	tonnes	27	11	20	27	31
Nickel						
Unwrought	tonnes	9 950	9 094	7 460	8 396	9 203
Unwrought alloys	tonnes	1 187	434	294	542	1 455
Scrap	tonnes	7 190	9 134	6 625	8 306	6 618
Oxides	tonnes	387	551	24	359	1 140
Crude petroleum	tonnes	134 324	55 631	90 903	91 091	39
Phosphates	tonnes	1 523	2 536	1 488	1 018	6 362
Platinum metals						
Platinum	kilograms	5 800	6 900	5 300	3 800	2 800
Platinum metals	kilograms	14 400	7 000	4 600	3 400	5 200
Waste & scrap	kilograms	76 100	91 300	107 500	35 400	44 182
Potash						
Sulphate	tonnes	576	508	740	860	8 248
Chloride	tonnes	97 419	134 868	95 248	41 600	19 459
Other potassic fertilisers	tonnes	44 925	988	536	660	1 271
Rare earths						
Rare earth compounds	tonnes	1 151	638	314	1 660	8 588
Ferro-cerium & other pyrophoric alloys	tonnes	129	105	94	109	125
Metals	tonnes	33	26	231	58	65
Salt	tonnes	452 653	423 727	437 847	497 458	506 431
Sillimanite	tonnes	48 687	56 510	46 454	49 958	51 653
Silver						
Metal	kilograms	532 500	658 600	584 600	465 300	404 600
Sulphur and pyrites						
Sulphur, crude	tonnes	444 447	559 527	385 326	382 273	481 226
Sulphur, refined	tonnes	4 959	1 354	10 988	16 851	16 076
Sulphur, sublimed & precipitated	tonnes	818	753	764	652	562
Talc	tonnes	229 681	191 750	222 699	226 550	262 147
Tantalum and niobium						
Tantalum	tonnes	59	32	207	3	20
Tin						
Unwrought	tonnes	282	350	354	577	430
Unwrought alloys	tonnes	378	627	659	612	527
Scrap	tonnes	1 612	1 484	618	279	457

France

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Titanium						
Metal	tonnes	5 081	5 636	4 180	3 722	4 086
Oxides	tonnes	198 541	180 271	199 744	180 080	172 796
Tungsten						
Metal	tonnes	2 755	911	624	538	571
Carbide	tonnes	394	366	348	241	251
Vanadium						
Pentoxide	tonnes	13	10	8	183	138
Metal	tonnes	16	0	0	0	26
Zinc						
Ores & concentrates	tonnes	44 107	18 305	17 775	37 167	38 779
Unwrought	tonnes	111 730	127 252	143 307	109 839	115 352
Unwrought alloys	tonnes	29 963	30 971	31 535	31 625	35 879
Scrap	tonnes	41 599	42 470	33 611	38 294	56 440
Zirconium						
Concentrates	tonnes	754	657	1 126	653	1 129

Note(s):-

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

(b) Including manganiferous iron ore

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	9 710 939	9 295 683	9 666 340	8 239 025	9 431 953
Aluminium and bauxite						
Bauxite	tonnes	1 569 306	1 667 959	1 347 713	1 786 905	1 507 504
Alumina	tonnes	460 901	785 981	670 046	704 393	644 513
Alumina hydrate	tonnes	98 719	46 522	43 727	44 743	41 187
Unwrought	tonnes	190 495	182 477	148 344	165 490	144 053
Unwrought alloys	tonnes	337 271	324 411	325 980	324 997	369 795
Scrap	tonnes	150 091	145 422	133 794	149 876	143 833
Antimony						
Ores & concentrates	tonnes	8	223	6	5	11
Metal	tonnes	8 345	6 854	6 645	5 241	8 486
Oxide	tonnes	2 520	2 090	2 093	1 972	2 096
Arsenic						
Metallic arsenic	tonnes	87	50	17	4	9
Asbestos	tonnes	16	25	0	3	8
Barytes	tonnes	25 084	19 902	20 442	23 009	28 748
Bentonite and fuller's earth						
Bentonite	tonnes	184 809	162 787	174 735	170 540	220 260
Fuller's earth	tonnes	1 731	1 196	1 794	3 701	17 907
Bismuth						
Compounds	tonnes	226	101	...	...	...
Metal	tonnes	446	420	728	629	830
Bromine	kilograms	...	11 914 000	12 437 700	13 225 500	12 595 900
Cadmium						
Metal	tonnes	1 058	1 488	1 682	1 248	1 465
Oxide	tonnes	665	1 032	910	839	743
Sulphide	tonnes	0	7	82	20	5 802
Cement						
Cement clinkers	tonnes	855 948	919 175	852 287	793 933	865 213
Portland cement	tonnes	1 230 950	1 104 447	1 114 553	1 090 120	1 114 684
Other cement	tonnes	987 862	926 599	1 190 848	1 123 098	927 157
Chromium						
Ores & concentrates	tonnes	27 174	26 693	22 534	22 917	19 770
Metal	tonnes	649	699	782	677	1 323
Coal						
Anthracite	tonnes	1 088 272	1 049 738	1 323 661	1 557 639	2 076 592
Other coal	tonnes	16 091 962	13 508 122	13 960 659	15 082 984	17 619 595
Lignite	tonnes	51 244	60 810	23 470	41 784	40 405
Briquettes	tonnes	77 348	98 610	74 423	68 883	75 872

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Cobalt						
Ore	tonnes	65	69	45	9	5
Metal	tonnes	1 618	1 723	1 654	1 813	30 779
Oxides	tonnes	566	471	370	533	522
Copper						
Matte & cement	tonnes	151	390	58	1 651	386
Unwrought, unrefined	tonnes	72	177	253	118	168
Unwrought, refined	tonnes	585 829	564 415	576 398	578 525	590 304
Unwrought alloys	tonnes	21 121	12 858	13 722	8 308	7 564
Scrap	tonnes	87 946	70 698	65 362	70 422	78 853
Diamond						
Unsorted	carats	10 500 000	9 500 000	12 500 000	17 000 000	...
Gem, cut	carats	2 000 000	12 000 000	10 000 000	12 500 000	10 000 000
Industrial	carats	2 000 000	1 500 000	5 500 000	3 000 000	9 000 000
Dust	carats	12 000 000	24 000 000	10 500 000	10 500 000	10 000 000
Diatomite	tonnes	14 075	12 725	12 168	12 194	12 368
Feldspar	tonnes	37 596	29 741	40 941	37 538	44 615
Fluorspar	tonnes	3 999	3 355	3 510	7 006	10 457
Gold						
Metal	kilograms	44 200	42 500	35 100	30 900	*30 000
Waste & scrap	kilograms	31 100	335 000	4 600	12 500	...
Graphite	tonnes	53 643	24 440	13 016	11 149	15 083
Gypsum						
Crude	tonnes	200 529	205 820	168 598	266 857	311 411
Calcined	tonnes	47 813	44 697	48 920	45 214	85 845
Iodine	kilograms	2 139 700	1 469 800	1 553 000	1 563 800	1 317 700
Iron ore	tonnes	19 688 773	16 707 431	19 069 088	18 890 174	20 777 700
Iron ore						
Burnt pyrites	tonnes	4 228	24 758	0	3 348	65
Iron, steel and ferro-alloys						
Pig iron	tonnes	294 402	235 212	225 850	254 512	237 824
Sponge & powder	tonnes	23 054	124 727	140 863	148 215	151 090
Ferro-chrome	tonnes	314 783	253 110	310 760	260 231	224 722
Ferro-silico-chrome	tonnes	87	127	2 116	1 524	59
Ferro-silico-magnesium	tonnes	2 167	2 006	2 166	1 840	1 524
Ferro-manganese	tonnes	47 814	42 103	57 442	46 048	96 276
Ferro-silico-manganese	tonnes	69 823	53 527	64 538	73 362	61 446
Ferro-molybdenum	tonnes	5 885	5 803	4 839	4 643	5 474
Ferro-nickel	tonnes	25 071	27 640	36 725	28 974	10 966
Ferro-niobium	tonnes	2 044	2 133	1 703	2 286	2 297
Ferro-phosphorus	tonnes	3 136	2 550	2 464	2 160	2 942
Ferro-silicon	tonnes	74 807	68 969	87 071	70 729	62 260
Ferro-titanium & Fe-Si-Ti	tonnes	4 706	5 259	5 441	4 828	4 768
Ferro-tungsten & Fe-Si-W	tonnes	569	622	283	485	346
Ferro-vanadium	tonnes	1 008	1 401	940	1 063	1 031
Other ferro-alloys	tonnes	13 234	42 196	16 543	16 253	18 670
Silicon metal	tonnes	19 555	22 084	19 212	16 489	19 299
Ingots, blooms, billets	tonnes	1 765 134	2 120 903	1 777 677	1 595 528	1 803 335
Scrap	tonnes	3 236 091	2 934 281	2 833 589	3 019 857	3 449 108
Kaolin	tonnes	379 697	380 166	386 197	325 358	349 353
Lead						
Ores & concentrates	tonnes	222 259	182 072	146 270	...	...
Unwrought	tonnes	87 602	80 869	80 812	103 439	91 979
Scrap	tonnes	48 198	40 099	44 079	30 508	34 513
Lithium						
Oxides	tonnes	432	420	329	347	407
Carbonate	tonnes	1 333	1 133	1 612	1 381	1 484
Magnesite and magnesia						
Magnesite	tonnes	23 738	13 047	9 434	3 193	1 701
Magnesia	tonnes	164 453	148 516	146 526	149 468	148 780
Manganese						
Ores & concentrates (a)	tonnes	1 618 372	1 390 507	968 498	892 176	626 061
Metal	tonnes	10 132	11 081	8 693	7 613	8 851
Mercury	kilograms	31 400	23 100	25 200	57 900	299 200
Mica						
Ground (b)	tonnes	1 596	1 689	1 241	3 182	1 358
Waste	tonnes	2 470	981	2 001	1 043	546

France

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Molybdenum						
Ores & concentrates	tonnes	2 384	2 126	1 604	1 591	1 492
Metal	tonnes	817	635	686	727	762
Oxides	tonnes	104	119	284	371	664
Nickel						
Mattes, sinters etc.	tonnes	16 638	19 437	15 496	15 087	12 329
Unwrought	tonnes	40 991	34 347	39 979	30 995	26 842
Unwrought alloys	tonnes	5 491	7 372	2 269	3 192	5 350
Scrap	tonnes	3 351	1 848	2 048	2 210	2 068
Oxides	tonnes	317	219	140	200	166
Crude petroleum	tonnes	83 394 974	85 259 764	80 589 846	84 181 898	86 416 072
Phosphates	tonnes	1 072 594	923 926	919 097	773 860	593 253
Platinum metals						
Platinum	kilograms	11 400	12 600	8 500	5 100	6 200
Platinum metals	kilograms	27 300	22 800	12 100	15 400	17 900
Waste & scrap	kilograms	28 800	104 000	200 100	334 300	40 700
Potash						
Fertiliser salts	tonnes	1 916	1 660	2 337	1 807	1 988
Sulphate	tonnes	95 023	80 698	93 051	90 543	77 441
Chloride	tonnes	1 682 073	1 444 445	1 463 860	1 755 346	1 866 149
Other potassic fertilisers	tonnes	25 318	25 096	25 410	32 600	31 959
Rare earths						
Cerium compounds	tonnes	18 159	15 049	9 914	10 315	11 710
Other rare earth compounds	tonnes	679	1 407	382	1 480	1 037
Ferro-cerium & other pyrophoric alloys	tonnes	8	14	29	2	1
Metals	tonnes	382	230	169	279	251
Salt	tonnes	533 225	457 520	564 159	753 902	850 703
Sillimanite	tonnes	2 864	2 518	2 685	3 411	3 360
Silver						
Metal	kilograms	1 439 100	1 421 400	954 400	970 000	675 000
Sulphur and pyrites						
Pyrites	tonnes	12 396	4 229	7 314	3 359	5 643
Sulphur, crude	tonnes	97 992	55 620	42 855	50 147	43 846
Sulphur, refined	tonnes	75 859	68 001	74 225	56 388	27 041
Sulphur, sublimed & precipitated	tonnes	25 216	8 194	2 622	2 488	12 555
Talc	tonnes	41 304	41 095	43 342	40 650	77 240
Tantalum and niobium						
Tantalum	tonnes	16	20	42	41	67
Tin						
Concentrates	tonnes	37	65	0	43	3
Unwrought	tonnes	7 722	8 637	9 044	9 693	9 167
Unwrought alloys	tonnes	614	409	169	701	638
Scrap	tonnes	1 236	1 555	541	148	24
Titanium						
Ilmenite	tonnes	182 583	112 466	151 799	127 083	48 930
Other titanium minerals	tonnes	17 288	41 040	12 291	34 984	81 141
Titanium slag	tonnes	48 117	256 420	123 144	...	61 456
Metal	tonnes	7 757	8 459	6 461	5 689	8 259
Oxides	tonnes	143 436	127 843	138 316	151 809	140 068
Tungsten						
Metal	tonnes	744	889	422	448	568
Carbide	tonnes	534	628	604	695	692
Vanadium						
Ores & concentrates	tonnes	162	...	126	1	...
Pentoxide	tonnes	461	328	382	496	441
Metal	tonnes	130	54	54	34	72
Zinc						
Ores & concentrates	tonnes	637 021	574 312	558 771	482 493	458 760
Unwrought	tonnes	129 061	126 795	98 355	115 491	103 037
Unwrought alloys	tonnes	49 384	39 967	32 740	34 874	56 492
Scrap	tonnes	12 758	13 265	11 144	8 203	6 046
Zirconium						
Concentrates	tonnes	57 420	59 386	43 841	58 457	48 004
Metal	tonnes	135	2 323	251	288	276

Note(s):-

(a) Including manganiferous iron ore

(b) Including unmanufactured

Germany

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	343 200 000	324 200 000	303 500 000	296 900 000	278 900 000
Crushed rock	tonnes	144 805 000	136 788 000	130 693 000	124 047 000	125 600 000
Alumina	tonnes (Al ₂ O ₃ content)	*730 000	*750 000	*825 000	*830 000	*835 000
Primary aluminium	tonnes	643 545	651 592	652 845	660 783	667 800
White arsenic	tonnes	*200	*200	*200	*200	*200
Barytes	tonnes	111 790	108 111	100 993	109 506	93 624
Bentonite and fuller's earth						
Bentonite	tonnes	464 616	447 913	495 310	478 796	404 549
Bromine	kilograms	*500 000	*500 000	*500 000	*500 000	—
Cadmium	tonnes	458	539	422	640	*640
Cement clinker	tonnes	27 679 000	24 523 000	20 120 000	21 513 000	...
Cement, finished	tonnes	35 200 000	32 600 000	31 200 000	33 400 000	32 400 000
Coal						
Anthracite & bituminous	tonnes	34 251 019	27 361 079	26 363 084	25 873 043	25 871 882
Brown coal	tonnes	167 723 889	175 364 780	181 778 432	179 086 923	181 926 060
Copper, smelter	tonnes	211 200	317 700	295 100	288 800	278 600
Copper, refined	tonnes	709 472	693 714	695 741	597 531	652 600
Feldspar	tonnes	322 116	302 650	243 368	233 028	182 842
Fluorspar	tonnes	31 124	30 381	34 429	33 289	33 203
Graphite	tonnes	3 414	3 190	3 312	2 840	3 155
Gypsum (a)	tonnes	2 344 000	1 966 000	1 761 000	1 748 000	1 600 000
Iron ore (b) (c)	tonnes	461 525	407 002	419 371	429 170	412 238
Pig iron	tonnes	31 300 000	29 394 000	29 967 000	30 071 000	30 628 000
Crude steel	tonnes	46 376 000	44 803 000	45 015 000	44 809 000	46 374 000
Ferro-alloys						
Ferro-chrome	tonnes	21 600	19 308	20 018	18 318	24 857
Other ferro-alloys	tonnes	*30 000	*30 000	*30 000	*30 000	*30 000
Silicon metal	tonnes	27 119	28 379	26 049	28 663	28 773
Kaolin (d)	tonnes	714 936	696 832	740 821	738 123	...
Lead, refined	tonnes	386 658	373 397	379 905	356 900	359 200
Crude petroleum	tonnes	3 119 592	3 569 290	3 768 054	3 799 864	3 515 537
Natural gas	million m ³	21 576	21 545	21 422	22 092	20 270
Potash						
Potassic salts	tonnes (K ₂ O content)	3 407 467	3 548 665	3 471 763	3 563 932	3 626 510
Salt						
Rock salt	tonnes	5 360 000	5 326 000	6 134 000	6 178 000	7 268 000
Brine salt	tonnes	1 206 000	1 211 000	1 249 000	1 123 000	974 000
Salt in brine	tonnes	6 023 000	6 196 000	6 310 000	6 668 000	7 212 000
Selenium metal	tonnes	*100	*100	*100	*100	*100
Sulphur and pyrites						
Recovered (e)	tonnes (sulphur content)	80 128	80 000	46 000	—	—
Recovered (f)	tonnes (sulphur content)	1 611 792	1 640 000	1 657 200	1 619 900	1 526 700
Recovered (g)	tonnes (sulphur content)	42 518	40 000	41 900	43 900	40 000
Talc	tonnes	*15 000	*9 000	*8 000	3 859	...
Uranium, mine	tonnes (metal content)	28	27	221	104	77
Slab zinc	tonnes	356 516	361 348	378 561	388 131	382 020

Note(s):-

(1) Germany is believed to produce strontium minerals and tellurium metal

(2) Significant quantities of germanium are believed to be recovered from imported or domestic material

(a) Including anhydrite

(b) Including manganiferous iron ore

(c) Used as aggregate in the construction industry

(d) Washed and dried

(e) From metal sulphide processing

(f) From petroleum refining and/or natural gas

(g) Other

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	21 743 596	21 152 142	19 748 571	19 811 898	21 817 271
Aluminium and bauxite						
Bauxite	tonnes	35 361	35 894	42 524	26 666	30 647
Alumina	tonnes	191 531	167 226	201 103	308 210	294 034
Alumina hydrate	tonnes	515 888	537 767	488 918	472 091	528 700
Unwrought	tonnes	53 127	71 793	59 597	48 570	58 365
Unwrought alloys	tonnes	321 684	294 918	327 962	340 772	354 998
Scrap	tonnes	546 235	557 252	499 791	556 405	544 522
Antimony						
Metal	tonnes	36	38	10	27	12
Oxide	tonnes	968	783	543	683	786
Arsenic						
Metallic arsenic	tonnes	27	8	9	8	14
Barytes	tonnes	15 906	38 775	32 297	32 546	32 383
Bentonite and fuller's earth						
Bentonite	tonnes	42 595	56 589	43 329	57 237	50 477
Bismuth						
Compounds	tonnes	38	35	...	...	...
Metal	tonnes	125	104	228	152	275
Bromine	kilograms	12 300	15 000	13 700	16 700	5 600
Cadmium						
Metal	tonnes	600	1	1	0	...
Sulphide	tonnes	10	3	2	5	6
Cement						
Cement clinkers	tonnes	328 471	718 285	411 711	1 001 024	868 384
Portland cement	tonnes	1 907 253	1 959 481	2 083 433	2 472 418	3 496 157
Other cement	tonnes	1 121 582	1 084 249	1 226 979	1 196 558	1 580 315
Chromium						
Ores & concentrates	tonnes	14 675	6 771	11 760	3 666	12 691
Metal	tonnes	1 108	225	762	2 096	1 256
Coal						
Hard coal (b)	tonnes	178 430	105 443	49 449	182 233	183 694
Brown coal	tonnes	220 449	304 061	273 953	71 777	430
Briquettes	tonnes	260 538	218 890	173 867	156 179	87 651
Cobalt						
Metal	tonnes	931	1 027	901	1 116	1 441
Oxides	tonnes	164	126	122	151	233
Copper						
Ores & concentrates	tonnes	26 023	19 053	15 630	48 674	49 617
Unwrought, unrefined	tonnes	25	4 989	2 215	1 592	53
Unwrought, refined	tonnes	94 125	108 224	90 919	117 566	137 238
Unwrought alloys	tonnes	35 588	27 379	26 876	21 421	21 038
Scrap	tonnes	289 766	261 464	300 340	363 762	373 809
Diamond						
Gem, cut	carats	175 521	162 390	178 297	174 915	...
Industrial	carats	48 843	30 722	17 171	6 876	...
Dust	carats	46 500 000	41 500 000	10 000 000	17 000 000	13 500 000
Diatomite	tonnes	5 209	5 267	13 061	20 036	20 312
Feldspar	tonnes	60 691	63 736	134 033	102 472	118 838
Fluorspar	tonnes	18 875	16 634	22 274	17 105	17 594
Gold						
Metal	kilograms	80 000	78 100	45 400	36 400	36 500
Waste & scrap	kilograms	646 300	1 517 300	1 734 400	651 000	170 065
Graphite	tonnes	12 120	10 334	12 103	11 746	14 783
Gypsum						
Crude	tonnes	128 317	123 299	176 734	142 263	197 613
Calcined	tonnes	693 861	705 776	695 565	1 070 873	1 033 057
Iodine	kilograms	855 900	570 400	2 637 000	583 100	640 400
Iron ore						
Iron ore	tonnes	20 659	16 280	15 521	9 376	8 756
Burnt pyrites	tonnes	4 587	6 112	6 907	6 491	3 241

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	116 513	75 137	67 365	56 571	112 911
Sponge & powder	tonnes	27 258	30 585	83 354	95 612	148 734
Ferro-chrome	tonnes	47 714	34 379	33 992	30 640	22 758
Ferro-silico-chrome	tonnes	251	3 115	608	1	79
Ferro-silico-magnesium	tonnes	4 894	6 912	6 825	5 551	13 887
Ferro-manganese	tonnes	19 071	19 346	13 036	8 937	13 776
Ferro-silico-manganese	tonnes	11 082	13 743	11 520	10 306	9 286
Ferro-molybdenum	tonnes	765	903	1 283	2 054	2 597
Ferro-nickel	tonnes	42	...	57	94	625
Ferro-niobium	tonnes	1 066	816	828	713	1 076
Ferro-phosphorus	tonnes	1 704	1 149	1 163	691	786
Ferro-silicon	tonnes	50 904	66 920	64 000	60 016	61 239
Ferro-titanium & Fe-Si-Ti	tonnes	2 585	2 877	3 607	2 478	3 069
Ferro-tungsten & Fe-Si-W	tonnes	310	112	106	268	178
Ferro-vanadium	tonnes	299	373	634	653	600
Other ferro-alloys	tonnes	11 272	20 321	22 860	21 610	27 285
Silicon metal	tonnes	10 736	10 632	10 060	16 141	18 064
Ingots, blooms, billets	tonnes	2 451 015	2 032 350	2 011 458	2 563 182	2 104 580
Scrap	tonnes	6 878 310	6 598 673	6 880 778	6 718 904	6 956 839
Kaolin	tonnes	367 230	350 804	333 927	359 926	369 141
Lead						
Ores & concentrates	tonnes	27 765	8 868	22 024	31 512	3 423
Unwrought	tonnes	117 138	160 412	169 142	129 550	120 361
Scrap	tonnes	13 112	12 669	13 646	15 468	12 412
Lithium						
Oxides	tonnes	740	647	532	649	625
Carbonate	tonnes	1 690	1 771	1 768	2 484	2 660
Magnesite and magnesia						
Magnesite	tonnes	217	233	186	878	218
Magnesia	tonnes	56 707	90 154	66 559	45 840	66 422
Manganese						
Metal	tonnes	11 747	10 186	11 548	10 703	12 261
Mercury	kilograms	567 400	412 000	59 500	48 900	55 500
Mica	tonnes	2 173	1 922	2 018	2 457	3 655
Molybdenum						
Ores & concentrates	tonnes	39	157	240	905	2 309
Metal	tonnes	1 337	1 220	1 274	1 465	2 014
Oxides	tonnes	3 863	4 441	2 523	2 894	—
Nickel						
Ores & concentrates	tonnes	8 914	8 083	12 229	10 884	10 717
Unwrought	tonnes	7 346	8 418	5 582	5 225	5 549
Unwrought alloys	tonnes	7 190	6 328	5 837	6 011	8 732
Scrap	tonnes	26 627	10 826	8 277	8 091	8 096
Oxides	tonnes	77	670	505	246	105
Crude petroleum	tonnes	313 476	907 924	656 861	1 741 465	1 253 391
Phosphates	tonnes	678	674	302	66	43
Platinum metals						
Platinum	kilograms	23 500	28 500	21 400	26 300	31 900
Palladium	kilograms	19 900	19 600	40 200	22 000	15 900
Other platinum metals	kilograms	4 300	3 400	4 000	2 900	4 600
Waste & scrap	kilograms	575 900	1 040 875	1 067 200	803 500	815 821
Potash						
Fertiliser salts (a) (c)	tonnes	2 856 180	2 916 428	2 998 738	3 103 009	3 077 154
Rare earths						
Rare earth compounds	tonnes	106	225	102	115	108
Ferro-cerium & other pyrophoric alloys	tonnes	4	0	3	0	0
Metals	tonnes	31	16	8	10	4
Salt	tonnes	2 753 620	3 023 135	3 340 569	3 695 084	3 201 549
Sillimanite	tonnes	7 026	8 092	10 565	12 413	14 382
Silver						
Metal	kilograms	2 306 500	2 446 100	2 638 400	3 032 700	2 814 700
Sulphur and pyrites						
Pyrites	tonnes	457	511	483	389	339
Sulphur, crude	tonnes	1 013 806	976 781	943 122	856 707	854 548
Sulphur, refined	tonnes	31 354	36 859	35 614	41 163	40 135
Sulphur, sublimed & precipitated	tonnes	18 962	14 862	5 184	4 021	276

Germany

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Talc	tonnes	5 216	6 048	7 088	5 285	3 862
Tantalum and niobium						
Niobium & tantalum ores	tonnes	739	379	545	174	93
Tantalum	tonnes	336	258	719	323	337
Tin						
Unwrought	tonnes	575	1 089	1 137	909	978
Unwrought alloys	tonnes	1 108	1 178	1 077	481	408
Scrap	tonnes	309	507	719	849	994
Titanium						
Titanium minerals	tonnes	164	475	541	778	319
Metal	tonnes	6 578	6 257	6 581	6 705	8 048
Oxides	tonnes	299 268	290 191	323 059	331 806	356 007
Tungsten						
Metal	tonnes	1 942	2 418	1 735	2 209	2 816
Vanadium						
Vanadiferous residues	tonnes	358	630	...	...	...
Ores & concentrates	tonnes	...	...	...	127	1 060
Pentoxide	tonnes	91	83	81	102	296
Metal	tonnes	336	359	351	483	522
Zinc						
Ores & concentrates	tonnes	58 100	62 741	43 050	4 741	695
Unwrought	tonnes	66 002	71 859	95 493	104 982	91 123
Unwrought alloys	tonnes	40 377	38 250	40 259	38 710	37 762
Scrap	tonnes	45 218	47 388	40 684	47 414	52 545
Zirconium						
Concentrates	tonnes	5 428	4 161	2 539	2 111	2 450
Metal	tonnes	241	265	343	300	275

Note(s):-

(a) K₂O content

(b) Including anthracite

(c) Including sulphate, chloride and other potassic fertilisers

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	19 651 936	15 006 699	13 306 857	11 870 353	11 127 947
Aluminium and bauxite						
Bauxite	tonnes	2 170 064	1 965 709	1 950 542	1 907 966	2 119 259
Alumina	tonnes	650 080	777 003	867 297	1 047 728	1 107 265
Alumina hydrate	tonnes	359 940	480 679	378 146	225 998	204 721
Unwrought	tonnes	610 431	625 469	721 430	796 479	628 038
Unwrought alloys	tonnes	975 753	976 513	945 177	1 099 136	1 170 875
Scrap	tonnes	441 033	419 586	483 052	462 320	462 580
Antimony						
Ores & concentrates	tonnes	500	494	—	—	15
Metal	tonnes	741	599	309	149	178
Oxide	tonnes	6 835	6 384	6 915	6 707	7 072
Arsenic						
Metallic arsenic	tonnes	10	8	5	5	4
Asbestos	tonnes	189	168	199	59	69
Barytes	tonnes	241 776	251 884	221 000	218 811	226 706
Bentonite and fuller's earth						
Bentonite	tonnes	233 046	230 303	227 785	253 998	218 349
Fuller's earth	tonnes	5 419	7 476	7 315	8 483	11 202
Bismuth						
Compounds	tonnes	1 383	1 295	...	...	...
Metal	tonnes	1 810	2 038	1 517	1 689	1 693
Bromine	kilograms	4 095 300	2 121 000	1 775 500	1 835 400	1 626 600
Cadmium						
Metal	tonnes	6	8	8	11	39
Oxide	tonnes	150	149	152	143	139
Sulphide	tonnes	8	11	8	8	6

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Cement						
Cement clinkers	tonnes	591 026	494 930	523 967	325 302	370 454
Portland cement	tonnes	2 714 963	2 003 309	1 197 165	906 718	1 002 404
Other cement	tonnes	334 557	413 249	321 014	277 349	343 597
Chromium						
Ores & concentrates	tonnes	119 869	130 485	114 806	126 278	128 886
Metal	tonnes	2 905	2 257	3 291	4 063	5 599
Coal						
Anthracite	tonnes	440 328	846 310	775 851	1 143 311	1 413 902
Other coal	tonnes	22 483 547	27 397 137	26 629 962	25 164 977	31 047 441
Brown coal	tonnes	1 812 000	1 936 950	1 040 979	49 433	10 570
Briquettes	tonnes	195 611	159 991	154 033	178 993	95 446
Cobalt						
Metal	tonnes	2 289	2 408	2 349	2 568	2 602
Oxides	tonnes	385	301	346	439	448
Copper						
Ores & concentrates	tonnes	708 614	1 034 722	1 037 247	880 332	1 141 843
Matte & cement	tonnes	7 515	3 070	2 389	33 896	15 085
Unwrought, unrefined	tonnes	32 370	26 579	38 455	17 319	11 635
Unwrought, refined	tonnes	689 673	527 947	459 451	516 590	584 852
Unwrought alloys	tonnes	44 175	35 661	26 887	38 410	24 066
Scrap	tonnes	490 828	390 731	438 312	379 726	426 995
Diamond						
Gem, cut	carats	530 657	476 717	556 534	431 612	481 924
Industrial	carats	3 418 322	2 278 364	1 074 120	454 003	762 967
Dust	carats	67 140 000	67 250 000	49 500 000	69 000 000	82 500 000
Diatomite	tonnes	45 488	35 286	34 820	43 406	48 644
Feldspar	tonnes	51 494	51 965	43 033	50 809	70 064
Fluorspar	tonnes	270 412	266 764	272 913	234 067	302 071
Gold						
Metal	kilograms	60 400	71 600	44 400	40 100	49 800
Waste & scrap	kilograms	1 309 872	1 583 000	2 021 200	1 153 500	1 375 800
Graphite	tonnes	45 517	49 720	42 706	41 161	53 602
Gypsum						
Crude	tonnes	208 536	225 631	186 338	100 269	102 596
Calcined	tonnes	46 851	34 767	59 707	91 143	116 628
Iodine	kilograms	1 346 700	1 752 800	1 208 000	1 318 400	1 422 800
Iron ore						
Iron ore	tonnes	47 502 511	40 094 653	44 297 518	33 876 167	43 317 039
Burnt pyrites	tonnes	76 415	55 380	44 838	56 249	37 194
Iron, steel and ferro-alloys						
Pig iron	tonnes	256 621	280 829	229 592	221 451	342 152
Sponge & powder	tonnes	140 416	288 427	80 690	142 967	180 615
Ferro-chrome	tonnes	420 503	381 746	383 712	478 203	440 993
Ferro-silico-chrome	tonnes	8 144	6 087	2 740	8 354	11 367
Ferro-silico-magnesium	tonnes	11 926	12 538	12 651	1 103	1 722
Ferro-manganese	tonnes	197 356	198 415	183 336	178 917	175 176
Ferro-silico-manganese	tonnes	133 257	130 975	147 113	144 637	172 164
Ferro-molybdenum	tonnes	11 119	11 104	12 126	10 369	13 214
Ferro-nickel	tonnes	58 291	80 666	89 782	82 618	90 614
Ferro-niobium	tonnes	3 236	3 268	3 746	3 197	3 864
Ferro-phosphorus	tonnes	6 176	5 285	5 807	4 728	4 131
Ferro-silicon	tonnes	196 017	209 195	195 233	231 346	237 700
Ferro-titanium & Fe-Si-Ti	tonnes	7 921	8 310	11 188	8 862	6 845
Ferro-tungsten & Fe-Si-W	tonnes	403	561	498	486	400
Ferro-vanadium	tonnes	5 263	6 832	4 767	5 471	4 006
Other ferro-alloys	tonnes	14 481	33 594	43 225	25 367	22 754
Silicon metal	tonnes	98 318	94 338	108 062	120 821	130 408
Ingots, blooms, billets	tonnes	1 778 789	1 310 471	1 160 168	1 306 210	1 945 817
Scrap	tonnes	3 523 681	3 560 264	3 804 881	4 364 130	5 411 710
Kaolin	tonnes	809 665	749 260	750 621	771 902	774 307
Lead						
Ores & concentrates	tonnes	209 758	267 848	228 055	193 156	202 309
Unwrought	tonnes	134 230	189 697	158 048	159 860	112 975
Scrap	tonnes	18 724	19 056	19 472	9 075	11 757

Germany

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Lithium						
Oxides	tonnes	5 529	5 100	3 198	4 405	3 699
Carbonate	tonnes	4 026	4 187	4 825	6 018	7 189
Magnesite and magnesite						
Magnesite	tonnes	17 337	16 285	19 665	7 724	4 684
Magnesia	tonnes	493 512	451 522	453 680	348 042	348 766
Manganese						
Ores & concentrates (a)	tonnes	8 644	7 380	6 629	6 917	8 034
Metal	tonnes	47 498	45 296	45 208	21 229	22 435
Mercury	kilograms	59 300	68 300	19 900	39 500	80 600
Mica						
Unmanufactured	tonnes	1 453	387	227	205	237
Ground	tonnes	19 428	21 498	23 488	24 993	28 784
Waste	tonnes	56	468	345	840	1 212
Molybdenum						
Ores & concentrates	tonnes	10 866	10 814	8 663	9 800	12 221
Metal	tonnes	2 159	2 364	2 406	1 878	3 043
Oxides	tonnes	311	318	397	545	703
Nickel						
Mattes, sinters etc.	tonnes	10 701	9 525	23 006	4 030	7 264
Unwrought	tonnes	94 153	81 674	84 677	72 571	72 788
Unwrought alloys	tonnes	4 335	1 660	1 625	1 933	1 646
Scrap	tonnes	12 599	9 254	11 197	10 889	11 347
Oxides	tonnes	701	590	668	563	517
Crude petroleum	tonnes	105 292 890	104 631 624	104 331 841	107 268 878	112 096 299
Phosphates	tonnes	140 251	155 278	167 297	120 231	148 082
Platinum metals						
Platinum	kilograms	38 900	39 800	34 300	44 800	39 600
Palladium	kilograms	34 400	25 200	45 000	31 600	20 700
Other platinum metals	kilograms	5 100	4 600	5 600	6 100	6 400
Waste & scrap	kilograms	3 957 300	5 274 800	4 500 100	3 837 500	3 713 700
Potash						
Chloride	tonnes	79 841	86 916	89 067	85 597	97 924
Other potassic fertilisers	tonnes	...	5 724	6 206	5 810	4 996
Rare earths						
Cerium compounds	tonnes	1 390	1 351	1 208	1 115	1 082
Other rare earth compounds	tonnes	4 674	7 555	7 811	7 810	7 776
Ferro-cerium & other pyrophoric alloys	tonnes	6	27	15	...	214
Metals	tonnes	895	564	218	358	285
Salt	tonnes	2 062 758	1 824 730	2 391 447	2 366 521	2 467 276
Sillimanite	tonnes	56 898	56 821	62 654	63 602	60 782
Silver						
Metal	kilograms	1 584 400	1 894 000	1 844 300	2 185 300	1 434 200
Sulphur and pyrites						
Pyrites	tonnes	84 043	77 260	51 479	42 170	53 264
Sulphur	tonnes	21 207	31 498	31 481	45 962	56 272
Sulphur, sublimed & precipitated	tonnes	2 133	1 837	1 121	1 448	12 782
Talc	tonnes	258 529	244 678	263 988	307 374	352 177
Tantalum and niobium						
Tantalum	tonnes	298	259	274	239	281
Tin						
Unwrought	tonnes	21 519	23 984	20 524	20 904	21 258
Unwrought alloys	tonnes	528	847	744	381	453
Scrap	tonnes	758	681	400	505	408
Titanium						
Ilmenite	tonnes	387 707	272 849	307 791	349 819	315 214
Other titanium minerals	tonnes	170 381	132 952	131 844	175 660	225 849
Titanium slag	tonnes	130 353	137 542	52 787	41 319	—
Metal	tonnes	9 595	9 774	10 532	10 044	14 756
Oxides	tonnes	196 901	189 674	192 414	211 539	237 464
Tungsten						
Ores & concentrates	tonnes	77	378	129	195	389
Metal	tonnes	4 392	4 914	3 024	4 874	4 976
Carbide	tonnes	1 182	1 664	1 103	1 419	1 520
Vanadium						
Pentoxide	tonnes	614	657	538	802	648
Metal	tonnes	20	60	88	106	159

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Zinc						
Ores & concentrates	tonnes	282 566	316 009	319 996	340 244	480 355
Unwrought	tonnes	251 227	261 517	231 495	253 892	248 654
Unwrought alloys	tonnes	86 245	79 743	77 600	100 172	83 556
Scrap	tonnes	18 021	21 487	34 083	26 647	23 997
Zirconium						
Concentrates (b)	tonnes	*70 000	82 728	76 921	85 178	80 328
Metal	tonnes	412	409	456	632	516

Note(s):-

(a) Including manganiferous iron ore

(b) Including niobium and tantalum concentrates

Greece

Production

Commodity	Units	2000	2001	2002	2003	2004
Bauxite	tonnes	1 818 525	1 903 280	2 492 000	2 418 000	2 444 000
Alumina	tonnes (Al ₂ O ₃ content)	451 000	463 000	490 000	496 000	514 000
Primary aluminium	tonnes	168 000	164 000	165 262	167 797	166 634
Asbestos	tonnes	*10 000	*1 000	—	*13 000	*4 000
Barytes	tonnes	*800	*800	*800	*800	*800
Bentonite and fuller's earth						
Bentonite	tonnes	1 148 694	1 258 872	1 056 598	1 156 642	1 030 556
Cement clinker	tonnes	13 169 136	13 210 781	8 947 394	...	...
Cement, finished	tonnes	15 597 959	15 562 654	*15 500 000	17 546 281	18 040 788
Coal						
Lignite	tonnes	63 947 813	66 621 437	71 087 609	69 410 756	71 237 228
Feldspar	tonnes	94 700	126 400	124 100	102 800	88 274
Gypsum	tonnes	801 025	808 890	890 148	731 785	856 606
Crude steel	tonnes	1 088 000	1 281 000	1 835 000	1 701 000	1 967 000
Ferro-alloys						
Ferro-nickel	tonnes	81 662	88 755	96 000	90 000	91 000
Kaolin	tonnes	54 226	60 075	57 885	59 680	53 438
Lead, mine	tonnes (metal content)	15 554	26 588	29 300	2 000	—
Lead, refined	tonnes	*6 000	*6 000	*6 000	*6 000	*6 000
Magnesite	tonnes	414 400	442 800	553 700	542 800	552 300
Nickel, mine	tonnes (metal content)	23 365	20 742	22 700	19 100	19 000
Nickel, smelter/refinery	tonnes	17 126	17 675	19 230	18 000	18 116
Perlite	tonnes	817 825	840 660	838 997	1 079 036	1 053 388
Crude petroleum	tonnes	256 000	293 000	207 000	162 000	...
Natural gas	million m ³	36	32	36	27	23
Salt	tonnes	244 709	208 776	126 118	192 161	187 522
Silver, mine	kilograms (metal content)	30 644	62 400	74 800	7 000	—
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	150 000	153 000	157 000	162 000	160 000
Talc	tonnes	2 300	2 073	670	500	200
Zinc, mine	tonnes (metal content)	16 834	31 737	35 000	3 000	—

Note(s):-

(1) Greece is believed to produce gold

(a) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	33 773	33 971	18 672	12 670	108 042
Aluminium and bauxite						
Bauxite	tonnes	666 578	567 470	535 074	701 911	925 282
Alumina	tonnes	249 681	279 120	327 476	358 955	404 852
Alumina hydrate	tonnes	6 500	34 493	12 261	11 568	3 760
Unwrought	tonnes	84 799	6 368	56 730	58 714	61 846
Unwrought alloys	tonnes	9 663	9 457	6 142	8 880	8 597
Scrap	tonnes	16 410	9 444	12 794	10 731	13 777
Antimony						
Metal	tonnes	1	54	22	49	3
Asbestos	tonnes	8 946	252	29	12 576	4 256
Bentonite and fuller's earth						
Bentonite	tonnes	10 810	80 669	25 969	27 395	15 612
Cement						
Cement clinkers	tonnes	641 771	549 377	400 700	742 540	257 136
Portland cement	tonnes	3 821 755	4 165 718	2 312 090	2 507 359	2 679 607
Other cement	tonnes	576 485	221 294	142 068	110 674	170 640
Chromium						
Ores & concentrates	tonnes	3 000	5 067	...	...	21
Coal						
Briquettes	tonnes	1 434	404	40 046	71 510	67 701
Copper						
Scrap	tonnes	6 298	6 558	6 520	9 460	8 517

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Feldspar	tonnes	68	67	16 764	25 176	8 515
Gold						
Metal	kilograms	352	219	509	4 714	15
Waste & scrap	kilograms	...	...	...	...	65 955
Gypsum						
Crude	tonnes	111 045	56 967	44 953	112 510	106 082
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	12 794	10 175	7 976	1 742	5 528
Ingots, blooms, billets	tonnes	2 363	5 083	1 157	2 908	64 105
Scrap	tonnes	35 747	47 721	39 806	56 047	59 502
Kaolin	tonnes	4 252	723	884	976	131
Lead						
Unwrought	tonnes	3 671	6 127	1 712	107	51 638
Magnesite and magnesite						
Magnesite	tonnes	19 205	18 555	35 594	40	—
Magnesia	tonnes	135 809	128 124	94 668	65 673	130 910
Mica	tonnes	46	121	179	4 239	2 769
Crude petroleum	tonnes	695 163	596 613	4	—	—
Potash						
Potassic fertilisers	tonnes	...	451	2 119	2 107	4 083
Salt	tonnes	40 445	34 429	36 450	42 976	44 664
Silver						
Metal	kilograms	3 047	215	71	351	3 299
Talc	tonnes	1 413	31 989	1 853	990	2 566
Titanium						
Oxides	tonnes	1 281	1 380	1 412	1 624	1 835
Zinc						
Ores & concentrates	tonnes	32 670	57 166	65 084	0	0
Unwrought (a)	tonnes	885	82 848	671	1 076	709
Scrap	tonnes	173	120	172	683	709

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	119 692	29 123	105 277	324 882	199 144
Aluminium and bauxite						
Bauxite	tonnes	282 649	252 246	246 155	375 275	247 358
Alumina	tonnes	5 225	3 711	952	889	905
Unwrought	tonnes	95 031	78 683	79 463	98 093	116 074
Unwrought alloys	tonnes	40 679	44 151	39 444	46 193	51 522
Scrap	tonnes	16 678	19 148	17 329	15 127	16 631
Antimony						
Metal	tonnes	47	98	40	40	46
Arsenic						
Metallic arsenic	tonnes	27	15	31	16	21
Asbestos	tonnes	501	1 016	1 988	91	—
Barytes	tonnes	1 711	1 657	839	791	858
Bentonite and fuller's earth						
Bentonite	tonnes	8 119	3 654	3 639	14 280	8 902
Fuller's earth	tonnes	601	362	1 068	898	633
Bismuth						
Metal	tonnes	9	8	3	17	23
Cement						
Portland cement	tonnes	1 847	79 052	56 424	302	1 754
Other cement	tonnes	3 163	2 989	2 628	3 322	3 497
Chromium						
Ores & concentrates	tonnes	213	231	360	218	122
Coal						
Hard coal (b)	tonnes	1 038 517	1 357 243	285 975	854 992	791 582
Cobalt						
Metal	tonnes	108	33	34	30	89

Greece

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Copper						
Unwrought	tonnes	135 629	129 818	126 027	107 425	120 088
Unwrought alloys	tonnes	624	590	699	843	550
Scrap	tonnes	7 841	2 627	2 672	1 979	1 864
Diamond						
Unsorted	carats	£447 000	£223 000	£367 000	£340 000	£625 000
Gem, rough	carats	£11 000	£6 000	£83 000	£166 000	£145 000
Gem, cut	carats	£2 062 000	£1 824 000	£1 437 000	£1 130 000	£1 701 000
Industrial	carats	£801 000	£58 000	£220 000	£456 000	£771 000
Dust	carats	...	6 825 000	9 520 000	6 205 000	8 390 000
Diatomite	tonnes	714	504	529	556	610
Feldspar	tonnes	2 545	7 466	4 599	5 216	499
Fluorspar	tonnes	8 733	11 210	12 582	10 579	20 720
Gold						
Metal	kilograms	...	757	1 497	8 276	37 484
Waste & scrap	kilograms	14 425	5 149	1 126	79 288	—
Graphite	tonnes	60	54	75	77	127
Gypsum						
Crude	tonnes	1 408	504	350	362	826
Calcined	tonnes	23 025	26 386	1 501	1 361	13 614
Iodine	kilograms	1 158	1 766	1 000	2 593	1 673
Iron ore						
Burnt pyrites	tonnes	156 876	125 242	58 666	132	4 601
Iron, steel and ferro-alloys						
Pig iron	tonnes	4 864	14 682	15 085	10 844	15 494
Ferro-manganese	tonnes	2 971	2 188	1 695	2 454	2 604
Ferro-silico-manganese	tonnes	8 827	15 462	24 110	19 505	23 808
Ferro-silicon	tonnes	1 987	11 059	3 990	7 353	7 899
Other ferro-alloys	tonnes	649	163	642	540	1 022
Silicon metal	tonnes	915	873	856	1 140	1 055
Ingots, blooms, billets	tonnes	711 253	505 889	148 798	211 021	229 854
Scrap	tonnes	309 235	776 523	1 179 017	1 138 900	1 178 451
Kaolin	tonnes	43 835	23 933	43 586	52 833	56 380
Lead						
Unwrought	tonnes	3 764	5 970	5 309	4 633	28 460
Scrap	tonnes	1 350	882	3 349	5 496	1 284
Magnesite and magnesia						
Magnesite	tonnes	5 505	13 087	19 308	23 470	20 579
Magnesia	tonnes	1 358	11 507	7 442	10 427	11 985
Manganese						
Ores & concentrates	tonnes	20 853	22 329	2	24 985	1
Metal	tonnes	546	681	1 289	389	1 510
Mercury	kilograms	20 940	125 335	291	11 617	187
Mica	tonnes	119	48	114	203	94
Molybdenum						
Metal	tonnes	1	12	21	1	13
Nickel						
Ores & concentrates	tonnes	10 975	31 111	...	10 480	6
Unwrought	tonnes	226	126	67	60	61
Crude petroleum	tonnes	18 301 453	20 112 238	18 653 052	18 976 807	18 390 500
Phosphates	tonnes	264 934	328 110	338 443	336 893	364 398
Platinum metals						
Platinum & platinum metals	kilograms	372	1 001	449	156	179
Potash						
Sulphate	tonnes	109 584	25 433	59 315	55 208	92 816
Chloride	tonnes	23 925	27 415	32 834	36 469	29 191
Other potassic fertilisers	tonnes	3 880	2 251	3 057	5 256	6 411
Salt	tonnes	131 417	98 438	102 103	218 991	173 729
Silver						
Metal	kilograms	39 023	25 686	38 516	49 225	95 318
Sulphur and pyrites						
Sulphur, crude	tonnes	127 790	90 126	90 577	106 897	83 711
Talc	tonnes	10 325	6 528	4 206	5 316	10 061
Tin						
Unwrought (a)	tonnes	307	503	382	598	671

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Titanium						
Titanium minerals	tonnes	742	529	816	313	563
Oxides	tonnes	20 719	18 389	17 646	22 801	27 241
Zinc						
Unwrought (a)	tonnes	24 617	31 737	26 052	24 982	29 255

Note(s):-

(a) Including alloys

(b) Including anthracite

Hungary

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	29 793 000	32 252 000	35 407 000	40 530 145	46 354 829
Crushed rock	tonnes	8 136 900	8 621 080	9 792 782	10 090 547	13 037 471
Bauxite	tonnes	1 046 470	1 000 044	720 000	665 904	646 726
Alumina	tonnes (Al ₂ O ₃ content)	357 100	330 000	293 700	300 000	304 000
Primary aluminium	tonnes	33 850	34 600	35 294	34 000	34 300
Bentonite and fuller's earth						
Bentonite	tonnes	5 120	30 441	3 700	87 200	9 300
Cement, finished	tonnes	3 326 000	3 452 000	3 510 000	3 573 000	3 349 000
Coal						
Bituminous	tonnes	744 000	635 200	660 000	667 126	670 000
Lignite	tonnes	7 862 000	8 043 062	7 573 971	8 564 000	8 470 258
Brown coal	tonnes	5 670 000	5 392 000	4 530 000	4 128 000	4 130 000
Diatomite	tonnes	1 878	1 323	1 656	1 770	1 640
Gypsum (a)	tonnes	251 000	231 000	108 000	62 000	55 000
Pig iron	tonnes	1 340 353	1 225 714	1 334 000	1 332 000	1 350 000
Crude steel	tonnes	1 969 821	2 064 507	2 138 146	2 044 526	1 944 017
Manganese ore	tonnes	41 000	43 000	43 000	48 000	49 000
Perlite	tonnes	151 069	89 900	72 196	95 100	65 000
Crude petroleum	tonnes	1 130 850	1 058 060	1 049 770	1 134 245	1 076 844
Natural gas	million m ³	3 349	3 286	3 130	3 145	3 200
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	34 082	43 000	52 000	51 000	51 000

Note(s):-

(1) Hungary is believed to produce antimony and arsenic

(2) In addition to the countries producing sillimanite minerals, synthetic mullite is known to be produced in Hungary

(a) Including anhydrite

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	629 388	590 064	743 157	598 056	729 270
Aluminium and bauxite						
Alumina	tonnes	278 685	258 945	241 441	216 200	250 978
Unwrought (a)	tonnes	12 185	10 894	11 730	16 231	25 475
Scrap	tonnes	24 313	29 656	24 428	27 022	38 684
Bentonite and fuller's earth						
Bentonite	tonnes	4 503	5 784	2 118	1 030	897
Cement						
Cement clinkers	tonnes	7 487	44	125 482	41 006	78 590
Portland cement	tonnes	599 719	492 397	433 217	440 285	244 276
Coal						
Lignite	tonnes	...	...	...	13 966	81 047
Copper						
Scrap	tonnes	20 586	19 952	17 867	27 405	31 741
Diatomite	tonnes	271	264	308	284	452
Gold						
Metal	kilograms	1 092	1 110	928	...	826
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	1 573	651	694	436	701
Ingots, blooms, billets	tonnes	23 843	47 954	87 994	32 452	24 042
Scrap	tonnes	631 088	462 209	553 847	618 827	887 069
Kaolin	tonnes	2 229	3 121	3 539	2 388	7 180
Lead						
Scrap	tonnes	1 718	1 944	1 421	1 237	2 377
Potash						
Potassic fertilisers	tonnes	2 776	6 617	221	61	2 512
Salt	tonnes	446	232	629	2 987	576
Sillimanite						
Mullite	tonnes	2 703	...	2 728	3 869	6 108

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Silver						
Metal	kilograms	746	1 204	962	1 300	2 516
Sulphur and pyrites						
Sulphur	tonnes	...	...	28 389	...	22 607
Talc	tonnes	...	...	15	314	1 533
Tungsten						
Metal	tonnes	41	53	74	56	64
Zinc						
Unwrought	tonnes	948	1 032	997	921	3 798
Scrap	tonnes	3 153	2 837	2 202	2 794	3 571

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	189 014	57 443	241 929	104 705	254 800
Aluminium and bauxite						
Bauxite	tonnes	25 212	88 950	116 037	164 930	189 528
Alumina	tonnes	3 017	2 609	3 188	17 819	8 751
Unwrought (a)	tonnes	192 980	203 346	224 720	227 904	370 016
Scrap	tonnes	9 344	7 016	17 071	16 764	13 111
Asbestos	tonnes	3 558	2 167	740	574	...
Barytes	tonnes	1 037	1 455	1 878	1 704	3 453
Bentonite and fuller's earth	tonnes	3 587	3 797	4 440	5 914	5 214
Cement						
Portland cement	tonnes	649 903	401 168	303 249	342 107	451 613
Other cement	tonnes	151 109	174 362	466 700	536 445	579 735
Chromium						
Ores & concentrates	tonnes	1 010	549	651	593	367
Metal	tonnes	104	85	65	82	68
Coal						
Hard coal (b)	tonnes	1 663 064	...	874 393	1 108 289	1 347 232
Brown coal	tonnes	221 555	247 929	259 129	311 845	403 297
Copper						
Unwrought	tonnes	29 877	19 937	18 994	14 327	11 365
Scrap	tonnes	8 310	5 370	3 483	502	512
Diamond						
Dust	carats	715 975	1 269 915	...	...	...
Diatomite	tonnes	2 975	2 845	1 633	1 593	1 390
Feldspar	tonnes	24 276	19 213	20 250	19 131	19 205
Fluorspar	tonnes	545	6 006	3 626	3 907	4 366
Gold						
Metal	kilograms	283	194	127	...	...
Graphite	tonnes	571	474	528	517	234
Gypsum						
Crude & calcined	tonnes	51 481	48 842	53 147	59 741	64 726
Iron ore	tonnes	2 098 145	1 702 510	1 718 394	1 864 033	1 063 931
Iron, steel and ferro-alloys						
Pig iron	tonnes	25 167	23 983	23 881	19 312	14 429
Ferro-manganese	tonnes	11 584	10 441	10 908	11 503	9 152
Ferro-silicon	tonnes	5 830	5 736	5 173	5 530	5 295
Other ferro-alloys	tonnes	4 309	5 764	6 406	4 089	4 376
Silicon metal	tonnes	2 766	2 772	3 567	4 686	5 196
Ingots, blooms, billets	tonnes	210 739	168 833	82 919	91 664	82 336
Scrap	tonnes	40 299	111 440	135 594	112 463	62 753
Kaolin	tonnes	28 869	34 000	30 130	28 472	23 417
Lead						
Unwrought	tonnes	11 577	10 117	6 552	7 148	4 545
Magnesite and magnesite	tonnes	11 963	12 032	32 296	10 463	7 003
Manganese						
Metal	tonnes	453	476	677	568	111

Hungary

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Molybdenum						
Metal	tonnes	150	114	105	121	129
Crude petroleum	tonnes	...	...	5 029 814	...	5 001 714
Phosphates	tonnes	23 144	14 793	14 730	9 140	...
Platinum metals						
Platinum & platinum metals	kilograms	88	117	140	274	168
Potash						
Potassic fertilisers	tonnes	108 643	112 995	124 330	121 815	143 465
Rare earths						
Rare earth compounds	tonnes	188	216	202	114	158
Salt	tonnes	527 154	395 106	468 704	557 050	486 695
Sillimanite	tonnes	...	...	1 370	2 045	2 396
Silver						
Metal	kilograms	17 843	19 541	15 444	17 695	33 178
Sulphur and pyrites						
Sulphur	tonnes	7 270	4 339	1 853	1 426	1 088
Sulphur, sublimed & precipitated	tonnes	289	287	134	67	296
Talc	tonnes	10 224	9 698	9 576	10 070	9 178
Tin						
Unwrought (a)	tonnes	562	292	219	91	155
Titanium						
Metal	tonnes	345	49	215	367	387
Oxides	tonnes	7 605	6 976	7 941	8 247	8 677
Zinc						
Unwrought (a)	tonnes	23 997	23 615	23 295	16 900	15 779

Note(s):-

(a) Including alloys

(b) Including anthracite

Irish Republic

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	29 000 000	33 000 000	34 000 000	40 000 000	*40 000 000
Crushed rock	tonnes	68 000 000	77 000 000	78 000 000	60 000 000	*60 000 000
Alumina	tonnes (Al ₂ O ₃ content)	1 410 674	1 448 730	1 400 000	1 500 000	*1 500 000
Cement, finished	tonnes	2 620 000	2 600 000	2 500 000	2 500 000	*2 500 000
Gypsum	tonnes	*500 000	*500 000	*500 000	*600 000	*650 000
Crude steel	tonnes	360 000	150 000	—	—	—
Lead, mine	tonnes (metal content)	57 500	44 500	41 700	50 300	63 800
Lead, refined	tonnes	8 500	9 800	6 600	7 800	19 600
Natural gas	million m ³	1 187	816	839	640	1 127
Silver, mine	kilograms (metal content)	16 700	8 700	7 500	8 500	5 200
Zinc, mine	tonnes (metal content)	263 000	298 100	276 700	419 000	438 300

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	327 350	380 067	703 054	563 286	135 579
Aluminium and bauxite						
Alumina	tonnes	1 873 414	1 891 293	1 564 481	2 405 797	1 388 723
Alumina hydrate	tonnes	4 563	20 746	22 656	51 149	44 645
Unwrought alloys	tonnes	5 879	3 287	4 389	4 569	3 776
Scrap	tonnes	14 765	14 470	19 240	12 307	15 367
Cement						
Cement clinkers	tonnes	7 040	6 447	...	2 650	...
Portland cement	tonnes	181 278	220 581	263 254	439 876	1 133 469
Chromium						
Metal	tonnes	35	1	760	1	—
Coal						
Anthracite	tonnes	32 942	1 285	2 745	1 154	1 037
Briquettes	tonnes	23 638	20 787	20 130	21 151	18 049
Cobalt						
Oxides	tonnes	68	49	119	118	11
Copper						
Scrap	tonnes	11 790	8 835	9 043	17 824	16 118
Diamond						
Unsorted	carats	...	...	...	...	5 785 000
Gem, rough	carats	...	5 525 000	7 285 000	5 040 000	...
Industrial	carats	24 430 000	5 140 000	7 120 000	2 275 000	3 395 000
Gold						
Metal	kilograms	£5 000	£35 000	£389 000	£784 000	£1 076 000
Waste & scrap	kilograms	£2 900 000	£3 850 000	£1 623 000	£1 520 000	£1 672 000
Gypsum						
Crude	tonnes	896	820	817	873	919
Calcined	tonnes	35 199	37 919	22 181	33 382	40 636
Iodine	kilograms	27 742	2 500	2 000	9 600	—
Iron, steel and ferro-alloys						
Scrap	tonnes	61 401	133 287	228 807	292 971	347 479
Lead						
Ores & concentrates	tonnes	48 056	58 150	21 069	56 141	84 115
Magnesium and magnesia	tonnes	1 177	1 541	65 428	65 601	69 111
Nickel						
Scrap	tonnes	833	674	701	664	797
Platinum metals						
Platinum & platinum metals	kilograms	239	74	20	...	...
Waste & scrap	kilograms	3 559	12 292	22 983	5 544	13 100
Rare earths						
Rare earth compounds	tonnes	87	182	64	107	85
Ferro-cerium & other pyrophoric alloys	tonnes	100	142	...	362	...
Tin						
Unwrought (a)	tonnes	106	281	77	29	103
Scrap	tonnes	207	304	109	21	140

Irish Republic

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Tungsten						
Metal	tonnes	194	96	38	41	72
Zinc						
Ores & concentrates	tonnes	331 533	381 072	161 452	439 247	564 018
Scrap	tonnes	632	296	235	298	450

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	1 056 985	989 926	1 121 763	1 036 886	1 269 673
Aluminium and bauxite						
Bauxite	tonnes	3 232 037	3 493 883	3 732 789	3 418 940	3 740 006
Alumina	tonnes	9 493	7 768	7 544	6 718	6 626
Unwrought (a)	tonnes	12 219	11 474	6 750	6 503	6 603
Scrap	tonnes	2 301	695	503	294	490
Antimony						
Metal	tonnes	35	12	31	15	13
Arsenic						
Metallic arsenic	tonnes	218	31	127	47	...
Asbestos	tonnes	1 007	1	19	—	475
Barytes	tonnes	192	176	318	332	411
Bentonite and fuller's earth						
Bentonite	tonnes	1 271	1 064	966	869	2 042
Bismuth						
Metal	tonnes	54	30	33	54	2
Bromine	kilograms	22 158	22 000	5 739	33 238	602
Cement						
Cement clinkers	tonnes	178 554	66 661	56 199	88 669	226 116
Portland cement	tonnes	498 089	430 990	373 759	259 703	281 044
Other cement	tonnes	4 160	3 092	2 968	4 105	9 132
Chromium						
Metal	tonnes	46	26	19	27	25
Coal						
Anthracite	tonnes	102 388	282 790	163 733	164 270	100 792
Other coal	tonnes	1 666 083	1 682 981	1 337 469	1 307 994	2 930 298
Briquettes	tonnes	42 306	42 480	28 105	46 789	48 348
Cobalt						
Metal	tonnes	207	527	398	282	273
Oxides	tonnes	101	45	6	3	5
Copper						
Scrap	tonnes	1 354	1 080	1 087	514	16
Diamond						
Unsorted	carats	34 310 000	48 655 000	19 505 000	22 665 000	33 525 000
Gem, rough	carats	1 910 000	2 140 000	...	8 225 000	1 815 000
Gem, cut	carats	20 375 000	45 300 000	30 805 000	23 370 000	21 175 000
Industrial	carats	8 565 000	46 820 000	95 650 000	3 930 000	26 740 000
Diatomite	tonnes	211	286	450	729	594
Feldspar	tonnes	50	98	677	24	72
Gold						
Metal	kilograms	£9 094 000	£8 002 196	£6 057 000	£9 565 000	£7 480 000
Waste & scrap	kilograms	12 435	6 158	120	2 322	4 880
Graphite	tonnes	342	108	541	248	288
Gypsum						
Crude	tonnes	8 639	8 615	10 931	373	536
Calcined	tonnes	561	444	914	2 228	6 015
Iodine	kilograms	17 582	44 664	5 000	8 712	18 215
Iron, steel and ferro-alloys						
Pig iron	tonnes	5 475	3 401	5 120	4 808	3 812
Ferro-alloys	tonnes	626	3 772	663	224	286
Silicon metal	tonnes	1 366	1 032	219	431	367
Ingots, blooms, billets	tonnes	1 222	1 203	1 601	1 291	1 487
Scrap	tonnes	88 914	26 285	1 420	786	1 277

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Kaolin	tonnes	12 539	11 505	20 919	19 186	22 213
Lead						
Unwrought	tonnes	21 083	24 432	35 376	28 438	26 896
Scrap	tonnes	5 974	9 163	9 985	7 798	18 290
Magnesite and magnesia						
Magnesite	tonnes	296	108	1 500	15 449	25 886
Magnesia	tonnes	56 551	47 947	59 905	43 802	49 664
Manganese						
Ores & concentrates (b)	tonnes	54 840	38 977	27 456	19 306	268
Metal	tonnes	59	49	23	9	5
Mercury	kilograms	1 298	2 401	1 008	11 604	61
Mica	tonnes	657	639	463	364	551
Nickel						
Unwrought (a)	tonnes	1 154	1 834	1 361	1 558	1 493
Crude petroleum	tonnes	2 128 504	2 475 545	1 112 511	1 378 494	2 128 991
Phosphates	tonnes	2 227	2 144	9 717	440	1 159
Platinum metals						
Platinum & platinum metals	kilograms	1 410	3 694	2 342	1 829	2 626
Potash						
Chloride	tonnes	76 443	36 186	17 160	3 790	30 456
Other potassic fertilisers	tonnes	1 485	2 170	2 483	6 156	4 924
Rare earths						
Rare earth compounds	tonnes	58	46	44	245	74
Metals	tonnes	66	66	63	64	4
Salt	tonnes	82 940	107 438	110 654	77 992	83 789
Sillimanite	tonnes	9 521	14 377	5 795	10	89
Silver						
Metal	kilograms	3 115	2 940	2 960	2 247	2 709
Sulphur and pyrites						
Sulphur, sublimed & precipitated	tonnes	274	1 281	194	898	1 371
Talc	tonnes	1 783	1 848	2 224	2 008	2 508
Tantalum and niobium						
Tantalum	tonnes	23	7	2	2	2
Tin						
Unwrought (a)	tonnes	435	655	271	171	462
Titanium						
Oxides	tonnes	4 101	3 931	5 070	5 095	5 685
Tungsten						
Metal	tonnes	79	45	152	331	177
Zinc						
Unwrought (a)	tonnes	3 232	3 668	5 699	4 241	2 956

Note(s):-

(a) Including alloys

(b) Including manganiferous iron ore

Italy

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	...	215 622 251	200 776 836	212 169 204	176 252 243
Crushed rock	tonnes	...	51 224 533	46 512 344	44 562 447	54 195 444
Alumina	tonnes (Al ₂ O ₃ content)	1 022 000	993 000	1 010 000	1 021 000	1 064 000
Primary aluminium	tonnes	189 800	187 500	190 400	191 400	195 400
Barytes	tonnes	11 262	10 809	10 215	12 214	9 608
Bentonite and fuller's earth						
Bentonite	tonnes	636 589	579 029	463 231	474 475	437 659
Fuller's earth	tonnes	25 384	19 815	24 595	250	300
Bromine	kilograms	*300 000	*300 000	*300 000	*300 000	*300 000
Cadmium	tonnes	287	352	362	22	—
Cement clinker	tonnes	29 816 013	30 893 082	30 770 167	32 077 055	33 048 546
Cement, finished	tonnes	39 388 765	40 190 597	41 722 254	43 580 047	45 342 868
Coal						
Lignite	tonnes	120 000	130 000	100 000	...	...
Copper, refined	tonnes	33 000	30 200	32 400	26 700	33 600
Feldspar	tonnes	2 851 289	3 240 457	3 159 569	2 972 187	2 941 272
Fluorspar	tonnes	67 768	70 160	53 260	26 387	17 915
Gold, mine	kilograms (metal content)	820	522	631	*100	—
Gypsum	tonnes	1 511 650	1 558 882	1 531 477	1 783 903	1 615 287
Pig iron	tonnes	11 195 000	10 581 000	9 746 000	10 123 000	10 566 000
Crude steel	tonnes	26 759 000	26 544 000	26 302 000	26 832 000	28 479 000
Ferro-alloys						
Ferro-manganese	tonnes	*40 000	*40 000	*40 000	*40 000	*40 000
Ferro-silico-manganese	tonnes	*100 000	*100 000	*100 000	*100 000	*100 000
Silicon metal	tonnes	9 590	—	—	—	—
Kaolin	tonnes	284 148	295 263	174 990	224 755	246 608
Lead, mine	tonnes (metal content)	3 300	2 700	3 200	2 700	800
Lead, refined	tonnes	233 900	226 500	196 000	214 100	201 600
Manganese ore	tonnes	1 038	803	867	763	714
Perlite	tonnes	*60 000	*60 000	*60 000	*60 000	*60 000
Crude petroleum	tonnes	4 586 000	4 097 000	5 531 000	5 570 000	5 445 000
Natural gas	million m ³	16 633	15 242	14 623	13 885	12 921
Salt						
Rock salt & brine salt	tonnes	3 332 901	3 301 173	3 342 992	2 922 251	2 876 469
Silver, mine	kilograms (metal content)	*1 000	*1 000	*1 000	*1 000	—
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	203 000	203 000	142 000	127 000	113 000
Recovered (b)	tonnes (sulphur content)	490 000	540 000	560 000	565 000	575 000
Talc	tonnes	121 068	126 868	125 040	122 849	138 367
Slab zinc	tonnes	170 300	178 600	175 800	123 100	118 400

Note(s):-

(1) Germanium is believed to be recovered from imported or domestic material

(a) From metal sulphide processing

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	1 595 225	1 443 143	1 638 314	1 333 675	1 556 414
Aluminium and bauxite						
Bauxite	tonnes	255 878	69 646	49 307	9 291	40 512
Alumina	tonnes	601 032	646 064	721 558	682 587	606 416
Alumina hydrate	tonnes	33 622	29 901	35 623	34 820	24 895
Unwrought	tonnes	2 894	2 639	5 986	3 385	4 203
Unwrought alloys	tonnes	30 940	28 817	35 982	31 082	43 578
Scrap	tonnes	21 689	19 416	17 707	20 358	26 630
Antimony						
Metal	tonnes	13	36	70	1	3
Oxide	tonnes	332	200	504	340	207

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Arsenic						
Metallic arsenic	tonnes	15	—	—	—	—
Barytes	tonnes	306	390	2 076	224	1 951
Bentonite and fuller's earth						
Bentonite	tonnes	209 236	209 107	215 834	221 353	257 596
Bromine	kilograms	...	16 000	2 259	1 296	505
Cadmium						
Metal	tonnes	5	739	377	239	54
Sulphide	tonnes	2	5	4	...	—
Cement						
Cement clinkers	tonnes	95 220	99 472	82 835	55 289	78 590
Portland cement	tonnes	2 027 730	2 078 455	1 940 114	1 816 975	1 903 368
Other cement	tonnes	271 031	168 039	174 484	181 086	130 920
Chromium						
Ores & concentrates	tonnes	2 669	5 558	3 014	2 638	3 803
Metal	tonnes	594	815	407	1 993	4 184
Coal (b)	tonnes	32 153	54 884	33 141	17 124	92 227
Cobalt						
Metal	tonnes	566	86	98	174	236
Oxides	tonnes	188	126	49	63	123
Copper						
Matte & cement	tonnes	677	4 377	5 982	561	366
Unwrought	tonnes	12 084	28 074	7 528	13 371	22 988
Unwrought alloys	tonnes	21 555	16 851	12 631	12 110	16 772
Scrap	tonnes	66 030	55 930	46 184	53 184	97 964
Diamond						
Unsorted	carats	£744 000	£154 000	£42 000	£173 000	£483 000
Gem, cut	carats	£12 151 000	£15 342 000	£15 982 000	£21 938 000	£26 708 000
Industrial	carats	£309 000	£111 000	£607 000	£228 000	£565 000
Dust	carats	...	57 190 000	104 155 000	42 170 000	49 130 000
Diatomite	tonnes	1 531	1 776	1 194	1 217	1 745
Feldspar	tonnes	122 154	128 544	159 403	165 128	204 096
Fluorspar	tonnes	13 443	20 709	31 142	28 222	20 607
Gold						
Metal	kilograms	138 479	31 299	32 091	36 047	44 180
Graphite	tonnes	373	199	313	222	625
Gypsum						
Crude	tonnes	51 791	47 185	24 560	1 032	8 040
Calcined	tonnes	113 041	74 209	54 393	38 778	42 223
Iodine	kilograms	4 694	2 892	3 000	2 065	3 080
Iron ore						
Burnt pyrites	tonnes	96 060	57 643	46 294	30 848	11 086
Iron, steel and ferro-alloys						
Pig iron	tonnes	26 986	47 031	58 982	40 069	41 068
Sponge & powder	tonnes	215	2 095	651	130	62
Ferro-chrome	tonnes	2 693	1 843	9 576	7 290	8 411
Ferro-silico-magnesium	tonnes	57	10	2 119	1 673	3 163
Ferro-manganese	tonnes	20 413	17 472	5 382	6 322	8 857
Ferro-silico-manganese	tonnes	6 876	3 371	2 055	1 392	3 167
Ferro-molybdenum	tonnes	186	525	351	352	162
Ferro-silicon	tonnes	2 248	3 143	2 697	3 287	3 594
Ferro-vanadium	tonnes	1 669	1 023	2 873	817	63
Other ferro-alloys	tonnes	340	1 107	975	488	2 859
Silicon metal	tonnes	1 197	743	1 092	583	1 667
Ingots, blooms, billets	tonnes	841 283	770 001	786 800	546 474	402 967
Scrap	tonnes	166 125	151 196	153 190	173 616	211 385
Kaolin	tonnes	56 689	58 835	47 652	37 357	29 995
Lead						
Unwrought	tonnes	24 103	8 646	20 987	26 711	28 295
Scrap	tonnes	5 595	2 716	4 792	5 652	1 262
Lithium						
Oxides	tonnes	5	8	58	47	11
Carbonate	tonnes	124	87	138	162	206
Magnesite and magnesita						
Magnesite	tonnes	3 016	2 521	3 170	2 141	2 868
Magnesia	tonnes	68 596	57 158	52 206	17 414	9 779

Italy

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Manganese						
Metal	tonnes	84	62	120	37	113
Mercury	kilograms	28 325	21 968	274 624	20 153	6 952
Mica	tonnes	352	349	667	371	623
Molybdenum						
Metal	tonnes	34	98	57	250	171
Nickel						
Unwrought (a)	tonnes	2 472	2 102	2 701	2 923	1 637
Scrap	tonnes	1 354	1 057	552	351	644
Crude petroleum	tonnes	167 922	250 353	871 391	802 524	824 206
Phosphates	tonnes	820	794	513	475	4 417
Platinum metals						
Platinum	kilograms	3 443	31 775	3 546	10 430	6 277
Platinum metals	kilograms	6 159	6 133	13 337	8 310	4 207
Waste & scrap	kilograms	2 167	23 155	61 441	96 968	105 220
Potash						
Potassic fertilisers	tonnes	1 965	804	1 502	2 415	1 169
Rare earths						
Metals	tonnes	11	18	19	15	81
Salt	tonnes	168 498	170 027	326 123	325 395	289 415
Sillimanite	tonnes	100	248	240	7	123
Silver						
Metal	kilograms	478 031	399 772	442 900	677 683	616 861
Sulphur and pyrites						
Pyrites	tonnes	22 810	9 455	9 547	8 185	7 384
Sulphur	tonnes	107 740	179 324	155 173	151 075	165 618
Sulphur, sublimed & precipitated	tonnes	176	352	251	5 693	930
Talc	tonnes	98 344	89 839	108 467	116 739	118 131
Tantalum and niobium						
Tantalum	tonnes	14	3	50	1	2
Tin						
Unwrought (a)	tonnes	248	268	497	458	406
Scrap	tonnes	195	222	191	201	180
Titanium						
Metal	tonnes	4 676	5 102	3 727	3 159	4 439
Oxides	tonnes	26 858	24 393	28 434	28 323	28 476
Tungsten						
Metal	tonnes	171	245	129	191	357
Vanadium						
Ores & concentrates	tonnes	774	3 964	2 401	1 691	1 267
Zinc						
Ores & concentrates	tonnes	30 670	37 107	21 429	61 273	93 317
Unwrought	tonnes	5 731	6 624	2 250	2 761	2 331
Unwrought alloys	tonnes	6 328	5 002	6 520	6 914	3 523
Scrap	tonnes	10 845	9 793	12 762	17 313	15 157
Zirconium						
Concentrates	tonnes	22 582	15 906	20 510	22 050	25 633
Metal	tonnes	721	1 604	775	424	441

Note(s):-

(a) Including alloys

(b) Including anthracite

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	3 395 954	4 014 635	3 324 865	3 368 905	4 102 477
Aluminium and bauxite						
Bauxite	tonnes	2 226 746	2 324 849	2 256 065	2 169 206	2 407 108
Alumina	tonnes	213 732	126 284	126 299	123 514	142 931
Alumina hydrate	tonnes	115 215	145 496	134 724	128 280	151 086
Unwrought	tonnes	321 717	307 267	381 046	425 165	434 802
Unwrought alloys	tonnes	383 057	362 897	400 139	446 358	468 500
Scrap	tonnes	368 341	429 647	300 058	327 721	346 736
Antimony						
Ores & concentrates	tonnes	611	446	727	786	879
Metal	tonnes	1 429	1 929	1 551	1 377	743
Oxide	tonnes	4 391	4 366	5 037	4 314	5 528
Arsenic						
Metallic arsenic	tonnes	75	48	91	111	84
Asbestos	tonnes	87	—	—	—	0
Barytes	tonnes	70 143	93 733	79 605	87 501	86 874
Bentonite and fuller's earth						
Bentonite	tonnes	104 562	112 094	103 545	139 576	153 410
Fuller's earth	tonnes	12 139	12 920	12 954	10 982	5 760
Bismuth						
Metal	tonnes	190	391	301	151	175
Bromine	kilograms	...	113 000	104 414	139 908	355 734
Cadmium						
Metal	tonnes	35	45	46	48	87
Oxide	tonnes	94	76	95	62	96
Cement						
Cement clinkers	tonnes	546 747	1 018 494	1 777 159	2 322 710	2 720 499
Portland cement	tonnes	1 677 438	1 915 641	1 796 508	2 033 657	2 130 079
Other cement	tonnes	173 744	314 706	304 329	168 008	146 033
Chromium						
Ores & concentrates	tonnes	60 566	82 769	56 835	26 802	30 872
Metal	tonnes	467	549	544	520	677
Coal						
Anthracite	tonnes	231 539	155 092	193 308	243 578	338 706
Other coal	tonnes	18 768 117	20 068 964	19 682 422	21 029 014	25 382 339
Cobalt						
Ore	tonnes	0	1	41	495	122
Metal	tonnes	539	624	649	449	440
Oxides	tonnes	1 089	1 004	1 256	966	1 004
Copper						
Unwrought, unrefined	tonnes	2 763	1 455	636	310	216
Unwrought, refined	tonnes	603 259	649 687	643 386	650 757	700 101
Unwrought alloys	tonnes	20 460	21 575	19 779	21 862	16 723
Scrap	tonnes	179 050	168 541	188 238	164 700	128 501
Diamond						
Unsorted	carats	£1 612 000	£1 087 000	£1 680 000	£1 138 000	£1 655 000
Gem, rough	carats	£631 000	£890 000	£1 425 000	£1 241 000	£928 000
Gem, cut	carats	£236 883 000	£236 885 000	£176 777 000	£180 528 000	£210 629 000
Industrial	carats	£7 469 000	£6 802 000	£6 699 000	£4 647 000	£5 949 000
Dust	carats	12 585 000	101 940 000	147 020 000	117 845 000	135 820 000
Diatomite	tonnes	7 865	7 047	8 990	10 429	14 744
Feldspar	tonnes	1 566 525	1 865 170	1 871 798	2 291 993	2 693 951
Fluorspar	tonnes	209 326	209 672	162 510	226 780	212 975
Gold						
Metal	kilograms	415 753	398 542	358 654	281 157	274 841
Waste & scrap	kilograms	9 571	15 694	7 584	1 685	3 612
Graphite	tonnes	12 241	11 319	11 302	10 845	10 699
Gypsum						
Crude	tonnes	2 304	2 479	2 391	1 947	5 024
Calcined	tonnes	25 943	23 487	22 706	17 681	22 515
Iodine	kilograms	749 474	1 049 291	1 218 000	1 167 573	1 127 906
Iron ore (a)	tonnes	17 619 370	15 813 643	14 898 058	15 231 519	16 715 081

Italy

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	1 103 642	1 308 092	1 121 250	1 209 778	1 304 367
Sponge & powder	tonnes	202 669	220 836	289 728	316 524	206 956
Ferro-chrome	tonnes	294 176	303 726	378 402	368 649	400 159
Ferro-silico-chrome	tonnes	347	...	189	30	5
Ferro-silico-magnesium	tonnes	6 628	4 570	7 651	6 601	7 826
Ferro-manganese	tonnes	72 812	74 801	77 121	69 901	79 827
Ferro-silico-manganese	tonnes	83 192	95 270	151 140	150 805	182 945
Ferro-molybdenum	tonnes	4 886	5 063	3 866	4 954	7 289
Ferro-nickel	tonnes	23 913	36 887	60 680	59 367	82 107
Ferro-niobium	tonnes	1 285	1 431	1 523	1 408	1 403
Ferro-phosphorus	tonnes	1 653	917	1 021	662	830
Ferro-silicon	tonnes	118 396	134 547	114 779	130 582	119 820
Ferro-titanium & Fe-Si-Ti	tonnes	3 735	3 120	2 462	3 065	3 379
Ferro-tungsten & Fe-Si-W	tonnes	180	177	108	123	229
Ferro-vanadium	tonnes	1 380	2 014	2 180	1 759	1 890
Other ferro-alloys	tonnes	8 562	14 245	17 338	15 096	17 062
Silicon metal	tonnes	44 411	42 596	37 799	48 298	46 108
Ingots, blooms, billets	tonnes	2 070 840	2 270 890	2 138 491	2 510 222	3 874 346
Scrap	tonnes	4 056 830	4 348 543	4 045 986	4 380 744	5 606 124
Kaolin	tonnes	1 108 281	1 020 131	952 526	947 116	939 832
Lead						
Ores & concentrates	tonnes	158 478	109 714	98 430	86 985	99 015
Unwrought	tonnes	88 093	90 537	111 214	88 333	114 546
Scrap	tonnes	1 965	6 346	4 737	3 669	3 877
Lithium						
Oxides	tonnes	165	168	209	237	148
Carbonate	tonnes	1 662	1 659	1 581	1 686	1 505
Magnesite and magnesia						
Magnesite	tonnes	29 864	32 911	18 687	17 326	9 429
Magnesia	tonnes	106 661	106 250	120 820	129 672	163 273
Manganese						
Ores & concentrates (b)	tonnes	253 215	100 908	111 716	100 796	206 249
Metal	tonnes	3 466	10 089	4 723	3 673	4 970
Mercury	kilograms	48 484	32 672	15 389	27 140	135 119
Mica						
Unmanufactured	tonnes	121	62	52	106	65
Ground	tonnes	2 741	2 594	2 586	2 759	3 473
Molybdenum						
Ores & concentrates	tonnes	3 140	4 065	4 097	4 119	4 719
Metal	tonnes	241	284	163	122	105
Oxides	tonnes	92	74	141	172	247
Nickel						
Mattes, sinters etc.	tonnes	77	225	515	306	353
Unwrought	tonnes	46 241	50 142	49 803	51 276	41 944
Unwrought alloys	tonnes	1 640	1 845	1 577	1 211	2 664
Scrap	tonnes	5 970	2 141	559	2 248	3 075
Crude petroleum	tonnes	83 272 202	83 971 514	81 043 087	84 724 010	87 208 954
Phosphates	tonnes	198 434	263 295	278 389	296 497	359 090
Platinum metals						
Platinum	kilograms	10 925	9 394	17 518	10 551	12 087
Platinum metals	kilograms	34 483	30 150	26 602	20 085	21 430
Waste & scrap	kilograms	255	988	5	39	278
Potash						
Sulphate	tonnes	90 920	87 150	84 724	102 855	96 904
Chloride	tonnes	448 256	425 575	445 906	422 469	392 833
Other potassic fertilisers	tonnes	19 572	17 701	21 604	16 491	29 902
Rare earths						
Rare earth compounds	tonnes	755	669	637	656	932
Metals	tonnes	27	17	4	102	108
Salt	tonnes	565 098	771 298	685 681	745 388	833 790
Sillimanite	tonnes	28 898	15 859	18 193	14 669	15 132
Silver						
Metal	kilograms	2 226 980	2 030 362	1 705 431	1 724 000	1 776 385

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Sulphur and pyrites						
Pyrites	tonnes	13 177	9 174	15 021	12 067	8 929
Sulphur, crude	tonnes	123 667	43 335	53 623	11 975	8 646
Sulphur, refined	tonnes	5 887	8 086	8 330	8 478	10 279
Sulphur, sublimed & precipitated	tonnes	770	3 939	820	483	281
Talc	tonnes	99 879	133 646	117 688	127 855	126 745
Tin						
Unwrought	tonnes	6 068	6 171	6 507	6 201	5 610
Unwrought alloys	tonnes	185	204	190	105	95
Titanium						
Titanium minerals	tonnes	85 910	112 828	99 830	123 862	88 361
Metal	tonnes	5 904	6 126	5 052	4 738	6 580
Oxides	tonnes	163 705	149 841	157 476	149 238	158 592
Tungsten						
Metal	tonnes	292	301	236	258	321
Carbide	tonnes	360	363	324	318	299
Vanadium						
Pentoxide	tonnes	74	199	153	129	134
Zinc						
Ores & concentrates	tonnes	316 968	311 767	283 804	191 369	249 978
Unwrought	tonnes	212 920	175 658	201 905	226 245	273 146
Unwrought alloys	tonnes	38 457	42 197	31 361	28 659	35 835
Scrap	tonnes	23 204	21 985	15 509	14 095	15 991
Zirconium						
Concentrates	tonnes	151 500	137 649	136 504	130 207	149 787
Metal	tonnes	1 159	936	85	823	122

Note(s):-

(a) Including burnt pyrites

(b) Including manganiferous iron ore

Latvia

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	...	2 283 102	2 534 837	3 584 055	2 803 682
Cement clinker	tonnes	*200 000	*200 000	*200 000	*200 000	250 000
Cement, finished	tonnes	*300 000	*300 000	*300 000	*300 000	280 000
Gypsum	tonnes	100 000	*100 000	(a) 220 000	(a) 160 000	(a) 230 000
Crude steel	tonnes	500 292	515 000	507 000	546 000	550 000

Note(s):-

(a) Including anhydrite

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	302 958	173 112	118 698	12 108	10 278
Aluminium and bauxite						
Unwrought (a)	tonnes	23 419	26 973	37 243	34 081	39 368
Scrap	tonnes	6 115	2 389	1 477	747	748
Cement						
Portland cement	tonnes	58 600	53 352	42 492	42 644	26 144
Copper						
Scrap	tonnes	9 196	8 160	7 775	6 329	7 153
Gold						
Waste & scrap	kilograms	133	137	1	72	...
Gypsum	tonnes	37 150	35 302	55 225	58 186	24 782
Iron, steel and ferro-alloys						
Ferro-chrome	tonnes	8 800	24 000	11 000	20	19
Scrap	tonnes	96 674	37 885	6 328	6 415	64 936
Nickel						
Scrap	tonnes	4 303	2 293	1 004	853	170
Crude petroleum	tonnes	...	10 999	10 477	10 162	19 892
Platinum metals						
Waste & scrap	kilograms	550	2	407	567	716
Salt	tonnes	632	730	668	411	5 169
Titanium						
Metal	tonnes	28	180	16	45	61
Tungsten						
Metal	tonnes	...	...	42	84	32

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	519 139	543 479	623 854	676 383	629 613
Aluminium and bauxite						
Unwrought (a)	tonnes	1 786	2 634	2 052	4 940	6 100
Scrap	tonnes	10 380	11 977	24 125	22 149	27 340
Asbestos	tonnes	857	664	...	...	34
Cement						
Cement clinkers	tonnes	44 422	3 255	...	...	...
Portland cement	tonnes	94 635	87 609	112 025	138 488	204 353
Coal						
Hard coal (b)	tonnes	79 833	86 754	101 680	123 844	94 896
Diatomite	tonnes	211	263	236	392	592
Gypsum						
Crude & calcined	tonnes	2 852	3 459	3 138	3 232	2 931

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	200	14 209	14 351	79 359	75 448
Ferro-alloys	tonnes	14 474	7 585	8 980	10 920	16 240
Silicon metal	tonnes	1 793	1 895	2 572	5 638	2 220
Ingots, blooms, billets	tonnes	64 766	91 262	99 588	172 092	195 467
Scrap	tonnes	214 024	178 503	160 459	174 272	171 941
Kaolin	tonnes	2 607	3 386	4 933	4 962	5 096
Magnesite and magnesite	tonnes	3 322	3 071	3 021	3 518	5 297
Potash						
Potassic fertilisers	tonnes	18 747	20 692	17 241	22 764	26 368
Salt	tonnes	88 877	91 525	100 542	100 459	122 251
Titanium						
Oxides	tonnes	873	998	1 132	2 032	1 232
Zinc						
Unwrought (a)	tonnes	378	747	753	895	1 172

Note(s):-

(a) Including alloys

(b) Including anthracite

Lithuania

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	4 203 206	4 018 341	5 770 428	4 793 670	5 835 729
Cement, finished	tonnes	573 000	529 193	605 784	596 857	753 069
Crude petroleum	tonnes	316 000	470 000	433 700	382 400	301 900
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	28 000	47 000	49 824	48 515	67 094

Note(s):-

(1) Small amounts of steel are believed to be produced in Lithuania

(a) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	152 220	258 802	255 405	228 171	460 569
Aluminium and bauxite						
Unwrought (a)	tonnes	802	4 767	4 083	5 222	3 943
Scrap	tonnes	31 742	22 873	24 276	15 140	11 953
Asbestos	tonnes	643	139	0	0	...
Cement						
Portland cement	tonnes	326 851	213 851	224 544	212 730	247 918
Chromium						
Metal	tonnes	48	26	7	...	0
Copper						
Scrap	tonnes	12 134	10 016	9 719	8 383	7 611
Gold						
Waste & scrap	kilograms	9 148	10 140	20	100	...
Iodine	kilograms	2 000	13 000	1 832	827	7 502
Iron, steel and ferro-alloys						
Scrap	tonnes	396 627	563 394	704 948	618 231	677 727
Lead						
Scrap	tonnes	779	1 129	931	3 239	6 613
Nickel						
Scrap	tonnes	711	739	759	996	770
Crude petroleum	tonnes	311 983	349 491	134 180	273 187	197 709
Platinum metals						
Waste & scrap	kilograms	6 750	9 867	2 982	7 980	6 019
Potash						
Potassic fertilisers	tonnes	9 386	9 243	7 705	7 128	8 037
Salt	tonnes	1 496	1 822	2 887	3 377	5 457
Sulphur and pyrites						
Sulphur	tonnes	354	5 660	14 094	16 724	13 960

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	614 623	964 300	1 096 672	993 051	1 069 921
Aluminium and bauxite						
Alumina	tonnes	9 718	5 338	9 431	6 673	10 388
Scrap	tonnes	6 583	1 654	7 907	4 435	1 131
Asbestos	tonnes	1 356	...	...	...	...
Bentonite and fuller's earth	tonnes	1 670	2 124	1 762	2 642	2 475
Cement						
Cement clinkers	tonnes	...	...	14 459	...	22 496
Portland cement	tonnes	188 422	88 783	128 201	206 317	183 712

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Chromium						
Metal	tonnes	58	3	0	1	2
Coal						
Hard coal (a)	tonnes	129 430	105 625	222 485	294 938	260 684
Diatomite	tonnes	364	319	503	1 499	917
Feldspar	tonnes	5 563	5 065	3 259	3 380	7 461
Gypsum						
Crude	tonnes	24 843	22 275	36 355	1 495	39 653
Calcined	tonnes	5 858	16 723	11 630	45 996	16 245
Iodine	kilograms	4 000	7 000	1 376	1 050	1 796
Iron, steel and ferro-alloys						
Scrap	tonnes	8 286	32 421	96 950	30 508	82 325
Crude petroleum	tonnes	4 690 000	6 117 000	6 219 137	7 075 694	837 578
Phosphates	tonnes	836 797	485 429	899 042	1 079 502	1 082 901
Potash						
Fertiliser salts	tonnes	12 989	6 264	...	...	...
Chloride	tonnes	77 322	116 995	141 946	160 334	172 622
Other potassic fertilisers	tonnes	8 460	450	6 767	7 384	12 978
Salt	tonnes	142 384	157 181	166 252	187 050	204 839
Silver						
Metal	kilograms	...	...	3 058	1 771	5 885
Sulphur and pyrites						
Sulphur	tonnes	263 058	66 675	269 602	316 359	255 917

Note(s):-

(a) Including anthracite

Malta

Exports

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys Scrap	tonnes	11 197	...	...	...	...

Imports

Commodity	Units	2000	2001	2002	2003	2004
Cement						
Portland cement	tonnes	251 860	260 812	275 627	275 736	179 533
Gold						
Metal	kilograms	...	5 926	3 835	3 927	3 607
Salt	tonnes	1 319	1 722	...	...	...

Netherlands

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	108 299 000	113 917 000	81 490 000	74 200 000	66 200 000
Primary aluminium	tonnes	301 689	293 068	284 364	282 800	331 000
Cadmium	tonnes	655	455	485	495	572
Cement, finished	tonnes	3 500 000	3 300 000	3 100 000	2 600 000	...
Pig iron	tonnes	4 970 000	5 305 000	5 367 000	5 846 000	6 011 000
Crude steel	tonnes	5 492 000	5 902 000	6 117 000	6 561 000	6 848 000
Lead, refined	tonnes	21 000	20 000	18 000	17 000	17 000
Magnesite (a)	tonnes	233 000	250 000	226 000	261 194	245 495
Crude petroleum	tonnes	2 350 758	2 263 590	3 073 924	3 076 398	2 890 979
Natural gas	million m ³	69 158	74 323	71 786	69 114	81 499
Salt	tonnes	5 564 000	5 717 000	5 773 000	5 980 000	5 896 000
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	123 000	126 000	124 000	131 000	137 000
Recovered (c)	tonnes (sulphur content)	428 000	384 000	373 000	408 000	410 000
Slab zinc	tonnes	216 768	204 794	203 460	224 000	228 100

Note(s):-

(a) Chloride produced from solution mining

(b) From metal sulphide processing

(c) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	14 426 000	11 540 000	12 743 000	12 427 000	(a) *14 294 000
Aluminium and bauxite						
Bauxite	tonnes	35 211	76 216	35 719	58 848	109 399
Alumina	tonnes	287 473	144 613	125 292	51 228	308 563
Alumina hydrate	tonnes	47 315	24 904	37 548	48 026	45 928
Unwrought	tonnes	177 895	169 741	356 282	408 302	314 462
Unwrought alloys	tonnes	275 788	300 275	225 385	227 283	320 583
Scrap	tonnes	168 405	153 947	186 791	187 522	192 722
Antimony						
Metal	tonnes	286	186	115	315	212
Oxide	tonnes	649	872	345	270	652
Arsenic						
Metallic arsenic	tonnes	46	39	45	64	49
Barytes	tonnes	49 611	88 229	98 393	91 083	73 527
Bentonite and fuller's earth						
Bentonite	tonnes	155 660	165 460	178 006	180 736	274 342
Fuller's earth	tonnes	9 860	8 123	4 019	3 752	9 085
Bismuth						
Metal	tonnes	73	6	100	327	334
Bromine	kilograms	...	9 091 000	11 625 600	5 219 900	634 000
Cadmium						
Metal	tonnes	791	891	741	572	621
Cement						
Cement clinkers	tonnes	3	1 259	1 325	2 326	1 585
Portland cement	tonnes	260 209	215 827	108 209	209 122	326 234
Other cement	tonnes	153 428	158 864	86 102	53 743	30 013
Chromium						
Ores & concentrates	tonnes	50 515	58 219	46 386	52 636	49 669
Metal	tonnes	969	812	1 282	1 817	2 655
Coal						
Anthracite	tonnes	99 939	272 320	162 820	206 426	148 188
Other coal	tonnes	8 316 654	13 104 257	6 539 589	5 574 363	8 624 870
Briquettes	tonnes	3 612	977	13 472	1 362	71 710
Cobalt						
Metal	tonnes	2 451	2 737	690	2 247	1 954
Oxides	tonnes	527	459	271	150	352
Copper						
Unwrought	tonnes	6 702	5 444	10 075	18 605	32 548
Scrap	tonnes	132 013	100 488	101 624	109 595	140 909

Netherlands

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Diamond						
Unsorted	carats	£2 016 000	£2 026 000	£1 672 000	£1 490 000	£1 883 000
Gem, rough	carats	£14 000	£3 000	£64 000	£437 000	—
Gem, cut	carats	£6 466 000	£7 891 000	£10 491 000	£8 511 000	£9 806 000
Industrial	carats	£2 951 000	£2 887 000	£758 000	£813 000	£188 000
Diatomite	tonnes	564	1 105	6 583	1 212	735
Feldspar	tonnes	810	693	808	749	81
Fluorspar	tonnes	2 825	7 399	12 752	19 186	3 019
Gold						
Metal	kilograms	3 592	28 356	9 601	...	...
Waste & scrap	kilograms	37 100	31 500	108 000	276 600	32 600
Graphite	tonnes	1 798	4 877	2 851	5 209	3 448
Gypsum						
Crude	tonnes	537	22 169	24 263	32 752	27 293
Calcined	tonnes	2 885	2 350	26 463	7 905	7 231
Iodine	kilograms	...	...	147 664	527 769	114 800
Iron ore	tonnes	157 231	29 724	42 244	20 881	1 384 740
Iron, steel and ferro-alloys						
Pig iron	tonnes	62 714	62 667	5 131	7 377	31 821
Sponge & powder	tonnes	87 650	76 545	107 474	15 255	15 794
Ferro-chrome	tonnes	24 952	27 898	9 122	38 469	70 272
Ferro-silico-chrome	tonnes	25	32	5	68	18
Ferro-manganese	tonnes	28 383	26 335	23 131	25 842	53 367
Ferro-silico-manganese	tonnes	9 105	25 958	7 037	20 830	16 109
Ferro-molybdenum	tonnes	4 282	3 401	1 242	1 610	2 712
Ferro-nickel	tonnes	12 525	10 796	4 159	4 112	9 855
Ferro-niobium	tonnes	10 281	7 512	130	131	47
Ferro-silicon	tonnes	1 351	4 937	9 899	27 511	27 328
Ferro-titanium & Fe-Si-Ti	tonnes	...	780	225	213	660
Ferro-tungsten & Fe-Si-W	tonnes	215	380	217	264	193
Ferro-vanadium	tonnes	1 083	2 194	910	2 838	2 901
Other ferro-alloys	tonnes	2 162	9 767	9 379	10 519	5 925
Silicon metal	tonnes	2 098	14 014	8 819	15 957	10 319
Ingots, blooms, billets	tonnes	511 537	312 200	538 825	239 603	309 454
Scrap	tonnes	3 101 130	3 072 052	3 064 283	3 242 779	3 859 394
Kaolin	tonnes	233 688	282 035	234 669	335 299	307 337
Lead						
Unwrought	tonnes	3 532	1 256	1 263	23 942	34 426
Scrap	tonnes	24 706	26 188	5 670	8 732	10 215
Lithium						
Oxides	tonnes	380	590	203	190	187
Carbonate	tonnes	142	205	104	89	199
Magnesite and magnesite						
Magnesite	tonnes	562	2 502	2 944	12 352	8 704
Magnesia	tonnes	69 044	448 602	438 407	384 711	431 175
Manganese						
Ores & concentrates	tonnes	13 617	9 889	14 115	12 041	15 143
Metal	tonnes	6 503	9 614	3 869	7 365	12 548
Mercury	kilograms	426 300	298 000	344 400	105 100	123 400
Mica	tonnes	4 589	1 397	4 384	5 359	7 532
Molybdenum						
Ores & concentrates	tonnes	7 303	16 092	52 237	17 141	30 424
Metal	tonnes	380	829	81	161	120
Oxides	tonnes	2 109	2 014	1 920	1 640	3 125
Nickel						
Mattes, sinters etc. (a)	tonnes	*9 200	*8 200	*19 300	*8 100	*11 700
Unwrought (b)	tonnes	27 901	54 127	25 214	33 096	24 467
Scrap	tonnes	2 042	1 365	1 494	3 602	2 745
Oxides	tonnes	1 817	...	2 528	0	28 549
Crude petroleum	tonnes	17 545	177 964	849	54 938	136 202
Phosphates	tonnes	120 824	65 689	181 928	94 541	122 866
Platinum metals						
Platinum	kilograms	£25 074 000	£21 776 000	£17 686 000	£19 007 000	£18 570 000
Platinum metals	kilograms	£2 069 000	...	£634 000	£1 015 000	£1 377 000
Waste & scrap	kilograms	46 500	23 800	10 900	9 200	201 129
Potash						
Chloride	tonnes	42 219	74 347	243 242	219 413	197 731

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Rare earths						
Ferro-cerium & other pyrophoric alloys	tonnes	34	2	14	...	...
Metals	tonnes	63	15	17	58	124
Salt	tonnes	2 863 204	2 689 600	3 641 444	3 679 323	3 212 606
Sillimanite	tonnes	7 318	10 932	5 604	6 400	11 761
Silver						
Metal	kilograms	£8 867 000	£6 398 000	£6 378 000	£16 904 000	£12 360 000
Sulphur and pyrites						
Pyrites	tonnes	119 675	93 095	16 401	...	...
Sulphur, crude	tonnes	52 565	186 059	118 053	223 880	133 553
Sulphur, refined	tonnes	84 609	105 723	143 272	98 196	170 473
Sulphur, sublimed & precipitated	tonnes	46	26	38	105	2
Talc	tonnes	162 006	145 951	164 515	177 554	245 245
Tantalum and niobium						
Tantalum	tonnes	...	31	21	23	24
Tin						
Unwrought	tonnes	2 976	1 845	4 138	4 278	3 921
Unwrought alloys	tonnes	449	102	205	240	1 430
Scrap	tonnes	483	511	643	344	685
Titanium						
Titanium minerals	tonnes	1 806	1 935	1 093	3 611	4 050
Metal	tonnes	1 482	1 532	2 344	2 015	1 846
Oxides	tonnes	(a) *73 000	(a) *68 100	80 663	(a) *65 100	89 130
Tungsten						
Ores & concentrates	tonnes	10	55	16	1	16
Metal	tonnes	182	380	469	237	520
Vanadium						
Vanadiferous residues	tonnes	291	207	...	...	...
Pentoxide	tonnes	222	253	87	219	1 575
Metal	tonnes	339	179	71	379	5
Zinc						
Unwrought	tonnes	223 418	252 993	187 416	277 262	282 610
Unwrought alloys	tonnes	98	90	4 234	7 571	19 867
Scrap	tonnes	18 842	21 496	16 093	24 856	29 836
Zirconium						
Concentrates	tonnes	1 978	1 430	5 361	7 011	8 548

Note(s):-

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

(b) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	32 500 000	36 200 000	44 000 000	45 300 000	*45 000 000
Aluminium and bauxite						
Bauxite	tonnes	108 474	95 110	92 667	120 787	227 827
Alumina	tonnes	826 316	726 542	554 967	634 626	635 820
Alumina hydrate	tonnes	154 745	131 097	141 991	191 165	136 100
Unwrought	tonnes	492 419	350 467	332 873	367 227	349 481
Unwrought alloys	tonnes	124 172	170 095	193 099	216 251	249 182
Scrap	tonnes	239 333	206 963	150 466	138 051	174 969
Antimony						
Ores & concentrates	tonnes	265	144	54	61	—
Metal	tonnes	762	775	268	511	817
Oxide	tonnes	3 061	2 293	1 287	39 431	31 244
Arsenic						
Metallic arsenic	tonnes	77	137	77	61	110
Barytes	tonnes	98 200	111 042	103 133	136 981	148 115
Bentonite and fuller's earth						
Bentonite	tonnes	276 017	236 201	247 142	298 369	358 305
Fuller's earth	tonnes	24 909	24 615	14 975	76 241	92 237

Netherlands

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Bismuth						
Compounds	tonnes	393	360	...	...	...
Metal	tonnes	1 107	278	108	274	166
Cadmium						
Metal	tonnes	25	544	...	357	284
Cement						
Cement clinkers	tonnes	147 310	706 124	52 231	616 756	355 870
Portland cement	tonnes	1 608 997	1 551 824	370 170	1 348 889	1 259 127
Other cement	tonnes	972 419	934 043	229 933	656 654	647 017
Chromium						
Ores & concentrates	tonnes	55 178	73 730	62 992	52 353	89 201
Metal	tonnes	1 488	1 359	562	310	612
Coal						
Anthracite	tonnes	1 890 491	1 293 055	190 633	363 692	288 990
Other coal	tonnes	18 794 685	26 951 400	18 685 529	20 158 178	22 241 661
Brown coal	tonnes	30 042	38 959	36 923	23 782	18 294
Briquettes	tonnes	12 541	16 111	13 474	24 574	15 510
Cobalt						
Metal	tonnes	781	1 451	478	551	1 340
Oxides	tonnes	624	510	570	215	319
Copper						
Unwrought	tonnes	155 553	123 138	156 095	123 682	135 495
Unwrought alloys	tonnes	1 374	1 612	1 725	1 326	2 172
Scrap	tonnes	78 166	65 053	70 660	80 262	76 679
Diamond						
Unsorted	carats	£8 713 000	£2 021 000	£2 276 000	£1 858 000	£3 327 000
Gem, rough	carats	£184 000	£2 135 000	£2 950 000	£828 000	£108 000
Gem, cut	carats	£26 503 000	£20 034 000	£17 776 000	£13 846 000	£14 630 000
Industrial	carats	£236 000	£850 000	£827 000	£940 000	£907 000
Diatomite	tonnes	20 654	11 800	12 979	12 069	10 515
Feldspar	tonnes	9 213	7 531	11 603	11 084	9 606
Fluorspar	tonnes	50 999	65 422	55 212	63 896	119 665
Gold						
Metal	kilograms	6 574	19 215	11 825	10 318	16 275
Waste & scrap	kilograms	62 000	1 000	500	1 000	...
Graphite	tonnes	3 622	5 636	8 232	10 208	18 139
Gypsum						
Crude	tonnes	175 167	222 337	208 013	132 882	160 621
Calcined	tonnes	407 007	274 769	381 920	387 829	478 509
Iodine	kilograms	2 380 900	2 156 800	1 269 000	632 000	460 600
Iron ore	tonnes	7 560 788	6 310 886	7 369 802	8 740 391	12 622 628
Iron ore						
Burnt pyrites	tonnes	47 175	106 277	23 596	22 545	26 717
Iron, steel and ferro-alloys						
Pig iron	tonnes	127 682	132 065	144 375	63 821	71 664
Sponge & powder	tonnes	95 375	42 829	114 868	71 606	60 793
Ferro-chrome	tonnes	132 868	126 622	114 878	68 424	176 862
Ferro-silico-chrome	tonnes	3 545	2 487	398	6	616
Ferro-silico-magnesium	tonnes	502	318	3 212	1 305	...
Ferro-manganese	tonnes	59 362	42 022	42 054	72 916	112 073
Ferro-silico-manganese	tonnes	26 395	35 316	40 133	54 901	33 492
Ferro-molybdenum	tonnes	7 956	8 781	1 457	1 800	5 282
Ferro-nickel	tonnes	29 130	23 658	12 428	9 213	38 872
Ferro-niobium	tonnes	6 575	7 888	31	16	16
Ferro-phosphorus	tonnes	1 520	2 720	1 976	1 421	...
Ferro-silicon	tonnes	81 450	90 882	129 678	110 329	153 435
Ferro-titanium & Fe-Si-Ti	tonnes	2 389	1 736	1 565	2 083	4 272
Ferro-tungsten & Fe-Si-W	tonnes	2 380	370	393	405	625
Ferro-vanadium	tonnes	2 477	1 969	3 240	3 565	3 608
Other ferro-alloys	tonnes	2 330	4 798	6 654	4 002	5 680
Silicon metal	tonnes	42 360	32 276	33 395	43 195	36 792
Ingots, blooms, billets	tonnes	279 573	119 504	102 428	124 817	302 637
Scrap	tonnes	1 167 772	1 272 600	1 378 767	1 751 693	2 250 964
Kaolin	tonnes	560 760	455 737	444 622	560 878	667 968
Lead						
Unwrought	tonnes	12 184	9 316	17 070	66 405	83 391
Scrap	tonnes	11 164	8 427	8 824	8 034	7 818

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Lithium						
Oxides	tonnes	332	539	217	237	270
Carbonate	tonnes	952	897	854	956	1 081
Magnesite and magnesite						
Magnesite	tonnes	5 562	2 242	5 758	13 139	24 206
Magnesia	tonnes	286 232	377 804	362 706	392 299	591 172
Manganese						
Ores & concentrates	tonnes	11 984	10 209	7 086	9 129	17 158
Metal	tonnes	14 471	9 661	4 533	9 112	14 347
Mercury	kilograms	560 000	908 200	517 600	143 200	449 500
Mica	tonnes	4 005	3 383	6 320	8 540	11 950
Molybdenum						
Ores & concentrates	tonnes	25 656	25 896	21 723	29 337	39 710
Metal	tonnes	530	192	285	459	747
Oxides	tonnes	1 758	1 958	1 891	1 577	2 032
Nickel						
Mattes, sinters etc.	tonnes	...	...	10 394	8 566	9 144
Unwrought	tonnes	65 684	59 920	61 898	65 504	61 516
Unwrought alloys	tonnes	59	401	47	266	314
Scrap	tonnes	2 368	3 083	4 398	5 585	6 507
Oxides	tonnes	752	1 728	6 764	7 683	4 632
Crude petroleum	tonnes	55 718 885	60 427 836	54 968 223	56 463 347	61 377 494
Phosphates	tonnes	1 178 614	822 583	964 035	922 349	757 700
Platinum metals						
Platinum	kilograms	£13 510 000	£16 677 000	£13 377 000	£14 194 000	£11 484 000
Platinum metals	kilograms	£12 436 000	£7 361 000	£8 134 000	£5 463 000	£6 930 000
Waste & scrap	kilograms	300	4 100	100	300	4 000
Potash						
Sulphate	tonnes	...	...	12 505	12 777	23 765
Chloride	tonnes	(b) 191 669	(b) 215 193	180 033	467 219	387 637
Other potassic fertilisers	tonnes	...	...	4 949	6 018	4 321
Rare earths						
Cerium compounds	tonnes	93	138	44	135	103
Other rare earth compounds	tonnes	2 972	3 793	1 380	2 222	2 254
Ferro-cerium & other pyrophoric alloys	tonnes	490	406	27	2	7
Metals	tonnes	105	57	25	38	10
Salt	tonnes	98 806	224 608	432 437	489 369	461 283
Sillimanite	tonnes	25 485	29 657	37 966	24 106	13 824
Silver						
Metal	kilograms	£13 873 000	£12 117 066	£15 277 000	£13 948 000	£18 592 000
Sulphur and pyrites						
Pyrites	tonnes	73 366	...	...	...	...
Sulphur	tonnes	21 193	30 101	58 270	29 631	35 441
Sulphur, sublimed & precipitated	tonnes	27 801	34 161	55 027	210 984	104 818
Talc	tonnes	167 896	89 378	95 121	220 448	240 799
Tantalum and niobium						
Tantalum	tonnes	72	63	15	4	34
Tin						
Unwrought	tonnes	5 603	4 346	7 008	7 368	6 801
Unwrought alloys	tonnes	888	1 007	1 162	1 330	1 830
Scrap	tonnes	1 008	609	388	202	155
Titanium						
Ilmenite	tonnes	55 587	33 524	40 286	46 568	...
Other titanium minerals	tonnes	42 479	70 438	64 024	76 539	(a) 154 460
Titanium slag	tonnes	9 877	9 848	...	...	...
Metal	tonnes	4 101	3 099	2 806	2 676	2 835
Oxides	tonnes	52 786	47 008	44 525	33 290	47 957
Tungsten						
Ores & concentrates	tonnes	397	144	195	342	265
Metal	tonnes	247	584	80	217	210
Carbide	tonnes	74	77	44	18	56
Vanadium						
Vanadiferous residues	tonnes	127	251	...	...	...
Pentoxide	tonnes	1 312	653	815	865	1 832

Netherlands

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Zinc						
Ores & concentrates	tonnes	427 101	299 374	375 646	430 349	408 032
Unwrought	tonnes	171 866	152 500	126 816	160 793	143 218
Unwrought alloys	tonnes	603	1 536	7 633	853	2 318
Scrap	tonnes	8 849	11 413	10 368	14 213	15 230
Zirconium						
Concentrates	tonnes	30 993	27 300	21 401	11 607	13 613
Metal	tonnes	64	53	42	52	105

Note(s):-

(a) Including ilmenite

(b) Including sulphate

Norway

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	19 000 000	15 000 000	14 000 000	15 000 000	15 000 000
Crushed rock	tonnes	34 000 000	36 000 000	36 000 000	36 000 000	37 000 000
Primary aluminium (a)	tonnes	1 031 000	1 034 000	1 044 000	1 180 200	1 370 438
Cadmium	tonnes	302	371	215	323	141
Cement, finished	tonnes	1 851 000	1 870 000	1 850 000	1 860 000	1 870 000
Coal						
Bituminous (b)	tonnes	631 926	1 787 784	2 131 691	2 944 000	3 100 000
Cobalt metal	tonnes	3 400	3 300	4 000	4 556	4 670
Copper, smelter	tonnes	27 000	26 704	30 483	35 851	35 643
Copper, refined	tonnes	25 300	26 700	30 600	35 852	35 643
Feldspar	tonnes	72 000	79 510	75 184	70 000	51 000
Graphite	tonnes	8 392	9 070	8 600	1 000	6 000
Iron ore	tonnes	470 000	395 000	490 000	410 000	590 000
Pig iron	tonnes	70 000	70 000	108 000	*110 000	*100 000
Crude steel	tonnes	679 000	635 000	694 000	703 000	725 000
Ferro-alloys						
Ferro-chrome	tonnes	153 500	82 600	61 100	—	—
Ferro-manganese	tonnes	150 585	111 823	126 960	*130 000	*130 000
Ferro-silico-manganese	tonnes	198 671	277 938	252 723	*250 000	*260 000
Ferro-silicon	tonnes	450 364	427 590	359 944	...	389 599
Other ferro-alloys	tonnes	54 639	47 600	48 500	*50 000	*50 000
Silicon metal	tonnes	138 139	134 958	152 981	...	193 566
Primary magnesium metal	tonnes	41 400	40 700	3 100	—	—
Nepheline syenite	tonnes	330 000	330 362	330 461	332 000	333 000
Nickel, mine	tonnes (metal content)	2 536	2 800	2 052	—	—
Nickel, smelter/refinery	tonnes	58 700	68 200	68 500	77 183	71 410
Crude petroleum	tonnes	160 804 000	162 099 000	157 847 000	153 508 000	151 221 000
Natural gas	million m ³	49 748	53 895	65 501	72 905	78 351
Sulphur and pyrites						
Recovered (c)	tonnes (sulphur content)	*90 000	*95 000	95 000	100 000	*100 000
Recovered (d)	tonnes (sulphur content)	18 000	18 000	19 000	20 000	18 000
Talc	tonnes	26 660	24 626	23 564	*24 000	23 725
Titanium minerals						
Ilmenite	tonnes	690 900	777 000	837 000	859 000	867 000
Slab zinc	tonnes	138 390	144 694	144 538	143 627	140 901

Note(s):-

(1) Norway is believed to produce gold

(a) May include some super purity aluminium

(b) Spitzbergen: not including production from mines controlled by the former Soviet Union

(c) From metal sulphide processing

(d) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	11 764 392	10 846 009	12 751 398	12 300 157	12 561 778
Aluminium and bauxite						
Unwrought	tonnes	138 907	156 506	135 792	150 101	150 479
Unwrought alloys	tonnes	902 908	1 031 140	992 055	1 212 372	1 333 251
Scrap	tonnes	24 721	37 376	40 797	37 566	39 742
Barytes	tonnes	5 169	9 227	5 234	11 105	15 888
Cadmium						
Metal	tonnes	347	357	117	237	304
Cement						
Cement clinkers	tonnes	327 552	156 911	98 557	...	...
Portland cement	tonnes	444 672	506 741	558 861	...	...
Cobalt						
Metal	tonnes	3 908	3 322	3 941	4 635	4 744

Norway

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Copper						
Unwrought	tonnes	25 968	24 681	32 302	35 392	35 632
Unwrought alloys	tonnes	1 674	1 665	1 421	1 195	988
Scrap	tonnes	17 248	17 394	15 814	25 382	21 256
Diamond						
Gem, cut	carats	...	21 000	60 000	530 000	40 000
Industrial	carats	...	194 750 000	105 000 000	2 160 000	10 000
Feldspar	tonnes	71 154	82 030	74 549	68 076	60 972
Gold						
Metal	kilograms	1 621	2 647	2 554	2 527	2 293
Waste & scrap	kilograms	1 215	5 007	1 102	174	127
Graphite	tonnes	9 002	9 032	8 129	...	—
Gypsum						
Crude	tonnes	...	...	...	27 287	30 825
Crude & calcined	tonnes	17 358	22 305	20 691	27 684	30 879
Calcined	tonnes	...	...	...	...	54
Iodine	kilograms	19 244	64	3 000	1 509	—
Iron ore						
Iron ore	tonnes	17 598	33 727	620 478	530 851	648 583
Burnt pyrites	tonnes	45 081	46 323	62 214	62 315	117 389
Iron, steel and ferro-alloys						
Pig iron (a)	tonnes	*27 900	*46 600	*119 400	*118 400	*123 700
Ferro-chrome (a)	tonnes	*172 700	*76 100	*87 500	*1 900	*600
Ferro-manganese (a)	tonnes	*205 400	*193 000	*169 400	*214 100	*332 500
Ferro-silico-manganese	tonnes	232 125	275 291	240 477	255 243	264 163
Ferro-silicon	tonnes	407 164	324 858	251 252	194 246	256 018
Other ferro-alloys	tonnes	54 776	48 994	49 366	53 913	59 696
Silicon metal	tonnes	154 807	153 017	150 681	151 476	176 458
Ingots, blooms, billets	tonnes	177 302	110 888	126 094	160 127	148 514
Scrap	tonnes	139 044	150 020	227 592	263 510	270 903
Lead						
Scrap	tonnes	15 329	15 693	5 188	987	601
Mica	tonnes	1 833	1 760	2 155	2 413	2 076
Nickel						
Ores & concentrates	tonnes	24 999	30 142	25 902	6 268	9 575
Unwrought	tonnes	59 956	65 829	67 718	78 389	71 982
Scrap	tonnes	173	255	139	264	909
Crude petroleum	tonnes	139 954 502	146 645 926	139 103 257	135 201 186	129 935 579
Platinum metals						
Platinum & platinum metals	kilograms	5 668	6 659	10 986	11 150	13 360
Waste & scrap	kilograms	851	2 639	76 801	616	384
Potash						
Potassic fertilisers	tonnes	4 033	12 006	3 869	10 964	10 107
Salt	tonnes	4 114	1 994	3 687	4 657	4 948
Silver						
Metal	kilograms	112 502	74 774	64 962	62 669	69 207
Sulphur and pyrites						
Sulphur, sublimed & precipitated	tonnes	10 694	11 504	11 630	12 194	2 671
Talc	tonnes	31 249	30 480	32 894	32 520	30 279
Titanium						
Titanium minerals	tonnes	455 450	429 000	443 833	500 000	...
Metal	tonnes	176	117	103	214	182
Oxides (a)	tonnes	*25 900	*28 300	*28 700	*30 700	*33 000
Zinc						
Unwrought	tonnes	116 999	113 170	133 006	125 896	127 410
Unwrought alloys	tonnes	12 067	13 990	6 704	6 245	6 710

Note(s):-

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

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	81 128	91 192	66 824	71 837	85 471
Aluminium and bauxite						
Bauxite	tonnes	24 325	34 811	20 898	22 147	9 035
Alumina	tonnes	2 034 199	1 977 187	2 063 999	2 267 237	2 620 149
Alumina hydrate	tonnes	42 387	37 426	42 984	42 487	42 775
Unwrought	tonnes	160 813	163 090	225 972	277 122	325 514
Unwrought alloys	tonnes	91 639	60 982	56 209	24 473	29 974
Scrap	tonnes	86 441	95 290	100 006	113 228	70 430
Antimony						
Metal	tonnes	3	9	3	8	...
Oxide	tonnes	338	157	234	351	775
Arsenic						
Metallic arsenic	tonnes	54	44	36	0	...
Barytes	tonnes	158 610	145 445	110 755	115 402	129 547
Bentonite and fuller's earth						
Bentonite	tonnes	15 220	11 476	11 618	13 963	13 667
Cement						
Portland cement	tonnes	159 245	192 678	186 529	188 442	236 622
Other cement	tonnes	7 823	7 224	5 549	5 026	10 738
Chromium						
Ores & concentrates (a)	tonnes	*282 000	*176 000	*51 000	*600	*400
Metal	tonnes	48	89	53	47	88
Coal						
Anthracite (b)	tonnes	86 671	105 585	56 263	84 858	71 785
Other coal (b)	tonnes	746 117	684 305	598 378	586 775	693 106
Lignite (b)	tonnes	86 497	35 000	1 308	9	67
Cobalt						
Metal	tonnes	1 717	2 196	3 131	4 773	9 629
Oxides	tonnes	642	113	41	22	4
Copper						
Matte & cement (c)	tonnes	*18 000	...	...	...	...
Unwrought	tonnes	3 594	3 500	3 645	1 190	2 594
Scrap	tonnes	5 890	7 647	7 609	12 591	11 270
Diamond						
Unsorted	carats	30 000	45 000	100 000	125 000	45 000
Gem	carats	2 550 000	1 965 000	2 330 000	2 165 000	2 430 000
Industrial	carats	90 000	90 000	80 000	80 000	75 000
Dust	carats	290 000	220 000	500 000	105 000	310 000
Diatomite	tonnes	1 974	2 021	1 400	1 596	2 500
Feldspar	tonnes	8 870	14 040	13 589	13 710	15 490
Fluorspar	tonnes	47 415	38 862	13 589	—	—
Gold						
Metal	kilograms	2 197	3 501	2 927	1 599	1 253
Waste & scrap	kilograms	322	1 115	1 613	776	987
Graphite	tonnes	318	347	615	502	548
Gypsum						
Crude	tonnes	23 851	36 175	59 945	49 398	109 069
Calcined	tonnes	332 034	308 328	315 517	295 160	259 001
Iodine	kilograms	228 029	118 903	684 000	1 105 811	1 294 934
Iron ore	tonnes	187 630	224 442	206 650	178 025	495 047
Iron, steel and ferro-alloys						
Pig iron	tonnes	15 874	18 207	16 844	14 639	8 823
Sponge & powder	tonnes	42 414	44 037	48 170	45 271	38 519
Ferro-chrome	tonnes	844	762	499	571	860
Ferro-manganese	tonnes	17 467	10 848	3 987	5 921	9 703
Ferro-silico-manganese	tonnes	438	19	716	3 560	933
Ferro-silicon	tonnes	7 057	13 610	14 177	19 180	11 684
Other ferro-alloys	tonnes	1 152	2 145	1 543	2 016	1 679
Silicon metal	tonnes	7 898	8 649	8 629	13 424	17 653
Ingots, blooms, billets	tonnes	176 632	161 217	132 220	101 819	150 611
Scrap	tonnes	368 454	334 136	347 080	381 683	416 062
Kaolin	tonnes	274 484	251 950	234 592	241 975	237 725
Lead						
Unwrought	tonnes	4 111	3 213	3 971	2 024	2 970
Magnesite and magnesia						
Magnesite	tonnes	6 594	4 013	3 148	3 736	2 587
Magnesia	tonnes	368	403	130	190	1 643

Norway

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Manganese						
Ores & concentrates	tonnes	608 216	711 545	660 348	803 971	1 132 985
Metal	tonnes	2 284	1 699	2 155	3 069	3 610
Mercury	kilograms	180	347	99	38	42
Mica	tonnes	2 051	2 426	1 174	1 759	1 559
Nickel						
Mattes, sinters etc.	tonnes	118 719	131 096	145 072	158 897	136 200
Unwrought (d)	tonnes	175	134	138	46	222
Crude petroleum	tonnes	915 314	956 019	590 064	562 851	440 346
Phosphates	tonnes	615 940	638 449	664 834	666 188	646 319
Platinum metals						
Platinum & platinum metals	kilograms	1 138	1 231	984	747	973
Waste & scrap	kilograms	1 327	641	840	87	59
Potash						
Sulphate	tonnes	204 059	211 169	200 407	249 307	267 653
Chloride	tonnes	335 274	331 063	339 431	310 954	309 061
Rare earths						
Metals	tonnes	751	775	558	713	702
Salt	tonnes	691 422	718 394	725 887	702 713	741 959
Sillimanite	tonnes	2 609	4 793	2 537	2 004	3 605
Silver						
Metal	kilograms	128 551	84 784	60 995	72 647	86 037
Sulphur and pyrites						
Pyrites	tonnes	216 882	151 438	225 139	225 492	225 513
Sulphur	tonnes	—	1 542	1 567	628	4 559
Talc	tonnes	12 722	8 762	11 557	14 737	14 522
Tin						
Unwrought	tonnes	457	560	458	382	47
Unwrought alloys	tonnes	96	111	176	71	79
Titanium						
Metal	tonnes	407	623	386	557	505
Oxides	tonnes	8 626	9 617	7 931	8 729	10 026
Vanadium						
Metal	tonnes	58	51	41	55	32
Zinc						
Ores & concentrates	tonnes	209 118	233 797	220 879	221 754	231 563
Unwrought (d)	tonnes	1 577	190	1 240	109	296
Scrap	tonnes	429	421	675	261	295

Note(s):-

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

(b) Excludes coal imported from Spitzbergen

(c) Cu content

(d) Including alloys

Poland

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel (a)	tonnes	73 107 000	60 039 000	60 186 000	71 376 000	*60 000 000
Crushed rock	tonnes	27 661 000	25 593 000	25 875 000	26 404 000	29 271 189
Primary aluminium	tonnes	55 473	54 606	58 777	57 145	58 931
Barytes	tonnes	—	—	2 708	3 030	3 183
Bentonite and fuller's earth						
Fuller's earth	tonnes	4 000	...	...	...	...
Cadmium	tonnes	6	330	440	375	356
Cement clinker	tonnes	11 558 467	9 335 062	8 811 639	8 647 397	9 620 601
Cement, finished	tonnes	15 046 351	12 069 941	11 206 439	11 653 448	12 837 083
Coal						
Bituminous	tonnes	103 617 556	103 991 700	103 546 000	103 016 400	101 230 400
Lignite	tonnes	59 505 486	59 557 400	58 209 600	60 919 100	61 197 500
Copper, mine	tonnes (metal content)	454 100	474 000	502 800	503 544	530 768
Copper, smelter	tonnes	462 838	485 869	510 725	559 960	547 228
Copper, refined	tonnes	486 002	498 451	508 674	529 616	550 066
Diatomite	tonnes	*1 270	*1 000	*1 000	*700	*700
Feldspar	tonnes	95 588	145 980	209 226	276 264	373 459
Gold, mine (b)	kilograms (metal content)	367	349	296	356	527
Gypsum						
Gypsum	tonnes	998 628	793 684	866 674	1 030 693	970 786
Anhydrite	tonnes	284 683	300 356	280 031	297 088	301 161
Pig iron	tonnes	6 491 867	5 440 047	5 296 410	5 585 094	6 292 341
Crude steel	tonnes	10 498 262	8 809 211	8 367 434	9 107 384	10 578 482
Ferro-alloys						
Ferro-chrome	tonnes	—	—	106	188	—
Ferro-manganese	tonnes	0	497	602	979	46 898
Ferro-silico-manganese	tonnes	18 997	20 007	7 338	*7 000	...
Ferro-silicon	tonnes	55 969	48 608	41 759	92 687	83 552
Other ferro-alloys	tonnes	4 174	4 039	4 200	—	—
Kaolin (e)	tonnes	90 139	103 220	89 372	106 761	130 596
Lead, mine	tonnes (metal content)	51 200	52 600	56 600	54 700	52 700
Lead, refined	tonnes	55 900	66 000	65 800	74 300	73 900
Magnesite	tonnes	26 140	22 200	22 100	27 200	*52 000
Crude petroleum	tonnes	652 696	767 004	727 973	764 806	886 188
Natural gas	million m ³	4 956	5 179	5 263	5 315	5 630
Salt						
Rock salt	tonnes	841 340	786 609	838 858	847 880	1 099 072
Brine salt	tonnes	2 652 042	2 688 929	2 719 131	2 790 996	2 940 169
Selenium metal	tonnes	65	65	68	78	83
Silver, mine	kilograms (metal content)	1 163 600	1 230 700	1 343 000	1 332 200	1 372 700
Sulphur and pyrites						
Frasch	tonnes (sulphur content)	1 369 259	942 252	760 320	762 689	821 489
Recovered (c)	tonnes (sulphur content)	*278 600	*280 000	*275 000	293 700	*300 000
Recovered (d)	tonnes (sulphur content)	16 483	27 602	22 777	23 384	23 767
Zinc, mine	tonnes (metal content)	156 900	152 700	152 100	154 277	140 381
Slab zinc	tonnes	173 000	174 700	158 900	154 200	155 500

Note(s):-

(1) Poland is believed to produce strontium minerals

(a) Includes an estimate for small producers

(b) Metal production

(c) From metal sulphide processing

(d) From petroleum refining and/or natural gas

(e) Washed

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	1 837 157	867 725	435 628	393 090	790 734
Aluminium and bauxite						
Unwrought (a)	tonnes	36 275	30 519	32 349	52 132	70 740
Scrap	tonnes	49 630	62 915	65 404	63 022	71 525
Bromine	kilograms	8 154	3 000	2 000	...	...
Cadmium						
Metal	tonnes	0	198	49	697	665
Cement						
Cement clinkers	tonnes	...	2 894	6 461	87 470	226 981
Portland cement	tonnes	855 843	757 302	370 832	262 290	341 112
Other cement	tonnes	118 868	134 130	98 766	7 406	7 059
Chromium						
Ores & concentrates	tonnes	3 452	145	1 533	...	117
Metal	tonnes	2	140	73	181	0
Coal						
Anthracite	tonnes	47 863	79 908	6 677	71 646	8 599
Other coal	tonnes	23 189 484	22 946 136	22 608 910	20 044 204	19 684 005
Lignite	tonnes	9 477	14 789	41 287	35 824	26 929
Cobalt						
Metal	tonnes	22	57	1	...	26
Copper						
Unwrought	tonnes	240 290	226 889	279 803	278 113	275 089
Unwrought alloys	tonnes	6 121	4 680	5 020	5 329	5 007
Scrap	tonnes	26 153	22 351	22 529	40 542	42 763
Feldspar	tonnes	831	562	649	1 626	1 441
Gold						
Metal	kilograms	389	113	1 210	249	...
Waste & scrap	kilograms	1 942	2 767	3 239	8 477	4 074
Gypsum						
Crude & calcined	tonnes	79 661	21 449	21 259	24 706	29 467
Iron, steel and ferro-alloys						
Pig iron	tonnes	137 667	40 670	3 003	16 023	57 696
Ferro-manganese & Fe-Si-Mn	tonnes	...	20	3 637	1 451	66 666
Ferro-silicon	tonnes	50 497	50 649	43 021	84 406	85 538
Other ferro-alloys	tonnes	9 298	10 522	96	86	195
Ingots, blooms, billets	tonnes	1 256 739	948 473	1 034 776	975 777	1 585 494
Scrap	tonnes	987 895	1 269 594	1 535 305	1 804 181	1 973 116
Kaolin	tonnes	1 903	6 321	3 538	10 408	9 941
Lead						
Ores & concentrates	tonnes	59 977	73 989	77 493	86 395	94 126
Unwrought	tonnes	41 381	44 691	38 602	42 518	39 287
Scrap	tonnes	1 501	1 921	2 107	2 408	963
Mercury	kilograms	94 317	82 000	24 000	...	2
Nickel						
Oxides	tonnes	95	125	146	339	468
Crude petroleum	tonnes	128 931	439 625	450 000	161 074	138 253
Phosphates	tonnes	14 989	2 700	2 511	...	507
Platinum metals						
Platinum & platinum metals	kilograms	795	43	872	308	470
Waste & scrap	kilograms	7 958	27 622	6 543	52 366	33 019
Salt	tonnes	426 860	375 944	339 140	419 201	493 259
Silver						
Metal	kilograms	1 041 874	1 094 153	1 135 000	1 251 194	821 501
Sulphur and pyrites						
Sulphur	tonnes	1 023 400	773 373	597 905	530 180	560 340
Titanium						
Oxides	tonnes	21 280	24 215	30 457	23 977	20 818
Tungsten						
Metal	tonnes	147	113	1	34	89
Zinc						
Ores & concentrates	tonnes	21 200	29 223	61 378	64 486	44 257
Unwrought	tonnes	75 489	86 067	78 497	65 661	72 820
Unwrought alloys	tonnes	2 488	2 391	1 844	1 330	850
Scrap	tonnes	897	2 497	1 463	136	269

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	1 158 007	1 428 456	1 252 285	1 527 892	1 756 513
Aluminium and bauxite						
Bauxite	tonnes	27 063	37 835	49 504	67 966	82 233
Alumina	tonnes	126 656	109 044	97 085	120 733	124 274
Alumina hydrate	tonnes	24 499	25 766	25 562	25 572	26 927
Unwrought	tonnes	54 469	49 259	74 302	88 008	85 010
Unwrought alloys	tonnes	67 290	68 294	73 770	94 090	119 305
Scrap	tonnes	16 057	12 080	9 616	13 472	31 536
Antimony						
Metal	tonnes	70	53	10	49	80
Oxide	tonnes	605	611	711	920	1 042
Arsenic						
White arsenic	tonnes	50	63	36	32	...
Metallic arsenic	tonnes	25	11	30	—	14
Asbestos	tonnes	19	19	19	—	16
Barytes	tonnes	7 958	7 358	6 571	8 318	6 593
Bentonite and fuller's earth						
Bentonite	tonnes	61 733	64 986	68 020	93 915	126 127
Fuller's earth	tonnes	920	797	1 432	1 263	1 749
Bismuth						
Metal	tonnes	9	8	4	4	6
Bromine	kilograms	43 259	14 000	6 000	2 000	(b) 9 348
Cadmium						
Oxide	tonnes	141	4	38	...	...
Cement						
Cement clinkers	tonnes	605 835	251 458	66 800	70 207	13 746
Portland cement	tonnes	306 163	328 347	630 256	699 379	540 342
Other cement	tonnes	31 863	17 313	23 531	16 352	2 323
Chromium						
Ores & concentrates	tonnes	25 804	26 128	8 461	10 977	13 053
Metal	tonnes	...	...	...	...	242
Coal						
Anthracite	tonnes	50 350	41 730	37 788	49 745	168 095
Other coal	tonnes	1 451 581	1 857 741	2 729 972	2 506 316	2 231 606
Cobalt						
Metal	tonnes	46	53	44	49	44
Oxide	tonnes	38	38	33	16	37
Copper						
Unwrought	tonnes	8 099	2 135	1 484	2 257	3 071
Scrap	tonnes	6 249	3 722	5 203	6 001	14 973
Diamond						
Unsorted	carats	20 000	...	...	...	...
Gem	carats	30 000	10 000	15 000	50 000	...
Industrial	carats	235 000	165 000	105 000	75 000	...
Diatomite	tonnes	7 150	7 284	6 961	6 394	6 387
Feldspar	tonnes	81 995	144 145	168 167	155 283	201 509
Fluorspar	tonnes	5 387	4 789	5 609	5 858	7 501
Gold						
Metal	kilograms	413	985	774	588	2 301
Graphite	tonnes	3 727	2 856	2 700	3 150	3 089
Gypsum						
Crude	tonnes	78 372	22 813	46 123	101 589	163 227
Calcined	tonnes	127 071	125 354	124 727	123 919	100 886
Iodine	kilograms	17 773	20 000	13 312	23 875	18 687
Iron ore (c)	tonnes	9 736 781	7 709 132	6 956 999	8 596 971	10 933 453

Poland

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	11 745	146 508	103 349	86 108	150 163
Sponge & powder	tonnes	2 103	1 876	13 193	34 091	34 456
Ferro-chrome	tonnes	10 388	7 729	7 716	8 073	10 352
Ferro-silico-magnesium	tonnes	2 313	...	...	...	...
Ferro-manganese	tonnes	63 562	43 277	42 851	37 530	46 414
Ferro-silico-manganese	tonnes	33 705	28 401	40 023	53 968	64 985
Ferro-molybdenum	tonnes	795	809	833	829	1 138
Ferro-phosphorus	tonnes	1 104	...	...	...	...
Ferro-silicon	tonnes	25 762	24 657	25 664	27 132	29 551
Ferro-vanadium	tonnes	541	386	308	228	393
Other ferro-alloys	tonnes	3 500	6 424	6 431	6 322	7 454
Silicon metal	tonnes	6 764	5 665	6 208	10 586	9 967
Ingots, blooms, billets	tonnes	43 331	48 142	31 962	85 027	191 722
Scrap	tonnes	170 108	104 820	69 947	96 426	278 271
Kaolin	tonnes	53 027	66 759	77 155	81 181	89 139
Lead						
Unwrought	tonnes	33 525	33 400	43 821	47 030	50 189
Lithium						
Oxides	tonnes	87	39	69	74	132
Carbonate	tonnes	44	46	55	56	117
Magnesite and magnesia	tonnes	95 007	69 772	73 266	77 830	82 164
Manganese						
Ores & concentrates	tonnes	38 975	43 603	14 597	10 037	205 290
Metal	tonnes	345	1 834	821	432	652
Mercury	kilograms	5 287	7 000	21 976	3 875	4 456
Mica	tonnes	883	820	557	486	878
Molybdenum						
Ores & concentrates	tonnes	144	111	16	1	8
Metal	tonnes	75	54	84	36	142
Nickel						
Unwrought (a)	tonnes	2 052	2 307	1 561	1 589	2 207
Crude petroleum	tonnes	18 039 804	17 558 327	16 400 000	17 448 290	17 316 135
Phosphates	tonnes	1 472 050	1 636 053	1 407 541	1 452 726	1 885 350
Platinum metals						
Platinum & platinum metals	kilograms	1 550	293	208	402	...
Waste & scrap	kilograms	2 609	...	...	23	16
Potash						
Fertiliser salts	tonnes	...	...	1 245	948	2 264
Sulphate	tonnes	...	...	18 752	19 967	24 143
Chloride	tonnes	(d) 770 508	(d) 742 114	754 473	821 469	1 098 679
Other potassic fertilisers	tonnes	...	...	2 877	5 223	4 174
Rare earths						
Rare earth compounds	tonnes	79	70	77	245	61
Metals	tonnes	23	1	1	...	3
Salt	tonnes	113 806	95 520	156 461	156 406	294 590
Sillimanite						
Sillimanite	tonnes	8 697	11 872	16 182	17 682	14 928
Mullite	tonnes	1 425	963	659	1 974	1 355
Silver						
Metal	kilograms	22 562	22 372	18 297	36 266	34 563
Sulphur and pyrites						
Pyrites	tonnes	294	402	504	1 933	1 061
Sulphur	tonnes	49 273	70 246	98 279	88 544	78 292
Sulphur, sublimed & precipitated	tonnes	560	239	120	97	11
Talc	tonnes	13 450	14 274	17 989	18 342	16 155
Tantalum and niobium						
Tantalum	tonnes	5	14	0	...	1
Tin						
Unwrought (a)	tonnes	1 194	1 010	1 344	1 077	1 367
Titanium						
Titanium minerals	tonnes	87 393	95 674	73 655	101 284	98 214
Metal	tonnes	186	182	163	151	271
Oxides	tonnes	26 324	24 027	30 029	30 546	29 710
Tungsten						
Metal	tonnes	178	276	68	42	46

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Zinc						
Ores & concentrates	tonnes	95 443	118 106	112 193	113 990	114 800
Unwrought (a)	tonnes	10 493	10 113	14 789	22 182	31 603
Scrap	tonnes	373	261	251	656	4 636
Zirconium						
Concentrates	tonnes	1 790	2 002	1 207	1 056	1 085
Metal	tonnes	7	29	13	2	23

Note(s):-

- (a) Including alloys
- (b) May include some fluorine
- (c) Including burnt pyrites
- (d) Including sulphate and fertiliser salts

Portugal

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	6 876 470	9 852 769	7 514 159	6 483 435	...
Crushed rock	tonnes	63 610 282	61 453 129	86 055 000	83 462 955	...
White arsenic	tonnes	*50	*50	*50	*50	*50
Cement clinker	tonnes	...	...	...	845 594	1 082 678
Cement, finished	tonnes	(b) 10 343 068	(b) 10 162 310	(c) 9 760 964	(c) 8 485 826	(c) 8 764 587
Copper, mine	tonnes (metal content)	76 300	82 965	77 227	77 581	95 700
Diatomite	tonnes	686	387	—	—	—
Feldspar	tonnes	136 730	112 923	141 125	129 366	98 262
Gypsum	tonnes	698 673	787 646	579 143	419 799	...
Iron ore (a)	tonnes	11 800	—	—	—	—
Pig iron	tonnes	382 000	82 000	—	—	—
Crude steel	tonnes	1 089 000	727 000	799 000	722 000	720 000
Kaolin	tonnes	162 674	148 706	147 448	169 669	*170 000
Lead, refined	tonnes	*6 000	*6 000	*6 000	*6 000	*6 000
Lithium minerals						
Lepidolite	tonnes	9 352	11 571	16 325	24 606	28 696
Salt						
Rock salt	tonnes	584 516	625 785	604 969	602 035	661 704
Sea salt	tonnes	74 027	76 653	40 139	86 603	...
Silver, mine	kilograms (metal content)	20 430	23 100	19 500	21 100	24 400
Sulphur and pyrites						
Recovered	tonnes (sulphur content)	28 000	35 000	28 000	27 000	25 000
Talc	tonnes	9 895	8 362	8 279	5 460	6 231
Tin, mine	tonnes (metal content)	1 246	1 201	345	203	200
Tungsten, mine (d)	tonnes (metal content)	743	700	693	715	746
Uranium, mine	tonnes (metal content)	13	4	2	—	—
Slab zinc	tonnes	*4 000	*4 000	*4 000	*4 000	*4 000

Note(s):-

(1) Portugal is a small producer of tantalum bearing tin slags but no detailed information is available

(a) Including manganiferous iron ore

(b) Portland cement only

(c) Portland cement, excluding white cement

(d) Wolframite and scheelite

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	59 430	54 077	31 516	31 257	53 451
Aluminium and bauxite						
Unwrought alloys	tonnes	106 585	96 207	84 709	111 732	105 837
Scrap	tonnes	14 682	19 266	24 671	19 513	28 576
Cement						
Cement clinkers	tonnes	1	...	41 626	117 332	148 984
Portland cement	tonnes	36 782	35 442	59 628	114 182	286 819
Other cement	tonnes	3 643	5 109	5 815	6 081	13 267
Copper						
Ores & concentrates	tonnes	325 725	368 150	196 709	286 781	346 534
Unwrought	tonnes	269	36	415	747	1 165
Scrap	tonnes	20 006	14 353	18 236	24 440	35 927
Diamond						
Gem, rough	carats	...	£37 983 000	£1 793 000	£3 650 000	£96 000
Gem, cut	carats	£19 186 000	£26 769 000	£23 412 000	£37 983 000	£45 779 000
Diatomite	tonnes	...	...	...	2 050	7 755
Feldspar	tonnes	2 616	147	603	5	—
Iron, steel and ferro-alloys						
Ingots, blooms, billets	tonnes	107 702	44 980	15 058	33 032	184 547
Scrap	tonnes	172 330	246 777	231 761	201 189	259 297
Kaolin	tonnes	10 287	11 944	15 318	10 131	11 383

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Lead						
Unwrought	tonnes	60	567	3 769	2 367	1 988
Scrap	tonnes	2 827	3 506	2 733	3 502	3 452
Salt	tonnes	1 892	3 656	4 413	3 952	4 444
Sulphur and pyrites						
Sulphur	tonnes	7 367	14 009	20 172	9 847	10 838
Sulphur, sublimed & precipitated	tonnes	2	1	509	408	121
Talc	tonnes	245	93	150	204	1 117
Tantalum and niobium						
Tantalum	tonnes	33	24	...	18	42
Tin						
Concentrates	tonnes	2 332	2 395	537	266	147
Tungsten						
Ores & concentrates	tonnes	715	914	588	...	900
Metal	tonnes	546	415	693	143	217
Zinc						
Scrap	tonnes	729	682	1 001	1 198	1 855
Zirconium						
Metal	tonnes	472	0	1	0	0

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	799 810	750 486	867 165	641 696	790 615
Aluminium and bauxite						
Alumina	tonnes	10 115	10 638	9 820	10 152	9 257
Unwrought	tonnes	6 314	5 072	5 276	7 903	10 903
Unwrought alloys	tonnes	188 624	169 878	167 619	185 279	200 335
Scrap	tonnes	4 306	2 746	9 043	1 755	4 214
Antimony						
Metal	tonnes	5	3	10	10	6
Oxide	tonnes	263	331	254	147	242
Asbestos	tonnes	4 710	5 505	7 137	1 568	474
Barytes	tonnes	3 893	2 721	2 607	3 589	2 630
Bentonite and fuller's earth						
Bentonite	tonnes	16 679	16 376	16 115	14 208	17 907
Fuller's earth	tonnes	85	47	351	936	662
Cement						
Cement clinkers	tonnes	1 307 807	917 322	5 421	7 715	8 775
Portland cement	tonnes	677 746	1 497 434	1 485 581	1 225 167	1 066 969
Other cement	tonnes	14 553	17 671	11 842	50 576	65 793
Chromium						
Ores & concentrates	tonnes	1 916	2 569	2 334	2 062	1 547
Coal						
Anthracite	tonnes	375 617	209 725	211 583	276 685	30 630
Other coal	tonnes	5 999 032	4 459 459	5 627 373	5 084 416	5 241 255
Copper						
Unwrought	tonnes	3 409	3 637	4 307	6 245	7 740
Scrap	tonnes	487	1 265	838	1 383	1 874
Diamond						
Unsorted	carats	£43 000	£78 000	£69 000	£30 000	£22 000
Gem, rough	carats	£17 753 000	£20 914 000	£24 832 000	£26 362 000	£18 757 000
Gem, cut	carats	£12 550 000	£8 758 000	£5 367 000	£3 926 000	£11 608 000
Industrial	carats	£491 000	£738 000	£874 000	£803 000	£669 000
Dust	carats	...	740 000	750 000	690 000	710 000
Diatomite	tonnes	2 151	1 771	1 537	3 223	2 263
Feldspar	tonnes	50 280	72 198	87 177	79 521	96 049
Fluorspar	tonnes	1 693	1 243	1 196	574	158
Gold						
Metal	kilograms	2 551	4 791	3 303	1 893	655
Graphite	tonnes	678	1 297	1 436	1 129	1 317

Portugal

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Gypsum						
Crude	tonnes	35 966	40 509	33 696	60 120	82 603
Calcined	tonnes	374 538	374 719	371 705	338 228	340 665
Iodine	kilograms	22 443	76 686	25 000	28 807	14 717
Iron ore	tonnes	580 178	141 064	829	421	448
Iron, steel and ferro-alloys						
Pig iron	tonnes	24 253	23 395	25 139	12 763	16 089
Ferro-manganese	tonnes	1 180	603	490	779	889
Ferro-silico-manganese	tonnes	6 877	3 204	2 331	5 757	1 742
Ferro-silicon	tonnes	3 749	3 439	2 296	2 339	1 881
Other ferro-alloys	tonnes	5 922	5 942	4 762	3 894	2 981
Ingots, blooms, billets	tonnes	46 558	73 499	123 087	5 829	7 167
Scrap	tonnes	227 168	184 327	218 978	353 646	292 753
Kaolin	tonnes	140 863	151 525	125 201	135 681	124 508
Lead						
Unwrought	tonnes	18 053	20 604	16 952	15 624	18 885
Magnesite and magnesite						
Magnesite	tonnes	2 892	1 888	909	885	969
Magnesia	tonnes	2 288	18 635	6 078	5 855	4 808
Mercury	kilograms	749	7 546	533	523	291
Mica	tonnes	57	56	113	198	311
Molybdenum						
Metal	tonnes	17	14	15	15	24
Nickel						
Unwrought (a)	tonnes	282	315	293	184	310
Crude petroleum	tonnes	11 422 174	12 517 253	11 635 480	12 544 785	13 081 242
Phosphates	tonnes	141 161	158 684	134 664	141 740	149 365
Platinum metals						
Waste & scrap	kilograms	1 804	13	...	...	—
Potash						
Sulphate	tonnes	6 133	1 950	2 144	4 457	7 526
Chloride	tonnes	55 774	55 972	73 748	55 775	79 232
Salt	tonnes	104 476	116 508	119 892	139 720	121 621
Sillimanite	tonnes	568	566	405	330	337
Silver						
Metal	kilograms	...	599	64	2 520	2 237
Sulphur and pyrites						
Sulphur	tonnes	2 302	3 306	5 981	6 333	3 532
Sulphur, sublimed & precipitated	tonnes	7	103	5	5	431
Talc	tonnes	14 873	14 354	16 685	17 721	20 203
Tantalum and niobium						
Tantalum	tonnes	71	99	171	69	68
Tin						
Unwrought	tonnes	1 505	780	1 223	781	434
Unwrought alloys	tonnes	246	210	29	63	71
Titanium						
Oxides	tonnes	17 227	17 341	20 230	18 922	20 120
Tungsten						
Metal	tonnes	...	...	28	103	153
Carbide	tonnes	75	82	79	96	109
Zinc						
Unwrought	tonnes	12 146	12 701	13 649	18 113	13 450
Unwrought alloys	tonnes	7 413	6 907	10 678	10 616	14 675
Zirconium						
Concentrates	tonnes	3 610	3 990	2 924	2 802	2 045

Note(s):-

(a) Including alloys

Romania

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	813 941	1 075 191	1 568 994	1 013 386	1 458 266
Alumina	tonnes (Al ₂ O ₃ content)	416 587	319 403	361 047	332 853	559 307
Primary aluminium	tonnes	179 039	181 830	187 052	196 844	218 534
Barytes	tonnes	4 266	2 851	100	23	—
Bentonite and fuller's earth						
Bentonite	tonnes	37 587	24 779	15 389	17 637	18 161
Bismuth, mine	tonnes (metal content)	*40	*40	*40	*40	*40
Cement, finished	tonnes	6 058 000	5 702 000	5 679 776	5 991 962	6 209 251
Coal						
Anthracite & bituminous	tonnes	4 042 000	4 033 000	3 976 000	3 309 000	*3 000 000
Brown coal & lignite	tonnes	26 882 000	30 750 000	28 015 000	31 121 000	28 648 476
Copper, mine	tonnes (metal content)	16 099	19 185	19 323	23 389	18 767
Copper, smelter	tonnes	4 900	3 000	3 000	3 000	61
Copper, refined	tonnes	15 303	17 654	11 453	16 739	24 383
Diatomite	tonnes	9 890	9 743	20 922	33 296	14 192
Feldspar	tonnes	37 157	43 037	51 959	72 827	60 636
Fluorspar	tonnes	*15 000	*15 000	*15 000	*15 000	*15 000
Gold, mine	kilograms (metal content)	1 200	1 600	1 700	*1 700	*1 700
Graphite	tonnes	1 251	1 176	1 001	1 014	395
Gypsum	tonnes	218 338	282 985	421 235	409 516	485 704
Iron ore	tonnes	116 000	221 000	248 000	244 000	*202 500
Pig iron	tonnes	3 065 788	3 242 994	3 979 346	4 101 409	4 243 999
Crude steel	tonnes	4 671 967	4 935 623	5 490 434	5 692 496	6 041 903
Ferro-alloys						
Ferro-manganese	tonnes	1 989	384	—	—	—
Ferro-silico-manganese	tonnes	62 320	71 921	84 720	141 899	194 945
Ferro-silicon	tonnes	8 309	5 823	—	—	—
Kaolin	tonnes	18 942	21 867	22 517	25 741	22 337
Lead, mine	tonnes (metal content)	18 750	19 676	17 500	15 747	14 952
Lead, refined	tonnes	23 555	22 000	23 000	28 000	32 000
Manganese ore	tonnes	27 080	73 276	59 148	72 931	*77 500
Crude petroleum	tonnes	6 042 000	6 011 000	5 810 000	5 651 000	5 465 000
Natural gas	million m ³	14 607	14 090	13 647	13 174	13 290
Salt	tonnes	2 307 806	2 225 052	2 257 886	2 416 970	2 398 324
Silver, mine	kilograms (metal content)	*18 000	*18 000	*18 000	*18 000	*18 000
Sulphur and pyrites						
Pyrites	tonnes (sulphur content)	9 883	1 835	—	—	—
Recovered	tonnes (sulphur content)	35 000	41 000	29 000	49 000	53 000
Talc	tonnes	7 850	7 270	7 310	10 082	9 725
Uranium, mine	tonnes (metal content)	*50	85	90	90	90
Zinc, mine	tonnes (metal content)	27 452	29 786	21 512	22 081	18 604
Slab zinc	tonnes	51 929	48 000	38 000	51 000	*50 000

Note(s):-

(1) Romania is also believed to produce asbestos, mica and molybdenum

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	7 132	1 953	18 927	35 924	23 073
Aluminium and bauxite						
Alumina	tonnes	239 780	196 600	5 128	155 094	209 950
Unwrought (a)	tonnes	72 767	73 320	88 022	35 094	79 508
Scrap	tonnes	32 905	6 577	6 963	5 787	4 703
Bentonite and fuller's earth						
Bentonite	tonnes	14 789	12 748	4 430	4 056	8 810
Cement						
Cement clinkers	tonnes	625 989	512 590	572 684	360 639	669 204
Portland cement	tonnes	1 208 858	1 133 414	1 020 819	963 978	701 686
Copper						
Ores & concentrates	tonnes	19 489	64 002	87 299	94 668	81 485
Unwrought	tonnes	13 064	14 740	3 826	1 185	815
Scrap	tonnes	41 553	9 417	19 432	16 683	15 979

Romania

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Feldspar	tonnes	22	2 977	15 465	33 265	28 820
Gypsum	tonnes	5 191	6 115	6 473	10 539	14 277
Iron, steel and ferro-alloys						
Pig iron	tonnes	7 473	2 548	2 686	6 367	3 339
Sponge & powder	tonnes	7 767	7 264	7 797	6 886	9 187
Ferro-alloys	tonnes	61 255	66 286	...	127 086	...
Ferro-silico-manganese	tonnes	(b) ...	(b) ...	(b) ...	124 557	179 788
Other ferro-alloys	tonnes	61 255	66 286	88 368	2 529	3 891
Ingots, blooms, billets	tonnes	59 291	435 748	162 991	130 415	161 438
Scrap	tonnes	2 289 430	1 679 265	2 070 119	2 386 017	2 394 490
Lead						
Ores & concentrates	tonnes	26 003	15 585	36 089	30 390	25 092
Unwrought	tonnes	18 260	16 142	16 544	23 388	20 894
Scrap	tonnes	6 083	1 483	1 518	964	1 689
Salt	tonnes	465 106	349 112	393 787	546 390	497 826
Sulphur and pyrites						
Sulphur	tonnes	320	79	5 505	12 974	20 682
Titanium						
Metal	tonnes	...	23	80	94	277
Zinc						
Ores & concentrates	tonnes	46 410	60 681	59 456	99 978	31 665
Unwrought	tonnes	46 355	44 984	34 261	49 234	42 968

Note(s):-

(a) Including alloys

(b) Included with 'other ferro-alloys'

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	13 512	123 702	218 348	213 091	370 184
Aluminium and bauxite						
Bauxite	tonnes	1 428 143	1 152 415	843 557	821 036	1 532 335
Alumina	tonnes	186 972	81 407	31 763	223 466	125 902
Unwrought (a)	tonnes	1 187	224	...	3 145	7 449
Antimony						
Metal	tonnes	63	70	64	65	62
Asbestos	tonnes	10 244	13 644	12 137	11 859	13 036
Barytes	tonnes	21 086	8 198	16 869	2 943	9 943
Bentonite and fuller's earth	tonnes	2 700	9 861	14 733	3 383	4 652
Cement						
Portland cement	tonnes	31 754	9 680	20 478	123 332	228 506
Chromium						
Ores & concentrates	tonnes	1 301	2 405	3 869	2 701	2 562
Metal	tonnes	95	22	60	70	58
Coal						
Anthracite	tonnes	...	...	14 124	18 267	74 708
Other coal	tonnes	(b) 2 467 034	(b) 3 015 063	3 658 335	3 251 154	3 584 413
Lignite	tonnes	...	...	153	18 554	44 787
Copper						
Ores & concentrates	tonnes	41 206	127	—	...	1
Unwrought	tonnes	15 938	25 611	12 248	2 225	7 255
Diatomite	tonnes	3 133	2 980	2 909	3 267	3 294
Feldspar	tonnes	19 694	34 378	35 924	41 385	38 470
Fluorspar	tonnes	4 739	7 314	6 653	5 547	4 117
Gypsum	tonnes	36 947	109 719	102 708	48 336	37 805
Iron ore	tonnes	5 049 180	3 874 940	6 198 085	6 977 977	6 609 026
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	61 774	59 826	66 087	69 411	92 302
Silicon metal	tonnes	2 460	1 759	1 590	5 888	3 401
Ingots, blooms, billets	tonnes	512 266	648 391	724 751	510 940	559 793
Kaolin	tonnes	68 404	71 015	71 628	82 981	71 987

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Lead						
Ores & concentrates	tonnes	32 615	30 678	32 043	14 899	26 920
Unwrought	tonnes	4 377	3 767	2 811	1 111	1 667
Magnesite and magnesia	tonnes	23 280	31 707	35 478	23 255	26 209
Manganese						
Ores & concentrates	tonnes	127 114	128 961	209 891	380 043	534 014
Metal	tonnes	137	158	230	297	303
Mica	tonnes	42	72	...	590	828
Nickel						
Unwrought (a)	tonnes	467	671	457	280	563
Crude petroleum	tonnes	4 641 598	5 543 644	5 690 063	5 216 636	7 314 284
Phosphates	tonnes	344 152	278 348	249 271	264 547	303 713
Potash						
Sulphate	tonnes	9	71	2 174	41 698	8 070
Chloride	tonnes	71 311	76 450	58 108	33 920	53 008
Salt	tonnes	6 242	23 077	59 231	99 679	120 787
Sulphur and pyrites						
Sulphur	tonnes	54 047	22 311	357	5 660	2 075
Sulphur, sublimed & precipitated	tonnes	69	146	13	30	9
Talc	tonnes	804	1 038	1 200	1 187	1 609
Tin						
Unwrought (a)	tonnes	191	333	245	291	188
Titanium						
Titanium minerals	tonnes	3 017	2 544	1 993	2 192	2 334
Oxides	tonnes	3 992	4 621	4 742	5 454	6 378
Zinc						
Ores & concentrates	tonnes	148 679	87 597	55 758	113 683	109 019
Unwrought (a)	tonnes	6 075	11 747	15 482	16 030	19 555
Zirconium						
Concentrates	tonnes	468	685	678	827	809
Metal	tonnes	18	48	12	22	30

Note(s):-

(a) Including alloys

(b) Including anthracite

Slovakia

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	2 000 000	2 000 000	2 200 000	...	...
Crushed rock	tonnes	7 700 000	8 100 000	8 800 000	...	...
Primary aluminium	tonnes	109 000	110 062	111 600	132 089	156 893
Barytes	tonnes	13 700	14 450	25 820	12 000	27 063
Bentonite and fuller's earth						
Bentonite	tonnes	77 000	73 000	65 500	74 700	73 273
Cement, finished	tonnes	3 044 923	3 122 665	3 140 581	3 147 478	3 158 308
Coal						
Brown coal	tonnes	3 646 100	3 421 100	3 406 400	3 076 100	2 951 598
Copper, refined	tonnes	—	10 584	6 989	600	—
Gold, mine	kilograms (metal content)	306	157	77	79	107
Gypsum (a)	tonnes	108 000	168 800	121 680	93 800	127 100
Iron ore	tonnes	447 055	435 492	326 300	287 000	305 072
Pig iron	tonnes	3 166 400	3 254 600	3 533 150	3 892 000	3 765 000
Crude steel	tonnes	3 733 200	3 988 600	4 275 470	4 588 000	4 454 000
Ferro-alloys						
Ferro-chrome	tonnes	17 658	5 968	5 695	1 924	1 784
Ferro-silico-manganese	tonnes	52 141	46 288	62 084	52 733	64 842
Ferro-silicon	tonnes	59 443	55 577	35 920	41 539	34 600
Other ferro-alloys	tonnes	50 508	46 357	24 657	44 589	68 096
Kaolin	tonnes	21 000	34 730	24 600	24 800	89 424
Magnesite	tonnes	1 000 211	961 212	929 630	1 640 900	1 668 900
Perlite	tonnes	17 022	14 910	18 635	15 000	16 000
Crude petroleum	tonnes	56 940	54 115	51 921	47 953	42 140
Natural gas	million m ³	203	212	212	201	178
Salt	tonnes	121 700	123 000	97 400	133 100	100 420
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	5 000	5 000	5 000	5 000	5 000
Recovered (c)	tonnes (sulphur content)	51 000	57 000	61 000	60 000	65 000
Talc	tonnes	1 800	2 600	2 290	4 200	7 100

Note(s):-

(1) Slovakia is believed to produce feldspar

(a) Including anhydrite

(b) From metal sulphide processing

(c) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	557 394	573 398	570 446	328 547	(a) *541 000
Aluminium and bauxite						
Unwrought	tonnes	909	1 345	2 225	3 098	6 827
Unwrought alloys	tonnes	142 530	146 730	156 343	169 698	183 346
Scrap	tonnes	6 583	4 744	5 417	5 722	7 594
Barytes	tonnes	13 197	14 215	11 037	6 642	7 919
Bentonite and fuller's earth						
Bentonite	tonnes	55 209	65 850	56 645	66 954	85 341
Fuller's earth	tonnes	1 248	1 091	1 007	856	*1 000
Cement						
Cement clinkers	tonnes	45	3 848	9 501	27 695	4 768
Portland cement	tonnes	1 488 158	1 697 104	1 584 379	1 476 998	1 470 728
Other cement	tonnes	11 577	58 301	18 992	15 958	24 408
Chromium						
Metal	tonnes	2 699	2 869	2 511	2 289	2 362
Copper						
Unwrought	tonnes	343	1 280	1 151	7 094	15 680
Scrap	tonnes	7 854	5 475	7 711	8 889	12 764
Gold						
Ores & concentrates	kilograms	968 000	...	...	...	...
Metal	kilograms	147	133	255	325	274
Waste & scrap	kilograms	155	494	1 600	1 012	357

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Gypsum						
Crude & calcined	tonnes	3 666	69	154	184	679
Iron ore	tonnes	115 628	112 227	127 174	76 957	135 398
Iron, steel and ferro-alloys						
Pig iron	tonnes	37 392	23 551	13 213	37 145	73 303
Ferro-manganese	tonnes	39 221	36 573	47 074	37 139	57 440
Ferro-silico-manganese	tonnes	51 409	47 734	56 484	54 945	66 902
Ferro-silicon	tonnes	58 058	53 701	39 550	42 018	40 135
Other ferro-alloys	tonnes	25 904	18 111	14 541	10 013	11 834
Ingots, blooms, billets	tonnes	53 720	202 645	191 414	125 822	286 072
Scrap	tonnes	274 525	375 552	450 126	497 645	544 714
Lead						
Unwrought	tonnes	3 311	2 873	984	3 124	(a) *2 000
Magnesite and magnesite	tonnes	385 032	377 755	343 123	396 477	414 176
Mercury	kilograms	1 000	34 000	1 188	2 437	0
Crude petroleum	tonnes	14 668	16 895	13 013	16 699	113 305
Platinum metals						
Platinum & platinum metals	kilograms	...	...	257	310	308
Salt	tonnes	39 930	50 441	45 612	47 199	51 539
Silver						
Metal	kilograms	...	...	8 498	7 985	6 465
Talc	tonnes	1 510	1 549	1 322	1 205	...
Zinc						
Unwrought	tonnes	286	199	104	587	...
Scrap	tonnes	791	732	1 337	743	...

Note(s):-

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

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	125 093	194 367	188 874	208 515	294 267
Aluminium and bauxite						
Bauxite	tonnes	4 125	28 803	8 211	8 300	7 991
Alumina	tonnes	212 209	232 975	221 205	253 825	366 784
Unwrought (a)	tonnes	51 099	36 909	53 060	49 945	45 913
Scrap	tonnes	2 181	4 163	11 508	10 593	13 701
Barytes	tonnes	301	538	1 312	956	927
Bentonite and fuller's earth						
Bentonite	tonnes	5 871	4 861	4 008	3 912	6 040
Fuller's earth	tonnes	...	...	204	1 014	866
Cement						
Cement clinkers	tonnes	825	0	—	34 550	33 021
Portland cement	tonnes	80 531	80 356	82 114	113 926	85 834
Other cement	tonnes	1 139	2 629	2 320	3 379	19 636
Chromium						
Ores & concentrates	tonnes	54 500	28 803	16 766	12 624	24 479
Metal	tonnes	9	58	103	179	2
Coal						
Hard coal (b)	tonnes	4 852 343	4 974 806	4 630 110	4 944 486	5 181 166
Lignite	tonnes	806 199	763 850	710 943	805 556	717 562
Copper						
Ores & concentrates	tonnes	*12 000	...	...	538	295
Unwrought	tonnes	1 464	11 071	11 400	3 689	1 269
Scrap	tonnes	386	5 462	5 604	8 448	20 776
Diatomite	tonnes	1 599	1 406	1 283	1 067	865
Feldspar	tonnes	26 213	29 202	27 596	48 100	39 689
Fluorspar	tonnes	7 955	2 393	1 797	1 965	1 574
Gold						
Metal	kilograms	495	545	654	421	...
Graphite	tonnes	5 199	1 992	2 633	2 209	1 667
Gypsum						
Crude & calcined	tonnes	102 728	40 702	125 948	121 461	110 803

Slovakia

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron ore	tonnes	4 741 501	3 269 165	4 990 546	5 704 522	2 745 925
Iron, steel and ferro-alloys						
Pig iron	tonnes	17 889	19 209	20 219	14 998	29 498
Sponge & powder	tonnes	8 483	26	15 318	11 704	11 141
Ferro-alloys	tonnes	18 946	24 870	31 332	36 038	35 878
Silicon metal	tonnes	5 348	50	6 496	7 593	8 199
Ingots, blooms, billets	tonnes	19 599	4 015	29 081	17 534	15 927
Scrap	tonnes	219 213	383 068	475 898	389 383	241 718
Kaolin	tonnes	81 985	93 735	111 841	88 513	76 440
Magnesite and magnesite	tonnes	34 249	36 609	32 571	31 606	27 698
Manganese						
Ores & concentrates	tonnes	132 601	...	186 061	176 511	257 331
Metal	tonnes	101	185	121	147	...
Mercury	kilograms	8 022	4 000	3 677	2 230	2 738
Crude petroleum	tonnes	5 329 492	5 408 523	5 554 324	5 603 952	5 858 911
Potash						
Potassic fertilisers	tonnes	30 294	821	39 452	30 582	36 256
Salt	tonnes	193 174	158 752	200 614	213 250	266 601
Sillimanite	tonnes	3 668	1 770	2 385	2 690	2 459
Silver						
Metal	kilograms	13 002	...	13 268	13 073	17 735
Sulphur and pyrites						
Sulphur	tonnes	15 022	21 142	18 738	7 439	3 582
Talc	tonnes	433	711	382	369	192
Tin						
Unwrought (a)	tonnes	651	624	800	1 091	2 034
Titanium						
Metal	tonnes	335	142	103	111	101
Oxides	tonnes	2 047	530	429	2 701	2 173
Zinc						
Unwrought (a)	tonnes	24 062	...	31 953	33 557	42 324

Note(s):-

(a) Including alloys

(b) Including anthracite

Slovenia

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	12 546 000	11 661 000	11 277 000	11 012 000	11 466 000
Crushed rock	tonnes	13 916 820	12 200 746	13 049 675	15 040 340	...
Primary aluminium	tonnes	75 600	76 632	87 600	109 800	120 700
Cement, finished	tonnes	*1 300 000	*1 300 000	*1 250 000	1 300 000	1 300 000
Coal						
Brown coal & lignite	tonnes	4 479 300	4 133 000	4 684 710	4 828 786	4 809 058
Crude steel	tonnes	519 000	462 000	481 000	541 000	566 000
Ferro-alloys						
Ferro-silicon	tonnes	*9 000	*9 000	*9 000	*12 000	*18 000
Lead, refined	tonnes	15 300	15 400	15 400	15 000	*15 000
Natural gas	million m ³	6 800	6 100	5 704	4 926	5 040
Salt	tonnes	5 000	2 000	5 200	3 632	...

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	48 539	77 693	92 618	137 354	166 176
Aluminium and bauxite						
Alumina	tonnes	6 979	10 452	11 760	18 072	24 277
Unwrought alloys	tonnes	60 662	70 705	77 362	101 446	124 069
Scrap	tonnes	7 393	9 522	12 329	11 619	14 971
Cement						
Cement clinkers	tonnes	25	...	2 163	7 589	18 577
Portland cement	tonnes	173 192	184 683	171 993	166 323	101 842
Other cement	tonnes	...	...	...	...	16 154
Copper						
Scrap	tonnes	7 857	7 999	8 615	10 550	12 564
Gold						
Metal	kilograms	128	160	1 287	681	254
Waste & scrap	kilograms	0	5 973	—	1 012	1 649
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	25 967	27 200	31 083	34 420	37 714
Silicon metal	tonnes	0	...	40	188	1 608
Ingots, blooms, billets	tonnes	13 638	11 953	8 292	13 311	15 327
Scrap	tonnes	114 018	136 041	126 233	113 448	186 726
Lead						
Unwrought	tonnes	6 392	6 587	3 757	5 136	4 701
Lithium						
Carbonate	tonnes	67	91	68	64	89
Manganese						
Metal	tonnes	5	3	104	185	143
Mercury	kilograms	831	1 446	1 312	15 826	7 327
Nickel						
Unwrought (a)	tonnes	850	225	262	116	144
Platinum metals						
Platinum & platinum metals	kilograms	201	322	919	817	1 083
Salt	tonnes	3 957	3 513	4 400	4 814	5 253
Silver						
Metal	kilograms	1 020	1 775	1 367	3 948	2 699
Titanium						
Oxides	tonnes	42 369	32 782	38 484	35 655	38 497

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	585 923	491 305	447 327	541 189	532 614
Aluminium and bauxite						
Bauxite	tonnes	54 840	87 940	35 020	51 683	44 560
Alumina	tonnes	159 323	167 095	239 473	252 351	264 319
Alumina hydrate	tonnes	17 969	26 905	23 219	22 878	14 131
Unwrought	tonnes	57 360	79 091	51 670	63 688	57 362
Unwrought alloys	tonnes	21 500	28 897	33 274	40 332	43 403
Scrap	tonnes	10 874	13 739	13 262	13 676	27 390
Antimony						
Metal	tonnes	3	29	118	52	84
Asbestos	tonnes	893	...	...	...	10
Barytes	tonnes	730	1 026	1 075	931	896
Bentonite and fuller's earth	tonnes	4 657	3 738	4 122	4 322	3 591
Bismuth						
Metal	tonnes	39	35	54	42	43
Cement						
Cement clinkers	tonnes	16 485	21 066	16 279	95 002	61 151
Portland cement	tonnes	140 600	174 690	150 749	205 345	219 779
Other cement	tonnes	1 613	1 254	1 272	1 440	112
Chromium						
Ores & concentrates	tonnes	607	722	451	340	406
Metal	tonnes	8	18	10	26	31
Coal						
Hard coal (b)	tonnes	12 937	28 581	34 607	54 168	38 849
Lignite	tonnes	296 245	440 419	539 356	488 929	584 117
Cobalt						
Metal	tonnes	180	214	141	198	162
Copper						
Unwrought	tonnes	3 540	3 226	4 005	3 835	2 948
Scrap	tonnes	3 755	3 300	3 119	3 787	3 743
Diamond						
Gem, cut	carats	15 000	25 000	15 000	...	...
Industrial	carats	110 000	90 000	50 000	...	...
Dust	carats	1 730 000	1 505 000	2 040 000	...	...
Diatomite	tonnes	481	503	446	450	730
Feldspar	tonnes	3 923	5 232	4 870	8 605	10 045
Fluorspar	tonnes	1 141	939	1 148	1 113	1 178
Gold						
Metal	kilograms	1 399	1 539	2 696	612	382
Gypsum	tonnes	77 110	70 509	74 660	59 685	46 703
Iodine	kilograms	1 263	2 200	150	180	172
Iron, steel and ferro-alloys						
Pig iron	tonnes	14 265	13 497	14 851	19 260	27 783
Ferro-alloys	tonnes	28 058	28 298	32 616	34 959	44 254
Silicon metal	tonnes	2 564	3 547	4 059	6 483	10 171
Ingots, blooms, billets	tonnes	4 057	5 800	3 620	3 312	3 199
Scrap	tonnes	250 090	249 517	262 294	316 188	386 832
Kaolin	tonnes	28 703	25 583	27 112	29 449	28 782
Lead						
Unwrought	tonnes	10 923	10 738	12 629	13 604	12 854
Scrap	tonnes	91	215	783	538	1 223
Lithium						
Oxides	tonnes	82	116	80	88	127
Magnesite and magnesite	tonnes	7 584	8 406	9 377	9 732	9 560
Manganese						
Metal	tonnes	70	42	154	152	296
Molybdenum						
Ores & concentrates	tonnes	247	95	0	42	524
Nickel						
Unwrought (a)	tonnes	3 718	2 954	1 595	992	959
Crude petroleum	tonnes	128 439	1	0	0	0
Platinum metals						
Platinum & platinum metals	kilograms	656	1 411	1 018	1 033	430
Rare earths						
Metals	tonnes	55	74	71	80	107
Salt	tonnes	98 702	107 755	128 212	155 881	178 531

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Silver						
Metal	kilograms	36 769	32 378	35 827	36 253	307 045
Sulphur and pyrites						
Pyrites	tonnes	294	379	426	399	375
Sulphur	tonnes	47 621	51 734	49 560	46 289	49 649
Talc	tonnes	3 639	3 990	4 706	5 251	5 628
Titanium						
Titanium minerals	tonnes	12 462	18 676	7 805	24 652	11 610
Metal	tonnes	67	68	127	118	300
Oxides	tonnes	2 444	2 282	2 936	3 219	3 033
Zinc						
Unwrought (a)	tonnes	23 136	20 516	18 031	19 925	21 146
Zirconium						
Concentrates	tonnes	415	440	440	529	416

Note(s):-

(a) Including alloys

(b) Including anthracite

Spain

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	81 688 475	85 000 000	97 857 003	118 746 034	*124 000 000
Crushed rock	tonnes	192 655 157	200 000 000	237 379 504	254 100 000	*265 000 000
Alumina	tonnes (Al ₂ O ₃ content)	1 123 000	1 199 000	1 350 000	1 380 000	*1 400 000
Primary aluminium	tonnes	365 700	376 400	380 100	389 100	397 500
Barytes	tonnes	32 653	45 473	50 071	44 660	40 776
Bentonite and fuller's earth						
Bentonite	tonnes	90 152	*120 000	123 457	103 174	79 919
Attapulgite	tonnes	28 307	24 477	22 918	18 975	18 000
Sepiolite	tonnes	596 324	*600 000	564 610	548 728	550 000
Bromine	kilograms	*100 000	*100 000	*100 000	*100 000	*100 000
Cement, finished	tonnes	38 115 621	40 512 090	42 417 253	44 746 757	47 800 000
Coal						
Anthracite	tonnes	5 143 977	4 693 831	4 399 365	3 857 364	3 693 414
Bituminous	tonnes	6 166 586	5 797 496	5 349 027	5 547 150	5 229 416
Sub-bituminous	tonnes	3 630 805	3 456 000	3 537 710	3 182 572	3 426 085
Lignite	tonnes	8 523 586	8 787 000	8 726 121	7 977 546	8 147 237
Copper, mine	tonnes (metal content)	24 804	9 800	1 248	635	1 308
Copper, smelter	tonnes	289 957	280 015	298 057	290 282	224 249
Copper, refined	tonnes	315 734	290 630	312 145	293 495	228 466
Diatomite (a)	tonnes	66 770	70 000	53 558	57 934	24 799
Feldspar	tonnes	478 260	*520 000	548 964	563 580	580 000
Fluorspar	tonnes	140 466	134 039	141 434	139 266	143 824
Gold, mine	kilograms (metal content)	4 304	4 277	5 559	5 212	5 251
Gypsum	tonnes	9 929 478	*10 920 000	11 218 410	11 366 375	11 500 000
Iron ore	tonnes	75 054	55 058	24 489	571	10 879
Pig iron	tonnes	4 059 000	4 094 000	3 973 000	3 645 000	4 036 000
Crude steel	tonnes	15 874 000	16 504 000	16 408 000	16 407 000	17 700 000
Ferro-alloys						
Ferro-chrome	tonnes	905	—	—	—	—
Ferro-manganese	tonnes	26 815	24 804	33 218	*35 000	*35 000
Ferro-silico-manganese	tonnes	128 197	102 110	103 494	*100 000	*100 000
Ferro-silicon	tonnes	50 071	53 427	56 994	*60 000	*60 000
Silicon metal	tonnes	28 215	29 114	26 071	*25 000	*25 000
Kaolin (b)	tonnes	353 355	*400 000	419 483	427 193	402 347
Lead, mine	tonnes (metal content)	51 793	35 573	6 171	1 765	—
Lead, refined	tonnes	120 000	121 600	115 552	99 100	105 600
Magnesite	tonnes	534 234	598 000	637 024	517 030	556 500
Mercury	kilograms	236 600	524 000	726 139	745 260	—
Mica (e)	tonnes	10 086	9 874	11 783	11 800	7 000
Crude petroleum	tonnes	226 422	344 074	326 197	329 171	262 802
Natural gas	million m ³	179	557	553	268	372
Potash						
Chloride	tonnes (K ₂ O content)	521 984	470 933	406 571	505 527	553 237
Salt						
Rock salt	tonnes	2 328 464	2 319 800	2 559 760	2 562 832	2 541 000
Sea salt	tonnes	1 436 345	1 420 000	1 234 679	1 327 108	1 300 000
Other salt	tonnes	105 187	100 000	97 945	97 730	100 000
Sillimanite minerals						
Andalusite	tonnes	*260	*250	*250	*200	*200
Silver, mine	kilograms (metal content)	114 537	55 000	12 792	2 173	3 581
Strontium minerals	tonnes	158 590	164 030	171 293	152 383	158 000
Sulphur and pyrites						
Pyrites	tonnes (sulphur content)	94 222	89 796	—	—	—
Recovered (c)	tonnes (sulphur content)	454 000	461 000	544 000	560 000	488 000
Recovered (d)	tonnes (sulphur content)	115 000	135 000	140 000	145 000	145 000
Talc						
Talc	tonnes	115 154	119 000	108 312	101 739	107 829
Pyrophyllite	tonnes	...	...	...	900	700
Uranium, mine	tonnes (metal content)	251	0	0	—	—
Zinc, mine	tonnes (metal content)	202 360	165 568	69 926	15 140	—
Slab zinc	tonnes	391 000	437 000	503 000	519 000	525 000

Note(s):-

(1) Spain is believed to produce arsenic

(a) Including Tripoli

(b) Washed

(c) From metal sulphide processing

(d) From petroleum refining and/or natural gas

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

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	1 493 043	1 641 676	1 724 911	1 647 138	1 694 285
Aluminium and bauxite						
Alumina	tonnes	208 414	292 210	179 478	369 353	491 808
Alumina hydrate	tonnes	268 920	231 485	11 685	214 263	241 910
Unwrought	tonnes	2 890	5 191	2 429	915	1 024
Unwrought alloys	tonnes	79 183	86 974	68 484	87 356	102 146
Scrap	tonnes	34 991	30 251	37 236	41 646	35 021
Antimony						
Metal	tonnes	16	92	10	41	409
Oxide	tonnes	701	974	934	622	706
Asbestos	tonnes	126	36	1	—	—
Barytes	tonnes	25 431	39 910	44 570	37 141	33 930
Bentonite and fuller's earth						
Bentonite	tonnes	68 216	61 691	63 120	74 277	80 410
Sepiolite	tonnes	603 895	609 250	581 737	507 584	501 988
Fuller's earth	tonnes	15 790	14 370	14 721	12 417	11 362
Bismuth						
Compounds	tonnes	43	72	—	...	...
Metal	tonnes	4	7	13	10	2
Cadmium						
Metal	tonnes	10	1	0	0	0
Cement						
Cement clinkers	tonnes	21 552	6 538	45 657	18 350	9 491
Portland cement	tonnes	2 060 260	1 713 277	1 700 683	1 585 078	1 681 953
Other cement	tonnes	189 524	94 252	92 852	100 272	59 696
Chromium						
Ores & concentrates	tonnes	1 315	678	1 040	947	2 113
Metal	tonnes	815	1 569	2 679	1 126	905
Coal						
Anthracite	tonnes	13 377	7 146	12 173	47 185	48 710
Cobalt						
Metal	tonnes	24	49	16	14	35
Oxides	tonnes	39	2	122	8	33
Copper						
Ores & concentrates	tonnes	29 057	79 561	6 756	2 682	4 327
Unwrought, unrefined	tonnes	27 068	35 090	21 126	37 437	50 901
Unwrought, refined	tonnes	57 383	23 785	23 999	46 677	32 366
Unwrought alloys	tonnes	7 502	7 465	7 124	9 747	11 724
Scrap	tonnes	53 947	52 154	72 157	62 879	77 850
Diamond						
Unsorted	carats	...	375 000	1 391 000	8 140 000	25 000
Gem, cut	carats	£2 760 000	£1 890 000	...	£2 606 000	£1 855 000
Industrial	carats	£241 000	£1 481 000	£613 000	£245 000	£212 000
Dust	carats	...	235 000	615 000	385 000	...
Diatomite	tonnes	2 243	4 467	6 829	5 385	5 278
Feldspar	tonnes	57 316	52 161	79 520	65 385	71 993
Fluorspar	tonnes	8 920	1 132	1 106	1 745	2 221
Gold						
Metal	kilograms	4 053	2 046	3 867	4 793	6 490
Waste & scrap	kilograms	36 797	14 030	1 126	784	2 908
Graphite	tonnes	13 134	14 299	8 521	9 288	27 634
Gypsum						
Crude	tonnes	3 080 386	2 590 879	2 818 090	2 732 211	2 820 367
Calcined	tonnes	500 097	460 778	517 466	473 180	470 437
Iodine	kilograms	74 721	300 485	115 000	27 811	31 156
Iron ore						
Iron ore	tonnes	26 227	1 702	53	94	259
Burnt pyrites	tonnes	108 384	168 181	189 404	105 203	171 292

Spain

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	2 065	2 900	4 177	2 751	3 258
Sponge & powder	tonnes	3 074	4 956	3 920	4 447	4 914
Ferro-chrome	tonnes	1 257	466	472	369	551
Ferro-manganese	tonnes	42 861	66 834	73 506	62 260	82 733
Ferro-silico-manganese	tonnes	27 949	34 622	29 297	44 214	40 130
Ferro-molybdenum	tonnes	362	120	326	342	60
Ferro-silicon	tonnes	4 666	5 826	14 730	13 140	19 332
Other ferro-alloys	tonnes	304	1 120	750	891	558
Silicon metal	tonnes	15 379	14 027	17 621	11 035	13 254
Ingots, blooms, billets	tonnes	376 331	263 813	241 944	182 247	130 079
Scrap	tonnes	52 770	45 419	93 970	103 413	205 298
Kaolin	tonnes	130 290	155 446	159 759	172 414	154 667
Lead						
Ores & concentrates	tonnes	113 715	97 594	13	5 057	6 057
Unwrought	tonnes	5 842	6 098	9 458	6 219	8 301
Scrap	tonnes	2 706	3 684	6 797	7 028	6 399
Lithium						
Carbonate	tonnes	6 839	1 617	639	373	3 157
Magnesite and magnesia						
Magnesite	tonnes	23 270	9 201	24 152	23 640	25 557
Magnesia	tonnes	151 712	150 632	154 661	158 844	185 811
Manganese						
Ores & concentrates	tonnes	3 588	11 474	1 208	855	989
Metal	tonnes	5 331	6 113	5 727	4 791	6 117
Mercury	kilograms	956 655	569 833	820 527	836 784	596 739
Mica	tonnes	1 925	1 856	2 001	3 996	3 075
Nickel						
Unwrought (a)	tonnes	3 743	169	609	126	177
Scrap	tonnes	190	385	208	420	363
Platinum metals						
Platinum & platinum metals	kilograms	4 617	256	285	104	1 054
Waste & scrap	kilograms	216	616	253	7 479	1 893
Potash						
Sulphate	tonnes	62 178	57 091	15 635	11 628	3 958
Chloride	tonnes	542 664	418 155	350 315	502 348	675 140
Rare earths						
Ferro-cerium & other pyrophoric alloys	tonnes	13	56	85	...	...
Salt	tonnes	845 033	785 056	617 170	695 177	744 750
Silver						
Metal	kilograms	369 220	14 145	51 246	115 059	43 448
Sulphur and pyrites						
Sulphur, crude	tonnes	40 984	49 385	39 389	29 959	45 034
Sulphur, refined	tonnes	20 960	19 318	13 476	12 746	8 704
Sulphur, sublimed & precipitated	tonnes	474	52	69	575	79
Talc	tonnes	58 247	63 657	67 921	67 748	60 832
Tin						
Unwrought (a)	tonnes	669	218	738	179	205
Scrap	tonnes	94	111	1 169	198	221
Titanium						
Metal	tonnes	308	434	376	697	483
Oxides	tonnes	74 071	79 643	73 320	70 052	85 867
Tungsten						
Metal	tonnes	185	56	109	158	141
Zinc						
Ores & concentrates	tonnes	232 781	296 040	29 661	33 913	37 986
Unwrought	tonnes	84 575	93 738	79 286	245 702	294 548
Unwrought alloys	tonnes	38 900	36 413	42 647	75 497	54 670
Scrap	tonnes	5 451	5 861	4 577	3 561	5 125
Zirconium						
Concentrates	tonnes	6 951	7 449	7 852	13 669	10 844
Metal	tonnes	15	5	122	602	989

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	1 165 081	1 088 430	1 073 979	1 156 484	1 190 670
Aluminium and bauxite						
Bauxite	tonnes	2 757 733	3 059 122	2 887 349	2 781 769	3 329 441
Alumina	tonnes	59 544	61 147	53 469	50 403	55 184
Alumina hydrate	tonnes	19 818	35 064	19 509	14 595	30 429
Unwrought	tonnes	90 024	67 047	55 894	116 742	91 382
Unwrought alloys	tonnes	140 965	149 069	166 771	166 538	235 123
Scrap	tonnes	57 095	63 125	70 908	66 466	86 553
Antimony						
Metal	tonnes	1 511	2 277	2 314	1 516	2 270
Oxide	tonnes	813	828	544	519	5 656
Arsenic						
Metallic arsenic	tonnes	153	87	136	114	92
Asbestos	tonnes	15 568	13 349	3 085	130	192
Barytes	tonnes	27 032	39 311	51 952	50 596	59 378
Bentonite and fuller's earth						
Bentonite	tonnes	59 714	64 157	72 294	68 776	60 709
Fuller's earth	tonnes	743	578	1 067	488	271
Bismuth						
Metal	tonnes	167	125	139	188	206
Bromine	kilograms	226 237	233 000	166 487	122 194	73 493
Cadmium						
Metal	tonnes	43	94	4	23	22
Oxide	tonnes	22	56	70	29	28
Cement						
Cement clinkers	tonnes	2 706 698	3 975 430	4 646 090	5 897 219	6 266 470
Portland cement	tonnes	2 073 449	2 960 674	3 155 122	2 606 300	2 549 086
Other cement	tonnes	296 630	200 370	36 947	54 726	21 527
Chromium						
Ores & concentrates	tonnes	5 861	9 141	2 585	5 799	3 947
Metal	tonnes	385	1 202	666	921	1 519
Coal						
Anthracite	tonnes	1 326 932	1 741 429	1 729 758	2 015 985	2 376 019
Other coal	tonnes	20 321 647	17 174 707	22 792 868	19 537 014	22 098 156
Cobalt						
Metal	tonnes	287	228	131	171	181
Oxides	tonnes	1 223	1 336	1 436	1 401	1 249
Copper						
Ores & concentrates	tonnes	936 207	902 428	1 057 377	1 052 115	776 980
Unwrought, unrefined	tonnes	17 557	16 024	9 150	15 283	2 488
Unwrought, refined	tonnes	30 885	42 505	28 095	33 781	74 277
Unwrought alloys	tonnes	9 976	6 461	7 256	4 444	5 254
Scrap	tonnes	81 310	82 473	83 664	57 315	112 934
Diamond						
Unsorted	carats	£3 264 000	£2 679 000	£4 900 000	£4 602 000	£5 431 000
Gem, cut	carats	£30 064 000	£27 660 000	£25 162 000	£25 111 000	£41 732 000
Industrial	carats	£2 246 000	£4 508 000	£1 674 000	£1 809 000	£1 412 000
Dust	carats	270 000	6 555 000	3 435 000	5 545 000	89 035 000
Diatomite	tonnes	5 501	5 349	4 442	10 575	7 004
Feldspar	tonnes	552 152	501 395	593 452	760 473	955 039
Fluorspar	tonnes	14 153	18 819	17 878	8 538	15 006
Gold						
Metal	kilograms	22 968	30 100	26 690	27 662	29 702
Waste & scrap	kilograms	742	3 182	818	411	5 018
Graphite	tonnes	8 296	7 675	8 119	7 363	9 402
Gypsum						
Crude	tonnes	43 375	47 567	51 797	65 152	43 004
Calcined	tonnes	22 248	8 143	38 659	142 719	14 462
Iodine	kilograms	1 019 447	1 247 590	796 000	784 718	710 814
Iron ore	tonnes	6 265 454	6 641 053	6 158 325	5 765 648	6 118 975

Spain

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	387 778	321 671	397 194	434 682	593 588
Sponge & powder	tonnes	860 410	738 608	640 298	593 176	670 063
Ferro-chrome	tonnes	215 228	246 756	229 425	579 714	221 156
Ferro-silico-chrome	tonnes	4 186	2 951	1 878	...	48
Ferro-silico-magnesium	tonnes	2 493	4 035	3 529	3 979	6 183
Ferro-manganese	tonnes	32 615	53 221	45 100	27 846	19 817
Ferro-silico-manganese	tonnes	15 121	26 375	28 237	56 110	75 061
Ferro-molybdenum	tonnes	2 186	3 077	3 486	4 042	3 456
Ferro-nickel	tonnes	43 770	49 769	51 626	60 141	58 664
Ferro-niobium	tonnes	221	271	335	348	491
Ferro-phosphorus	tonnes	1 841	2 127	2 051	2 020	2 072
Ferro-silicon	tonnes	39 884	50 862	43 230	56 258	56 736
Ferro-titanium & Fe-Si-Ti	tonnes	1 044	1 059	496	1 017	1 212
Ferro-vanadium	tonnes	567	1 688	971	1 050	1 077
Other ferro-alloys	tonnes	10 015	11 130	9 865	6 818	11 175
Silicon metal	tonnes	3 328	3 816	4 528	3 677	5 660
Ingots, blooms, billets	tonnes	772 207	855 775	1 062 109	1 524 971	1 495 840
Scrap	tonnes	6 127 787	6 290 607	5 533 584	6 389 902	7 093 195
Kaolin	tonnes	797 987	796 040	792 920	999 504	1 209 303
Lead						
Unwrought	tonnes	106 245	117 501	178 929	129 925	154 828
Scrap	tonnes	8 903	13 311	19 914	21 943	27 866
Lithium						
Oxides	tonnes	243	347	357	436	329
Carbonate	tonnes	469	713	1 046	983	759
Magnesite and magnesite						
Magnesite	tonnes	6 924	1 521	1 303	3 608	2 901
Magnesite	tonnes	104 268	112 201	101 620	367 117	102 418
Manganese						
Ores & concentrates	tonnes	420 908	352 275	431 720	437 088	575 518
Metal	tonnes	6 913	12 475	8 174	10 569	9 786
Mercury	kilograms	143 032	734 351	318 263	350 266	301 097
Mica	tonnes	1 287	1 185	5 447	1 810	1 641
Molybdenum						
Ores & concentrates	tonnes	3 578	3 811	4 226	3 917	3 805
Metal	tonnes	45	34	91	45	30
Nickel						
Mattes, sinters etc.	tonnes	42	18	31	11	9
Unwrought (a)	tonnes	20 849	31 752	32 795	27 346	28 234
Oxides	tonnes	231	231	306	225	210
Crude petroleum	tonnes	57 954 412	56 824 754	57 489 130	57 578 507	59 343 873
Phosphates	tonnes	1 862 774	2 062 062	1 805 229	1 790 138	1 800 329
Platinum metals						
Platinum & platinum metals	kilograms	4 186	4 830	3 311	1 612	1 402
Waste & scrap	kilograms	2 742	166	32	31	298
Potash						
Sulphate	tonnes	21 804	32 543	71 719	37 444	48 174
Chloride	tonnes	313 204	268 306	245 620	249 881	269 278
Other potassic fertilisers	tonnes	5 378	2 862	9 304	10 427	22 019
Rare earths						
Rare earth compounds	tonnes	456	522	523	548	692
Ferro-cerium & other pyrophoric alloys	tonnes	27	44	28	87	...
Metals	tonnes	14	59	92	90	84
Salt	tonnes	44 723	31 179	42 431	47 011	36 494
Sillimanite	tonnes	20 724	12 885	13 581	15 782	15 262
Silver						
Ores & concentrates	kilograms	31 406	43 638	75 862	59 205	54 295
Metal	kilograms	941 883	175 430	307 864	133 844	158 529
Sulphur and pyrites						
Sulphur, crude	tonnes	174 499	221 786	205 049	210 794	220 662
Sulphur, refined	tonnes	8 261	5 869	8 219	5 936	13 582
Sulphur, sublimed & precipitated	tonnes	209	220	238	753	533
Talc	tonnes	60 728	63 627	65 691	68 760	80 626

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Tin						
Concentrates	tonnes	436	399	225	101	160
Unwrought	tonnes	4 875	6 313	6 967	8 072	7 860
Unwrought alloys	tonnes	600	175	58	90	292
Scrap	tonnes	2 242	2 830	4 842	2 400	2 111
Titanium						
Ilmenite	tonnes	170 723	130 991	153 688	128 692	172 431
Other titanium minerals	tonnes	2 020	1 844	2 315	2 296	2 316
Metal	tonnes	1 498	3 407	3 241	2 974	3 722
Oxides	tonnes	87 837	99 887	107 418	100 814	116 397
Tungsten						
Metal	tonnes	556	68	83	179	259
Carbide	tonnes	39	77	64	48	59
Zinc						
Ores & concentrates	tonnes	562 965	687 733	901 359	1 096 292	917 968
Unwrought	tonnes	2 507	4 529	4 939	7 448	3 862
Unwrought alloys	tonnes	9 059	9 499	10 398	12 477	16 601
Scrap	tonnes	3 314	2 850	2 506	4 103	4 062
Zirconium						
Concentrates	tonnes	115 108	133 013	145 970	142 949	143 860
Metal	tonnes	232	163	41	60	94

Note(s):-

(a) Including alloys

Sweden

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	26 469 878	25 549 623	24 537 500	21 650 322	22 647 111
Crushed rock	tonnes	44 753 483	45 992 625	46 771 631	49 326 880	54 737 031
Primary aluminium	tonnes	100 788	101 420	100 125	100 707	100 591
Cement clinker	tonnes	2 381 938	2 421 693	2 364 724	2 235 138	...
Cement, finished	tonnes	2 612 901	2 644 365	2 764 954	2 544 647	*2 600 000
Copper, mine	tonnes (metal content)	77 765	74 269	71 991	83 143	82 415
Copper, smelter	tonnes	105 088	179 364	186 984	175 475	174 459
Copper, refined	tonnes	133 118	216 237	224 402	214 181	235 620
Feldspar	tonnes	35 000	40 000	37 000	44 000	38 000
Gold, mine	kilograms (metal content)	3 570	4 986	5 757	5 900	6 564
Graphite	tonnes	5 602	1 035	—	—	—
Iron ore	tonnes	20 557 000	19 486 000	20 281 000	21 498 000	22 272 000
Pig iron	tonnes	3 270 000	3 725 000	3 815 000	3 819 000	3 992 000
Crude steel	tonnes	5 228 700	5 518 100	5 753 300	5 707 300	5 976 900
Ferro-alloys						
Ferro-chrome	tonnes	106 399	107 036	118 800	106 100	127 300
Ferro-silicon	tonnes	18 948	21 197	21 500	17 100	18 500
Lead, mine	tonnes (metal content)	106 584	85 975	42 954	50 962	54 347
Lead, refined	tonnes	78 068	75 608	63 451	73 340	73 548
Selenium metal	tonnes	104	88	118	107	*100
Silver, mine	kilograms (metal content)	328 737	306 029	320 823	340 701	319 563
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	95 800	160 100	177 600	180 200	185 800
Recovered (b)	tonnes (sulphur content)	58 521	54 530	51 065	62 454	62 238
Talc	tonnes	20 000	14 000	20 000	7 000	8 000
Zinc, mine	tonnes (metal content)	176 788	156 334	148 620	185 884	197 034

Note(s):-

(a) From metal sulphide processing

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	2 282 723	2 206 841	2 132 194	2 067 542	2 213 385
Aluminium and bauxite						
Unwrought	tonnes	8 982	3 183	2 529	101	22 096
Unwrought alloys	tonnes	44 335	62 986	78 675	75 903	105 752
Scrap	tonnes	66 697	63 869	70 721	109 170	79 433
Bentonite and fuller's earth						
Bentonite	tonnes	6 917	6 716	9 401	10 082	9 486
Bismuth						
Metal	tonnes	25	2	13	...	...
Cadmium						
Oxide	tonnes	96	54	78	120	139
Cement						
Portland cement	tonnes	1 225 569	1 241 183	1 285 376	1 064 305	867 450
Other cement	tonnes	2 338	2 341	1 469	2 818	2 492
Cobalt						
Metal	tonnes	234	110	146	117	127
Oxides	tonnes	257	12	...	...	...
Copper						
Ores & concentrates	tonnes	28 758	14 829	...	125	29
Matte & cement	tonnes	3 853	196	—	25	30
Unwrought, refined	tonnes	12 232	70 682	91 869	77 216	81 878
Unwrought alloys	tonnes	8 712	8 827	6 486	7 104	5 040
Scrap	tonnes	31 160	29 680	34 747	35 982	44 366
Diatomite	tonnes	1 682	1 605	579	491	492
Feldspar	tonnes	20 164	27 662	25 400	23 847	23 752
Fluorspar	tonnes	6 451	5 603	5 998	8 981	8 702

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Gold						
Metal	kilograms	4 000	6 000	12 000	10 000	19 000
Waste & scrap	kilograms	6 000	79 000	24 000	...	20 000
Graphite	tonnes	4 042	2 164	600	302	260
Gypsum						
Crude & calcined	tonnes	5 239	5 692	6 350	5 993	7 343
Iodine	kilograms	5 000	1 000	2 000	4 000	—
Iron ore	tonnes	16 323 925	13 619 293	14 233 450	15 559 741	17 336 835
Iron, steel and ferro-alloys						
Pig iron	tonnes	27 611	35 593	30 079	118 378	116 550
Sponge & powder	tonnes	13 929	11 324	11 356	9 311	12 306
Ferro-chrome	tonnes	53 700	1 023	617	1 070	1 830
Ferro-silico-magnesium	tonnes	2 636	1 102	392	479	235
Ferro-manganese & Fe-Si-Mn	tonnes	1 050	1 189	6 903	1 159	1 605
Ferro-molybdenum	tonnes	134	65	745	71	87
Ferro-phosphorus	tonnes	565	399	1 203	463	281
Ferro-silicon	tonnes	564	762	736	182	441
Ferro-vanadium	tonnes	30	24	427	27	99
Other ferro-alloys	tonnes	458	3 138	6 903	1 527	2 796
Silicon metal	tonnes	475	1 766	6 742	2 790	6 387
Ingots, blooms, billets	tonnes	92 258	197 800	297 913	166 876	367 562
Scrap	tonnes	473 534	560 297	722 509	708 654	741 254
Kaolin	tonnes	11 491	7 199	8 200	8 791	15 544
Lead						
Ores & concentrates	tonnes	127 922	118 723	63 204	59 340	60 105
Unwrought	tonnes	67 565	54 414	61 079	71 217	68 215
Scrap	tonnes	73	545	424	237	554
Magnesite and magnesite	tonnes	170	355	797	674	1 447
Manganese						
Ores & concentrates	tonnes	12 524	1	25	3	3
Metal	tonnes	116	99	425	352	196
Mercury	kilograms	—	23 000	...	...	0
Mica	tonnes	87	102	89	51	58
Nickel						
Unwrought (a)	tonnes	1 040	613	1 905	386	133
Scrap	tonnes	696	432	1 661	1 096	1 138
Oxides	tonnes	146	125	142	181	317
Platinum metals						
Platinum & platinum metals	kilograms	£897 000	£952 000	£610 000	£280 000	£1 037 000
Waste & scrap	kilograms	2 521	46 465	27 536	27 000	29 000
Potash						
Sulphate	tonnes	78 362	141 298	136 917	127 687	70 066
Salt	tonnes	8 420	1 849	20 208	156 140	10 354
Silver						
Metal	kilograms	315 000	291 000	408 000	433 000	473 000
Sulphur and pyrites						
Sulphur	tonnes	2 056	1 453	493	9 572	4 542
Sulphur, sublimed & precipitated	tonnes	—	2	2	0	139
Talc	tonnes	10 884	5 138	14 370	8 061	9 388
Tin						
Unwrought (a)	tonnes	390	329	313	238	261
Scrap	tonnes	305	125	178	88	161
Titanium						
Metal	tonnes	1 295	1 494	1 256	1 004	1 737
Oxides	tonnes	8 401	13 653	11 058	11 713	13 912
Tungsten						
Metal	tonnes	14	32	364	334	102
Carbide	tonnes	444	561	385	68	114
Zinc						
Ores & concentrates	tonnes	341 193	261 909	283 701	305 058	379 155
Unwrought (a)	tonnes	609	494	629	496	280
Scrap	tonnes	20 396	13 546	23 833	42 715	21 598

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	590 255	417 298	838 286	615 470	729 992
Aluminium and bauxite						
Bauxite	tonnes	13 219	28 463	1 920	3 317	28 758
Alumina	tonnes	154 467	133 786	172 761	196 834	205 734
Alumina hydrate	tonnes	62 269	54 262	55 379	54 825	66 156
Unwrought	tonnes	32 542	16 612	13 991	21 584	29 493
Unwrought alloys	tonnes	76 515	80 571	106 217	97 276	120 732
Scrap	tonnes	20 548	24 295	18 450	16 255	24 082
Antimony						
Metal	tonnes	26	108	176	269	234
Oxide	tonnes	396	401	485	232	328
Arsenic						
Metallic arsenic	tonnes	20	18	19	17	13
Barytes	tonnes	2 149	1 892	1 927	1 848	2 854
Bentonite and fuller's earth						
Bentonite	tonnes	62 250	136 742	125 852	140 176	82 414
Bismuth						
Metal	tonnes	41	16	12	8	13
Bromine	kilograms	6 000	—	...	0	5 000
Cadmium						
Metal	tonnes	26	65	150	402	330
Oxide	tonnes	20	10	—	26	71
Cement						
Cement clinkers	tonnes	654	440	93	493	1 621
Portland cement	tonnes	156 029	210 732	208 113	209 882	218 928
Other cement	tonnes	21 726	25 186	25 151	27 286	27 286
Chromium						
Ores & concentrates	tonnes	350 000	200 000	280 000	215 000	457 000
Metal	tonnes	888	1 275	1 265	823	1 903
Coal						
Anthracite	tonnes	13 939	10 194	11 078	99 008	7 304
Other coal	tonnes	2 974 052	2 758 180	2 652 007	3 081 407	3 059 218
Cobalt						
Metal	tonnes	764	813	599	663	711
Copper						
Ores & concentrates	tonnes	152 426	324 398	349 409	300 566	340 858
Unwrought, refined	tonnes	82 430	49 088	36 976	48 468	34 912
Unwrought alloys	tonnes	3 968	3 815	4 622	2 947	2 762
Scrap	tonnes	34 120	31 373	43 544	52 091	76 672
Diamond						
Unsorted	carats	£687 000	£84 000	£156 000	£203 000	£309 000
Gem, cut	carats	£3 002 000	£3 634 000	£2 337 000	£3 456 000	£3 205 000
Industrial	carats	£227 000	£116 000	£51 000	£30 000	£63 000
Dust	carats	£4 797 000	£5 248 000	£2 554 000	£2 374 000	£2 823 000
Diatomite	tonnes	5 964	4 684	3 913	4 143	5 475
Feldspar	tonnes	7 194	6 430	6 765	5 960	7 019
Fluorspar	tonnes	9 386	16 103	16 978	19 117	14 640
Gold						
Metal	kilograms	£10 355 000	£7 671 705	£7 655 000	£8 382 000	£8 498 000
Waste & scrap	kilograms	£76 000	£149 000	£1 126 000	—	£5 726
Graphite	tonnes	1 062	1 026	1 022	1 428	1 473
Gypsum						
Crude	tonnes	296 067	177 264	211 432	269 711	269 060
Calcined	tonnes	59 347	87 144	82 831	103 481	160 784
Iodine	kilograms	3 000	1 000	5 000	5 000	1 000
Iron ore						
Iron ore	tonnes	94 483	108 597	115 528	110 920	102 101
Burnt pyrites	tonnes	17 442	15 763	41 970	29 658	36 351

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Iron, steel and ferro-alloys						
Pig iron	tonnes	100 988	40 289	26 215	24 894	29 369
Sponge & powder	tonnes	12 168	3 704	2 667	2 746	3 074
Ferro-chrome	tonnes	85 046	92 574	109 391	85 830	72 926
Ferro-silico-chrome	tonnes	5 244	3 239	2 789	1 094	2 521
Ferro-silico-magnesium	tonnes	3 977	2 180	1 195	1 060	932
Ferro-manganese	tonnes	29 280	33 034	33 238	37 190	32 782
Ferro-silico-manganese	tonnes	28 840	17 309	13 357	19 493	17 887
Ferro-molybdenum	tonnes	3 269	3 585	3 728	3 797	4 369
Ferro-nickel	tonnes	12 756	12 418	8 765	8 738	948
Ferro-niobium	tonnes	671	623	747	732	809
Ferro-phosphorus	tonnes	1 114	777	1 553	739	920
Ferro-silicon	tonnes	35 802	42 809	41 278	41 098	38 534
Ferro-titanium & Fe-Si-Ti	tonnes	2 340	1 736	1 709	1 405	1 627
Ferro-tungsten & Fe-Si-W	tonnes	510	867	183	321	564
Ferro-vanadium	tonnes	1 209	855	1 037	1 059	1 375
Other ferro-alloys	tonnes	2 257	7 631	5 822	4 519	6 534
Silicon metal	tonnes	4 416	5 095	10 639	6 316	10 542
Ingots, blooms, billets	tonnes	477 366	366 264	426 018	495 734	491 102
Scrap	tonnes	490 184	376 456	429 341	351 024	271 041
Kaolin	tonnes	548 460	422 071	437 528	467 111	452 215
Lead						
Unwrought	tonnes	6 940	6 777	5 023	4 190	6 088
Scrap	tonnes	2 152	2 548	1 970	2 463	4 062
Lithium						
Oxides	tonnes	126	130	155	113	162
Carbonate	tonnes	126	183	179	186	208
Magnesite and magnesite						
Magnesia	tonnes	34 884	40 361	26 875	28 074	29 455
Manganese						
Ores & concentrates	tonnes	6 298	1 871	98	91	62
Metal	tonnes	8 164	8 072	6 660	3 618	2 641
Mercury	kilograms	...	2 096	4 004	3 022	4 000
Mica	tonnes	713	562	547	566	514
Molybdenum						
Ores & concentrates	tonnes	5 742	5 409	6 132	5 235	5 826
Metal	tonnes	208	249	219	252	458
Oxides	tonnes	784	659	791	784	594
Nickel						
Mattes, sinters etc.	tonnes	5 756	6 124	12 476	4 032	4 051
Unwrought	tonnes	28 583	24 547	24 982	25 423	27 687
Unwrought alloys	tonnes	687	942	863	857	1 076
Scrap	tonnes	12 901	13 495	18 399	12 543	10 523
Crude petroleum	tonnes	20 723 480	18 262 971	18 665 040	20 436 192	20 873 087
Phosphates	tonnes	67 416	81 983	66 930	18 346	129
Platinum metals						
Platinum & platinum metals	kilograms	£5 196 000	£5 430 000	£6 134 000	£6 531 000	£4 984 969
Waste & scrap	kilograms	6 000	1 000	265	339 000	273 000
Potash						
Sulphate	tonnes	5 380	3 958	4 755	884	2 819
Chloride	tonnes	87 518	54 531	44 086	33 748	68 457
Other potassic fertilisers	tonnes	5 150	4 651	2 285	9 862	4 409
Rare earths						
Rare earth compounds	tonnes	...	...	...	75	58
Metals	tonnes	18	28	39	48	56
Salt	tonnes	910 232	908 355	1 030 471	828 845	929 193
Sillimanite	tonnes	11 519	14 145	12 308	14 155	5 470
Silver						
Metal	kilograms	148 000	153 000	116 000	111 000	161 000
Sulphur and pyrites						
Pyrites	tonnes	389	482	386	291	699
Sulphur	tonnes	70 113	69 293	63 948	89 505	61 305
Sulphur, sublimed & precipitated	tonnes	5 600	7 141	5 010	5 632	2 693
Talc	tonnes	42 571	34 297	42 307	45 509	43 288

Sweden

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Tin						
Unwrought	tonnes	807	608	596	421	468
Unwrought alloys	tonnes	358	364	400	379	256
Scrap	tonnes	62	130	57	71	39
Titanium						
Titanium minerals	tonnes	225	610	439	320	389
Metal	tonnes	1 604	1 929	2 000	1 707	1 856
Oxides	tonnes	40 747	45 034	43 260	44 721	44 812
Tungsten						
Metal	tonnes	356	990	136	470	559
Carbide	tonnes	1 036	1 239	688	665	747
Vanadium						
Metal	tonnes	49	77	49	49	46
Zinc						
Unwrought	tonnes	22 536	27 156	25 562	22 320	29 682
Unwrought alloys	tonnes	11 313	11 170	12 145	13 496	18 009
Zirconium						
Concentrates	tonnes	602	435	424	480	564
Metal	tonnes	91	66	138	172	82

Switzerland

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes (a)	33 000 000	...	...	...	26 000 000
Crushed rock	tonnes	...	...	...	...	3 000 000
Primary aluminium	tonnes	35 539	36 288	40 224	43 865	44 879
Cement, finished	tonnes	3 720 000	3 920 000	3 771 000	3 700 000	3 800 000
Gypsum	tonnes	*300 000	*300 000	*300 000	*300 000	*300 000
Pig iron	tonnes	*80 000	*80 000	*80 000	*80 000	*80 000
Crude steel	tonnes	*1 000 000	*1 000 000	*1 000 000	*1 000 000	*1 000 000
Lead, refined	tonnes	10 007	10 250	8 700	9 600	9 300
Salt	tonnes	452 000	384 000	400 000	461 000	486 000

Note(s):-

(a) Includes crushed rock

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	146 750	118 787	229 451	184 678	296 911
Aluminium and bauxite						
Unwrought (a)	tonnes	15 691	5 536	7 139	775	8 180
Scrap	tonnes	88 590	100 096	96 217	96 860	108 536
Cement						
Cement clinkers	tonnes	139 427	123 026	130 261	106 617	106 263
Portland cement	tonnes	54 745	20 968	12 942	14 396	33 524
Chromium						
Metal	tonnes	27	156	31	66	319
Cobalt						
Metal	tonnes	85	205	61	104	95
Copper						
Unwrought	tonnes	4 313	128	907	1 163	1 872
Scrap	tonnes	61 756	58 356	55 491	56 398	69 243
Diamond						
Unsorted	carats	30 000	0	5 000	...	—
Gem, rough	carats	1 520 000	1 110 000	55 000	65 000	140 000
Gem, cut	carats	720 000	1 130 000	650 000	427 033	338 524
Industrial	carats	320 000	35 000	40 000	66 354	18 185
Dust	carats	80 145 000	80 615 000	81 580 000	95 290 000	120 790 000
Diatomite	tonnes	314	485	1 224	110	114
Gold						
Metal	kilograms	1 266 758	1 266 166	922 468	885 907	1 125 319
Waste & scrap	kilograms	43 817	27 274	16 868	14 039	55 166
Gypsum						
Crude	tonnes	24 560	25 122	1 709	44	158
Calcined	tonnes	2 830	1 738	1 667	1 680	1 002
Iron, steel and ferro-alloys						
Ingots, blooms, billets	tonnes	2 470	2 459	31 317	51 008	51 639
Scrap	tonnes	401 561	457 523	412 341	451 452	539 629
Lead						
Unwrought	tonnes	5 730	4 074	7 160	7 086	5 407
Scrap	tonnes	4 883	4 479	2 565	2 267	1 320
Lithium						
Oxides	tonnes	9	96	53	78	80
Mercury	kilograms	60 114	92 862	36 900	7 793	316 631
Nickel						
Unwrought (a)	tonnes	103	179	105	125	49
Scrap	tonnes	917	492	587	880	1 106
Platinum metals						
Platinum	kilograms	61 609	63 640	73 384	67 305	57 268
Palladium	kilograms	100 220	44 317	73 072	47 110	61 960
Other platinum metals	kilograms	257	324	829	203	1 703
Waste & scrap	kilograms	57 207	49 289	122 380	85 301	118 241
Salt	tonnes	15 388	10 146	28 394	52 482	41 044
Silver						
Metal	kilograms	2 480 600	1 627 403	1 306 190	1 544 676	1 416 770

Switzerland

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Talc	tonnes	1 048	1 070	847	1 777	72
Tin						
Unwrought (a)	tonnes	64	84	25	112	72
Scrap	tonnes	97	105	60	73	107
Titanium						
Metal	tonnes	332	465	400	398	562
Oxides	tonnes	1 723	525	666	499	740
Tungsten						
Metal	tonnes	154	121	185	244	268
Zinc						
Scrap	tonnes	3 832	2 405	2 358	2 415	2 582

Note(s):-

(a) Including alloys

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	6 266 692	6 307 738	6 554 457	6 134 548	6 413 474
Aluminium and bauxite						
Bauxite	tonnes	1 674	4 669	7 653	5 881	8 066
Alumina	tonnes	72 695	65 877	81 002	93 357	87 235
Alumina hydrate	tonnes	20 916	19 621	17 953	15 340	16 945
Unwrought	tonnes	67 842	67 203	66 958	60 791	73 413
Unwrought alloys	tonnes	68 454	63 319	52 470	64 351	59 125
Scrap	tonnes	18 745	15 910	12 565	11 327	20 734
Antimony						
Ores & concentrates	tonnes	121	10	154	89	5 004
Metal	tonnes	25	44	52	50	93
Oxide	tonnes	969	1 033	720	927	1 174
Arsenic						
Metallic arsenic	tonnes	3	2	4	4	2
Barytes	tonnes	2 090	1 917	1 844	2 433	2 187
Bentonite and fuller's earth						
Bentonite	tonnes	26 275	21 715	21 128	20 540	20 027
Fuller's earth	tonnes	1 802	1 682	1 544	1 541	1 641
Bismuth						
Metal	tonnes	27	18	15	15	6
Cadmium						
Metal	tonnes	13	7	6	4	30
Cement						
Cement clinkers	tonnes	132 450	156 910	146 388	47 050	64 882
Portland cement	tonnes	157 260	180 860	198 607	319 539	313 292
Other cement	tonnes	62 536	86 391	56 272	41 949	58 671
Chromium						
Ores & concentrates	tonnes	1 483	818	525	716	671
Metal	tonnes	135	112	116	110	141
Coal						
Anthracite	tonnes	14 357	12 492	6 828	6 146	7 396
Other coal	tonnes	236 123	155 809	115 061	79 125	169 472
Cobalt						
Metal	tonnes	380	394	342	291	361
Copper						
Unwrought	tonnes	7 604	8 621	5 899	5 206	6 779
Unwrought alloys	tonnes	3 588	3 777	3 300	3 496	4 481
Scrap	tonnes	16 675	13 800	8 406	9 469	11 881
Diamond						
Unsorted	carats	30 000	...	...	...	...
Gem, rough	carats	4 435 000	3 475 000	75 000	80 344	144 707
Gem, cut	carats	585 000	875 000	850 000	642 870	820 021
Industrial	carats	930 000	735 000	1 160 000	213 535	56 907
Dust	carats	83 965 000	89 730 000	94 935 000	103 005 000	126 815 000
Diatomite	tonnes	3 869	4 332	3 534	5 425	11 204
Feldspar	tonnes	4 550	7 408	7 541	7 229	8 347
Fluorspar	tonnes	664	497	916	413	991

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Gold						
Metal	kilograms	1 280 545	1 360 081	1 217 189	1 218 361	1 048 386
Waste & scrap	kilograms	42 648	45 122	48 626	32 454	52 053
Graphite	tonnes	445	538	918	863	395
Gypsum						
Crude	tonnes	67 960	65 203	64 517	50 760	64 677
Calcined	tonnes	71 517	66 156	72 876	75 394	81 971
Iodine	kilograms	18 949	28 203	14 000	27 226	7 428
Iron ore						
Burnt pyrites	tonnes	14 821	15 897	12 239	9 157	4 283
Iron, steel and ferro-alloys						
Pig iron	tonnes	30 806	33 986	19 466	22 120	22 954
Sponge & powder	tonnes	9 073	6 176	6 163	6 792	7 631
Ferro-aluminium	tonnes	4	1	48	24	...
Ferro-chrome	tonnes	1 412	1 020	978	1 504	1 161
Ferro-manganese	tonnes	5 927	6 161	7 567	7 406	7 884
Ferro-silico-manganese	tonnes	5 786	4 655	5 156	4 444	6 481
Ferro-silicon	tonnes	5 944	5 952	4 291	5 417	5 194
Other ferro-alloys	tonnes	1 971	1 511	1 198	1 070	1 203
Silicon metal	tonnes	696	701	1 168	716	694
Ingots, blooms, billets	tonnes	69 174	44 303	16 032	17 132	20 896
Scrap	tonnes	239 387	246 179	347 211	412 584	544 911
Kaolin	tonnes	45 273	37 383	37 298	45 012	41 350
Lead						
Unwrought	tonnes	6 976	7 098	5 943	6 047	7 831
Lithium						
Oxides	tonnes	67	91	97	89	89
Magnesite and magnesia						
Magnesite	tonnes	547	394	228	225	294
Magnesia	tonnes	4 278	4 600	4 521	5 744	6 538
Manganese						
Metal	tonnes	553	449	404	501	484
Mercury	kilograms	27 379	24 309	18 901	9 354	9 704
Mica	tonnes	297	300	289	357	426
Molybdenum						
Metal	tonnes	30	25	21	26	25
Nickel						
Unwrought (a)	tonnes	1 511	1 591	1 417	1 392	1 333
Scrap	tonnes	122	61	54	84	12
Crude petroleum	tonnes	4 578 217	4 773 040	4 869 479	4 551 511	5 086 184
Platinum metals						
Platinum	kilograms	59 331	68 461	56 039	69 111	47 742
Palladium	kilograms	87 714	94 074	106 412	54 805	96 530
Other platinum metals	kilograms	521	538	1 063	816	3 725
Waste & scrap	kilograms	34 405	19 435	49 569	129 698	161 433
Potash						
Sulphate	tonnes	2 844	1 815	2 496	2 621	2 170
Chloride	tonnes	21 100	19 144	23 053	15 792	19 185
Other potassic fertilisers	tonnes	2 738	1 922	3 983	3 721	3 039
Salt	tonnes	9 040	7 216	7 692	13 984	9 299
Sillimanite	tonnes	456	350	246	253	315
Silver						
Metal	kilograms	2 748 848	1 476 601	1 028 138	746 184	1 082 664
Sulphur and pyrites						
Pyrites	tonnes	220	217	239	207	117
Sulphur	tonnes	40 195	40 754	30 140	25 968	24 940
Sulphur, sublimed & precipitated	tonnes	67	24	93	193	120
Talc	tonnes	15 159	15 385	12 916	11 490	9 579
Tin						
Unwrought (a)	tonnes	824	1 017	893	803	726
Titanium						
Metal	tonnes	503	641	621	535	735
Oxides	tonnes	21 423	17 678	18 265	18 689	19 349
Tungsten						
Metal	tonnes	113	220	152	139	170

Switzerland

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Zinc						
Unwrought	tonnes	16 257	20 567	21 073	11 730	14 577
Unwrought alloys	tonnes	3 758	3 735	3 796	3 798	3 194
Zirconium						
Metal	tonnes	45	66	115	85	86

Note(s):-

(a) Including alloys

Turkey

Production

Commodity	Units	2000	2001	2002	2003	2004
Bauxite	tonnes	458 537	242 040	287 403	364 306	365 800
Alumina	tonnes (Al ₂ O ₃ content)	155 448	145 993	152 869	160 675	169 991
Primary aluminium	tonnes	61 501	61 730	62 501	63 140	62 400
Antimony, mine	tonnes (metal content)	*20	*20	*20	*20	*20
Barytes	tonnes	120 893	102 323	106 943	119 648	134 504
Bentonite and fuller's earth						
Bentonite	tonnes	636 273	674 178	559 224	831 146	*850 000
Sepiolite	tonnes	18 295	10 253	...	...	...
Borates	tonnes	1 402 000	1 399 000	1 328 000	1 324 000	1 727 000
Cement, finished	tonnes	35 825 000	30 125 000	32 576 701	35 076 902	38 019 112
Chromium ores and concentrates	tonnes	545 725	454 549	326 390	229 294	436 639
Coal						
Anthracite	tonnes	3 330 355	3 369 727	3 312 690	3 090 458	2 842 952
Bituminous	tonnes	110 945	55 860	118 235	217 759	...
Lignite	tonnes	61 314 974	58 172 982	49 626 612	43 749 420	43 754 159
Copper, mine	tonnes (metal content)	76 053	56 820	48 217	43 245	49 900
Copper, smelter	tonnes	25 886	23 751	19 375	14 426	10 300
Copper, refined	tonnes	64 100	58 400	41 000	36 900	63 000
Feldspar	tonnes	1 150 706	1 510 293	1 766 387	1 862 310	1 983 336
Fluorspar	tonnes	4 113	3 752	5 344	718	880
Gold, mine	kilograms (metal content)	*500	*1 100	*4 500	5 370	3 260
Graphite	tonnes	...	...	1 393	942	*1 000
Gypsum	tonnes	302 552	328 656	264 038	196 668	250 099
Iron ore	tonnes	4 076 257	4 434 621	3 432 775	3 429 070	3 856 536
Pig iron	tonnes	5 333 000	5 289 000	5 003 000	5 706 000	5 836 000
Crude steel	tonnes	13 571 563	14 382 257	16 045 522	17 644 020	19 868 118
Ferro-alloys						
Ferro-chrome	tonnes	97 240	50 735	11 200	35 393	28 701
Ferro-silico-chrome	tonnes	7 170	5 895	7 245	6 805	5 560
Kaolin	tonnes	390 830	505 773	372 344	370 455	536 008
Lead, mine	tonnes (metal content)	15 888	17 884	17 277	17 446	18 700
Lead, refined	tonnes	*9 000	*9 000	*9 000	*9 000	*9 000
Magnesite	tonnes	2 673 525	2 738 086	3 044 440	3 224 278	3 732 952
Manganese ore	tonnes	23 300	20 000	20 000	18 000	13 751
Perlite	tonnes	149 426	154 515	151 902	136 683	133 829
Crude petroleum	tonnes	2 747 630	2 551 647	2 440 202	2 375 082	2 275 529
Natural gas	million m ³	493	266	242	276	344
Salt						
Rock salt	tonnes	84 080	46 362	55 305	10 205	*10 000
Sea salt	tonnes	592 283	522 364	411 646	556 652	*559 000
Other salt	tonnes	1 450 008	1 202 025	1 729 686	1 675 915	*1 681 000
Silver, mine	kilograms (metal content)	193 000	188 000	124 000	149 000	*150 000
Strontium minerals	tonnes	24 150	63 635	*70 000	*70 000	*70 000
Sulphur and pyrites						
Pyrites	tonnes (sulphur content)	45 000	26 000	34 000	28 000	20 000
Recovered (a) (b)	tonnes (sulphur content)	118 000	126 000	123 000	94 000	68 000
Talc						
Pyrophyllite	tonnes	54 278	...	...	...	...
Zinc, mine	tonnes (metal content)	48 000	36 000	33 100	33 600	39 000

Note(s):-

(1) Turkey is believed to produce diatomite and wollastonite

(a) From petroleum refining and/or natural gas

(b) Other

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	109 032	174 436	401 071	619 130	758 169
Aluminium and bauxite						
Alumina	tonnes	17 613	29 123	23 425	25 573	29 915
Unwrought (a)	tonnes	10 319	6 289	3 745	4 429	8 076
Scrap	tonnes	12 992	12 098	10 582	8 036	9 955

Turkey

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Antimony						
Metal	tonnes	84	50	...	7	25
Asbestos	tonnes	—	5	3	42 000	0
Barytes	tonnes	89 145	136 916	117 862	101 716	142 767
Bentonite and fuller's earth						
Bentonite	tonnes	123 858	106 104	106 712	153 691	210 328
Cement						
Cement clinkers	tonnes	2 111 623	3 275 087	4 546 480	2 898 730	2 359 071
Portland cement	tonnes	4 375 817	4 968 305	5 803 964	6 749 791	7 907 130
Other cement	tonnes	36 120	33 163	25 296	96 793	147 792
Chromium						
Ores & concentrates	tonnes	467 010	321 047	265 296	363 699	575 030
Metal	tonnes	91	279	249	20	33
Coal						
Anthracite	tonnes	13 707	35 713	12 062	9 540	11 077
Copper						
Ores & concentrates	tonnes	190 007	136 702	209 656	151 667	180 609
Unwrought	tonnes	5 899	20 176	22 324	18 709	12 846
Scrap	tonnes	1 054	6 855	9 897	18 492	4 529
Diatomite	tonnes	496	387	4 653	11 294	14 581
Feldspar	tonnes	2 114 432	1 208 808	2 162 841	3 027 769	3 971 725
Gold						
Metal	kilograms	...	4 670	11 263	11 455	9 722
Gypsum						
Crude & calcined	tonnes	92 533	156 907	200 633	309 471	442 768
Iodine	kilograms	5 540	2 307	2 570	209	117
Iron, steel and ferro-alloys						
Pig iron	tonnes	94 231	109 862	12 895	1 060	50 165
Ferro-chrome	tonnes	68 597	15 446	61 163	53 695	16 286
Other ferro-alloys	tonnes	742	673	1 156	5 361	5 092
Ingots, blooms, billets	tonnes	1 262 574	2 132 421	2 734 188	3 178 909	3 769 934
Scrap	tonnes	28 583	28 937	34 512	48 741	82 460
Kaolin	tonnes	272 128	227 159	190 404	299 843	267 817
Lead						
Ores & concentrates (b)	tonnes	20 915	11 172	42 390	18 619	27 179
Unwrought	tonnes	1 890	4 985	4 728	1 484	6 190
Magnesite and magnesite						
Magnesite	tonnes	28 266	37 723	52 446	45 534	39 670
Magnesia	tonnes	207 486	190 347	213 384	196 613	230 675
Manganese						
Ores & concentrates	tonnes	—	560	5 655	...	12 817
Mica	tonnes	296	338	503	546	15 975
Salt	tonnes	36 334	31 967	46 398	43 317	30 898
Silver						
Metal	kilograms	45	75	303	947	2 731
Sulphur and pyrites						
Sulphur	tonnes	1 604	2 722	2 530	1 251	534
Sulphur, sublimed & precipitated	tonnes	434	880	1 641	141	75
Talc	tonnes	56	120	249	436	1 963
Titanium						
Metal	tonnes	245	92	2	7	20
Vanadium						
Pentoxide	tonnes	...	...	...	680	900
Zinc						
Ores & concentrates	tonnes	128 187	85 661	100 445	97 605	110 692
Unwrought (a)	tonnes	49	2 367	2 579	315	302
Scrap	tonnes	...	...	...	4 293	2 318

Note(s):-

(a) Including alloys

(b) Complex lead-zinc ore

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	5 634	1 325	2 425	3 660	4 519
Aluminium and bauxite						
Bauxite	tonnes	35 758	25 323	33 361	39 129	34 592
Alumina	tonnes	13 688	14 164	16 311	26 096	19 341
Unwrought	tonnes	92 299	72 786	109 683	160 378	182 113
Unwrought alloys	tonnes	80 861	52 939	84 829	114 881	144 836
Scrap	tonnes	28 263	11 090	9 478	14 850	11 648
Antimony						
Metal	tonnes	11	20	98	141	87
Oxide	tonnes	241	209	314	294	460
Arsenic						
White arsenic	tonnes	1	10	...	...	...
Metallic arsenic	tonnes	58	23	49	78	48
Asbestos	tonnes	19 455	10 557	13 977	14 645	13 509
Barytes	tonnes	626	371	202	121	258
Bentonite and fuller's earth						
Bentonite	tonnes	940	1 213	1 715	1 702	832
Fuller's earth	tonnes	352	305	201	104	157
Bismuth						
Metal	tonnes	4	3	4	4	6
Bromine	kilograms	69 811	91 505	(b) 111 895	(b) 75 080	(b) 149 960
Cadmium						
Metal	tonnes	8	9	14	12	6
Oxide	tonnes	46	28	...	...	...
Cement						
Cement clinkers	tonnes	256 247	143 225	7 117	170 275	375 619
Portland cement	tonnes	7 667	27 109	19 014	9 922	9 096
Other cement	tonnes	5 032	5 914	5 800	3 675	105
Chromium						
Ores & concentrates	tonnes	69 470	101 278	68 832	82 452	56 836
Metal	tonnes	15	12	19	19	85
Coal						
Anthracite	tonnes	115 900	119 373	213 743	340 165	397 125
Other coal	tonnes	12 994 265	6 086 397	13 394 458	15 215 711	16 033 118
Cobalt						
Metal	tonnes	75	62	88	157	170
Oxides	tonnes	59	60	84	108	134
Copper						
Ores & concentrates	tonnes	56 968	45 075	61 302	54 573	10 370
Unwrought, unrefined	tonnes	10 290	12 815	7 117	100	29 555
Unwrought, refined	tonnes	184 230	135 015	205 955	229 159	217 290
Unwrought alloys	tonnes	1 377	321	1 107	3 768	4 685
Scrap	tonnes	21 744	5 522	7 061	29 803	34 975
Diamond						
Unsorted	carats	974 245	25 000	...	...	...
Gem	carats	4 873 050	2 725 000	...	...	1 225 000
Industrial	carats	463 625	40 000	...	...	65 000
Dust	carats	4 908 115	4 725 000	...	...	15 900 000
Diatomite	tonnes	1 183	1 211	1 185	1 736	1 211
Feldspar	tonnes	18 840	19 803	5 269	26 977	40 733
Fluorspar	tonnes	19 263	16 100	13 790	18 208	31 908
Gold						
Metal	kilograms	...	111 958	142 013	225 021	262 519
Graphite	tonnes	6 250	6 431	7 010	7 429	10 212
Gypsum	tonnes	83 549	66 472	90 335	160 214	170 958
Iodine	kilograms	139 043	39 422	30 450	15 405	31 736
Iron ore (c)	tonnes	4 140 103	2 620 485	5 392 580	5 220 888	4 595 911
Iron, steel and ferro-alloys						
Pig iron	tonnes	226 951	155 350	324 368	306 901	286 589
Sponge & powder	tonnes	20 281	22 674	84 443	75 798	18 084
Ferro-manganese	tonnes	43 147	34 409	48 178	70 866	44 406
Ferro-silico-manganese	tonnes	97 763	78 749	157 650	178 594	189 294
Ferro-silicon	tonnes	58 630	44 864	55 575	126 532	82 543
Other ferro-alloys	tonnes	11 385	10 041	11 587	12 068	14 975
Silicon metal	tonnes	1 985	1 468	2 730	7 968	4 649
Ingots, blooms, billets	tonnes	1 923 083	1 039 166	896 891	1 618 384	1 531 529
Scrap	tonnes	7 457 315	4 993 240	9 749 780	12 818 350	12 892 546
Kaolin	tonnes	198 837	117 550	149 559	197 684	218 838

Turkey

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Lead						
Unwrought	tonnes	56 168	41 970	64 513	71 665	71 606
Lithium						
Oxides	tonnes	113	70	136	120	179
Carbonate	tonnes	107	134	157	278	417
Magnesite and magnesite						
Magnesia	tonnes	30 964	23 373	50 238	56 000	38 084
Manganese						
Metal	tonnes	85	34	182	137	495
Mercury	kilograms	3 981	10 602	5 358	8 152	6 044
Mica	tonnes	117	136	33	169	215
Molybdenum						
Metal	tonnes	5	2	4	4	10
Oxides	tonnes	...	66	54	84	130
Nickel						
Unwrought (a)	tonnes	1 459	1 584	1 919	2 415	3 353
Oxides	tonnes	94	92	160	162	144
Crude petroleum	tonnes	...	23 141 640	21 626 643	24 028 666	23 917 019
Phosphates	tonnes	667 998	497 120	746 033	610 286	291 245
Platinum metals						
Platinum & platinum metals	kilograms	259	321	393	378	231
Potash						
Sulphate	tonnes	15 152	26 753	31 362	51 467	59 381
Chloride	tonnes	101 485	82 849	111 780	107 412	130 748
Rare earths						
Rare earth compounds	tonnes	170	104	155	201	171
Ferro-cerium & other pyrophoric alloys	tonnes	7	1	...	...	253
Salt	tonnes	26 341	12 118	78 204	202 349	307 039
Sillimanite	tonnes	1 343	3 920	3 386	3 486	5 110
Silver						
Metal	kilograms	136 321	90 014	169 098	199 226	269 009
Sulphur and pyrites						
Sulphur	tonnes	107 173	67 396	127 779	124 243	90 502
Sulphur, sublimed & precipitated	tonnes	96	73	2 008	4 899	138
Talc	tonnes	12 809	7 026	10 937	11 227	16 810
Tin						
Unwrought (a)	tonnes	1 864	1 275	1 801	1 966	2 314
Titanium						
Titanium minerals	tonnes	6 077	2 953	5 876	5 591	10 435
Oxides	tonnes	59 446	38 734	61 927	68 613	85 832
Zinc						
Ores & concentrates	tonnes	333	416	910	1 027	367
Unwrought (a)	tonnes	95 229	84 091	110 773	126 315	148 897
Zirconium						
Concentrates	tonnes	3 184	2 263	3 914	3 954	3 881
Metal	tonnes	1	5	23	5	9

Note(s):-

(a) Including alloys

(b) May include some fluorine

(c) Including burnt pyrites

United Kingdom

Production

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates						
Sand and gravel	tonnes	101 622 000	101 397 000	94 424 000	91 803 000	97 333 000
Crushed rock (i)	tonnes	146 169 000	153 023 000	144 337 000	140 417 000	147 067 000
Alumina	tonnes (Al ₂ O ₃ content)	88 500	83 900	73 800	—	—
Primary aluminium	tonnes	305 099	340 778	344 318	342 748	359 631
Barytes	tonnes	54 000	*66 000	*59 000	*57 000	*61 000
Bentonite and fuller's earth						
Fuller's earth (a)	tonnes	65 500	52 000	44 200	33 900	27 540
Bromine	kilograms	33 200 000	27 854 000	24 542 000	*25 000 000	—
Cadmium	tonnes	503	425	292	22	—
Cement clinker	tonnes	11 456 000	10 573 000	10 327 000	10 146 000	10 402 000
Cement, finished	tonnes	12 452 000	11 854 000	11 089 000	11 215 000	11 405 000
Coal						
Bituminous (b)	tonnes	31 197 000	31 930 000	29 989 000	28 279 000	25 096 000
Feldspar (c)	tonnes	3 645	2 995	1 896	1 309	2 274
Fluorspar	tonnes	*36 000	*50 000	*53 000	*56 000	*52 000
Gypsum	tonnes	*1 500 000	*1 700 000	*1 700 000	*1 700 000	*1 700 000
Iron ore	tonnes	1 033	510	464	*500	*500
Pig iron	tonnes	10 890 500	9 870 400	8 560 600	10 277 800	10 179 600
Crude steel	tonnes	15 154 600	13 542 700	11 667 100	13 268 000	13 765 700
Kaolin (d) (e)	tonnes	2 376 057	2 204 156	2 162 815	2 097 137	1 944 955
Lead, mine	tonnes (metal content)	*1 000	*800	*700	*700	*500
Lead, refined	tonnes	327 904	366 305	374 646	364 574	245 938
Nickel, smelter/refinery	tonnes	37 980	33 800	33 800	24 200	38 600
Crude petroleum	tonnes	118 064 000	109 491 000	108 023 000	98 998 000	88 708 000
Natural gas	million m ³	114 557	112 567	109 816	108 088	100 966
Potash						
Chloride	tonnes (K ₂ O content)	600 800	531 900	540 100	621 400	539 500
Salt						
Rock salt	tonnes	*1 700 000	*1 900 000	*1 500 000	*1 700 000	*2 000 000
Brine salt	tonnes	*1 100 000	*1 100 000	*1 000 000	*1 000 000	*1 000 000
Salt in brine (f)	tonnes	*3 000 000	*3 000 000	*3 200 000	*3 200 000	*3 200 000
Sulphur and pyrites						
Recovered (g)	tonnes (sulphur content)	51 400	62 400	66 400	4 800	—
Recovered (h)	tonnes (sulphur content)	140 000	111 000	125 000	115 000	120 000
Talc	tonnes	4 832	4 947	6 194	6 494	4 000
Slab zinc	tonnes	99 600	99 600	99 600	16 600	—

Note(s):-

- (1) United Kingdom is believed to produce arsenic
- (2) In addition to the countries producing sillimanite minerals, synthetic mullite is known to be produced in United Kingdom

- (a) Saleable production based on data from producing companies
- (b) Including anthracite
- (c) China stone
- (d) Sales
- (e) Dry weight
- (f) Used for purposes other than salt-making
- (g) From metal sulphide processing
- (h) From petroleum refining and/or natural gas
- (i) Includes small quantities for other purposes in Northern Ireland

Exports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	12 334 251	13 238 740	12 475 405	11 608 077	12 257 855
Aluminium and bauxite						
Alumina	tonnes	(b) 12 581	11 795	7 768	(a) *5 000	...
Alumina hydrate	tonnes	(a) *30 600	42 451	20 170	(a) *25 800	...
Unwrought	tonnes	89 761	16 855	9 403	1 559	29 959
Unwrought alloys	tonnes	261 274	243 780	241 799	270 701	306 993
Scrap	tonnes	141 207	204 605	243 894	295 642	319 694
Antimony						
Metal	tonnes	870	473	252	65	85
Oxide	tonnes	(a) *4 400	1 297	1 879	1 413	602

United Kingdom

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Arsenic						
Metallic arsenic	tonnes	11	5	5	0	0
Asbestos	tonnes	2	1	1	0	0
Barytes	tonnes	28 503	58 969	37 778	69 094	...
Bentonite and fuller's earth						
Bentonite	tonnes	75 472	72 983	81 707	75 099	72 526
Fuller's earth	tonnes	429	121	74	254	124
Bismuth						
Metal	tonnes	2 987	1 269	1 793	2 239	2 633
Bromine	kilograms	10 850 261	11 304 252	8 671 909	5 307 678	1 125 241
Cadmium						
Metal	tonnes	19	87	114	187	28
Cement						
Cement clinkers	tonnes	256 077	169 344	160 704	60 920	72 996
Portland cement	tonnes	528 417	229 573	305 801	216 480	211 630
Other cement	tonnes	56 264	81 441	66 163	61 193	78 196
Chromium						
Ores & concentrates	tonnes	503	170	26	212	622
Metal	tonnes	8 821	4 609	3 837	4 173	4 776
Coal						
Anthracite	tonnes	304 387	272 985	187 372	180 382	172 431
Other coal	tonnes	616 291	309 560	341 626	352 620	449 187
Briquettes	tonnes	77 063	77 184	64 094	60 172	40 298
Cobalt						
Metal	tonnes	1 631	1 855	1 120	1 546	1 911
Oxides	tonnes	1 141	1 256	1 233	1 380	1 234
Copper						
Ore & matte	tonnes	6 741	11 075	10 724	2 729	...
Unwrought	tonnes	10 571	10 315	32 276	2 924	7 384
Unwrought alloys	tonnes	21 228	23 808	26 666	24 121	22 120
Scrap	tonnes	217 016	156 121	163 579	210 169	247 813
Diamond						
Unsorted	carats	8 616 140	4 030 600	...	9 744 443	6 389 942
Gem, rough	carats	61 757 031	69 542 709	86 681 020	104 300 972	78 961 611
Gem, cut	carats	795 268	899 959	394 881	828 103	1 590 995
Industrial	carats	27 030 867	11 861 312	7 837 074	12 177 638	24 215 012
Dust	carats	...	88 612 930	...	75 401 755	29 814 475
Diatomite	tonnes	511	1 342	816	1 003	2 114
Feldspar	tonnes	101	93	209	801	253
Fluorspar	tonnes	4 879	2 373	636	519	2 916
Gold						
Metal	kilograms	438 116	405 319	198 805	82 892	408 689
Waste & scrap	kilograms	356 243	493 588	548 843	1 074 829	471 657
Graphite	tonnes	2 429	2 635	2 816	4 158	4 210
Gypsum						
Crude	tonnes	9 709	3 049	14 460	2 601	3 650
Calcined	tonnes	31 474	29 474	44 827	39 515	50 648
Iodine	kilograms	385 000	507 363	207 341	169 145	106 950
Iron, steel and ferro-alloys						
Pig iron	tonnes	679	6 749	3 376	1 459	957
Sponge & powder	tonnes	2 231	3 164	3 134	3 666	3 884
Ferro-chrome & ferro-silico-chrome	tonnes	876	1 206	814	1 711	1 850
Ferro-manganese	tonnes	1 327	792	1 874	434	1 444
Ferro-silico-manganese	tonnes	1 307	8	116	42	7 658
Ferro-molybdenum	tonnes	7 251	9 278	11 965	14 081	14 401
Ferro-nickel	tonnes	9	104	368	424	126
Ferro-niobium	tonnes	107	280	46	59	37
Ferro-phosphorus	tonnes	22	26	57	109	1 409
Ferro-silicon	tonnes	1 400	2 247	3 155	1 845	2 699
Ferro-titanium & Fe-Si-Ti	tonnes	18 839	16 422	16 334	14 676	20 868
Ferro-vanadium	tonnes	49	118	55	39	17
Other ferro-alloys	tonnes	6 818	6 013	9 226	6 349	5 784
Silicon metal	tonnes	1 577	1 914	4 050	2 699	1 511
Ingots, blooms, billets	tonnes	520 306	746 730	560 796	1 305 976	1 721 824
Scrap	tonnes	4 378 117	4 821 840	5 538 569	7 174 934	6 779 611
Kaolin (c)	tonnes	2 074 548	1 928 230	1 899 220	1 862 437	1 728 161

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Lead						
Unwrought	tonnes	82 539	93 552	101 832	61 682	34 925
Unwrought alloys	tonnes	35 145	42 308	57 249	44 091	31 664
Scrap	tonnes	7 352	10 700	17 116	28 569	32 934
Lithium						
Oxides	tonnes	116	95	186	169	303
Carbonate	tonnes	285	214	147	193	161
Magnesite and magnesite						
Magnesite	tonnes	89	78	337	34	47
Magnesia	tonnes	43 835	40 023	26 460	26 248	24 977
Manganese						
Metal	tonnes	*3 800	(a) *6 000	(a) *4 300	(a) *3 000	(a) *3 100
Mercury	kilograms	3 069	17 299	6 226	851	3 037
Mica						
Unmanufactured	tonnes	68	22	20	34	—
Ground	tonnes	3 638	3 758	4 023	4 740	8 537
Waste	tonnes	56	17	46	0	—
Molybdenum						
Ores & concentrates	tonnes	317	297	418	84	181
Metal	tonnes	277	1 046	326	230	331
Nickel						
Mattes, sinters etc.	tonnes	1 634	136	128	200	964
Unwrought	tonnes	21 678	21 670	19 775	19 200	38 451
Unwrought alloys	tonnes	5 203	5 955	4 257	4 899	4 711
Scrap	tonnes	7 015	7 736	7 912	7 861	10 784
Crude petroleum	tonnes	78 022 274	82 057 946	79 943 787	69 617 507	60 743 679
Phosphates	tonnes	1 295	317	386	111	33
Platinum metals						
Platinum	kilograms	31 660	31 859	69 955	37 874	47 738
Palladium	kilograms	17 018	22 845	19 176	27 669	63 539
Other platinum metals	kilograms	7 537	5 604	6 002	9 631	14 070
Waste & scrap	kilograms	1 156 462	1 124 414	914 126	1 862 845	2 771 402
Potash						
Chloride	tonnes	*630 000	*530 000	*440 000	*630 000	*512 000
Other potassic fertilisers	tonnes	1 143	1 141	740	609	416
Rare earths						
Cerium compounds	tonnes	317	415	88	118	46
Other rare earth compounds	tonnes	354	329	1 128	1 105	1 163
Ferro-cerium & other pyrophoric alloys	tonnes	26	9	19	768	225
Metals	tonnes	60	51	148	16	10
Salt	tonnes	307 899	299 607	326 760	537 497	708 943
Sillimanite	tonnes	6 742	6 895	4 554	3 238	2 060
Silver						
Metal	kilograms	3 461 018	2 282 355	1 497 995	3 429 247	1 941 711
Sulphur and pyrites						
Sulphur	tonnes	10 824	1 563	580	476	705
Sulphur, sublimed & precipitated	tonnes	379	386	657	836	1 387
Talc	tonnes	3 812	4 034	3 833	3 325	3 570
Tantalum and niobium						
Tantalum	tonnes	569	395	280	278	79
Tin						
Concentrates	tonnes	121	59	24	29	0
Unwrought	tonnes	146	426	381	283	561
Unwrought alloys	tonnes	2 993	2 485	2 165	2 152	933
Scrap	tonnes	1 322	2 256	2 821	4 499	7 862
Titanium						
Metal	tonnes	14 152	13 597	11 511	10 084	12 081
Oxides	tonnes	209 583	207 483	238 884	242 541	234 373
Tungsten						
Metal	tonnes	4 647	1 874	1 667	2 053	1 303
Carbide	tonnes	8	20	5	70	92
Vanadium						
Metal	tonnes	1 790	1 405	1 425	1 137	1 075
Zinc						
Unwrought	tonnes	12 231	15 455	15 686	3 106	1 387
Unwrought alloys	tonnes	19 940	21 971	22 366	21 770	26 663
Scrap	tonnes	45 202	19 157	15 248	15 436	7 742

United Kingdom

Exports continued

Commodity	Units	2000	2001	2002	2003	2004
Zirconium						
Concentrates	tonnes	567	1 776	5 033	418	526
Metal	tonnes	317	380	263	244	186

Note(s):-

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

(b) Including some bauxite

(c) Dry weight

Imports

Commodity	Units	2000	2001	2002	2003	2004
Primary aggregates	tonnes	515 406	771 250	986 963	1 494 230	1 576 516
Aluminium and bauxite						
Bauxite	tonnes	(a) 222 319	(a) 271 404	...	...	56 822
Alumina	tonnes	568 317	713 808	(c) 798 479	(b) *828 300	...
Alumina hydrate	tonnes	73 170	63 687	...	(b) *14 300	62 084
Unwrought	tonnes	120 138	135 094	212 046	163 573	116 737
Unwrought alloys	tonnes	158 217	211 245	159 310	129 451	117 786
Scrap	tonnes	123 185	112 240	117 954	105 061	78 101
Antimony						
Metal	tonnes	461	345	183	290	439
Oxide	tonnes	2 082	4 103	3 164	2 712	3 066
Arsenic						
Metallic arsenic	tonnes	109	87	86	155	165
Asbestos	tonnes	246	347	118	3	2 150
Barytes	tonnes	57 362	77 273	74 935	56 867	63 794
Bentonite and fuller's earth						
Bentonite	tonnes	255 942	235 517	216 022	198 434	182 414
Sepiolite	tonnes	(d) 80 538	(d) 65 062	(d) 69 691	(d) 55 483	53 515
Fuller's earth	tonnes	6 563	5 896	9 115	7 085	2 578
Bismuth						
Metal	tonnes	1 379	1 515	1 513	2 237	2 194
Bromine	kilograms	5 986 773	5 387 458	2 879 558	1 899 231	7 301 117
Cadmium						
Metal	tonnes	790	942	225	416	409
Cement						
Cement clinkers	tonnes	350 975	387 306	289 685	506 128	386 581
Portland cement	tonnes	1 428 009	1 179 521	2 142 589	1 714 946	1 976 281
Other cement	tonnes	21 428	52 411	61 327	61 131	59 690
Chromium						
Ores & concentrates	tonnes	163 647	135 369	139 748	107 161	130 911
Metal	tonnes	1 519	1 601	1 171	1 612	2 333
Coal						
Anthracite	tonnes	1 057 911	2 757 188	1 550 849	334 883	193 647
Other coal	tonnes	22 397 393	32 772 976	27 110 435	31 538 546	35 959 163
Briquettes	tonnes	17 197	11 317	17 127	7 638	6 155
Cobalt						
Metal	tonnes	3 886	4 187	4 036	3 356	3 922
Oxides	tonnes	496	641	487	582	545
Copper						
Unwrought, unrefined	tonnes	1 085	290	89	14	122
Unwrought, refined	tonnes	337 969	310 894	316 578	245 152	214 304
Unwrought alloys	tonnes	7 325	7 249	5 480	6 160	8 020
Scrap	tonnes	20 597	19 651	19 240	17 378	16 119
Diamond						
Unsorted	carats	5 560 568	586 774	1 794 607	5 210 022	9 813 728
Gem, rough	carats	79 691 733	81 302 570	70 336 037	77 712 486	68 231 897
Gem, cut	carats	6 423 082	4 396 223	5 123 898	4 520 872	9 193 300
Industrial	carats	16 208 556	7 344 542	7 804 225	21 518 053	29 209 014
Dust	carats	98 133 490	74 756 325	68 359 660	92 290 565	129 250 000
Diatomite	tonnes	35 561	33 474	34 490	37 217	35 188
Feldspar	tonnes	25 743	18 361	33 196	25 764	31 320
Fluorspar	tonnes	*40 000	34 999	26 690	21 360	25 147

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Gold						
Metal	kilograms	971 705	972 188	1 280 970	1 414 697	1 092 060
Waste & scrap	kilograms	318 705	167 513	122 639	231 365	274 069
Graphite	tonnes	26 088	22 435	22 435	19 270	19 117
Gypsum						
Crude	tonnes	492 422	755 112	(e) 646 889	(e) 903 068	(e) 290 048
Calcined	tonnes	62 728	31 481	...	...	...
Iodine	kilograms	1 304 692	1 015 061	744 234	825 813	804 508
Iron ore						
Iron ore	tonnes	16 778 947	15 351 877	13 316 026	16 121 350	15 299 470
Burnt pyrites	tonnes	29 446	17 130	...	19 230	2 436
Iron, steel and ferro-alloys						
Pig iron	tonnes	133 734	159 725	124 682	116 724	103 729
Sponge & powder	tonnes	40 061	23 551	23 673	21 503	20 783
Ferro-chrome	tonnes	107 044	98 994	112 898	68 405	112 335
Ferro-silico-chrome	tonnes	7 415	5 136	2 309	63	—
Ferro-silico-magnesium	tonnes	6 965	5 318	5 820	5 663	4 961
Ferro-manganese	tonnes	91 053	73 507	86 681	76 686	69 872
Ferro-silico-manganese	tonnes	66 279	53 747	64 565	53 421	41 314
Ferro-molybdenum	tonnes	490	351	338	434	824
Ferro-nickel	tonnes	2 503	7 166	11 010	16 437	14 665
Ferro-niobium	tonnes	1 548	1 261	1 029	1 148	1 269
Ferro-phosphorus	tonnes	2 310	2 163	1 503	2 124	1 687
Ferro-silicon	tonnes	67 821	72 663	76 046	75 469	58 252
Ferro-titanium & Fe-Si-Ti	tonnes	2 672	2 465	2 729	2 042	2 448
Ferro-tungsten & Fe-Si-W	tonnes	63	96	32	60	10
Ferro-vanadium	tonnes	1 443	727	748	1 071	1 279
Other ferro-alloys	tonnes	4 086	4 073	4 258	2 195	2 289
Silicon metal	tonnes	78 089	86 026	80 766	100 472	70 563
Ingots, blooms, billets	tonnes	518 194	388 350	1 453 884	540 537	764 472
Scrap	tonnes	201 251	178 923	113 107	139 089	225 970
Kaolin	tonnes	50 300	102 839	58 993	72 719	126 644
Lead						
Ores & concentrates (f)	tonnes	*34 000	*33 000	*30 000	*5 000	—
Unwrought, base bullion (g)	tonnes	140 344	184 518	184 060	168 228	128 011
Unwrought, other	tonnes	109 102	33 202	32 468	28 132	53 706
Scrap	tonnes	10 849	15 633	4 946	6 043	7 811
Lithium						
Oxides	tonnes	376	374	409	554	379
Carbonate	tonnes	779	499	626	687	492
Magnesite and magnesite						
Magnesite	tonnes	24 541	7 122	9 252	20 287	11 186
Magnesia	tonnes	127 360	108 988	98 075	82 100	84 241
Manganese						
Ores & concentrates (h)	tonnes	2 956	2 701	1 218	2 102	2 526
Metal	tonnes	8 620	9 636	7 600	8 250	9 208
Mercury	kilograms	18 719	5 042	23 302	29 673	28 038
Mica						
Unmanufactured	tonnes	203	344	240	424	1 769
Ground	tonnes	5 355	7 258	9 349	8 327	6 292
Waste	tonnes	8 119	4 016	4 224	5 050	4 373
Molybdenum						
Ores & concentrates	tonnes	12 457	16 373	21 437	18 884	18 506
Metal	tonnes	846	1 165	1 220	1 169	1 845
Oxides	tonnes	34	60	106	7	2
Nickel						
Mattes, sinters etc.	tonnes	54 768	51 963	52 514	43 968	64 192
Unwrought	tonnes	18 825	47 030	46 610	34 162	45 264
Unwrought alloys	tonnes	2 095	2 788	1 868	31 491	2 238
Scrap	tonnes	22 644	14 963	25 270	20 038	9 060
Oxides	tonnes	131	145	130	47	85
Crude petroleum	tonnes	36 552 593	38 542 685	40 838 161	44 511 352	56 128 686
Phosphates	tonnes	13 808	9 223	10 275	1 242	11 377
Platinum metals						
Platinum	kilograms	35 968	17 825	12 030	13 827	47 717
Palladium	kilograms	34 022	19 724	22 072	48 106	24 657
Other platinum metals	kilograms	9 715	5 602	4 772	8 636	8 268
Waste & scrap	kilograms	593 208	729 250	775 673	367 327	617 569

United Kingdom

Imports continued

Commodity	Units	2000	2001	2002	2003	2004
Potash						
Fertiliser salts	tonnes	18 050	16 154	19 366	12 751	9 209
Chloride	tonnes	255 572	335 398	372 031	246 164	205 175
Other potassic fertilisers	tonnes	10 890	14 506	8 804	5 439	12 706
Rare earths						
Cerium compounds	tonnes	2 388	2 227	3 070	2 519	1 909
Other rare earth compounds	tonnes	466	403	491	471	773
Ferro-cerium & other pyrophoric alloys	tonnes	14	1	34	1	8
Metals	tonnes	226	172	64	115	135
Salt	tonnes	(b) *200 000	(b) *235 000	306 488	217 009	232 466
Sillimanite						
Sillimanite	tonnes	28 081	28 470	18 588	22 649	24 568
Mullite	tonnes	5 198	5 174	10 006	8 656	12 677
Silver						
Metal	kilograms	2 541 673	3 471 871	3 780 907	2 484 101	2 100 474
Sulphur and pyrites						
Sulphur, crude	tonnes	(i) 211 888	(i) 170 055	(i) 87 260	23 469	44 963
Sulphur, refined	tonnes	...	...	...	5 560	3 984
Sulphur, sublimed & precipitated	tonnes	94	390	355	544	675
Talc	tonnes	61 975	66 737	66 119	59 172	68 209
Tantalum and niobium						
Tantalum	tonnes	979	1 610	3 480	842	240
Tin						
Unwrought	tonnes	9 190	6 857	7 151	7 488	5 863
Unwrought alloys	tonnes	1 760	2 442	1 437	2 378	1 103
Scrap	tonnes	388	179	188	168	234
Titanium						
Ilmenite	tonnes	134 861	112 447	106 177	113 852	110 600
Other titanium minerals	tonnes	70 348	110 526	82 303	111 754	113 862
Titanium slag	tonnes	160 738	110 697	157 020	44 890	151
Metal	tonnes	27 331	30 752	25 319	25 126	28 137
Oxides	tonnes	80 087	82 852	95 583	74 138	75 331
Tungsten						
Metal	tonnes	2 176	2 538	2 121	1 932	1 880
Carbide	tonnes	829	1 381	759	1 232	819
Vanadium						
Pentoxide	tonnes	277	319	962	363	306
Metal	tonnes	272	381	171	256	340
Zinc						
Ores & concentrates	tonnes	177 332	215 342	229 042	16 611	260
Unwrought	tonnes	119 052	110 157	108 357	171 219	141 867
Unwrought alloys	tonnes	7 133	6 363	5 738	13 796	15 719
Scrap	tonnes	4 983	3 219	261	172	190
Zirconium						
Concentrates	tonnes	34 053	46 548	30 656	39 285	34 774
Metal	tonnes	733	693	394	346	443

Note(s):-

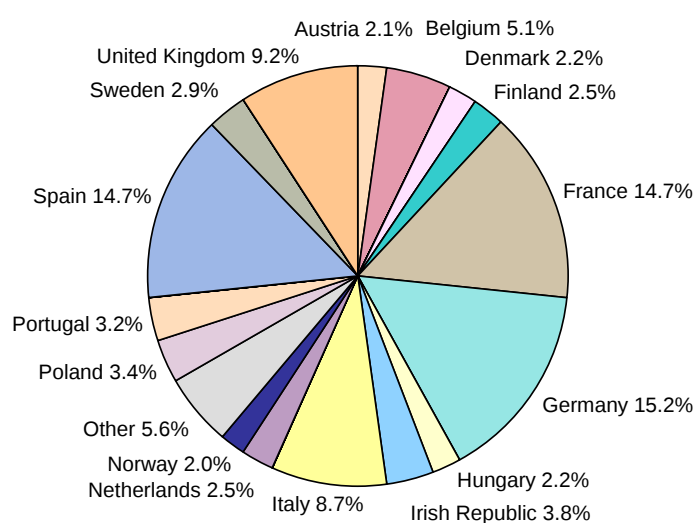
- (a) Excluding refractory grade bauxite
- (b) BGS estimates, based on known exports from certain countries
- (c) Including some bauxite
- (d) Exports from Spain
- (e) Including calcined
- (f) Pb content
- (g) Includes a substantial precious metal content, mainly silver
- (h) Including manganiferous iron ore
- (i) Including refined

STATISTICAL TABLES BY COMMODITY

Primary aggregates

- Primary aggregates are crushed rock aggregates and sands and gravels that are widely used in the construction industry. The trade data presented here is for crushed rock combined with sand and gravel.
- Aggregates data are very difficult to establish with satisfactory precision. There are frequent inconsistencies in the way countries report aggregates production and trade. Different definitions for similar materials are commonplace, and many countries do not require production to be reported from quarries that have less than a certain number of employees.
- Aggregates are primarily used in concrete for building, construction and civil engineering, for road surfaces (when bound with bitumen or concrete) and railway/road-base ballast.
- Germany was the largest EU31 producer of primary aggregates in 2004, with 404 million tonnes (15%). Norway and the UK were the largest net exporters. Germany was the largest exporter, in gross terms, but was also, with the Netherlands and Belgium-Luxembourg, a major importer. Total imports and exports of the EU31 are closely balanced from year to year and the considerable total trade (197 million tonnes) is almost entirely within the EU31 area.

EU31 Production of aggregates 2004



Production of primary aggregates (sand and gravel and crushed rock)

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Sand and gravel (a)	25 712 457	23 102 333	28 758 261	27 287 331	28 586 199
Crushed rock (a)	23 818 614	22 404 109	22 438 122	26 333 481	27 972 469
Belgium					
Sand and gravel (b) (c)	11 461 961	11 064 638	10 449 346	9 245 757	97 327 639
Crushed rock (b) (d)	39 577 921	39 270 358	39 772 457	36 772 879	36 993 110
Bulgaria					
Sand and gravel	*3 500 000	*3 500 000	*3 500 000	3 710 186	3 333 000
Cyprus					
Crushed rock	8 800 000	9 300 000	10 500 000	10 700 000	11 600 000
Czech Republic					
Sand and gravel	12 218 945	11 916 192	12 248 595	15 267 650	15 703 358
Crushed rock	18 304 260	20 301 407	23 643 644	27 934 515	28 846 776
Denmark					
Sand and gravel	59 000 000	55 200 000	53 300 000	50 800 000	57 300 000
Crushed rock	400 000	330 000	390 000	380 000	372 000
Estonia					
Sand and gravel	2 100 000	2 300 000	1 650 400	1 973 700	2 344 900
Crushed rock	2 300 000	1 800 000	4 571 100	4 082 700	5 426 600
Finland					
Sand and gravel (a)	11 186 871	*12 000 000	9 772 057	13 123 935	16 008 858
Crushed rock (a)	*36 000 000	*36 000 000	47 398 339	55 351 492	50 701 404

Production continued

Country	2000	2001	2002	2003	2004
France					
Sand and gravel	180 570 000	175 150 000	167 970 000	165 470 000	168 080 000
Crushed rock	218 670 000	221 600 000	215 290 000	217 400 000	223 170 000
Germany					
Sand and gravel	343 200 000	324 200 000	303 500 000	296 900 000	278 900 000
Crushed rock	144 805 000	136 788 000	130 693 000	124 047 000	125 600 000
Hungary					
Sand and gravel	29 793 000	32 252 000	35 407 000	40 530 145	46 354 829
Crushed rock	8 136 900	8 621 080	9 792 782	10 090 547	13 037 471
Irish Republic					
Sand and gravel	29 000 000	33 000 000	34 000 000	40 000 000	*40 000 000
Crushed rock	68 000 000	77 000 000	78 000 000	60 000 000	*60 000 000
Italy					
Sand and gravel	...	215 622 251	200 776 836	212 169 204	176 252 243
Crushed rock	...	51 224 533	46 512 344	44 562 447	54 195 444
Latvia					
Sand and gravel	...	2 283 102	2 534 837	3 584 055	2 803 682
Lithuania					
Sand and gravel	4 203 206	4 018 341	5 770 428	4 793 670	5 835 729
Netherlands					
Sand and gravel	108 299 000	113 917 000	81 490 000	74 200 000	66 200 000
Norway					
Sand and gravel	19 000 000	15 000 000	14 000 000	15 000 000	15 000 000
Crushed rock	34 000 000	36 000 000	36 000 000	36 000 000	37 000 000
Poland					
Sand and gravel (f)	73 107 000	60 039 000	60 186 000	71 376 000	*60 000 000
Crushed rock	27 661 000	25 593 000	25 875 000	26 404 000	29 271 189
Portugal					
Sand and gravel	6 876 470	9 852 769	7 514 159	6 483 435	...
Crushed rock	63 610 282	61 453 129	86 055 000	83 462 955	...
Romania					
Sand and gravel	813 941	1 075 191	1 568 994	1 013 386	1 458 266
Slovakia					
Sand and gravel	2 000 000	2 000 000	2 200 000	...	...
Crushed rock	7 700 000	8 100 000	8 800 000	...	...
Slovenia					
Sand and gravel	12 546 000	11 661 000	11 277 000	11 012 000	11 466 000
Crushed rock	13 916 820	12 200 746	13 049 675	15 040 340	...
Spain					
Sand and gravel	81 688 475	85 000 000	97 857 003	118 746 034	*124 000 000
Crushed rock	192 655 157	200 000 000	237 379 504	254 100 000	*265 000 000
Sweden					
Sand and gravel	26 469 878	25 549 623	24 537 500	21 650 322	22 647 111
Crushed rock	44 753 483	45 992 625	46 771 631	49 326 880	54 737 031
Switzerland					
Sand and gravel	(e) 33 000 000	...	...	...	26 000 000
Crushed rock	...	...	...	...	3 000 000
United Kingdom					
Sand and gravel	101 622 000	101 397 000	94 424 000	91 803 000	97 333 000
Crushed rock (g)	146 169 000	153 023 000	144 337 000	140 417 000	147 067 000
EU31 Total	2 546 000 000	2 530 000 000	2 524 000 000	2 560 000 000	2 653 000 000

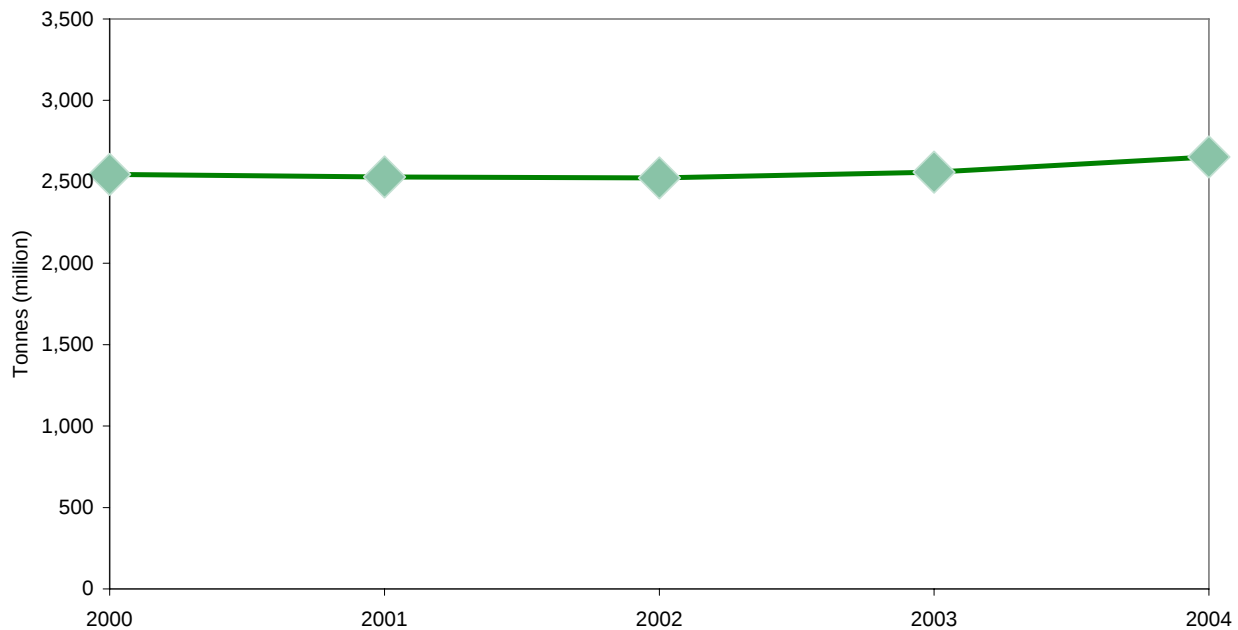
Note(s):-

- (1) So far as possible, these statistics include construction sands; gravel, pebbles, shingle and flint; crushed stone used for concrete aggregates, roadstone and other construction use; granules, chippings and powders, listed under Prodcom codes 14211190, 14211210, 14211230, 14211250, 14211290
- (2) Where official sources show more than one series for aggregates the higher series has generally been used in this compilation
- (3) Where marine sands and gravels have been identified, these are included
- (4) Information may be incomplete or absent due to reporting methods, confidentiality or lack of available information. All EU31 countries produce sand and gravel and crushed rock
- (5) Production from many small operations are not officially compiled. The minimum number of employees for which establishments are required to report production varies between different countries and can also vary from year to year within a country
- (6) Quantities of sand from sand and gravel operations may be discarded due to low demand. This may or may not be included in the statistics

- (a) Sales
- (b) Deliveries
- (c) Includes silica sand
- (d) Includes gravel, slag and tarred macadam

- (e) Includes crushed rock
- (f) Includes an estimate for small producers
- (g) Includes small quantities for other purposes in Northern Ireland

EU31 Production of aggregates 2000 - 04



Exports of primary aggregates (sand and gravel and crushed rock)

tonnes

Country	2000	2001	2002	2003	2004
Austria	2 230 878	2 323 043	2 581 242	3 163 141	2 829 930
Belgium-Luxembourg	17 109 102	15 784 851	15 340 439	13 562 764	13 208 283
Bulgaria	122 745	123 942	227 464	214 135	384 420
Czech Republic	584 161	555 449	417 503	464 898	344 850
Denmark	959 352	1 112 789	880 032	736 820	795 330
Estonia	280 181	282 172	376 987	469 343	487 863
Finland	635 614	581 353	879 966	446 404	422 709
France	12 787 965	12 547 219	11 154 637	10 116 439	9 389 763
Germany	21 743 596	21 152 142	19 748 571	19 811 898	21 817 271
Greece	33 773	33 971	18 672	12 670	108 042
Hungary	629 388	590 064	743 157	598 056	729 270
Irish Republic	327 350	380 067	703 054	563 286	135 579
Italy	1 595 225	1 443 143	1 638 314	1 333 675	1 556 414
Latvia	302 958	173 112	118 698	12 108	10 278
Lithuania	152 220	258 802	255 405	228 171	460 569
Netherlands	14 426 000	11 540 000	12 743 000	12 427 000	(a) *14 294 000
Norway	11 764 392	10 846 009	12 751 398	12 300 157	12 561 778
Poland	1 837 157	867 725	435 628	393 090	790 734
Portugal	59 430	54 077	31 516	31 257	53 451
Romania	7 132	1 953	18 927	35 924	23 073
Slovakia	557 394	573 398	570 446	328 547	(a) *541 000
Slovenia	48 539	77 693	92 618	137 354	166 176
Spain	1 493 043	1 641 676	1 724 911	1 647 138	1 694 285
Sweden	2 282 723	2 206 841	2 132 194	2 067 542	2 213 385
Switzerland	146 750	118 787	229 451	184 678	296 911
Turkey	109 032	174 436	401 071	619 130	758 169
United Kingdom	12 334 251	13 238 740	12 475 405	11 608 077	12 257 855

Note(s):-

(1) The figures in this table include construction sands, pebbles, gravel, shingle, flint, crushed rock, granules, chippings and powders covered by the Harmonised System codes 2505.90, 2517.10, 2517.41 and 2517.49

(2) Includes marine dredged sand and gravel landed at foreign ports

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

Imports of primary aggregates (sand and gravel and crushed rock)

tonnes

Country	2000	2001	2002	2003	2004
Austria	2 212 656	2 293 185	2 545 866	2 446 023	2 087 667
Belgium-Luxembourg	23 372 210	23 173 017	17 771 910	19 492 423	20 219 032
Bulgaria	10 339	13 069	17 160	24 578	20 303
Cyprus	4 112	3 104	1 870	3 201	(a) *8 400
Czech Republic	258 575	261 199	237 868	206 018	509 217
Denmark	2 308 202	2 124 031	2 299 752	2 632 665	2 949 549
Estonia	396 002	380 156	669 205	464 516	456 144
Finland	43 312	44 785	29 163	47 702	75 016
France	9 710 939	9 295 683	9 666 340	8 239 025	9 431 953
Germany	19 651 936	15 006 699	13 306 857	11 870 353	11 127 947
Greece	119 692	29 123	105 277	324 882	199 144
Hungary	189 014	57 443	241 929	104 705	254 800
Irish Republic	1 056 985	989 926	1 121 763	1 036 886	1 269 673
Italy	3 395 954	4 014 635	3 324 865	3 368 905	4 102 477
Latvia	519 139	543 479	623 854	676 383	629 613
Lithuania	614 623	964 300	1 096 672	993 051	1 069 921
Netherlands	32 500 000	36 200 000	44 000 000	45 300 000	*45 000 000
Norway	81 128	91 192	66 824	71 837	85 471
Poland	1 158 007	1 428 456	1 252 285	1 527 892	1 756 513
Portugal	799 810	750 486	867 165	641 696	790 615
Romania	13 512	123 702	218 348	213 091	370 184
Slovakia	125 093	194 367	188 874	208 515	294 267
Slovenia	585 923	491 305	447 327	541 189	532 614
Spain	1 165 081	1 088 430	1 073 979	1 156 484	1 190 670
Sweden	590 255	417 298	838 286	615 470	729 992
Switzerland	6 266 692	6 307 738	6 554 457	6 134 548	6 413 474
Turkey	5 634	1 325	2 425	3 660	4 519
United Kingdom (b)	515 406	771 250	986 963	1 494 230	1 576 516

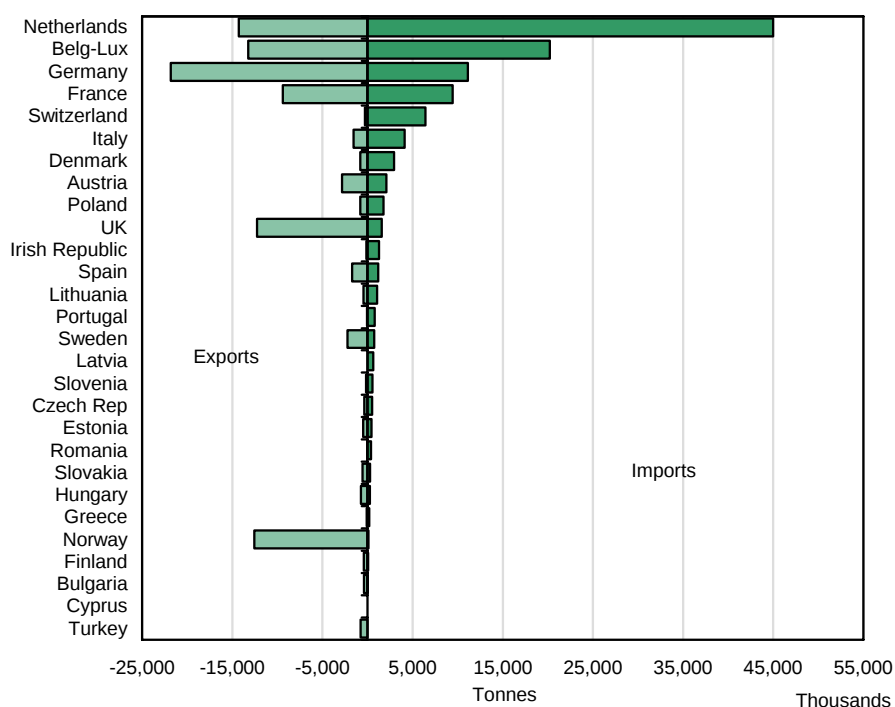
Note(s):-

(1) The figures in this table include construction sands, pebbles, gravel, shingle, flint, crushed rock, granules, chippings and powders covered by the Harmonised System codes 2505.90, 2517.10, 2517.41 and 2517.49

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

(b) For a number of years, a significant amount of crushed rock imports are believed to have been wrongly classified as 'granite unworked'. In 2003, BGS estimate that aggregate imports should be approximately 2 600 000 tonnes

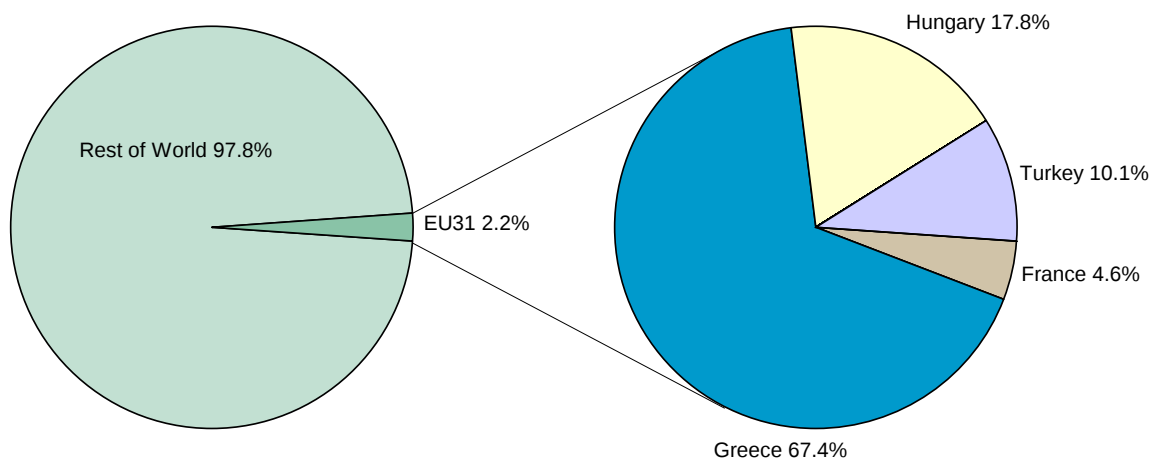
Aggregates - EU31 trade in 2004



Bauxite

- Bauxite is the only significant ore of aluminium and is generated by deep chemical weathering of rocks in tropical to sub-tropical climates. There is limited EU31 production, leaving a very strong dependence on imports from countries outside the EU31.
- The chief use of bauxite is as a raw material for the production of alumina. This, in turn, is smelted to aluminium metal.
- Australia was the world's largest producer in 2004. Greece was the largest producer within the EU31, with 67% of total EU31 production. Guyanan bauxite, (refractory grade, FOB barge, US Port) traded at an average price of \$165/tonne during 2004.

EU31 Production of bauxite 2004



Production of bauxite

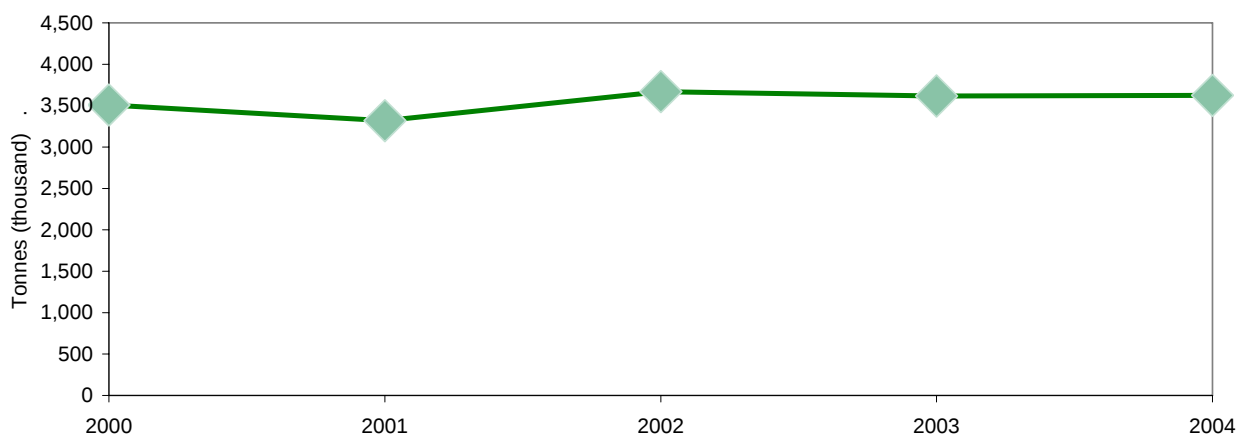
tonnes

Country	2000	2001	2002	2003	2004
France	185 000	174 000	170 000	168 000	168 000
Greece	1 818 525	1 903 280	2 492 000	2 418 000	2 444 000
Hungary	1 046 470	1 000 044	720 000	665 904	646 726
Turkey	458 537	242 040	287 403	364 306	365 800
EU31 Total	3 509 000	3 319 000	3 669 000	3 616 000	3 625 000

Note(s):-

(1) This table includes production of refractory bauxite

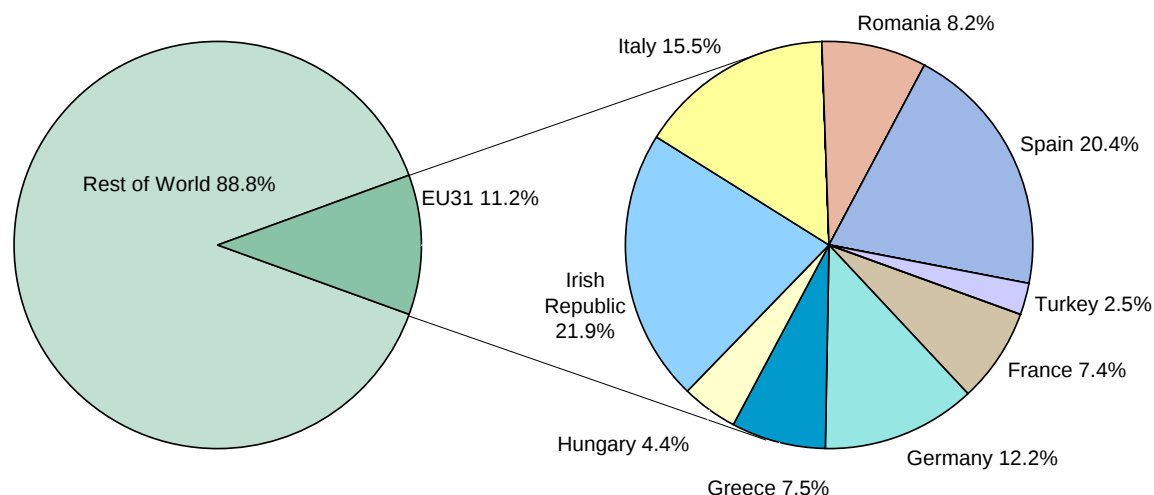
EU31 Production of bauxite 2000 - 04



Alumina

- Alumina (aluminium oxide) is an intermediate product in the manufacture of aluminium metal from raw bauxite ore. Alumina hydrate is a form of alumina containing combined water and used in the paper, petroleum, paint and other industries.
- Australia was the world's largest producer in 2004. The EU31 produced 6.9 million tonnes, representing 11% of world production.
- Spot prices for metallurgical-grade alumina increased considerably during the first half of the year, reaching \$330–\$350/tonne range, driven by greater demand and limited supply. Prices reached a peak in May trading at between \$470–\$490/tonne, and ended the year in the \$390–\$420/tonne range.

EU31 Production of alumina 2004



Production of alumina

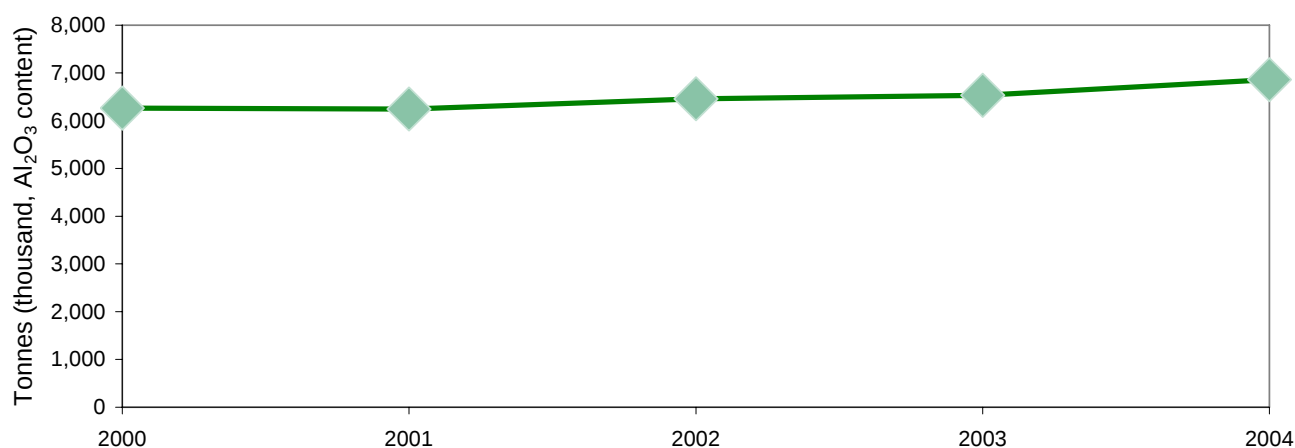
tonnes (Al₂O₃ content)

Country	2000	2001	2002	2003	2004
France	508 000	*510 000	*500 000	*510 000	*510 000
Germany	*730 000	*750 000	*825 000	*830 000	*835 000
Greece	451 000	463 000	490 000	496 000	514 000
Hungary	357 100	330 000	293 700	300 000	304 000
Irish Republic	1 410 674	1 448 730	1 400 000	1 500 000	*1 500 000
Italy	1 022 000	993 000	1 010 000	1 021 000	1 064 000
Romania	416 587	319 403	361 047	332 853	559 307
Spain	1 123 000	1 199 000	1 350 000	1 380 000	*1 400 000
Turkey	155 448	145 993	152 869	160 675	169 991
United Kingdom	88 500	83 900	73 800	----	----
EU31 Total	6 260 000	6 240 000	6 460 000	6 530 000	6 860 000

Note(s):-

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

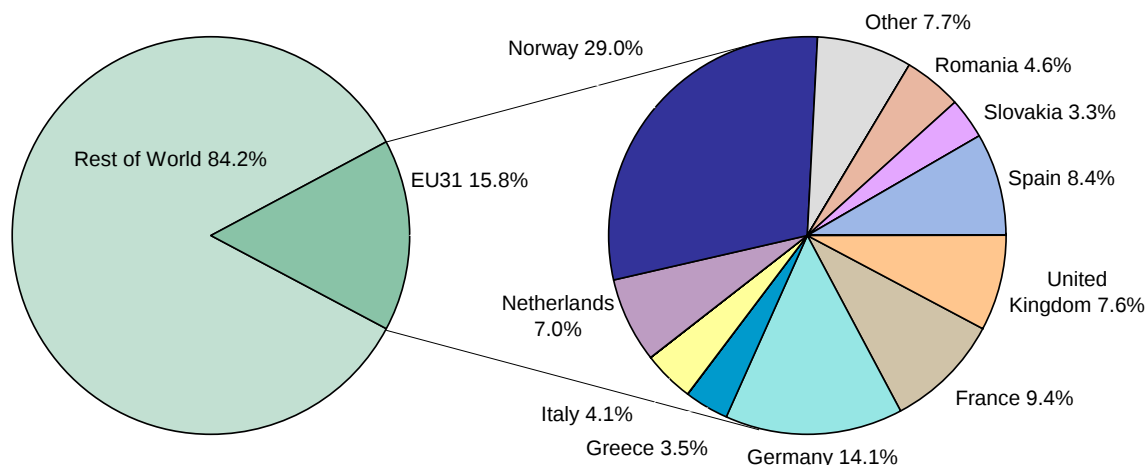
EU31 Production of alumina 2000 - 04



Aluminium metal

- Aluminium is a light-weight metallic element that has many uses. The chief uses are in packaging, transportation and construction.
- China was the world's largest producer in 2004, with 22% of world production. The EU31 produced 4.7 million tonnes, representing 16% of world production. Norway was the largest EU31 producer.
- High-grade (99.7% ingot) spot aluminium prices averaged \$1716/tonne during 2004.

EU31 Production of primary aluminium 2004



Production of primary aluminium

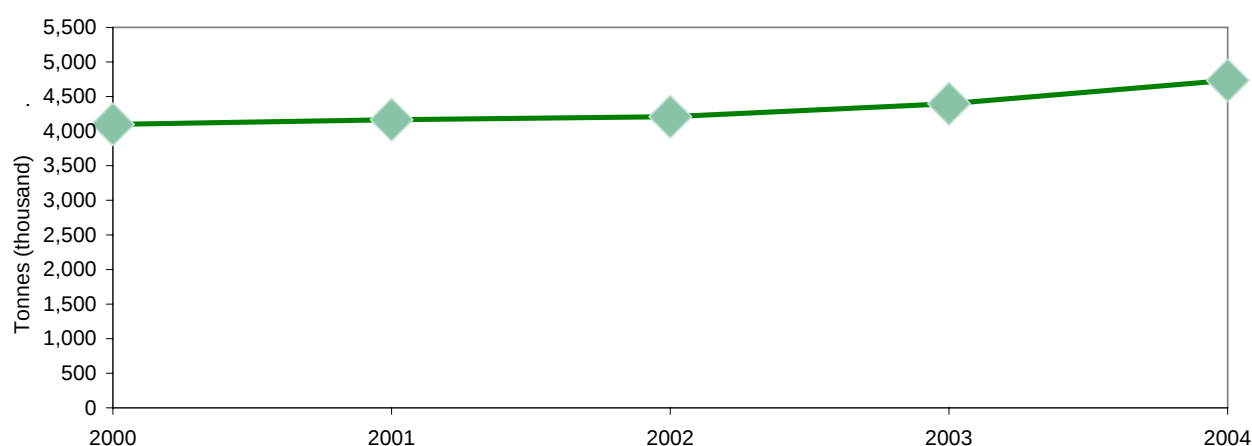
tonnes

Country	2000	2001	2002	2003	2004
France	441 100	461 000	463 000	444 000	447 000
Germany	643 545	651 592	652 845	660 783	667 800
Greece	168 000	164 000	165 262	167 797	166 634
Hungary	33 850	34 600	35 294	34 000	34 300
Italy	189 800	187 500	190 400	191 400	195 400
Netherlands	301 689	293 068	284 364	282 800	331 000
Norway (a)	1 031 000	1 034 000	1 044 000	1 180 200	1 370 438
Poland	55 473	54 606	58 777	57 145	58 931
Romania	179 039	181 830	187 052	196 844	218 534
Slovakia	109 000	110 062	111 600	132 089	156 893
Slovenia	75 600	76 632	87 600	109 800	120 700
Spain	365 700	376 400	380 100	389 100	397 500
Sweden	100 788	101 420	100 125	100 707	100 591
Switzerland	35 539	36 288	40 224	43 865	44 879
Turkey	61 501	61 730	62 501	63 140	62 400
United Kingdom	305 099	340 778	344 318	342 748	359 631
EU31 Total	4 097 000	4 166 000	4 207 000	4 396 000	4 733 000

Note(s):-

(a) May include some super purity aluminium

EU31 Production of primary aluminium 2000 - 04



Exports of bauxite, alumina and aluminium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Unwrought	7 666	12 071	14 271	16 150	13 341
Unwrought alloys	84 770	89 985	94 594	87 528	122 693
Scrap	54 104	55 565	57 505	52 564	71 362
Belgium-Luxembourg					
Bauxite	133 827	63 483	73 550	98 961	54 734
Alumina	5 098	3 608	8 955	7 058	6 524
Unwrought	29 754	142 931	234 880	157 800	266 682
Unwrought alloys	31 821	41 445	52 402	40 919	42 010
Scrap	142 861	161 980	151 468	133 871	137 374
Bulgaria					
Unwrought (a)	506	647	2 172	1 994	4 629
Scrap	21 721	18 352	22 994	21 838	22 036
Croatia					
Bauxite	21 015	5 981	3 869	1 478	566
Scrap	8 033	8 311	10 187	10 914	12 024
Cyprus					
Unwrought	15 477	6 236	1 028	381	316
Scrap	1 813	5 003	2 813	80	3 699
Czech Republic					
Unwrought (a)	47 454	38 362	34 611	43 045	48 698
Scrap	26 241	30 520	33 636	33 410	43 223
Denmark					
Alumina	4 141	3 481	4 520	4 556	7 112
Unwrought alloys	23 333	26 092	23 363	17 538	14 019
Scrap	34 292	48 753	45 342	36 738	55 407
Estonia					
Unwrought (a)	2 309	3 744	6 095	11 986	5 479
Scrap	16 144	9 994	9 108	9 712	8 062
Finland					
Unwrought (a)	40 730	33 670	23 544	18 568	17 261
Scrap	8 529	7 913	15 189	16 720	22 946
France					
Bauxite	25 619	4 157	14 013	253	2 985
Alumina	129 376	166 329	167 309	188 951	232 762
Alumina hydrate	68 272	117 496	103 258	125 437	144 331
Unwrought	81 992	78 306	81 601	63 659	70 010
Unwrought alloys	75 453	72 663	75 069	75 318	78 047
Scrap	247 753	248 291	274 551	257 279	299 226
Germany					
Bauxite	35 361	35 894	42 524	26 666	30 647
Alumina	191 531	167 226	201 103	308 210	294 034
Alumina hydrate	515 888	537 767	488 918	472 091	528 700
Unwrought	53 127	71 793	59 597	48 570	58 365
Unwrought alloys	321 684	294 918	327 962	340 772	354 998
Scrap	546 235	557 252	499 791	556 405	544 522

Aluminium and Bauxite

Exports continued

Country	2000	2001	2002	2003	2004
Greece					
Bauxite	666 578	567 470	535 074	701 911	925 282
Alumina	249 681	279 120	327 476	358 955	404 852
Alumina hydrate	6 500	34 493	12 261	11 568	3 760
Unwrought	84 799	6 368	56 730	58 714	61 846
Unwrought alloys	9 663	9 457	6 142	8 880	8 597
Scrap	16 410	9 444	12 794	10 731	13 777
Hungary					
Alumina	278 685	258 945	241 441	216 200	250 978
Unwrought (a)	12 185	10 894	11 730	16 231	25 475
Scrap	24 313	29 656	24 428	27 022	38 684
Irish Republic					
Alumina	1 873 414	1 891 293	1 564 481	2 405 797	1 388 723
Alumina hydrate	4 563	20 746	22 656	51 149	44 645
Unwrought alloys	5 879	3 287	4 389	4 569	3 776
Scrap	14 765	14 470	19 240	12 307	15 367
Italy					
Bauxite	255 878	69 646	49 307	9 291	40 512
Alumina	601 032	646 064	721 558	682 587	606 416
Alumina hydrate	33 622	29 901	35 623	34 820	24 895
Unwrought	2 894	2 639	5 986	3 385	4 203
Unwrought alloys	30 940	28 817	35 982	31 082	43 578
Scrap	21 689	19 416	17 707	20 358	26 630
Latvia					
Unwrought (a)	23 419	26 973	37 243	34 081	39 368
Scrap	6 115	2 389	1 477	747	748
Lithuania					
Unwrought (a)	802	4 767	4 083	5 222	3 943
Scrap	31 742	22 873	24 276	15 140	11 953
Netherlands					
Bauxite	35 211	76 216	35 719	58 848	109 399
Alumina	287 473	144 613	125 292	51 228	308 563
Alumina hydrate	47 315	24 904	37 548	48 026	45 928
Unwrought	177 895	169 741	356 282	408 302	314 462
Unwrought alloys	275 788	300 275	225 385	227 283	320 583
Scrap	168 405	153 947	186 791	187 522	192 722
Norway					
Unwrought	138 907	156 506	135 792	150 101	150 479
Unwrought alloys	902 908	1 031 140	992 055	1 212 372	1 333 251
Scrap	24 721	37 376	40 797	37 566	39 742
Poland					
Unwrought (a)	36 275	30 519	32 349	52 132	70 740
Scrap	49 630	62 915	65 404	63 022	71 525
Portugal					
Unwrought alloys	106 585	96 207	84 709	111 732	105 837
Scrap	14 682	19 266	24 671	19 513	28 576
Romania					
Alumina	239 780	196 600	5 128	155 094	209 950
Unwrought (a)	72 767	73 320	88 022	35 094	79 508
Scrap	32 905	6 577	6 963	5 787	4 703
Slovakia					
Unwrought	909	1 345	2 225	3 098	6 827
Unwrought alloys	142 530	146 730	156 343	169 698	183 346
Scrap	6 583	4 744	5 417	5 722	7 594
Slovenia					
Alumina	6 979	10 452	11 760	18 072	24 277
Unwrought alloys	60 662	70 705	77 362	101 446	124 069
Scrap	7 393	9 522	12 329	11 619	14 971
Spain					
Alumina	208 414	292 210	179 478	369 353	491 808
Alumina hydrate	268 920	231 485	11 685	214 263	241 910
Unwrought	2 890	5 191	2 429	915	1 024
Unwrought alloys	79 183	86 974	68 484	87 356	102 146
Scrap	34 991	30 251	37 236	41 646	35 021
Sweden					
Unwrought	8 982	3 183	2 529	101	22 096
Unwrought alloys	44 335	62 986	78 675	75 903	105 752
Scrap	66 697	63 869	70 721	109 170	79 433

Exports continued

Country	2000	2001	2002	2003	2004
Switzerland					
Unwrought (a)	15 691	5 536	7 139	775	8 180
Scrap	88 590	100 096	96 217	96 860	108 536
Turkey					
Alumina	17 613	29 123	23 425	25 573	29 915
Unwrought (a)	10 319	6 289	3 745	4 429	8 076
Scrap	12 992	12 098	10 582	8 036	9 955
United Kingdom					
Alumina	(c) 12 581	11 795	7 768	(b) *5 000	...
Alumina hydrate	(b) *30 600	42 451	20 170	(b) *25 800	...
Unwrought	89 761	16 855	9 403	1 559	29 959
Unwrought alloys	261 274	243 780	241 799	270 701	306 993
Scrap	141 207	204 605	243 894	295 642	319 694

Note(s):-

- (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 7601 of the Harmonised System 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) BGS estimates, based on known imports into certain countries

(c) Including some bauxite

Imports of bauxite, alumina and aluminium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Bauxite	24 404	25 581	21 354	31 082	36 791
Alumina	50 969	43 134	41 141	43 318	23 636
Alumina hydrate	5 612	5 937	6 538	7 779	6 372
Unwrought	116 717	160 372	136 767	141 841	106 348
Unwrought alloys	139 214	139 329	170 541	184 478	229 607
Scrap	139 274	(c) *123 900	(c) *129 700	(c) *143 400	128 798
Belgium-Luxembourg					
Bauxite	93 710	112 399	106 310	102 691	82 208
Alumina	9 709	8 785	9 983	11 350	12 942
Alumina hydrate	43 516	35 659	43 902	43 941	33 798
Unwrought	245 989	448 703	473 246	382 266	513 835
Unwrought alloys	185 915	151 061	196 413	217 309	235 761
Scrap	193 631	185 465	157 885	146 723	157 812
Bulgaria					
Unwrought (a)	13 105	19 069	22 890	28 194	35 515
Croatia					
Bauxite	62 267	76 243	42 464	71 335	48 302
Unwrought	(a) 31 487	(a) 32 087	32 229	21 289	47 437
Unwrought alloys	...	...	8 326	7 329	9 672
Cyprus					
Unwrought alloys	6 885	6 749	7 629	7 697	10 858
Czech Republic					
Bauxite	12 013	15 212	15 391	13 871	20 922
Alumina	17 095	24 771	22 117	23 142	26 898
Alumina hydrate	10 935	9 960	11 981	12 767	17 215
Unwrought	41 552	43 792	64 108	66 747	75 289
Unwrought alloys	64 904	76 779	78 849	82 823	90 688
Scrap	34 678	26 013	23 986	24 336	28 542
Denmark					
Bauxite	11 178	20 077	6 140	11 297	13 801
Alumina	17 027	18 897	20 228	17 896	23 666
Unwrought (a)	45 418	48 723	61 538	65 386	75 233
Scrap	20 371	163 573	52 460	41 373	39 949
Estonia					
Alumina	2 927	1 757	270	854	1 586
Unwrought (a)	57 168	6 047	6 086	10 428	5 859

Aluminium and Bauxite

Imports continued

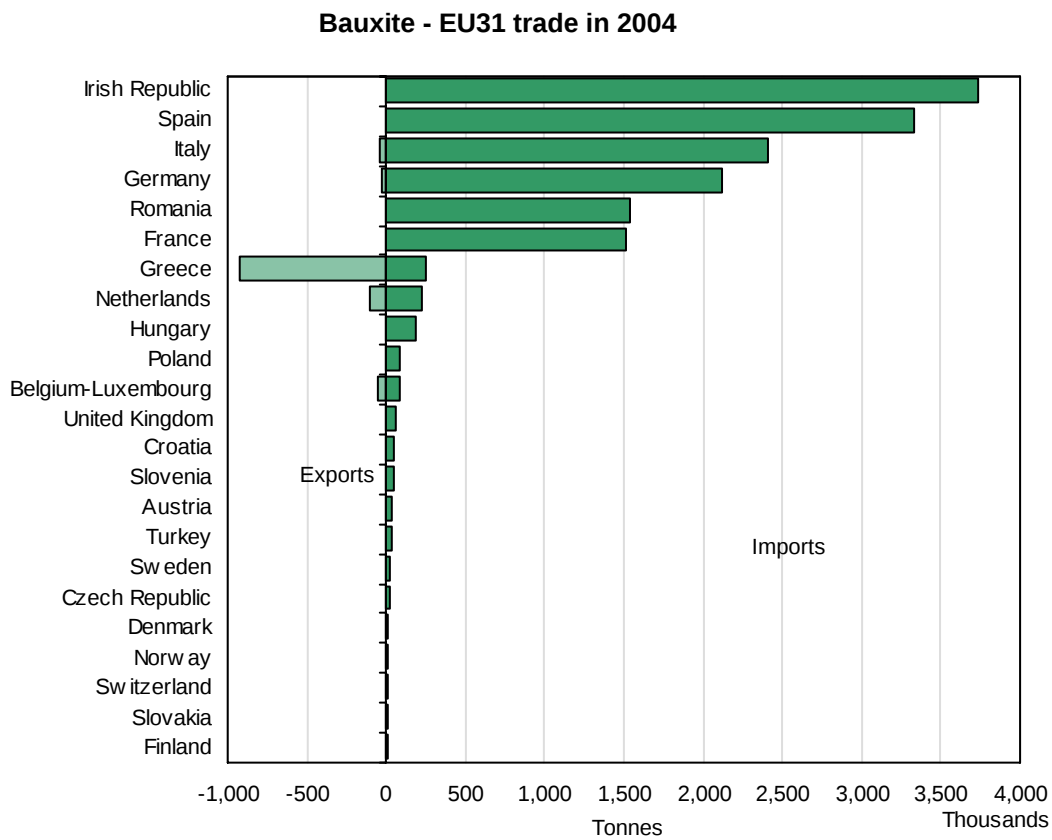
Country	2000	2001	2002	2003	2004
Finland					
Bauxite	3 848	3 544	3 790	6 027	4 782
Alumina	2 179	2 204	2 042	1 904	2 220
Alumina hydrate	36 424	41 950	44 570	24 958	37 361
Unwrought	20 721	21 586	13 704	3 534	3 295
Unwrought alloys	31 299	28 948	24 253	33 174	37 999
Scrap	30 155	29 829	30 310	23 445	18 901
France					
Bauxite	1 569 306	1 667 959	1 347 713	1 786 905	1 507 504
Alumina	460 901	785 981	670 046	704 393	644 513
Alumina hydrate	98 719	46 522	43 727	44 743	41 187
Unwrought	190 495	182 477	148 344	165 490	144 053
Unwrought alloys	337 271	324 411	325 980	324 997	369 795
Scrap	150 091	145 422	133 794	149 876	143 833
Germany					
Bauxite	2 170 064	1 965 709	1 950 542	1 907 966	2 119 259
Alumina	650 080	777 003	867 297	1 047 728	1 107 265
Alumina hydrate	359 940	480 679	378 146	225 998	204 721
Unwrought	610 431	625 469	721 430	796 479	628 038
Unwrought alloys	975 753	976 513	945 177	1 099 136	1 170 875
Scrap	441 033	419 586	483 052	462 320	462 580
Greece					
Bauxite	282 649	252 246	246 155	375 275	247 358
Alumina	5 225	3 711	952	889	905
Unwrought	95 031	78 683	79 463	98 093	116 074
Unwrought alloys	40 679	44 151	39 444	46 193	51 522
Scrap	16 678	19 148	17 329	15 127	16 631
Hungary					
Bauxite	25 212	88 950	116 037	164 930	189 528
Alumina	3 017	2 609	3 188	17 819	8 751
Unwrought (a)	192 980	203 346	224 720	227 904	370 016
Scrap	9 344	7 016	17 071	16 764	13 111
Irish Republic					
Bauxite	3 232 037	3 493 883	3 732 789	3 418 940	3 740 006
Alumina	9 493	7 768	7 544	6 718	6 626
Unwrought (a)	12 219	11 474	6 750	6 503	6 603
Scrap	2 301	695	503	294	490
Italy					
Bauxite	2 226 746	2 324 849	2 256 065	2 169 206	2 407 108
Alumina	213 732	126 284	126 299	123 514	142 931
Alumina hydrate	115 215	145 496	134 724	128 280	151 086
Unwrought	321 717	307 267	381 046	425 165	434 802
Unwrought alloys	383 057	362 897	400 139	446 358	468 500
Scrap	368 341	429 647	300 058	327 721	346 736
Latvia					
Unwrought (a)	1 786	2 634	2 052	4 940	6 100
Scrap	10 380	11 977	24 125	22 149	27 340
Lithuania					
Alumina	9 718	5 338	9 431	6 673	10 388
Scrap	6 583	1 654	7 907	4 435	1 131
Netherlands					
Bauxite	108 474	95 110	92 667	120 787	227 827
Alumina	826 316	726 542	554 967	634 626	635 820
Alumina hydrate	154 745	131 097	141 991	191 165	136 100
Unwrought	492 419	350 467	332 873	367 227	349 481
Unwrought alloys	124 172	170 095	193 099	216 251	249 182
Scrap	239 333	206 963	150 466	138 051	174 969
Norway					
Bauxite	24 325	34 811	20 898	22 147	9 035
Alumina	2 034 199	1 977 187	2 063 999	2 267 237	2 620 149
Alumina hydrate	42 387	37 426	42 984	42 487	42 775
Unwrought	160 813	163 090	225 972	277 122	325 514
Unwrought alloys	91 639	60 982	56 209	24 473	29 974
Scrap	86 441	95 290	100 006	113 228	70 430

Imports continued

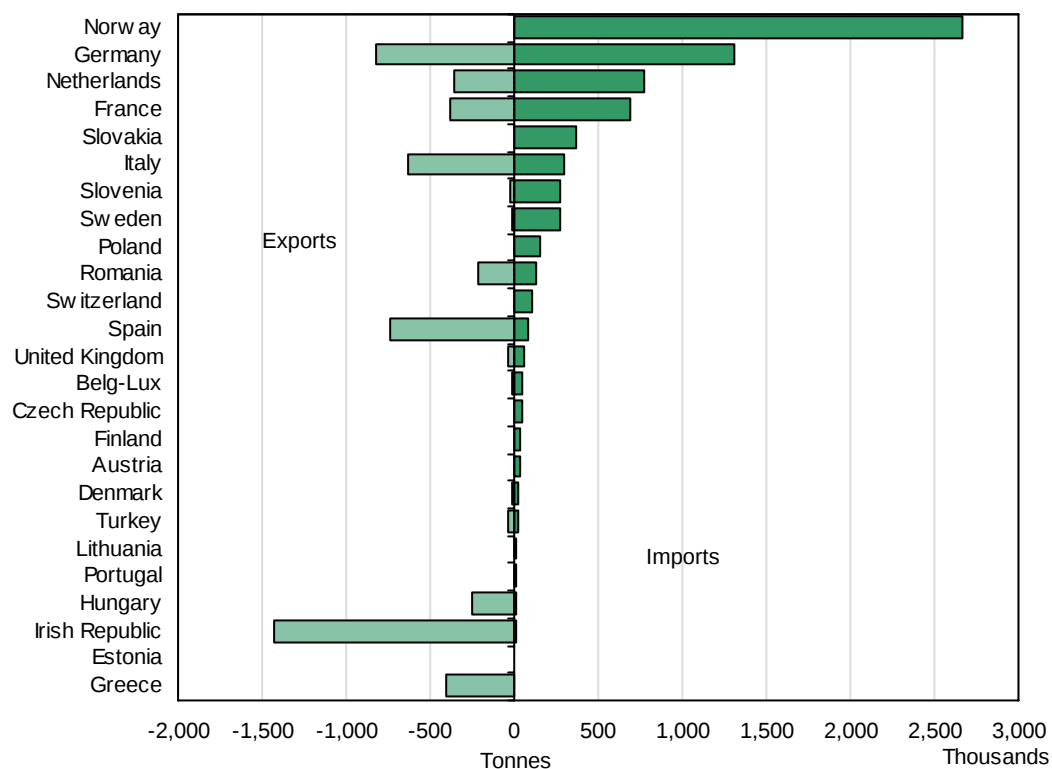
Country	2000	2001	2002	2003	2004
Poland					
Bauxite	27 063	37 835	49 504	67 966	82 233
Alumina	126 656	109 044	97 085	120 733	124 274
Alumina hydrate	24 499	25 766	25 562	25 572	26 927
Unwrought	54 469	49 259	74 302	88 008	85 010
Unwrought alloys	67 290	68 294	73 770	94 090	119 305
Scrap	16 057	12 080	9 616	13 472	31 536
Portugal					
Alumina	10 115	10 638	9 820	10 152	9 257
Unwrought	6 314	5 072	5 276	7 903	10 903
Unwrought alloys	188 624	169 878	167 619	185 279	200 335
Scrap	4 306	2 746	9 043	1 755	4 214
Romania					
Bauxite	1 428 143	1 152 415	843 557	821 036	1 532 335
Alumina	186 972	81 407	31 763	223 466	125 902
Unwrought (a)	1 187	224	...	3 145	7 449
Slovakia					
Bauxite	4 125	28 803	8 211	8 300	7 991
Alumina	212 209	232 975	221 205	253 825	366 784
Unwrought (a)	51 099	36 909	53 060	49 945	45 913
Scrap	2 181	4 163	11 508	10 593	13 701
Slovenia					
Bauxite	54 840	87 940	35 020	51 683	44 560
Alumina	159 323	167 095	239 473	252 351	264 319
Alumina hydrate	17 969	26 905	23 219	22 878	14 131
Unwrought	57 360	79 091	51 670	63 688	57 362
Unwrought alloys	21 500	28 897	33 274	40 332	43 403
Scrap	10 874	13 739	13 262	13 676	27 390
Spain					
Bauxite	2 757 733	3 059 122	2 887 349	2 781 769	3 329 441
Alumina	59 544	61 147	53 469	50 403	55 184
Alumina hydrate	19 818	35 064	19 509	14 595	30 429
Unwrought	90 024	67 047	55 894	116 742	91 382
Unwrought alloys	140 965	149 069	166 771	166 538	235 123
Scrap	57 095	63 125	70 908	66 466	86 553
Sweden					
Bauxite	13 219	28 463	1 920	3 317	28 758
Alumina	154 467	133 786	172 761	196 834	205 734
Alumina hydrate	62 269	54 262	55 379	54 825	66 156
Unwrought	32 542	16 612	13 991	21 584	29 493
Unwrought alloys	76 515	80 571	106 217	97 276	120 732
Scrap	20 548	24 295	18 450	16 255	24 082
Switzerland					
Bauxite	1 674	4 669	7 653	5 881	8 066
Alumina	72 695	65 877	81 002	93 357	87 235
Alumina hydrate	20 916	19 621	17 953	15 340	16 945
Unwrought	67 842	67 203	66 958	60 791	73 413
Unwrought alloys	68 454	63 319	52 470	64 351	59 125
Scrap	18 745	15 910	12 565	11 327	20 734
Turkey					
Bauxite	35 758	25 323	33 361	39 129	34 592
Alumina	13 688	14 164	16 311	26 096	19 341
Unwrought	92 299	72 786	109 683	160 378	182 113
Unwrought alloys	80 861	52 939	84 829	114 881	144 836
Scrap	28 263	11 090	9 478	14 850	11 648
United Kingdom					
Bauxite	(b) 222 319	(b) 271 404	...	...	56 822
Alumina	568 317	713 808	(d) 798 479	(c) *828 300	...
Alumina hydrate	73 170	63 687	...	(c) *14 300	62 084
Unwrought	120 138	135 094	212 046	163 573	116 737
Unwrought alloys	158 217	211 245	159 310	129 451	117 786
Scrap	123 185	112 240	117 954	105 061	78 101

Note(s):-
(See over)

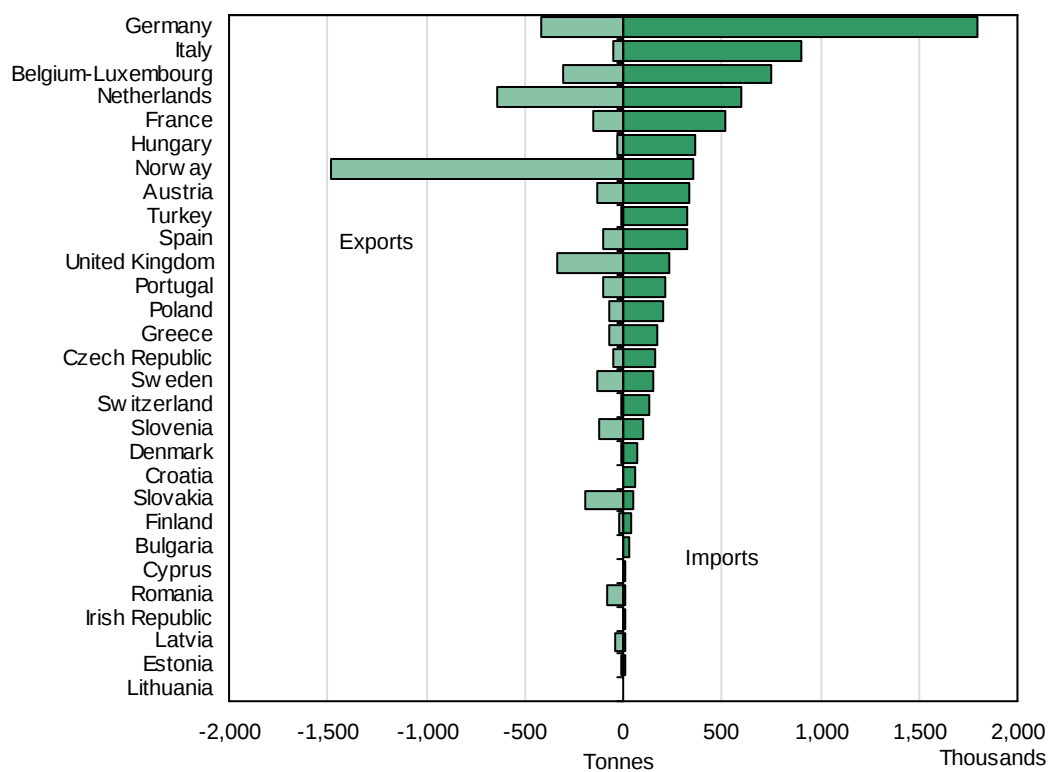
- Note(s):-
- (1) Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
 - (2) In this table the term 'unwrought' aluminium corresponds to item 7601 of the Harmonised System and comprises ingots, blocks, unwrought bars, etc.
 - (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys
(b) Excluding refractory grade bauxite
(c) BGS estimates, based on known exports from certain countries
(d) Including some bauxite



Alumina and alumina hydrate - EU31 trade in 2004



Aluminium metal - EU31 trade in 2004



Antimony

- Antimony is a toxic metallic element with several specialised uses. It is frequently alloyed with lead, where it greatly increases hardness and strength. Antimony is also used in semi-conductors and its compounds form excellent flame-retardants in cable sheathes.
- China was by far the largest mine producer of antimony in 2004, with 85% of world production. Antimony is also produced as a by-product of lead refining in many countries.
- Antimony with a purity >99.65% and antimony oxide are the most commonly traded forms. In 2004 the price of metal ranged from \$2275/tonne–\$3150/tonne.

Mine production of antimony

tonnes (metal content)

Country	2000	2001	2002	2003	2004
Turkey	*20	*20	*20	*20	*20

Note(s):-

(1) This table includes antimony content of antimonial lead alloys

(2) In addition, Hungary is believed to produce antimony

Exports of antimony

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	1	37	103	16	19
Belgium-Luxembourg					
Metal	40	2	48	181	493
Oxide	(a) *11 300	(a) *11 700	(a) *11 700	12 063	12 443
France					
Metal	292	60	104	8	79
Oxide	5 156	3 715	3 391	4 352	4 540
Germany					
Metal	36	38	10	27	12
Oxide	968	783	543	683	786
Greece					
Metal	1	54	22	49	3
Italy					
Metal	13	36	70	1	3
Oxide	332	200	504	340	207
Netherlands					
Metal	286	186	115	315	212
Oxide	649	872	345	270	652
Spain					
Metal	16	92	10	41	409
Oxide	701	974	934	622	706
Turkey					
Metal	84	50	...	7	25
United Kingdom					
Metal	870	473	252	65	85
Oxide	(a) *4 400	1 297	1 879	1 413	602

Note(s):-

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

Imports of antimony

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	174	205	270	120	53
Oxide	252	146	190	207	316
Belgium-Luxembourg					
Ores & concentrates	66	6	491	6	13
Metal	12 858	11 928	13 379	11 409	12 225
Oxide	1 612	900	1 583	1 615	1 708
Bulgaria					
Metal	60	50	48	52	47
Czech Republic					
Metal	2	53	76	45	14
Oxide	429	548	626	365	557
Finland					
Oxide	215	269	238	238	248
France					
Ores & concentrates	8	223	6	5	11
Metal	8 345	6 854	6 645	5 241	8 486
Oxide	2 520	2 090	2 093	1 972	2 096
Germany					
Ores & concentrates	500	494	-----	-----	15
Metal	741	599	309	149	178
Oxide	6 835	6 384	6 915	6 707	7 072
Greece					
Metal	47	98	40	40	46
Irish Republic					
Metal	35	12	31	15	13
Italy					
Ores & concentrates	611	446	727	786	879
Metal	1 429	1 929	1 551	1 377	743
Oxide	4 391	4 366	5 037	4 314	5 528
Netherlands					
Ores & concentrates	265	144	54	61	-----
Metal	762	775	268	511	817
Oxide	3 061	2 293	1 287	39 431	31 244
Norway					
Metal	3	9	3	8	...
Oxide	338	157	234	351	775
Poland					
Metal	70	53	10	49	80
Oxide	605	611	711	920	1 042
Portugal					
Metal	5	3	10	10	6
Oxide	263	331	254	147	242
Romania					
Metal	63	70	64	65	62
Slovenia					
Metal	3	29	118	52	84
Spain					
Metal	1 511	2 277	2 314	1 516	2 270
Oxide	813	828	544	519	5 656
Sweden					
Metal	26	108	176	269	234
Oxide	396	401	485	232	328
Switzerland					
Ores & concentrates	121	10	154	89	5 004
Metal	25	44	52	50	93
Oxide	969	1 033	720	927	1 174
Turkey					
Metal	11	20	98	141	87
Oxide	241	209	314	294	460
United Kingdom					
Metal	461	345	183	290	439
Oxide	2 082	4 103	3 164	2 712	3 066

Arsenic

- Arsenic is a toxic semi-metallic element produced and traded chiefly as 'white arsenic' (arsenic trioxide). Its principal uses are as compounds in wood preservatives and pesticides. Gallium arsenide is used in semi-conductors. Arsenic metal has a number of minor uses.
- China was the largest producer of white arsenic in 2004 with an estimated 60% of world production.
- In 2004 the price of metallic arsenic (min. 99% As) averaged \$0.50/lb.

Production of white arsenic

tonnes

Country	2000	2001	2002	2003	2004
Belgium	*1 500	*1 000	*1 000	*1 000	*1 000
France	*1 000	*1 000	*1 000	*1 000	*1 000
Germany	*200	*200	*200	*200	*200
Portugal	*50	*50	*50	*50	*50

Note(s):-

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

Exports of arsenic

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg					
Metallic arsenic	12	29	62	27	10
France					
Metallic arsenic	7	22	...	0	...
Germany					
Metallic arsenic	27	8	9	8	14
Italy					
Metallic arsenic	15	----	----	----	----
Netherlands					
Metallic arsenic	46	39	45	64	49
United Kingdom					
Metallic arsenic	11	5	5	0	0

Note(s):-

- (1) This table does not purport to be comprehensive: data relating to arsenic are not fully recorded by many countries

Imports of arsenic

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metallic arsenic	-----	28	16	5	...
Belgium-Luxembourg					
Metallic arsenic	149	73	75	90	95
Czech Republic					
Metallic arsenic	20	18	24	20	8
France					
Metallic arsenic	87	50	17	4	9
Germany					
Metallic arsenic	10	8	5	5	4
Greece					
Metallic arsenic	27	15	31	16	21
Irish Republic					
Metallic arsenic	218	31	127	47	...
Italy					
Metallic arsenic	75	48	91	111	84
Netherlands					
Metallic arsenic	77	137	77	61	110
Norway					
Metallic arsenic	54	44	36	0	...
Poland					
White arsenic	50	63	36	32	...
Metallic arsenic	25	11	30	-----	14
Spain					
Metallic arsenic	153	87	136	114	92
Sweden					
Metallic arsenic	20	18	19	17	13
Switzerland					
Metallic arsenic	3	2	4	4	2
Turkey					
White arsenic	1	10	...	...	...
Metallic arsenic	58	23	49	78	48
United Kingdom					
Metallic arsenic	109	87	86	155	165

Note(s):-

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

Asbestos

- Asbestos is a commercial term for six fibrous minerals of which chrysotile (white asbestos), the fibrous form of serpentine, is the only form of asbestos now worked. Asbestos was once highly sought after because of its unique combination of properties:
 - non-combustibility
 - resistance to heat, friction, corrosion and acid/alkali attack
 - good thermal and sound insulation qualities
 - good dielectric properties
- Airborne asbestos fibres are a serious hazard to health and virtually all industrial use of asbestos has now ceased in Europe. Only Greece continues to produce minor amounts for highly specialised, and carefully controlled, applications. The largest producer in the world is Russia with 38% of world production.
- In 2004 the EU31 countries were strongly dependent on asbestos imports from outside the EU31. The price of asbestos was around \$230/tonne in 2004.

Production of asbestos

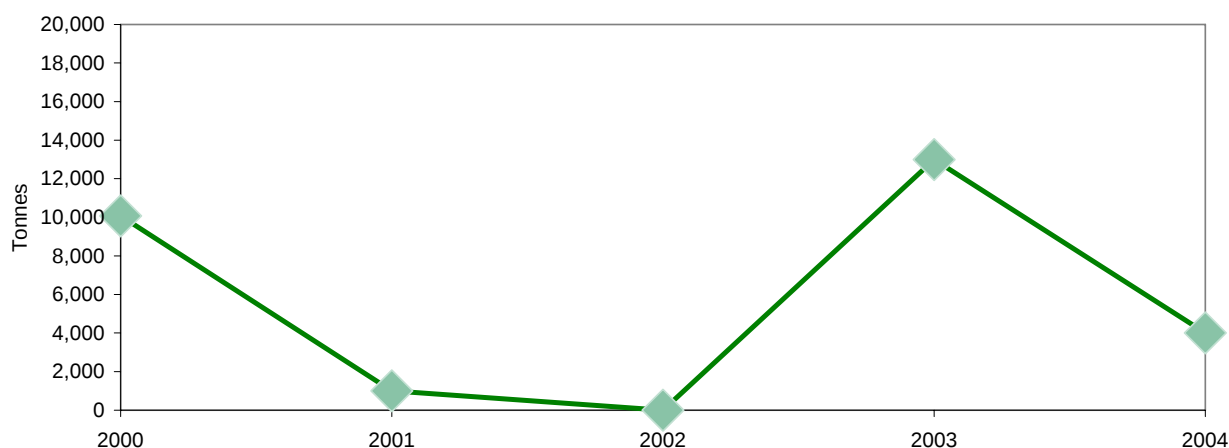
tonnes

Country	2000	2001	2002	2003	2004
Bulgaria	66	-----	-----	-----	-----
Greece	*10 000	*1 000	-----	*13 000	*4 000
EU31 Total	10 000	1 000	-----	13 000	4 000

Note(s):-

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

EU31 Production of asbestos 2000 - 04



Exports of unmanufactured asbestos

tonnes

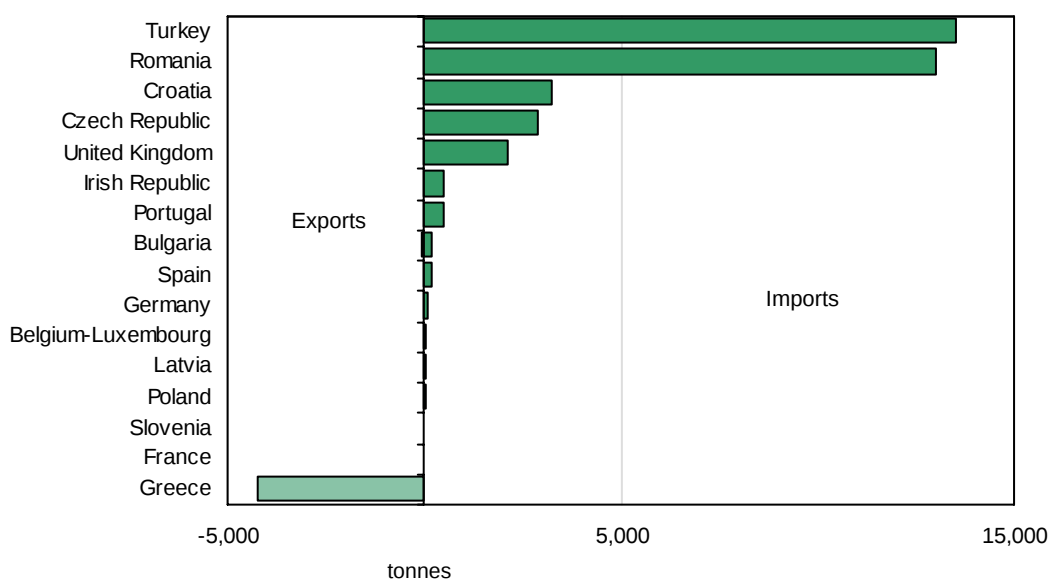
Country	2000	2001	2002	2003	2004
Bulgaria	...	36	9	0	83
France	46	59	...	5	31
Greece	8 946	252	29	12 576	4 256
Lithuania	643	139	0	0	...
Spain	126	36	1	-----	-----
Turkey	-----	5	3	42 000	0
United Kingdom	2	1	1	0	0

Imports of unmanufactured asbestos

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg	98	65	...	1	63
Bulgaria	139	271	160	50	196
Croatia	2 586	2 666	3 274	1 958	3 251
Czech Republic	1 402	2 322	785	1 464	2 891
Estonia	180	58	61	...	...
France	16	25	0	3	8
Germany	189	168	199	59	69
Greece	501	1 016	1 988	91	----
Hungary	3 558	2 167	740	574	...
Irish Republic	1 007	1	19	----	475
Italy	87	----	----	----	0
Latvia	857	664	...	...	34
Lithuania	1 356	...	...	...	...
Poland	19	19	19	----	16
Portugal	4 710	5 505	7 137	1 568	474
Romania	10 244	13 644	12 137	11 859	13 036
Slovenia	893	...	...	...	10
Spain	15 568	13 349	3 085	130	192
Turkey	19 455	10 557	13 977	14 645	13 509
United Kingdom	246	347	118	3	2 150

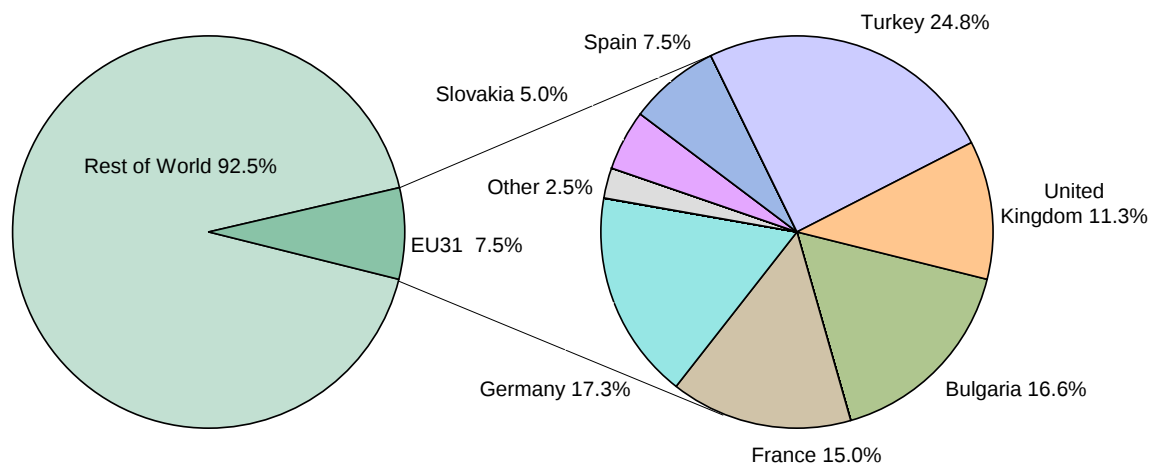
Asbestos - EU31 trade in 2004



Barytes

- Barytes (barium sulphate) is used in a variety of industries that utilise its properties of high specific gravity, softness, non-abrasiveness, chemical neutrality and brightness. Over 90% of barytes production is used in the manufacture and utilisation of drilling fluids in oil and gas exploration.
- The EU31 countries contributed 8% of world barytes production in 2004. The largest producer amongst the EU31 is Turkey. The largest world producer is China, which produced 47% of world production in 2004.
- Two main grades of barytes are traded on world markets: paint grade (min. 99%) and drilling fluid grade (min. 95%). In 2004 paint grade micronised barytes averaged £145/tonne delivered into the UK. Drilling fluid grade barytes delivered to Aberdeen averaged £53/tonne.

EU31 Production of barytes 2004



Production of barytes

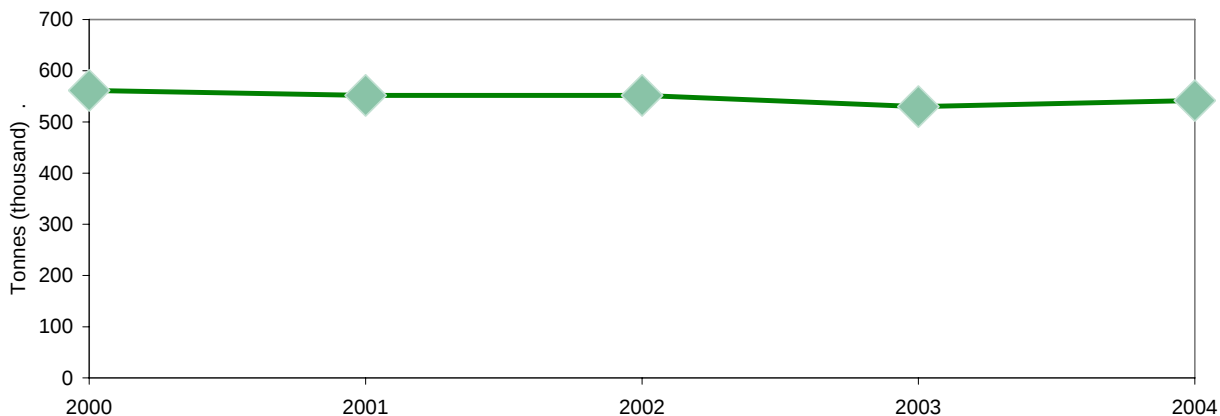
tonnes

Country	2000	2001	2002	2003	2004
Bulgaria	*120 000	*120 000	*110 000	*90 000	*90 000
France	92 000	81 000	85 200	81 100	81 000
Germany	111 790	108 111	100 993	109 506	93 624
Greece	*800	*800	*800	*800	*800
Italy	11 262	10 809	10 215	12 214	9 608
Poland	-----	-----	2 708	3 030	3 183
Romania	4 266	2 851	100	23	-----
Slovakia	13 700	14 450	25 820	12 000	27 063
Spain	32 653	45 473	50 071	44 660	40 776
Turkey	120 893	102 323	106 943	119 648	134 504
United Kingdom	54 000	*66 000	*59 000	*57 000	*61 000
EU31 Total	560 000	550 000	550 000	530 000	540 000

Note(s):-

(1) This table may include small quantities of witherite

EU31 Production of barytes 2000 - 04



Exports of barytes

tonnes

Country	2000	2001	2002	2003	2004
Austria	125	1 402	1 197	479	2 737
Belgium-Luxembourg	6 177	6 707	1 781	1 424	3 646
Bulgaria	125 440	131 137	123 224	91 215	75 393
Czech Republic	566	535	986	895	616
France (a)	*67 200	*61 000	*30 200	*55 500	*74 500
Germany	15 906	38 775	32 297	32 546	32 383
Italy	306	390	2 076	224	1 951
Netherlands	49 611	88 229	98 393	91 083	73 527
Norway	5 169	9 227	5 234	11 105	15 888
Slovakia	13 197	14 215	11 037	6 642	7 919
Spain	25 431	39 910	44 570	37 141	33 930
Turkey	89 145	136 916	117 862	101 716	142 767
United Kingdom	28 503	58 969	37 778	69 094	...

Note(s):-

(1) Trade in barytes is reported under item 2511 of the Harmonised System and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

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

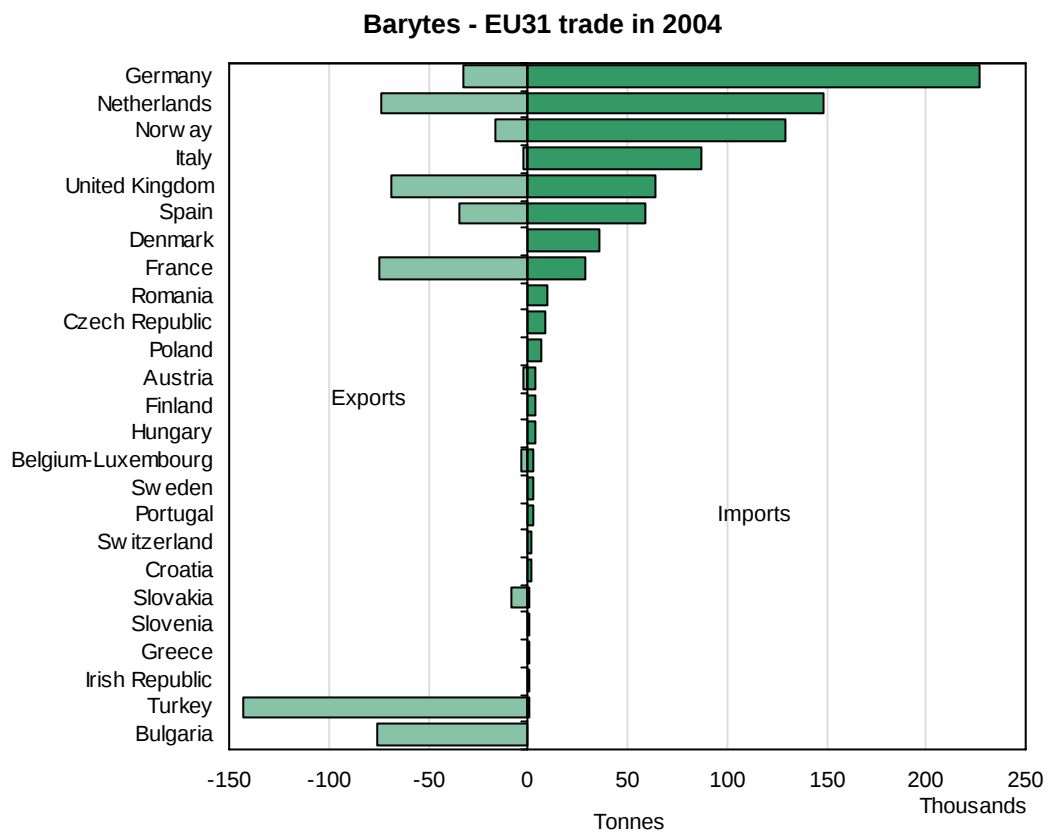
Imports of barytes

tonnes

Country	2000	2001	2002	2003	2004
Austria	3 439	3 151	2 420	2 742	3 910
Belgium-Luxembourg	14 738	6 706	5 369	6 045	3 255
Croatia	299	111	1 803	1 053	1 878
Czech Republic	9 230	10 594	10 754	8 448	8 782
Denmark	33 413	46 013	53 153	39 341	36 133
Finland	2 644	2 537	3 070	3 119	3 559
France	25 084	19 902	20 442	23 009	28 748
Germany	241 776	251 884	221 000	218 811	226 706
Greece	1 711	1 657	839	791	858
Hungary	1 037	1 455	1 878	1 704	3 453
Irish Republic	192	176	318	332	411
Italy	70 143	93 733	79 605	87 501	86 874
Netherlands	98 200	111 042	103 133	136 981	148 115
Norway	158 610	145 445	110 755	115 402	129 547
Poland	7 958	7 358	6 571	8 318	6 593
Portugal	3 893	2 721	2 607	3 589	2 630
Romania	21 086	8 198	16 869	2 943	9 943
Slovakia	301	538	1 312	956	927
Slovenia	730	1 026	1 075	931	896
Spain	27 032	39 311	51 952	50 596	59 378
Sweden	2 149	1 892	1 927	1 848	2 854
Switzerland	2 090	1 917	1 844	2 433	2 187
Turkey	626	371	202	121	258
United Kingdom	57 362	77 273	74 935	56 867	63 794

Note(s):-

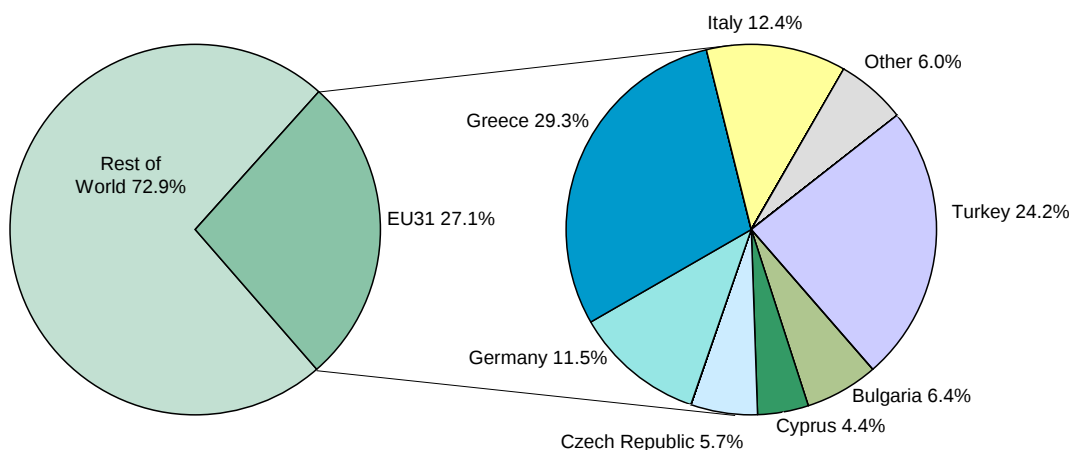
(1) Trade in barytes is reported under item 2511 of the Harmonised System and is described as 'barytes and witherite'. However, only small quantities of witherite are traded



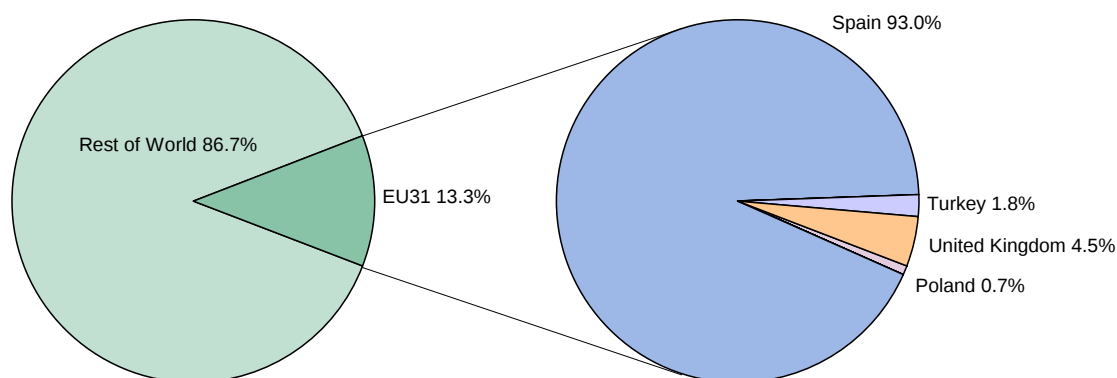
Bentonite and fullers earth

- Bentonites consist of montmorillonite (a clay mineral) and occur as two main varieties — calcium bentonite and the more commercially important sodium bentonite. In the UK the name fuller's earth is given to calcium bentonite (and in the USA to attapulgite). Sepiolite is a fibrous clay that can be a substitute for bentonite. Calcium bentonite can be changed to sodium bentonite by the ion-exchange process. The main uses of bentonite and fuller's earth take advantage of their natural sorptive and thixotropic properties. They are used as additions to drilling muds, in making foundry moulds, pelletising iron ore and in the manufacture of cat litter.
- The EU31 countries produced 27% of world bentonite and 13% of fuller's earth in 2004. Greece is the largest producer of bentonite in the EU31 and the UK is the largest producer of fuller's earth. All of Europe's reported sepiolite production in 2004 came from Spain. Turkey, however, is believed to produce some sepiolite.
- Bentonite is traded in a variety of forms. For example cat litter grade traded at between \$32–\$40/tonne through 2004.

EU31 Production of bentonite 2004



EU31 Production of fuller's earth 2004



Production of bentonite and fuller's earth

tonnes

Country	2000	2001	2002	2003	2004
Bulgaria					
Bentonite	173 534	171 092	211 500	145 500	224 900
Croatia					
Bentonite	10 013	10 580	12 102	13 568	16 000
Cyprus					
Bentonite	167 000	127 000	128 400	144 859	155 717
Czech Republic					
Bentonite	280 000	224 000	174 000	199 000	201 000
Denmark					
Bentonite	...	12 166	14 539	16 303	18 352
Germany					
Bentonite	464 616	447 913	495 310	478 796	404 549
Greece					
Bentonite	1 148 694	1 258 872	1 056 598	1 156 642	1 030 556

Bentonite and Fuller's Earth

Production continued

Country	2000	2001	2002	2003	2004
Hungary					
Bentonite	5 120	30 441	3 700	87 200	9 300
Italy					
Bentonite	636 589	579 029	463 231	474 475	437 659
Fuller's earth	25 384	19 815	24 595	250	300
Poland					
Fuller's earth	4 000	...	...	...	...
Romania					
Bentonite	37 587	24 779	15 389	17 637	18 161
Slovakia					
Bentonite	77 000	73 000	65 500	74 700	73 273
Spain					
Bentonite	90 152	*120 000	123 457	103 174	79 919
Attapulgite	28 307	24 477	22 918	18 975	18 000
Sepiolite	596 324	*600 000	564 610	548 728	550 000
Turkey					
Bentonite	636 273	674 178	559 224	831 146	*850 000
Sepiolite	18 295	10 253	...	...	...
United Kingdom					
Fuller's earth (a)	65 500	52 000	44 200	33 900	27 540
EU31 Total					
Bentonite	3 739 000	3 753 000	3 323 000	3 743 000	3 519 000
Fuller's Earth (b)	738 000	711 000	671 000	616 000	610 000

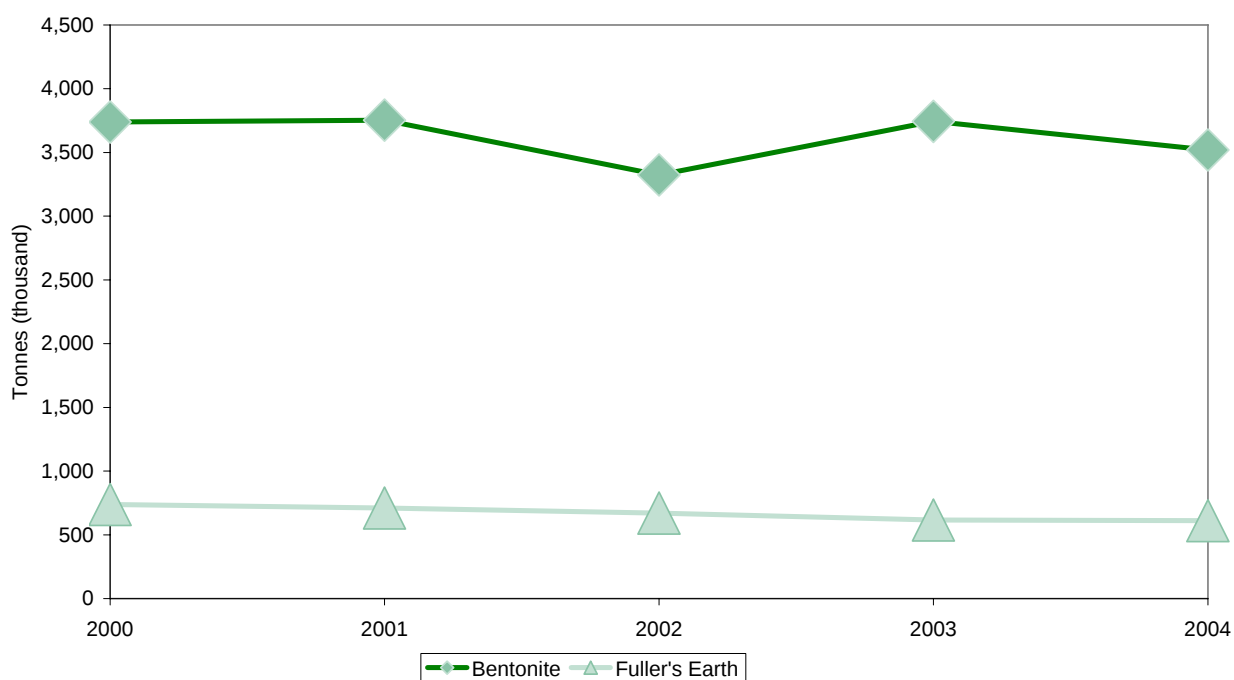
Note(s):-

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

(a) Saleable production based on data from producing companies

(b) Including attapulgite and sepiolite

EU31 production of bentonite and fuller's earth 2000 - 04



Exports of bentonite and fuller's earth

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Bentonite	2 881	8 142	10 394	9 246	8 242
Belgium-Luxembourg					
Bentonite	4 084	5 642	14 819	28 403	22 700
Bulgaria					
Bentonite	165 354	160 332	121 868	102 263	95 435
Cyprus					
Bentonite	71 060	80 714	81 388	71 460	81 596
Czech Republic					
Bentonite	32 853	46 823	32 002	17 439	62 012
Denmark					
Bentonite	5 113	10 911	14 601	16 821	17 279
Finland					
Bentonite	21 923	15 891	10 286	1 132	188
France					
Bentonite	37 805	23 580	20 343	18 966	7 696
Fuller's earth	2 609	267	34	----	10
Germany					
Bentonite	42 595	56 589	43 329	57 237	50 477
Greece					
Bentonite	10 810	80 669	25 969	27 395	15 612
Hungary					
Bentonite	4 503	5 784	2 118	1 030	897
Italy					
Bentonite	209 236	209 107	215 834	221 353	257 596
Netherlands					
Bentonite	155 660	165 460	178 006	180 736	274 342
Fuller's earth	9 860	8 123	4 019	3 752	9 085
Romania					
Bentonite	14 789	12 748	4 430	4 056	8 810
Slovakia					
Bentonite	55 209	65 850	56 645	66 954	85 341
Fuller's earth	1 248	1 091	1 007	856	*1 000
Spain					
Bentonite	68 216	61 691	63 120	74 277	80 410
Sepiolite	603 895	609 250	581 737	507 584	501 988
Fuller's earth	15 790	14 370	14 721	12 417	11 362
Sweden					
Bentonite	6 917	6 716	9 401	10 082	9 486
Turkey					
Bentonite	123 858	106 104	106 712	153 691	210 328
United Kingdom					
Bentonite	75 472	72 983	81 707	75 099	72 526
Fuller's earth	429	121	74	254	124

Note(s):-

(1) See notes 1-3 to production table

(2) The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Harmonised System 2508.10 and 2508.20

(3) Activated bentonite and fuller's earth, Harmonised System 3802.90, are excluded

(4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Harmonised System 3802.90, e.g. Italy

Imports of bentonite and fuller's earth

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Bentonite	52 361	55 291	54 441	47 358	53 871
Fuller's earth	48	45	129	560	615
Belgium-Luxembourg					
Bentonite	23 876	24 730	27 239	33 129	35 509
Fuller's earth	5 045	6 362	6 626	6 428	11 164
Bulgaria	...	550	653	511	1 089
Croatia					
Bentonite	7 138	10 094	14 571	1 238	2 181
Cyprus	1 790	11 060	24 260	20 519	...

Bentonite and Fuller's Earth

Imports continued

Country	2000	2001	2002	2003	2004
Czech Republic					
Bentonite	12 887	15 410	12 623	11 795	19 852
Fuller's earth	637	595	547	702	564
Denmark					
Bentonite	36 017	40 261	43 666	46 516	37 253
Fuller's earth	228	183	41	40	107
Finland					
Bentonite	30 609	50 898	27 758	26 569	27 321
Fuller's earth	42	60	207	212	322
France					
Bentonite	184 809	162 787	174 735	170 540	220 260
Fuller's earth	1 731	1 196	1 794	3 701	17 907
Germany					
Bentonite	233 046	230 303	227 785	253 998	218 349
Fuller's earth	5 419	7 476	7 315	8 483	11 202
Greece					
Bentonite	8 119	3 654	3 639	14 280	8 902
Fuller's earth	601	362	1 068	898	633
Hungary	3 587	3 797	4 440	5 914	5 214
Irish Republic					
Bentonite	1 271	1 064	966	869	2 042
Italy					
Bentonite	104 562	112 094	103 545	139 576	153 410
Fuller's earth	12 139	12 920	12 954	10 982	5 760
Lithuania	1 670	2 124	1 762	2 642	2 475
Netherlands					
Bentonite	276 017	236 201	247 142	298 369	358 305
Fuller's earth	24 909	24 615	14 975	76 241	92 237
Norway					
Bentonite	15 220	11 476	11 618	13 963	13 667
Poland					
Bentonite	61 733	64 986	68 020	93 915	126 127
Fuller's earth	920	797	1 432	1 263	1 749
Portugal					
Bentonite	16 679	16 376	16 115	14 208	17 907
Fuller's earth	85	47	351	936	662
Romania	2 700	9 861	14 733	3 383	4 652
Slovakia					
Bentonite	5 871	4 861	4 008	3 912	6 040
Fuller's earth	...	...	204	1 014	866
Slovenia	4 657	3 738	4 122	4 322	3 591
Spain					
Bentonite	59 714	64 157	72 294	68 776	60 709
Fuller's earth	743	578	1 067	488	271
Sweden					
Bentonite	62 250	136 742	125 852	140 176	82 414
Switzerland					
Bentonite	26 275	21 715	21 128	20 540	20 027
Fuller's earth	1 802	1 682	1 544	1 541	1 641
Turkey					
Bentonite	940	1 213	1 715	1 702	832
Fuller's earth	352	305	201	104	157
United Kingdom					
Bentonite	255 942	235 517	216 022	198 434	182 414
Sepiolite	(a) 80 538	(a) 65 062	(a) 69 691	(a) 55 483	53 515
Fuller's earth	6 563	5 896	9 115	7 085	2 578

Note(s):-

(1) See notes 1-3 to production table

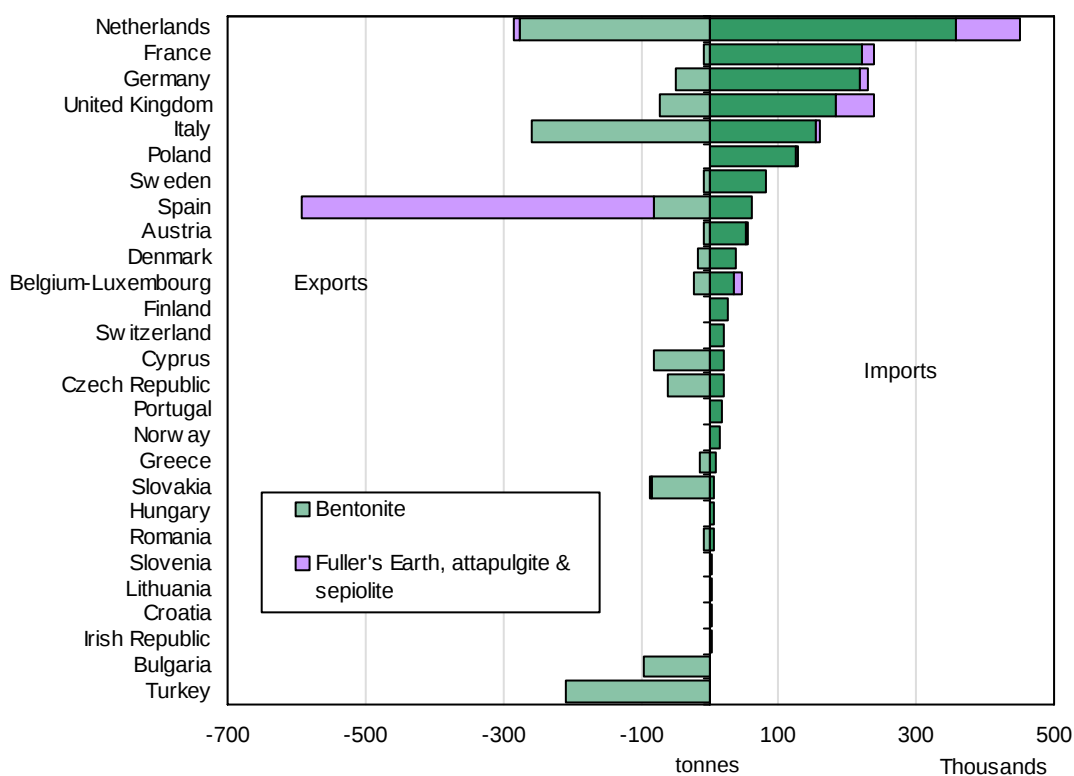
(2) The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Harmonised System 2508.10 and 2508.20

(3) Activated bentonite and fuller's earth, Harmonised System 3802.90, are excluded

(4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Harmonised System 3802.90, e.g. Italy

(a) Exports from Spain

Bentonite and fuller's earth - EU31 trade in 2004



Bismuth

- Bismuth is a metallic element chiefly used in the form of its compounds, in pharmaceuticals, and as metal in fusible (low-melting) alloys.
- Mexico and China are the world's largest producers of bismuth with 56% of world production in 2004. There is very little mine production in the EU31; however, bismuth is produced as a by-product of lead and zinc refining.
- The price of bismuth in 2004 was in the range \$2.90/lb–\$3.70/lb.

Mine production of bismuth

tonnes (metal content)

Country	2000	2001	2002	2003	2004
Bulgaria	*40	*40	*40	*40	*40
Romania	*40	*40	*40	*40	*40
EU31 Total	80	80	80	80	80

Note(s):-

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

Exports of bismuth

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	10	24	0	8	8
Belgium-Luxembourg					
Compounds	1 262	1 415	...	...	...
France					
Compounds	52	12	...	...	...
Metal	31	28	26	46	28
Germany					
Compounds	38	35	...	...	...
Metal	125	104	228	152	275
Netherlands					
Metal	73	6	100	327	334
Spain					
Compounds	43	72	-----	...	...
Metal	4	7	13	10	2
Sweden					
Metal	25	2	13	...	...
United Kingdom					
Metal	2 987	1 269	1 793	2 239	2 633

Note(s):-

- (1) The compounds recorded in this table are bismuth carbonate and/or bismuth nitrate

Imports of bismuth

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	18	67	105	128	114
Belgium-Luxembourg					
Metal	17	1	4	4	20
Czech Republic					
Metal	35	26	42	56	64
France					
Compounds	226	101	...	...	...
Metal	446	420	728	629	830
Germany					
Compounds	1 383	1 295	...	...	...
Metal	1 810	2 038	1 517	1 689	1 693
Greece					
Metal	9	8	3	17	23
Irish Republic					
Metal	54	30	33	54	2
Italy					
Metal	190	391	301	151	175
Netherlands					
Compounds	393	360	...	...	...
Metal	1 107	278	108	274	166
Poland					
Metal	9	8	4	4	6
Slovenia					
Metal	39	35	54	42	43
Spain					
Metal	167	125	139	188	206
Sweden					
Metal	41	16	12	8	13
Switzerland					
Metal	27	18	15	15	6
Turkey					
Metal	4	3	4	4	6
United Kingdom					
Metal	1 379	1 515	1 513	2 237	2 194

Note(s):-

(1) The compounds recorded in this table are bismuth carbonate and/or bismuth nitrate

Bromine

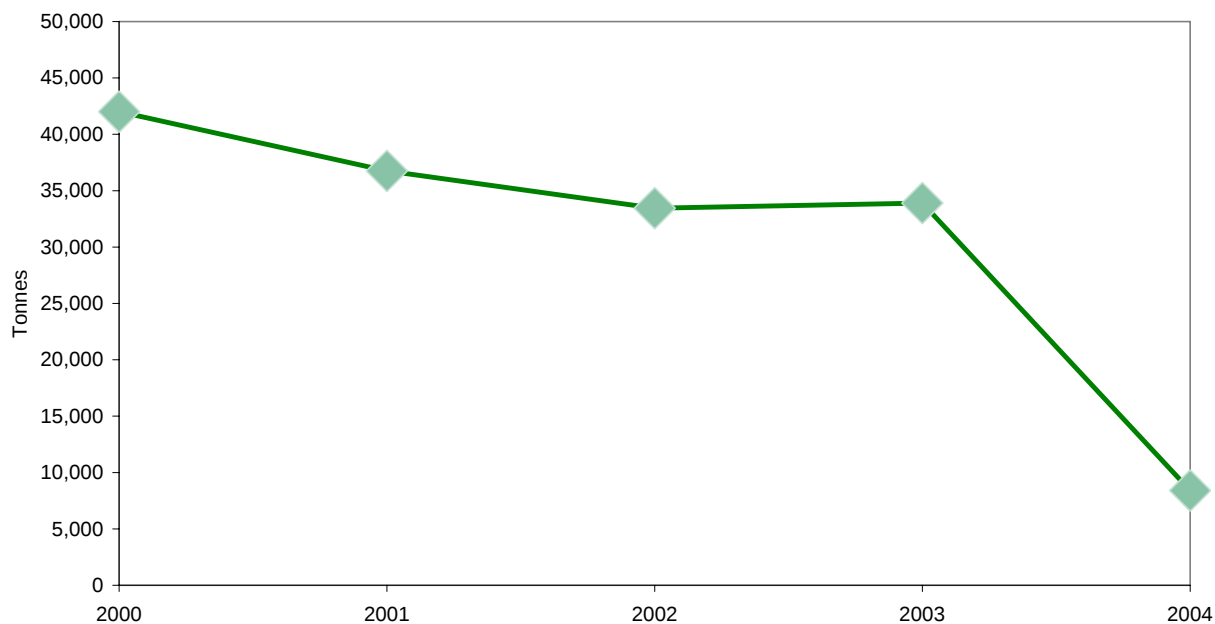
- Bromine is the only non-metallic element that is liquid at room temperature. It is strongly reactive and hazardous in pure forms and has a wide range of uses including medicinal, fumigants, dyes, and pesticides.
- Bromine is almost entirely produced from processing sea-water. The two largest producers are the USA (44%) and Israel (40%), the latter taking advantage of the relatively high bromine content of the Dead Sea.
- The price of purified bromine increased in 2004 with an estimated price of \$0.85/lb.

Production of bromine

kilograms

Country	2000	2001	2002	2003	2004
France	7 909 000	*8 000 000	*8 000 000	*8 000 000	*8 000 000
Germany	*500 000	*500 000	*500 000	*500 000	----
Italy	*300 000	*300 000	*300 000	*300 000	*300 000
Spain	*100 000	*100 000	*100 000	*100 000	*100 000
United Kingdom	33 200 000	27 854 000	24 542 000	*25 000 000	----
EU31 Total	42 000 000	36 800 000	33 400 000	33 900 000	8 400 000

EU31 Production of bromine 2000 - 04



Exports of bromine

kilograms

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg	25 565 000	21 200 000	21 462 800	17 930 400	21 275 800
Germany	12 300	15 000	13 700	16 700	5 600
Italy	...	16 000	2 259	1 296	505
Netherlands	...	9 091 000	11 625 600	5 219 900	634 000
Poland	8 154	3 000	2 000	...	...
United Kingdom	10 850 261	11 304 252	8 671 909	5 307 678	1 125 241

Note(s):-

- (1) This table does not purport to be comprehensive: trade in bromine is not separately distinguished from other halogens by many countries

Imports of bromine

kilograms

Country	2000	2001	2002	2003	2004
Austria	125 300	228 000	254 900	252 200	93 000
Belgium-Luxembourg	27 580 000	23 057 000	25 627 900	21 097 900	23 466 200
Finland	114 000	92 000	57 054	56 506	71 251
France	...	11 914 000	12 437 700	13 225 500	12 595 900
Germany	4 095 300	2 121 000	1 775 500	1 835 400	1 626 600
Irish Republic	22 158	22 000	5 739	33 238	602
Italy	...	113 000	104 414	139 908	355 734
Poland	43 259	14 000	6 000	2 000	(a) 9 348
Spain	226 237	233 000	166 487	122 194	73 493
Sweden	6 000	—	...	0	5 000
Turkey	69 811	91 505	(a) 111 895	(a) 75 080	(a) 149 960
United Kingdom	5 986 773	5 387 458	2 879 558	1 899 231	7 301 117

Note(s) :-

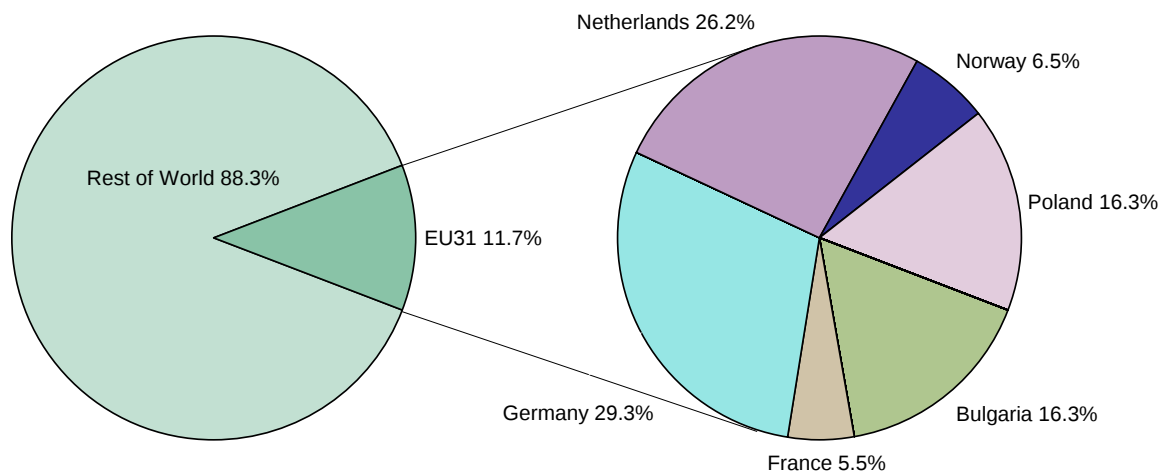
(1) This table does not purport to be comprehensive: trade in bromine is not separately distinguished from other halogens by many countries

(a) May include some fluorine

Cadmium

- Cadmium is a highly toxic metallic element mostly produced as a by-product of zinc refining. Probably the bulk of cadmium in use is in nickel-cadmium rechargeable batteries. Other major uses are in pigments and in metal plating.
- The two largest world producers in 2004 were China (16%) and the Republic of Korea (13%). The EU31 contributed 12% of world cadmium production in 2004. Germany was the largest EU31 producer.
- Cadmium metal (min. 99.95% Cd) traded between \$0.57/lb and \$0.67/lb in 2004.

EU31 Production of cadmium 2004



Production of cadmium

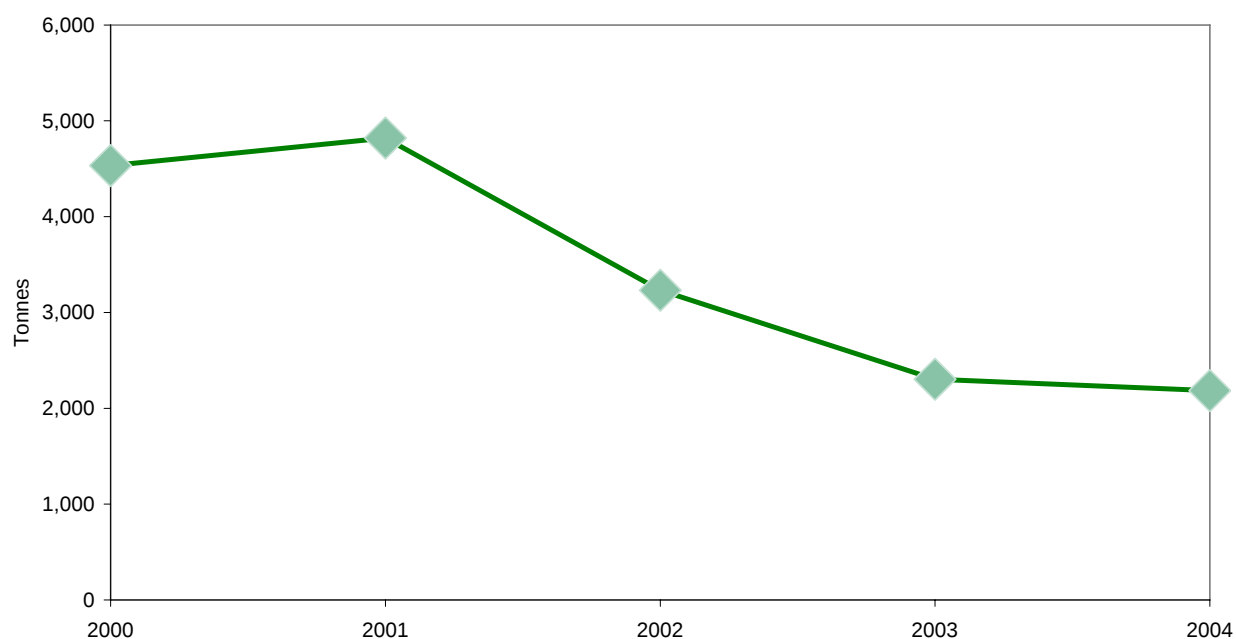
tonnes

Country	2000	2001	2002	2003	2004
Belgium	1 148	1 236	117	-----	-----
Bulgaria	331	333	345	307	356
Finland	683	604	400	-----	-----
France	160	176	154	*120	*120
Germany	458	539	422	640	*640
Italy	287	352	362	22	-----
Netherlands	655	455	485	495	572
Norway	302	371	215	323	141
Poland	6	330	440	375	356
United Kingdom	503	425	292	22	-----
EU31 Total	4 533	4 821	3 232	2 300	2 200

Note(s):-

(1) Data in this table exclude secondary metal

EU31 Production of cadmium 2000 - 04



Exports of cadmium

tonnes

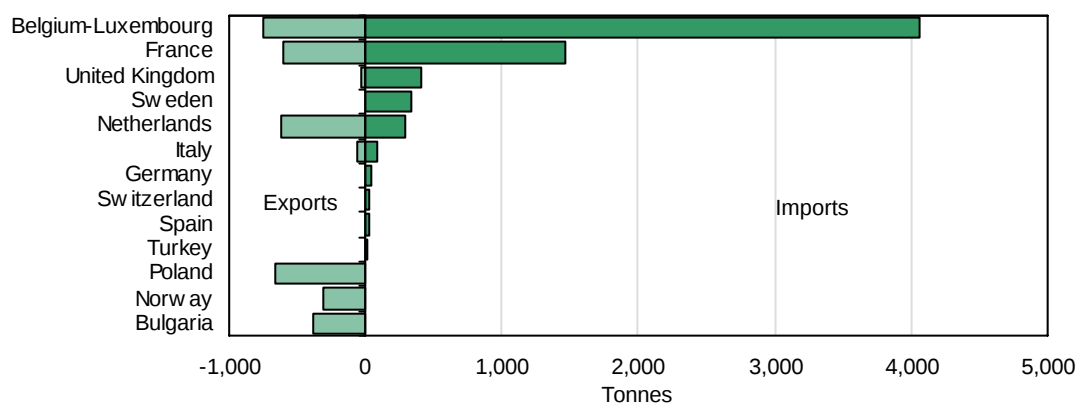
Country	2000	2001	2002	2003	2004
Belgium-Luxembourg					
Metal	1 956	1 525	607	1 018	746
Sulphide	12	31	17	10	15
Bulgaria					
Metal	286	374	337	344	378
Czech Republic					
Metal	141	87	0	0	0
Finland					
Metal	834	682	34	0	...
France					
Metal	2 533	3 614	1 232	794	604
Germany					
Metal	600	1	1	0	...
Sulphide	10	3	2	5	6
Italy					
Metal	5	739	377	239	54
Sulphide	2	5	4	...	-----
Netherlands					
Metal	791	891	741	572	621
Norway					
Metal	347	357	117	237	304
Poland					
Metal	0	198	49	697	665
Spain					
Metal	10	1	0	0	0
Sweden					
Oxide	96	54	78	120	139
United Kingdom					
Metal	19	87	114	187	28

Imports of cadmium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Oxide	44	5	1	1	1
Belgium-Luxembourg					
Metal	8 263	7 828	5 121	4 914	4 064
Sulphide	0	46	4	18	-----
Czech Republic					
Sulphide	21	36	11	20	19
France					
Metal	1 058	1 488	1 682	1 248	1 465
Oxide	665	1 032	910	839	743
Sulphide	0	7	82	20	5 802
Germany					
Metal	6	8	8	11	39
Oxide	150	149	152	143	139
Sulphide	8	11	8	8	6
Italy					
Metal	35	45	46	48	87
Oxide	94	76	95	62	96
Netherlands					
Metal	25	544	...	357	284
Poland					
Oxide	141	4	38	...	...
Spain					
Metal	43	94	4	23	22
Oxide	22	56	70	29	28
Sweden					
Metal	26	65	150	402	330
Oxide	20	10	-----	26	71
Switzerland					
Metal	13	7	6	4	30
Turkey					
Metal	8	9	14	12	6
Oxide	46	28	...	...	...
United Kingdom					
Metal	790	942	225	416	409

Cadmium metal - EU31 trade in 2004



Cement

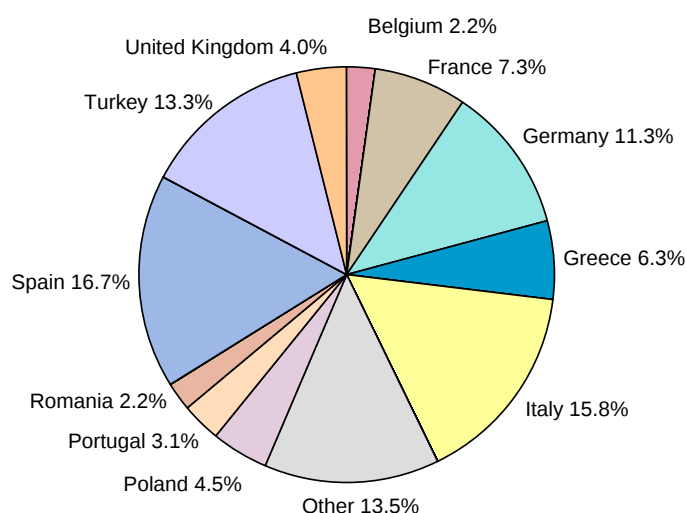
- Cement is a manufactured product and is the essential basis of concrete and mortar. Its chief raw materials are limestone or chalk and clay/mudstone. In Europe it is the largest use of limestone after crushed rock aggregate.
- Cement is made by firing a mixture of limestone and clay in a kiln to produce 'cement clinker'. This is a mixture of calcium silicates and calcium aluminates, which is finely ground with the addition of 5% gypsum/anhydrite to produce finished cement. Cement plants are nearly always sited at the limestone quarry.
- In the EU31, Italy (30%) and Germany (20%) are the largest producers of cement clinker. There is significant international trade in both clinker and finished cement.

Production of cement clinker

tonnes

Country	2000	2001	2002	2003	2004
Belgium	1 138 528	1 121 656	1 301 790	...	...
Cyprus	...	...	212 459	56 034	68 865
Czech Republic	3 540 600	2 441 353	2 102 275	...	...
Denmark	102 719	102 571	152 636	61 909	52 758
France	16 323 000	16 503 000	16 479 000	16 313 000	17 157 000
Germany	27 679 000	24 523 000	20 120 000	21 513 000	...
Greece	13 169 136	13 210 781	8 947 394	...	...
Italy	29 816 013	30 893 082	30 770 167	32 077 055	33 048 546
Latvia	*200 000	*200 000	*200 000	*200 000	250 000
Luxembourg	965 000	844 000	895 000	770 000	847 000
Poland	11 558 467	9 335 062	8 811 639	8 647 397	9 620 601
Portugal	...	...	...	845 594	1 082 678
Sweden	2 381 938	2 421 693	2 364 724	2 235 138	...
United Kingdom	11 456 000	10 573 000	10 327 000	10 146 000	10 402 000
EU31 Total	119 400 000	113 200 000	103 500 000	105 200 000	108 600 000

EU31 Production of finished cement 2004



Production of finished cement

tonnes

Country	2000	2001	2002	2003	2004
Austria	3 776 000	3 863 000	3 967 000	*4 000 000	4 040 000
Belgium	7 510 000	7 241 000	7 103 000	6 550 000	6 216 000
Bulgaria	2 209 000	2 088 000	2 137 000	2 100 000	2 100 000
Cyprus	1 398 000	1 368 800	1 438 160	1 636 879	1 688 917
Czech Republic	4 092 820	3 590 689	3 249 155	3 502 103	3 828 677
Denmark	2 536 080	2 575 512	2 544 868	2 580 427	2 892 831
Estonia	329 100	404 600	465 900	506 200	614 600
Finland (a)	1 421 959	1 324 705	1 198 423	1 186 000	1 295 000
France	19 720 000	19 839 000	19 437 000	19 655 000	20 962 000
Germany	35 200 000	32 600 000	31 200 000	33 400 000	32 400 000
Greece	15 597 959	15 562 654	*15 500 000	17 546 281	18 040 788
Hungary	3 326 000	3 452 000	3 510 000	3 573 000	3 349 000
Irish Republic	2 620 000	2 600 000	2 500 000	2 500 000	*2 500 000
Italy	39 388 765	40 190 597	41 722 254	43 580 047	45 342 868
Latvia	*300 000	*300 000	*300 000	*300 000	280 000
Lithuania	573 000	529 193	605 784	596 857	753 069
Luxembourg	751 000	726 000	729 000	709 000	797 000
Netherlands	3 500 000	3 300 000	3 100 000	2 600 000	...
Norway	1 851 000	1 870 000	1 850 000	1 860 000	1 870 000
Poland	15 046 351	12 069 941	11 206 439	11 653 448	12 837 083
Portugal	(b) 10 343 068	(b) 10 162 310	(c) 9 760 964	(c) 8 485 826	(c) 8 764 587
Romania	6 058 000	5 702 000	5 679 776	5 991 962	6 209 251
Slovakia	3 044 923	3 122 665	3 140 581	3 147 478	3 158 308
Slovenia	*1 300 000	*1 300 000	*1 250 000	1 300 000	1 300 000
Spain	38 115 621	40 512 090	42 417 253	44 746 757	47 800 000
Sweden	2 612 901	2 644 365	2 764 954	2 544 647	*2 600 000
Switzerland	3 720 000	3 920 000	3 771 000	3 700 000	3 800 000
Turkey	35 825 000	30 125 000	32 576 701	35 076 902	38 019 112
United Kingdom	12 452 000	11 854 000	11 089 000	11 215 000	11 405 000
EU31 Total	274 600 000	264 800 000	266 200 000	276 200 000	287 500 000

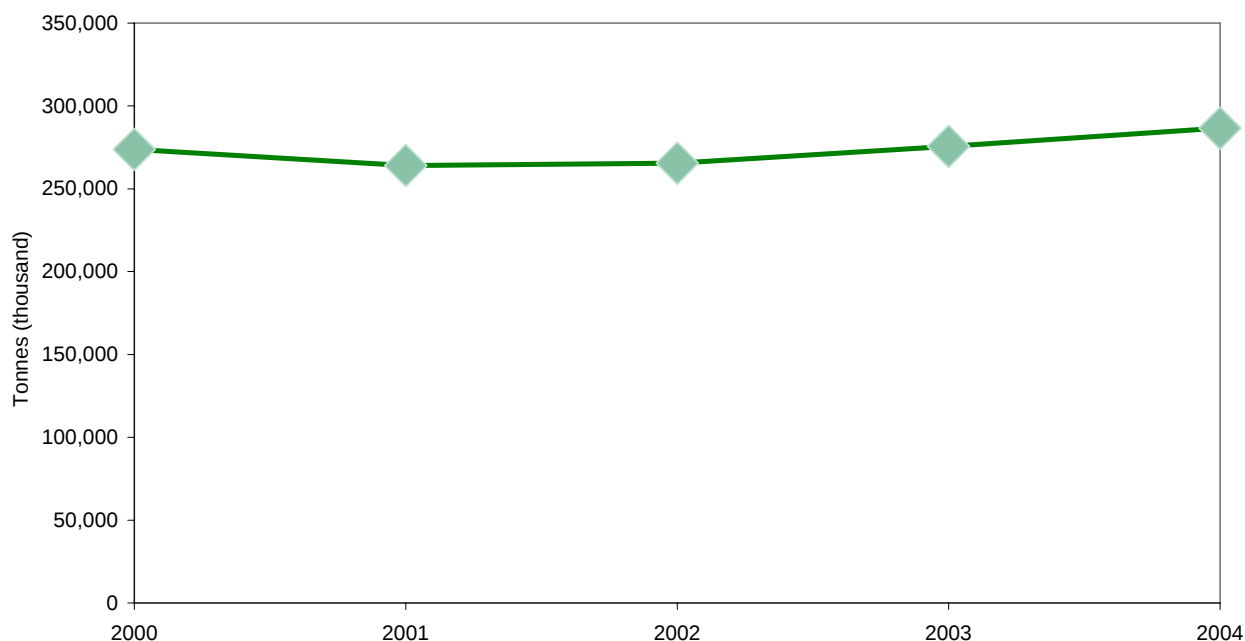
Note(s):-

(a) Sales

(b) Portland cement only

(c) Portland cement, excluding white cement

EU31 Production of finished cement 2000 - 04



Exports of cement

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Cement clinkers	23 014	60 212	47 401	54 375	58 262
Portland cement	125 800	118 822	97 600	136 732	185 069
Other cement	5 550	19 896	27 365	42 712	40 830
Belgium-Luxembourg					
Cement clinkers	1 209 440	1 111 745	767 780	749 249	842 257
Portland cement	1 489 343	1 432 246	1 854 749	1 815 882	1 598 742
Other cement	788 844	840 274	687 836	592 657	616 066
Bulgaria					
Cement clinkers	286 078	397 914	435 202	602 632	392 414
Portland cement	752 124	643 158	485 972	568 083	460 281
Other cement	1 665	240	2 729	22 625	50
Cyprus					
Cement clinkers	121 080	96 709	245 656	200 461	31 215
Portland cement	413 406	316 758	201 542	196 173	146 669
Czech Republic					
Cement clinkers	413 013	213 960	77 171	44 410	91 626
Portland cement	1 027 462	618 868	350 341	506 588	576 531
Other cement	53 298	33 244	38 341	11 476	3 216
Denmark					
Cement clinkers	90 394	101 949	97 886	65 962	85 967
Portland cement	1 152 612	1 220 484	1 259 988	1 164 923	1 127 638
Other cement	12 766	17 458	12 697	11 947	13 535
Estonia					
Cement clinkers	342 685	277 012	163 887	157 353	113 105
Portland cement	123 965	183 156	176 923	172 223	209 168
Finland					
Portland cement	4 412	872	633	837	11 449
France					
Cement clinkers	395 426	491 760	555 646	479 952	460 364
Portland cement	655 260	686 872	549 756	604 494	785 100
Other cement	127 464	120 320	157 945	144 523	112 828
Germany					
Cement clinkers	328 471	718 285	411 711	1 001 024	868 384
Portland cement	1 907 253	1 959 481	2 083 433	2 472 418	3 496 157
Other cement	1 121 582	1 084 249	1 226 979	1 196 558	1 580 315
Greece					
Cement clinkers	641 771	549 377	400 700	742 540	257 136
Portland cement	3 821 755	4 165 718	2 312 090	2 507 359	2 679 607
Other cement	576 485	221 294	142 068	110 674	170 640
Hungary					
Cement clinkers	7 487	44	125 482	41 006	78 590
Portland cement	599 719	492 397	433 217	440 285	244 276
Irish Republic					
Cement clinkers	7 040	6 447	...	2 650	...
Portland cement	181 278	220 581	263 254	439 876	1 133 469
Italy					
Cement clinkers	95 220	99 472	82 835	55 289	78 590
Portland cement	2 027 730	2 078 455	1 940 114	1 816 975	1 903 368
Other cement	271 031	168 039	174 484	181 086	130 920
Latvia					
Portland cement	58 600	53 352	42 492	42 644	26 144
Lithuania					
Portland cement	326 851	213 851	224 544	212 730	247 918
Netherlands					
Cement clinkers	3	1 259	1 325	2 326	1 585
Portland cement	260 209	215 827	108 209	209 122	326 234
Other cement	153 428	158 864	86 102	53 743	30 013
Norway					
Cement clinkers	327 552	156 911	98 557	...	...
Portland cement	444 672	506 741	558 861	...	...
Poland					
Cement clinkers	...	2 894	6 461	87 470	226 981
Portland cement	855 843	757 302	370 832	262 290	341 112
Other cement	118 868	134 130	98 766	7 406	7 059

Exports of cement

tonnes

Country	2000	2001	2002	2003	2004
Portugal					
Cement clinkers	1	...	41 626	117 332	148 984
Portland cement	36 782	35 442	59 628	114 182	286 819
Other cement	3 643	5 109	5 815	6 081	13 267
Romania					
Cement clinkers	625 989	512 590	572 684	360 639	669 204
Portland cement	1 208 858	1 133 414	1 020 819	963 978	701 686
Slovakia					
Cement clinkers	45	3 848	9 501	27 695	4 768
Portland cement	1 488 158	1 697 104	1 584 379	1 476 998	1 470 728
Other cement	11 577	58 301	18 992	15 958	24 408
Slovenia					
Cement clinkers	25	...	2 163	7 589	18 577
Portland cement	173 192	184 683	171 993	166 323	101 842
Other cement	...	...	...	...	16 154
Spain					
Cement clinkers	21 552	6 538	45 657	18 350	9 491
Portland cement	2 060 260	1 713 277	1 700 683	1 585 078	1 681 953
Other cement	189 524	94 252	92 852	100 272	59 696
Sweden					
Portland cement	1 225 569	1 241 183	1 285 376	1 064 305	867 450
Other cement	2 338	2 341	1 469	2 818	2 492
Switzerland					
Cement clinkers	139 427	123 026	130 261	106 617	106 263
Portland cement	54 745	20 968	12 942	14 396	33 524
Turkey					
Cement clinkers	2 111 623	3 275 087	4 546 480	2 898 730	2 359 071
Portland cement	4 375 817	4 968 305	5 803 964	6 749 791	7 907 130
Other cement	36 120	33 163	25 296	96 793	147 792
United Kingdom					
Cement clinkers	256 077	169 344	160 704	60 920	72 996
Portland cement	528 417	229 573	305 801	216 480	211 630
Other cement	56 264	81 441	66 163	61 193	78 196

Imports of cement

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Cement clinkers	302 996	314 407	314 864	444 535	443 956
Portland cement	819 643	717 691	804 924	763 455	773 897
Other cement	33 111	29 489	18 597	17 434	51 811
Belgium-Luxembourg					
Cement clinkers	94 978	133 317	64 453	256 355	553 911
Portland cement	709 775	809 758	795 844	846 044	956 062
Other cement	138 924	159 414	187 371	292 756	314 515
Bulgaria					
Cement clinkers	...	...	3 088	3 815	23 048
Portland cement	8 690	7 864	7 491	33 810	51 493
Cyprus					
Cement clinkers	...	5 550	17 144	74 627	28 622
Portland cement	685	1 636	2 926	2 496	2 092
Czech Republic					
Cement clinkers	144	147	6 792	76 152	167 711
Portland cement	1 168 974	1 278 439	748 672	1 044 234	1 105 823
Other cement	106 403	104 981	83 286	28 197	24 799
Denmark					
Cement clinkers	2	10	4 033	23 222	22 506
Portland cement	252 378	238 654	274 440	185 757	187 982
Other cement	21 963	33 903	29 067	30 501	33 913
Estonia					
Portland cement	33 161	44 989	31 847	36 438	16 827
Other cement	2 878	572	451	634	3
Finland					
Cement clinkers	150 391	95 591	7 265	67 297	28 129
Portland cement	342 793	333 868	382 160	438 363	423 958
Other cement	24 434	8 722	8 669	9 654	9 344

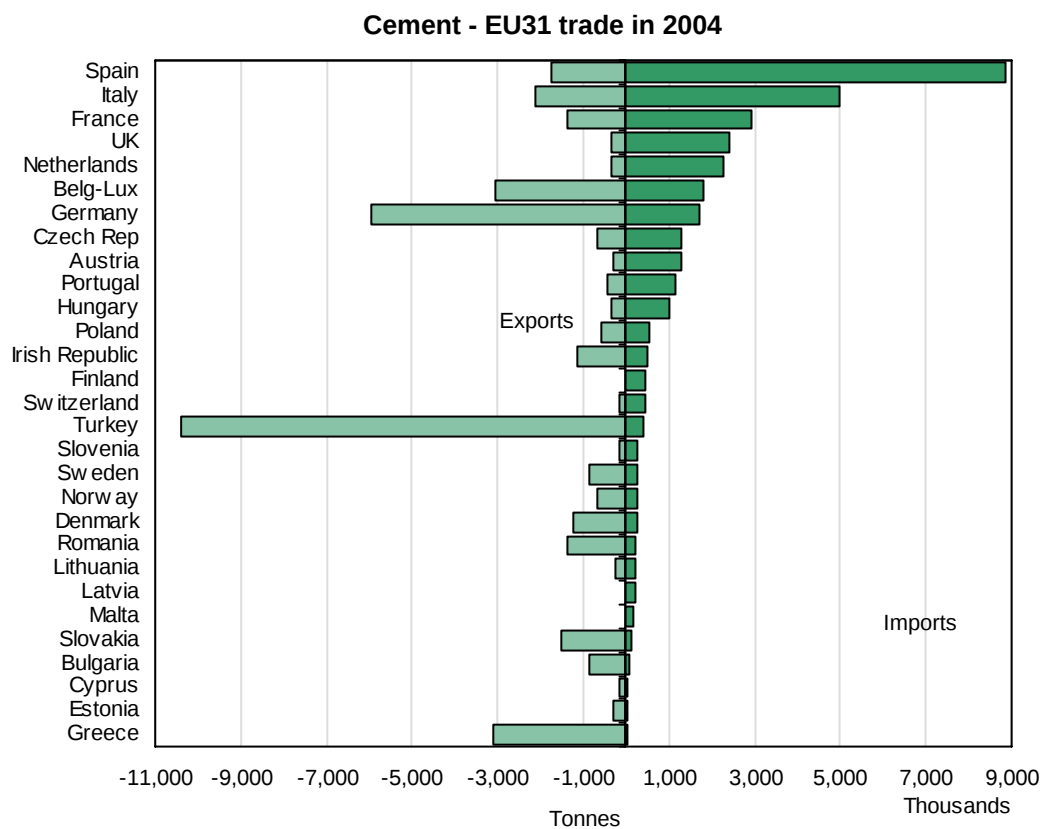
Imports continued

Country	2000	2001	2002	2003	2004
France					
Cement clinkers	855 948	919 175	852 287	793 933	865 213
Portland cement	1 230 950	1 104 447	1 114 553	1 090 120	1 114 684
Other cement	987 862	926 599	1 190 848	1 123 098	927 157
Germany					
Cement clinkers	591 026	494 930	523 967	325 302	370 454
Portland cement	2 714 963	2 003 309	1 197 165	906 718	1 002 404
Other cement	334 557	413 249	321 014	277 349	343 597
Greece					
Portland cement	1 847	79 052	56 424	302	1 754
Other cement	3 163	2 989	2 628	3 322	3 497
Hungary					
Portland cement	649 903	401 168	303 249	342 107	451 613
Other cement	151 109	174 362	466 700	536 445	579 735
Irish Republic					
Cement clinkers	178 554	66 661	56 199	88 669	226 116
Portland cement	498 089	430 990	373 759	259 703	281 044
Other cement	4 160	3 092	2 968	4 105	9 132
Italy					
Cement clinkers	546 747	1 018 494	1 777 159	2 322 710	2 720 499
Portland cement	1 677 438	1 915 641	1 796 508	2 033 657	2 130 079
Other cement	173 744	314 706	304 329	168 008	146 033
Latvia					
Cement clinkers	44 422	3 255	...	...	...
Portland cement	94 635	87 609	112 025	138 488	204 353
Lithuania					
Cement clinkers	...	...	14 459	...	22 496
Portland cement	188 422	88 783	128 201	206 317	183 712
Malta					
Portland cement	251 860	260 812	275 627	275 736	179 533
Netherlands					
Cement clinkers	147 310	706 124	52 231	616 756	355 870
Portland cement	1 608 997	1 551 824	370 170	1 348 889	1 259 127
Other cement	972 419	934 043	229 933	656 654	647 017
Norway					
Portland cement	159 245	192 678	186 529	188 442	236 622
Other cement	7 823	7 224	5 549	5 026	10 738
Poland					
Cement clinkers	605 835	251 458	66 800	70 207	13 746
Portland cement	306 163	328 347	630 256	699 379	540 342
Other cement	31 863	17 313	23 531	16 352	2 323
Portugal					
Cement clinkers	1 307 807	917 322	5 421	7 715	8 775
Portland cement	677 746	1 497 434	1 485 581	1 225 167	1 066 969
Other cement	14 553	17 671	11 842	50 576	65 793
Romania					
Portland cement	31 754	9 680	20 478	123 332	228 506
Slovakia					
Cement clinkers	825	0	----	34 550	33 021
Portland cement	80 531	80 356	82 114	113 926	85 834
Other cement	1 139	2 629	2 320	3 379	19 636
Slovenia					
Cement clinkers	16 485	21 066	16 279	95 002	61 151
Portland cement	140 600	174 690	150 749	205 345	219 779
Other cement	1 613	1 254	1 272	1 440	112
Spain					
Cement clinkers	2 706 698	3 975 430	4 646 090	5 897 219	6 266 470
Portland cement	2 073 449	2 960 674	3 155 122	2 606 300	2 549 086
Other cement	296 630	200 370	36 947	54 726	21 527
Sweden					
Cement clinkers	654	440	93	493	1 621
Portland cement	156 029	210 732	208 113	209 882	218 928
Other cement	21 726	25 186	25 151	27 286	27 286
Switzerland					
Cement clinkers	132 450	156 910	146 388	47 050	64 882
Portland cement	157 260	180 860	198 607	319 539	313 292
Other cement	62 536	86 391	56 272	41 949	58 671

Cement

Imports continued

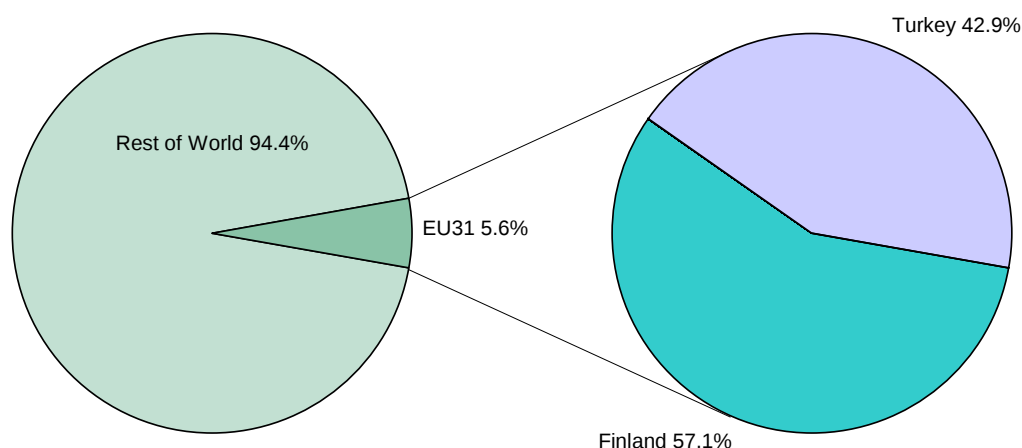
Country	2000	2001	2002	2003	2004
Turkey					
Cement clinkers	256 247	143 225	7 117	170 275	375 619
Portland cement	7 667	27 109	19 014	9 922	9 096
Other cement	5 032	5 914	5 800	3 675	105
United Kingdom					
Cement clinkers	350 975	387 306	289 685	506 128	386 581
Portland cement	1 428 009	1 179 521	2 142 589	1 714 946	1 976 281
Other cement	21 428	52 411	61 327	61 131	59 690



Chromium ores and concentrates

- Chromium is a hard metallic element that is an essential component of stainless steel and other alloy steels, where it is used in the form of the alloy ferro-chromium. It is also used extensively in superalloys and metal plating. Its compounds are important pigments and the natural mineral chromite is used in refractories.
- World production is dominated by South Africa, India and Kazakhstan which together produced 80% of world chromium in 2004. Finland and Turkey are the only countries in Europe with significant chromium production.
- The price of chromite in 2004 was \$135–\$155/tonne, depending on grade. The price of ferrochromium continued to rise in 2004 before leveling off and decreasing toward the end of the year; ferro-chrome traded at \$0.55–\$0.78/lb, depending on type, the price of chromium metal ranged from \$3800/tonne–\$5200/tonne (alumino-thermic, min. 99% in warehouse) in 2004.

EU31 Production of chromium ores and concentrates 2004



Production of chromium ores and concentrates

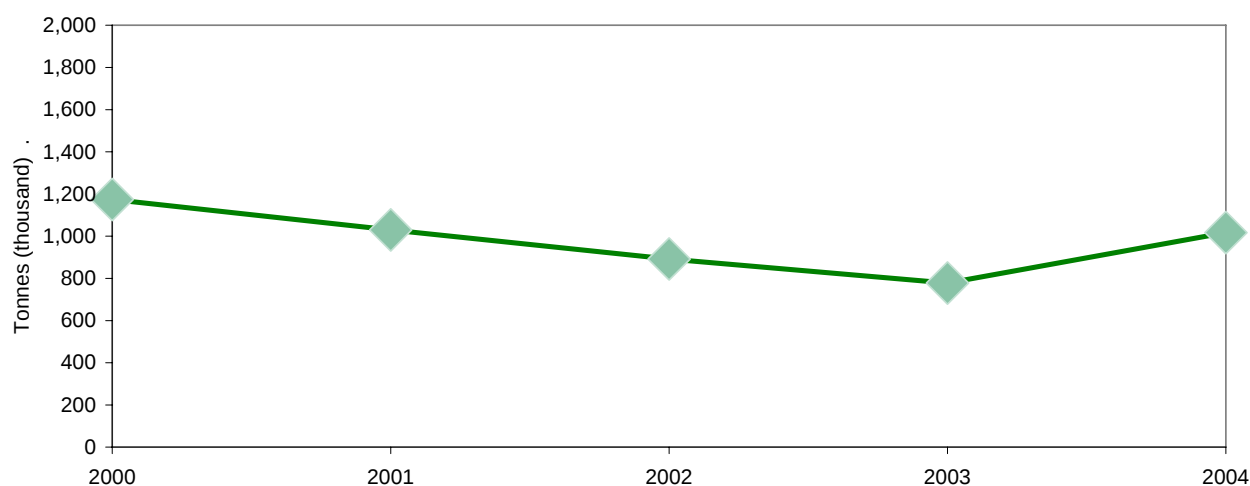
tonnes

Country	2000	2001	2002	2003	2004
Finland	628 414	575 126	566 090	549 000	580 000
Turkey	545 725	454 549	326 390	229 294	436 639
EU31 Total	1 174 139	1 029 675	892 480	778 000	1 017 000

Note(s):-

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

EU31 Production of chromium ores and concentrates 2000 - 04



Exports of chromium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Ores & concentrates	729	647	896	1 155	392
Metal	3 198	2 858	4 506	5 485	7 194
Belgium-Luxembourg					
Ores & concentrates	16 307	17 051	9 510	5 491	2 433
Metal	395	318	262	660	852
Czech Republic					
Metal	1	1	88	338	364
Denmark					
Metal	637	964	57	521	661
Estonia					
Metal	318	200	12	148	...
Finland					
Ores & concentrates	282	354	281	612	708
France					
Ores & concentrates	2 658	2 129	2 835	2 879	2 928
Metal	5 990	6 634	5 056	4 498	7 182
Germany					
Ores & concentrates	14 675	6 771	11 760	3 666	12 691
Metal	1 108	225	762	2 096	1 256
Greece					
Ores & concentrates	3 000	5 067	...	...	21
Irish Republic					
Metal	35	1	760	1	-----
Italy					
Ores & concentrates	2 669	5 558	3 014	2 638	3 803
Metal	594	815	407	1 993	4 184
Lithuania					
Metal	48	26	7	...	0
Netherlands					
Ores & concentrates	50 515	58 219	46 386	52 636	49 669
Metal	969	812	1 282	1 817	2 655
Poland					
Ores & concentrates	3 452	145	1 533	...	117
Metal	2	140	73	181	0
Slovakia					
Metal	2 699	2 869	2 511	2 289	2 362
Spain					
Ores & concentrates	1 315	678	1 040	947	2 113
Metal	815	1 569	2 679	1 126	905
Switzerland					
Metal	27	156	31	66	319
Turkey					
Ores & concentrates	467 010	321 047	265 296	363 699	575 030
Metal	91	279	249	20	33
United Kingdom					
Ores & concentrates	503	170	26	212	622
Metal	8 821	4 609	3 837	4 173	4 776

Note(s):-

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

Imports of chromium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Ores & concentrates	36 490	37 321	28 384	36 348	26 761
Metal	2 050	1 713	1 808	2 337	3 731
Belgium-Luxembourg					
Ores & concentrates	9 808	5 789	4 179	4 644	6 094
Metal	557	629	664	765	821
Croatia					
Ores & concentrates	15 705	908	287	341	459
Metal	...	6	160	200	279

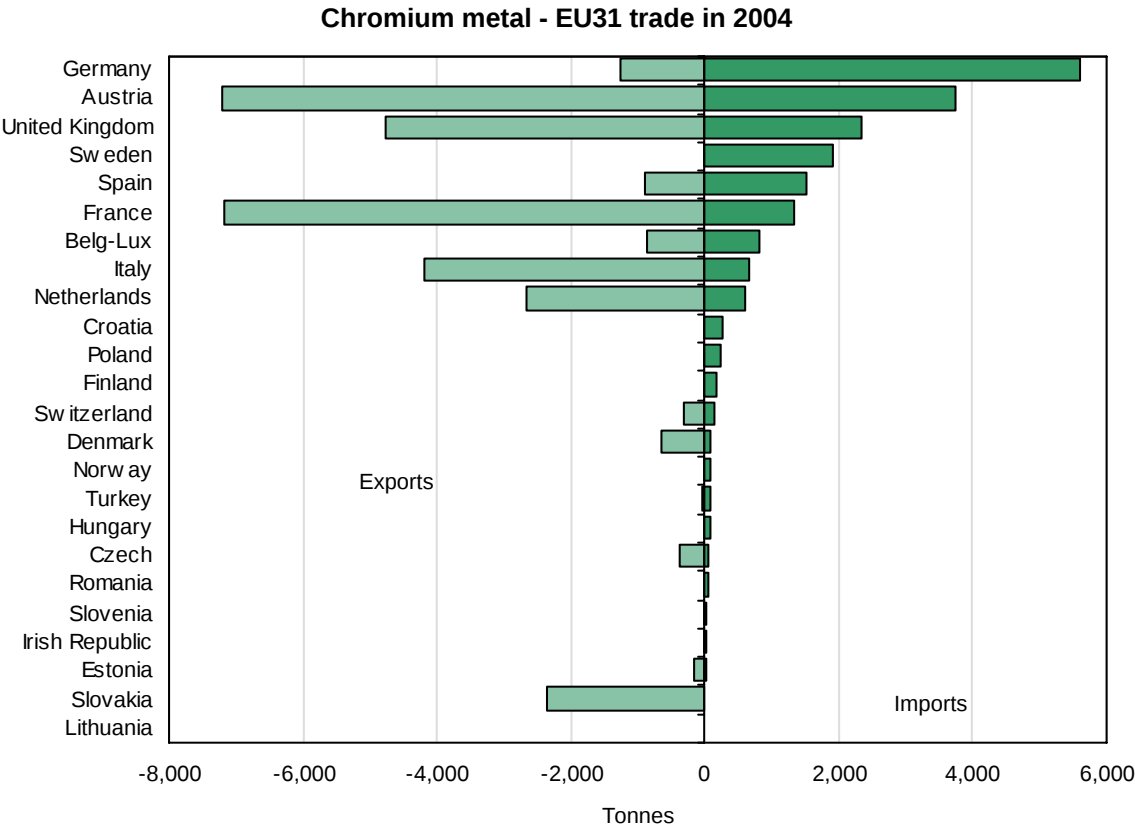
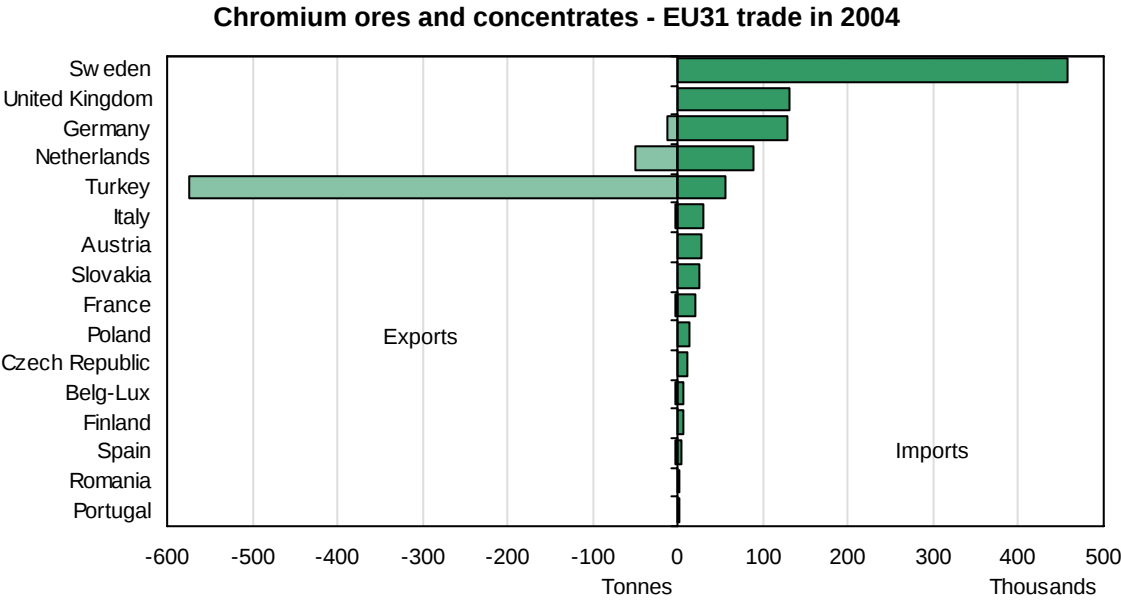
Imports continued

Country	2000	2001	2002	2003	2004
Czech Republic					
Ores & concentrates	11 821	15 054	11 655	10 674	11 365
Metal	35	12	14	66	60
Denmark					
Ores & concentrates	294	512	1 496	920	614
Metal	64	19	63	106	90
Estonia					
Metal	317	204	0	140	8
Finland					
Ores & concentrates	6 288	7 174	4 294	6 050	6 092
Metal	42	174	87	190	164
France					
Ores & concentrates	27 174	26 693	22 534	22 917	19 770
Metal	649	699	782	677	1 323
Germany					
Ores & concentrates	119 869	130 485	114 806	126 278	128 886
Metal	2 905	2 257	3 291	4 063	5 599
Greece					
Ores & concentrates	213	231	360	218	122
Hungary					
Ores & concentrates	1 010	549	651	593	367
Metal	104	85	65	82	68
Irish Republic					
Metal	46	26	19	27	25
Italy					
Ores & concentrates	60 566	82 769	56 835	26 802	30 872
Metal	467	549	544	520	677
Lithuania					
Metal	58	3	0	1	2
Netherlands					
Ores & concentrates	55 178	73 730	62 992	52 353	89 201
Metal	1 488	1 359	562	310	612
Norway					
Ores & concentrates (a)	*282 000	*176 000	*51 000	*600	*400
Metal	48	89	53	47	88
Poland					
Ores & concentrates	25 804	26 128	8 461	10 977	13 053
Metal	...	...	...	...	242
Portugal					
Ores & concentrates	1 916	2 569	2 334	2 062	1 547
Romania					
Ores & concentrates	1 301	2 405	3 869	2 701	2 562
Metal	95	22	60	70	58
Slovakia					
Ores & concentrates	54 500	28 803	16 766	12 624	24 479
Metal	9	58	103	179	2
Slovenia					
Ores & concentrates	607	722	451	340	406
Metal	8	18	10	26	31
Spain					
Ores & concentrates	5 861	9 141	2 585	5 799	3 947
Metal	385	1 202	666	921	1 519
Sweden					
Ores & concentrates	350 000	200 000	280 000	215 000	457 000
Metal	888	1 275	1 265	823	1 903
Switzerland					
Ores & concentrates	1 483	818	525	716	671
Metal	135	112	116	110	141
Turkey					
Ores & concentrates	69 470	101 278	68 832	82 452	56 836
Metal	15	12	19	19	85
United Kingdom					
Ores & concentrates	163 647	135 369	139 748	107 161	130 911
Metal	1 519	1 601	1 171	1 612	2 333

Note(s):-

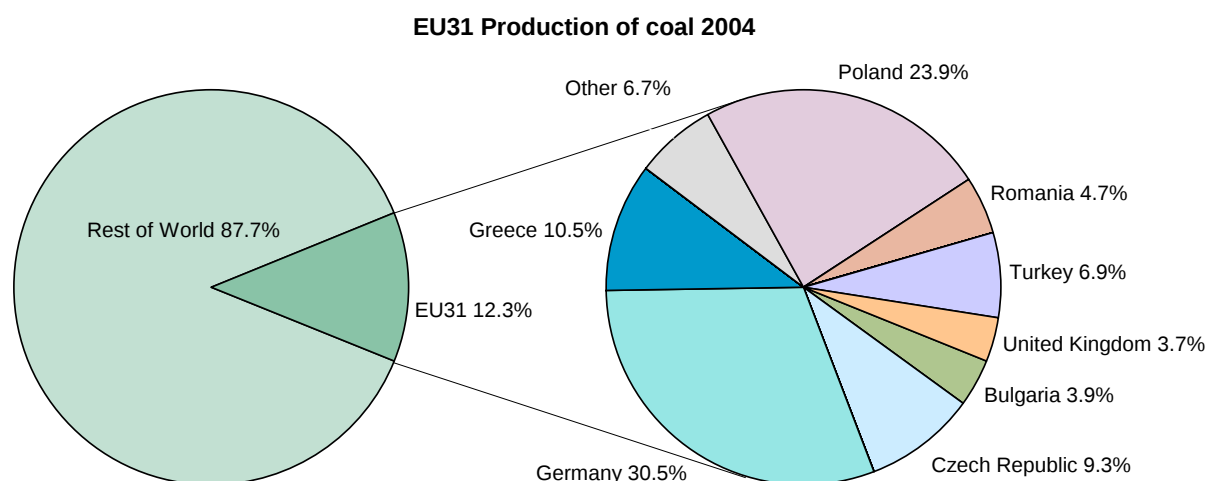
(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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



Coal

- Coal is a combustible rock, composed of lithified plant remains. It is an important source of energy throughout the world.
- Coal has two predominant end uses. Steam coal (or thermal coal) is burnt in power stations for electricity generation and is also used for other domestic and industrial purposes. Coking coal, which commands a higher price, is used in the steel industry to de-oxidise iron ore in the blast furnace. Both black coal (anthracite+bituminous) and brown coal (lignite) are used as steam coal; only bituminous coal is used as coking coal.
- In 2004 the EU31 countries produced 12% of the world's coal (all types) of which more than half was contributed by Germany and Poland. Overall production fell by 21.4 million tonnes (3%) between 2000 and 2004, with the UK recording a decline in production of 24%. Prices for internationally traded steam coal imported into Europe have risen strongly in recent years and reached an average of £37/tonne in 2004. European producers are normally able to charge above the import prices due to their proximity to power stations.



Production of coal

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Brown coal & lignite	1 254 605	1 193 970	1 411 824	1 152 389	235 397
Bulgaria					
Anthracite & bituminous	118 200	115 000	122 000	53 000	170 000
Brown coal & lignite	26 182 769	26 095 516	26 433 500	27 641 000	26 455 000
Czech Republic					
Bituminous	17 028 000	14 808 000	14 097 000	13 382 000	14 648 000
Lignite	453 000	507 000	501 000	470 000	450 000
Brown coal	50 610 000	51 036 000	48 834 000	49 920 000	47 840 000
France					
Anthracite & bituminous	3 166 000	1 972 000	1 483 000	1 728 000	708 000
Lignite	296 000	324 000	147 000	9 000	----
Germany					
Anthracite & bituminous	34 251 019	27 361 079	26 363 084	25 873 043	25 871 882
Brown coal	167 723 889	175 364 780	181 778 432	179 086 923	181 926 060
Greece					
Lignite	63 947 813	66 621 437	71 087 609	69 410 756	71 237 228
Hungary					
Bituminous	744 000	635 200	660 000	667 126	670 000
Lignite	7 862 000	8 043 062	7 573 971	8 564 000	8 470 258
Brown coal	5 670 000	5 392 000	4 530 000	4 128 000	4 130 000
Italy					
Lignite	120 000	130 000	100 000	...	...
Norway					
Bituminous (a)	631 926	1 787 784	2 131 691	2 944 000	3 100 000
Poland					
Bituminous	103 617 556	103 991 700	103 546 000	103 016 400	101 230 400
Lignite	59 505 486	59 557 400	58 209 600	60 919 100	61 197 500
Romania					
Anthracite & bituminous	4 042 000	4 033 000	3 976 000	3 309 000	*3 000 000
Brown coal & lignite	26 882 000	30 750 000	28 015 000	31 121 000	28 648 476

Coal

Production continued

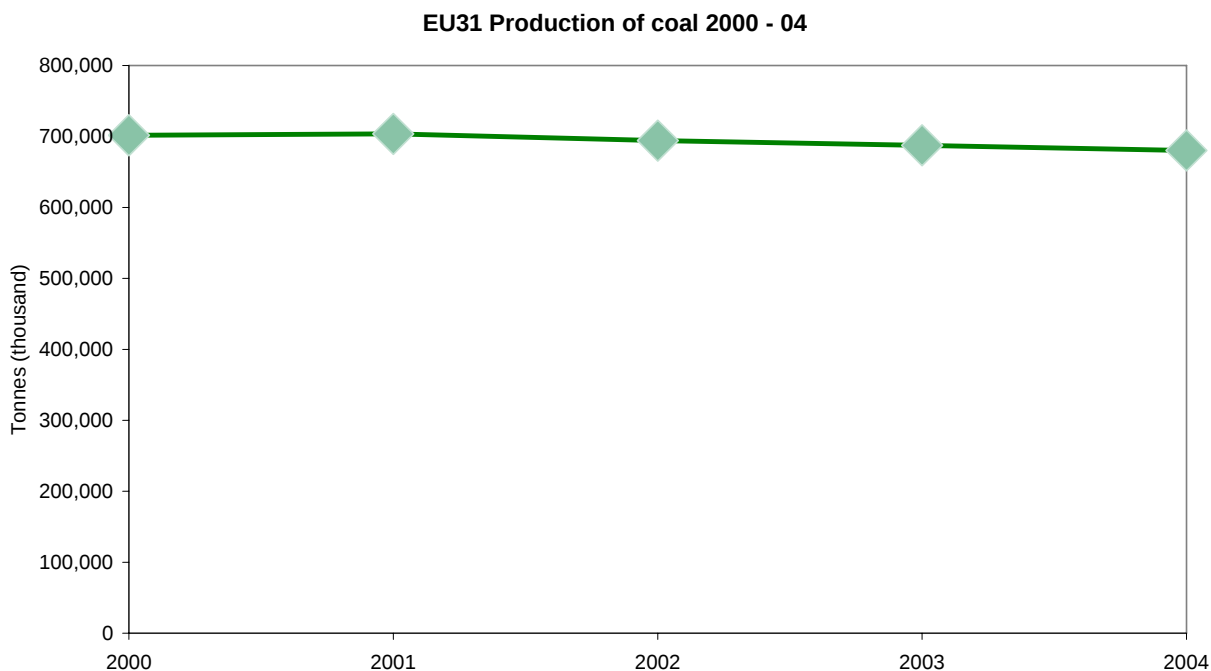
Country	2000	2001	2002	2003	2004
Slovakia					
Brown coal	3 646 100	3 421 100	3 406 400	3 076 100	2 951 598
Slovenia					
Brown coal & lignite	4 479 300	4 133 000	4 684 710	4 828 786	4 809 058
Spain					
Anthracite	5 143 977	4 693 831	4 399 365	3 857 364	3 693 414
Bituminous	6 166 586	5 797 496	5 349 027	5 547 150	5 229 416
Sub-bituminous	3 630 805	3 456 000	3 537 710	3 182 572	3 426 085
Lignite	8 523 586	8 787 000	8 726 121	7 977 546	8 147 237
Turkey					
Anthracite	3 330 355	3 369 727	3 312 690	3 090 458	2 842 952
Bituminous	110 945	55 860	118 235	217 759	...
Lignite	61 314 974	58 172 982	49 626 612	43 749 420	43 754 159
United Kingdom					
Bituminous (b)	31 197 000	31 930 000	29 989 000	28 279 000	25 096 000
EU31 Total	701 600 000	703 500 000	694 200 000	687 200 000	680 200 000

Note(s):-

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

(a) Spitzbergen: not including production from mines controlled by the former Soviet Union

(b) Including anthracite



Exports of coal

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg					
Anthracite	1 121 661	1 029 455	940 201	999 793	1 399 280
Other coal	1 556 603	1 309 947	1 783 567	1 777 869	2 273 223
Briquettes	18 869	15 955	43 484	19 122	...
Czech Republic					
Hard coal (a)	5 885 403	5 712 522	5 680 003	5 668 451	5 706 798
Lignite	2 732 595	2 977 065	1 770 888	1 082 961	1 072 275
Briquettes	155 398	168 874	188 383	191 650	160 823
Denmark					
Hard coal	112 533	100 160	97 862	6 665	7 380
Estonia					
Hard coal (a)	48 021	33 648	37 954	5 875	...
France					
Anthracite	1 240	15 698	26 834	9 324	1 077
Other coal	87 494	69 544	94 865	74 343	93 265
Germany					
Hard coal (a)	178 430	105 443	49 449	182 233	183 694
Brown coal	220 449	304 061	273 953	71 777	430
Briquettes	260 538	218 890	173 867	156 179	87 651
Greece					
Briquettes	1 434	404	40 046	71 510	67 701
Hungary					
Lignite	...	...	...	13 966	81 047
Irish Republic					
Anthracite	32 942	1 285	2 745	1 154	1 037
Briquettes	23 638	20 787	20 130	21 151	18 049
Italy (a)	32 153	54 884	33 141	17 124	92 227
Netherlands					
Anthracite	99 939	272 320	162 820	206 426	148 188
Other coal	8 316 654	13 104 257	6 539 589	5 574 363	8 624 870
Briquettes	3 612	977	13 472	1 362	71 710
Poland					
Anthracite	47 863	79 908	6 677	71 646	8 599
Other coal	23 189 484	22 946 136	22 608 910	20 044 204	19 684 005
Lignite	9 477	14 789	41 287	35 824	26 929
Spain					
Anthracite	13 377	7 146	12 173	47 185	48 710
Turkey					
Anthracite	13 707	35 713	12 062	9 540	11 077
United Kingdom					
Anthracite	304 387	272 985	187 372	180 382	172 431
Other coal	616 291	309 560	341 626	352 620	449 187
Briquettes	77 063	77 184	64 094	60 172	40 298

Note(s):-

(1) This table excludes bunker shipments

(a) Including anthracite

Imports of coal

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Hard coal (b)	3 412 703	3 846 806	3 993 504	3 965 922	3 552 594
Brown coal	38 117	52 745	61 439	59 077	38 833
Briquettes	117 219	108 786	76 354	84 343	83 035
Belgium-Luxembourg					
Anthracite	1 040 686	1 138 122	3 412 532	3 439 165	4 134 160
Other coal	9 702 654	9 829 971	8 263 921	8 342 288	9 728 235
Brown coal	198 317	232 063	244 300	219 162	232 809
Briquettes	20 372	52 887	53 715	14 717	3 924
Bulgaria					
Anthracite	1 448 415	1 928 500	1 173 622	1 396 246	1 464 605
Other coal	1 818 322	1 758 266	2 315 367	3 038 589	2 784 512
Croatia					
Hard coal	806 241	642 574	281 298	1 034 849	1 218 407
Lignite	80 303	84 520	34 807	69 679	79 921
Briquettes	22 405	18 278	65 401	22 828	2 981
Cyprus	57 607	85 931	71 734	21	...
Czech Republic (b)	1 094 508	1 202 901	1 216 954	1 280 903	1 694 815
Denmark					
Anthracite	89 167	81 874	120 888	92 434	77 502
Other coal	6 435 687	6 916 611	6 087 316	9 126 099	7 487 269
Estonia					
Hard coal (b)	149 092	126 569	59 183	60 731	44 399
Finland					
Hard coal (b)	5 072 701	6 174 441	5 788 973	10 145 037	8 283 891
France					
Anthracite	1 088 272	1 049 738	1 323 661	1 557 639	2 076 592
Other coal	16 091 962	13 508 122	13 960 659	15 082 984	17 619 595
Lignite	51 244	60 810	23 470	41 784	40 405
Briquettes	77 348	98 610	74 423	68 883	75 872
Germany					
Anthracite	440 328	846 310	775 851	1 143 311	1 413 902
Other coal	22 483 547	27 397 137	26 629 962	25 164 977	31 047 441
Brown coal	1 812 000	1 936 950	1 040 979	49 433	10 570
Briquettes	195 611	159 991	154 033	178 993	95 446
Greece					
Hard coal (b)	1 038 517	1 357 243	285 975	854 992	791 582
Hungary					
Hard coal (b)	1 663 064	...	874 393	1 108 289	1 347 232
Brown coal	221 555	247 929	259 129	311 845	403 297
Irish Republic					
Anthracite	102 388	282 790	163 733	164 270	100 792
Other coal	1 666 083	1 682 981	1 337 469	1 307 994	2 930 298
Briquettes	42 306	42 480	28 105	46 789	48 348
Italy					
Anthracite	231 539	155 092	193 308	243 578	338 706
Other coal	18 768 117	20 068 964	19 682 422	21 029 014	25 382 339
Latvia					
Hard coal (b)	79 833	86 754	101 680	123 844	94 896
Lithuania					
Hard coal (b)	129 430	105 625	222 485	294 938	260 684
Netherlands					
Anthracite	1 890 491	1 293 055	190 633	363 692	288 990
Other coal	18 794 685	26 951 400	18 685 529	20 158 178	22 241 661
Brown coal	30 042	38 959	36 923	23 782	18 294
Briquettes	12 541	16 111	13 474	24 574	15 510
Norway					
Anthracite (a)	86 671	105 585	56 263	84 858	71 785
Other coal (a)	746 117	684 305	598 378	586 775	693 106
Lignite (a)	86 497	35 000	1 308	9	67
Poland					
Anthracite	50 350	41 730	37 788	49 745	168 095
Other coal	1 451 581	1 857 741	2 729 972	2 506 316	2 231 606
Portugal					
Anthracite	375 617	209 725	211 583	276 685	30 630
Other coal	5 999 032	4 459 459	5 627 373	5 084 416	5 241 255

Imports continued

tonnes

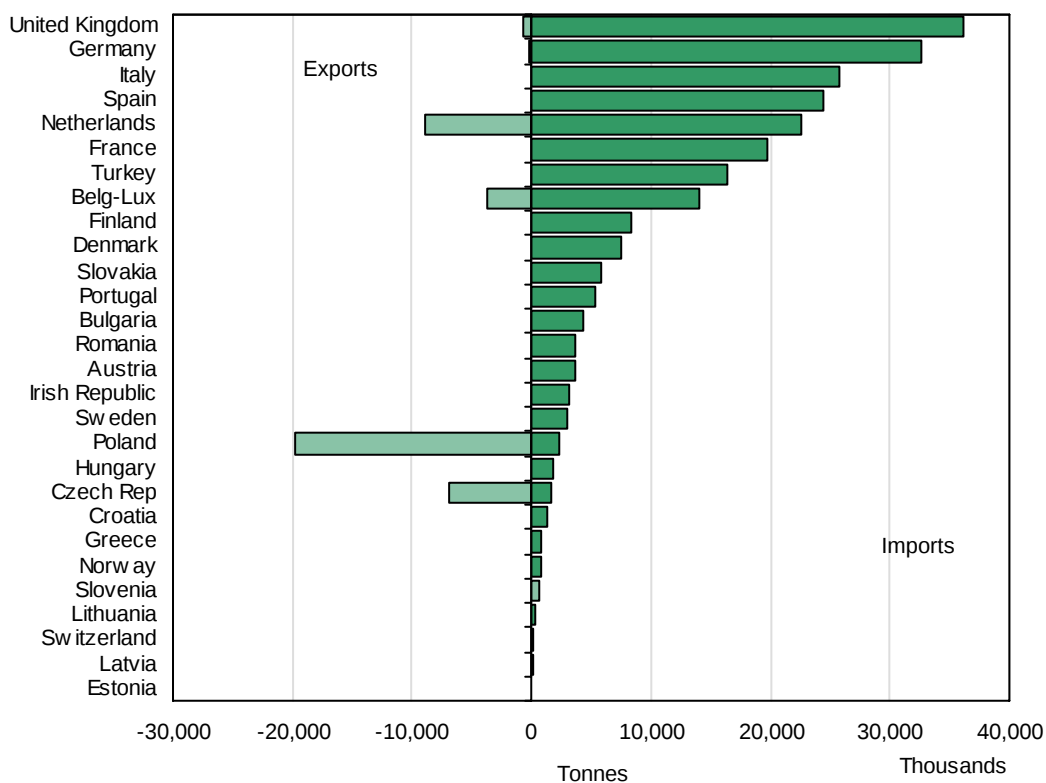
Country	2000	2001	2002	2003	2004
Romania					
Anthracite	...	...	14 124	18 267	74 708
Other coal	(b) 2 467 034	(b) 3 015 063	3 658 335	3 251 154	3 584 413
Lignite	...	...	153	18 554	44 787
Slovakia					
Hard coal (b)	4 852 343	4 974 806	4 630 110	4 944 486	5 181 166
Lignite	806 199	763 850	710 943	805 556	717 562
Slovenia					
Hard coal (b)	12 937	28 581	34 607	54 168	38 849
Lignite	296 245	440 419	539 356	488 929	584 117
Spain					
Anthracite	1 326 932	1 741 429	1 729 758	2 015 985	2 376 019
Other coal	20 321 647	17 174 707	22 792 868	19 537 014	22 098 156
Sweden					
Anthracite	13 939	10 194	11 078	99 008	7 304
Other coal	2 974 052	2 758 180	2 652 007	3 081 407	3 059 218
Switzerland					
Anthracite	14 357	12 492	6 828	6 146	7 396
Other coal	236 123	155 809	115 061	79 125	169 472
Turkey					
Anthracite	115 900	119 373	213 743	340 165	397 125
Other coal	12 994 265	6 086 397	13 394 458	15 215 711	16 033 118
United Kingdom					
Anthracite	1 057 911	2 757 188	1 550 849	334 883	193 647
Other coal	22 397 393	32 772 976	27 110 435	31 538 546	35 959 163
Briquettes	17 197	11 317	17 127	7 638	6 155

Note(s):-

(a) Excludes coal imported from Spitzbergen

(b) Including anthracite

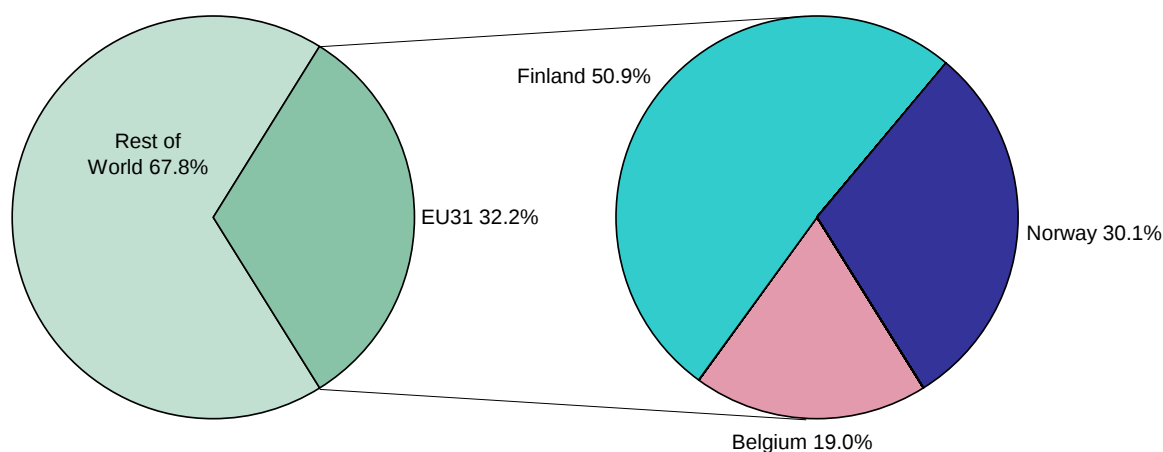
Coal - EU31 trade in 2004



Cobalt

- Cobalt is a magnetic, brittle, hard metallic element. Its chief uses are in alloy steels, superalloys, magnet alloys, batteries, catalysts and as the cement for carbides in tools. Cobalt compounds are used as pigments and paint-driers.
- Democratic Republic of Congo was the largest world producer in 2004 (33%), however mine production of cobalt is dominated by only five countries (Congo D.R., Zambia, Russia, Brazil and Canada). There was no mine production within the EU31. China was the world's largest producer of cobalt metal, closely followed by Finland, based on imported materials.
- The cobalt price tends to be highly volatile, usually as a result of production being concentrated in so few countries. During 2004 the price of cobalt (min. 99.8% ingot) ranged between \$16/lb and \$28/lb.

EU31 Production of cobalt metal 2004



Production of cobalt metal

tonnes

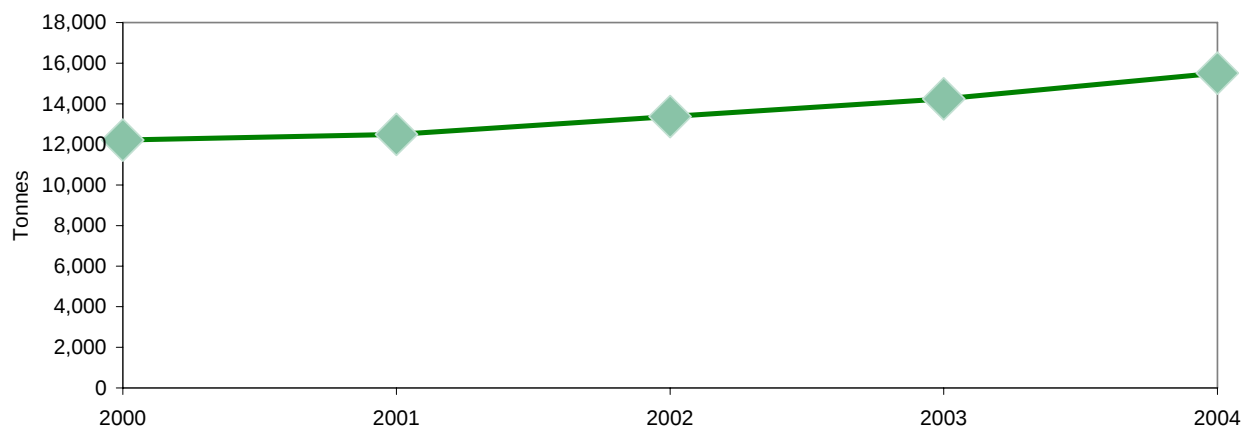
Country	2000	2001	2002	2003	2004
Belgium	*1 110	*1 090	1 135	1 704	(a) 2 947
Finland	7 700	8 100	8 240	7 989	7 893
Norway	3 400	3 300	4 000	4 556	4 670
EU31 Total	12 200	12 500	13 400	14 249	(a) 15 510

Note(s):-

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

(a) Some metal production in China is recorded in Belgium

EU31 Production of cobalt metal 2000 - 04



Exports of cobalt

Country	2000	2001	2002	2003	2004
Austria					
Metal	87	50	173	85	22
Belgium-Luxembourg					
Ore	92	104	145	381	1 064
Metal (a)	*3 300	*3 300	*3 600	*3 800	*5 000
Oxides (a)	*4 500	*3 200	*3 800	*6 900	*4 000
Estonia					
Metal	58	49	-----	143	12
Finland					
Metal	3 976	(b) *3 600	(b) *3 900	(b) *4 100	(b) *5 200
Oxides	3 256	(b) *3 500	(b) *3 700	(b) *3 400	(b) *2 100
France					
Metal	...	733	516	502	675
Oxides	209	114	64	69	221
Germany					
Metal	931	1 027	901	1 116	1 441
Oxides	164	126	122	151	233
Irish Republic					
Oxides	68	49	119	118	11
Italy					
Metal	566	86	98	174	236
Oxides	188	126	49	63	123
Netherlands					
Metal	2 451	2 737	690	2 247	1 954
Oxides	527	459	271	150	352
Norway					
Metal	3 908	3 322	3 941	4 635	4 744
Poland					
Metal	22	57	1	...	26
Spain					
Metal	24	49	16	14	35
Oxides	39	2	122	8	33
Sweden					
Metal	234	110	146	117	127
Oxides	257	12	...	...	...
Switzerland					
Metal	85	205	61	104	95
United Kingdom					
Metal	1 631	1 855	1 120	1 546	1 911
Oxides	1 141	1 256	1 233	1 380	1 234

Note(s):-

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

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

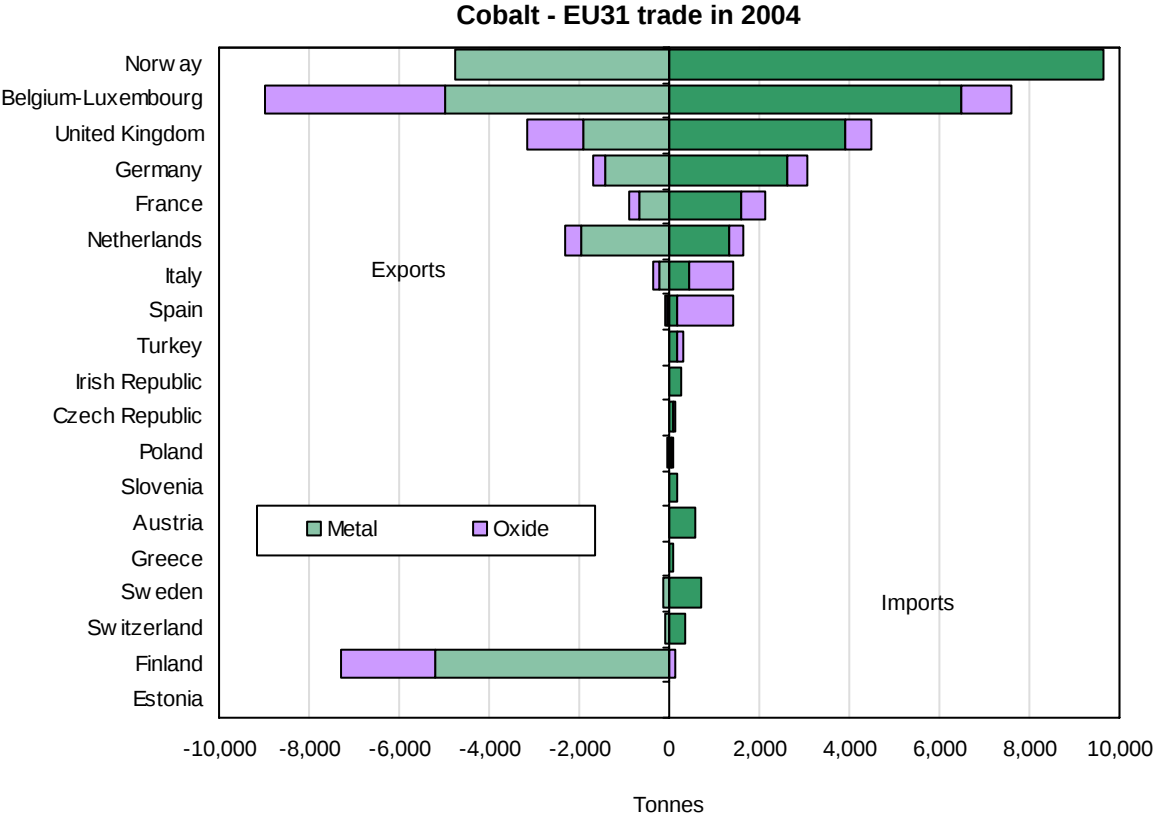
Imports of cobalt

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	537	415	345	30	585
Belgium-Luxembourg					
Ore	89	50	-----	67	455
Metal (a)	*5 700	*4 600	*4 800	*7 200	*6 500
Oxides	476	667	644	800	1 103
Czech Republic					
Metal	34	41	35	54	81
Oxides	32	37	32	25	33
Estonia					
Metal	42	30	0	138	17
Finland					
Ore	66 618	61 785	64 274	41 707	80 202
Oxides	-----	1	4	45	126
France					
Ore	65	69	45	9	5
Metal	1 618	1 723	1 654	1 813	*1 600
Oxides	566	471	370	533	522
Germany					
Metal	2 289	2 408	2 349	2 568	2 602
Oxides	385	301	346	439	448
Greece					
Metal	108	33	34	30	89
Irish Republic					
Metal	207	527	398	282	273
Oxides	101	45	6	3	5
Italy					
Ore	0	1	41	495	122
Metal	539	624	649	449	440
Oxides	1 089	1 004	1 256	966	1 004
Netherlands					
Metal	781	1 451	478	551	1 340
Oxides	624	510	570	215	319
Norway					
Metal	1 717	2 196	3 131	4 773	9 629
Oxides	642	113	41	22	4
Poland					
Metal	46	53	44	49	44
Oxide	38	38	33	16	37
Slovenia					
Metal	180	214	141	198	162
Spain					
Metal	287	228	131	171	181
Oxides	1 223	1 336	1 436	1 401	1 249
Sweden					
Metal	764	813	599	663	711
Switzerland					
Metal	380	394	342	291	361
Turkey					
Metal	75	62	88	157	170
Oxides	59	60	84	108	134
United Kingdom					
Metal	3 886	4 187	4 036	3 356	3 922
Oxides	496	641	487	582	545

Note(s):-

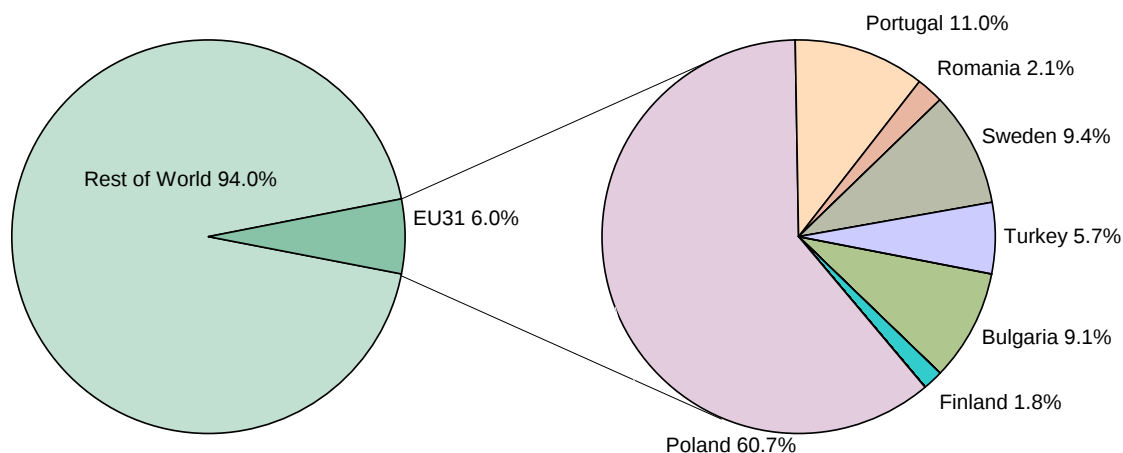
(a) BGS estimates, based on known exports from certain countries



Copper

- Copper is reddish, malleable and ductile metallic element with excellent thermal and electrical conductive qualities. It is a very important industrial material and is used in the electrical, electronics, transportation and construction industries.
- Mine production in 2004 was dominated by Chile (37%) although many countries have some form of copper production. In the EU31 Poland (61%) was the largest mine producer and second largest refined metal producer while Germany and Belgium are major producers of refined copper, based on imported materials.
- Copper is widely traded and sets the unofficial benchmark for many other traded metals. In 2004 the rapid growth of developing economies, especially in Asia, led to increased demand for copper, which vastly outstripped supply. The insufficient supply of concentrate on the market in 2004 was the result of decisions undertaken as far back as 2002 by leading copper producers aimed at reducing processing capacity. Time is therefore required to rebuild this processing capacity. The supply/demand shortfall in 2004 resulted in an annual settlement price on the LME of \$2,868.34/tonne, a greater than 60% increase over 2003.

EU31 Mine production of copper 2004

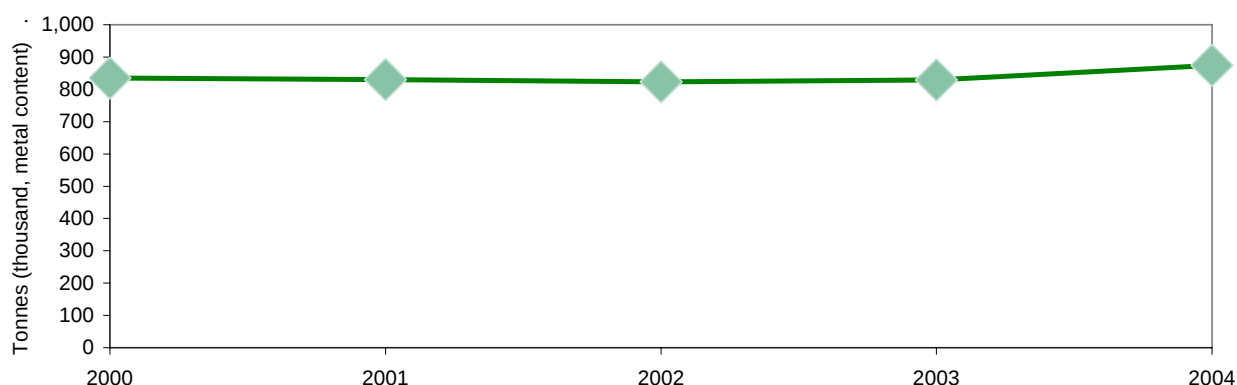


Mine production of copper

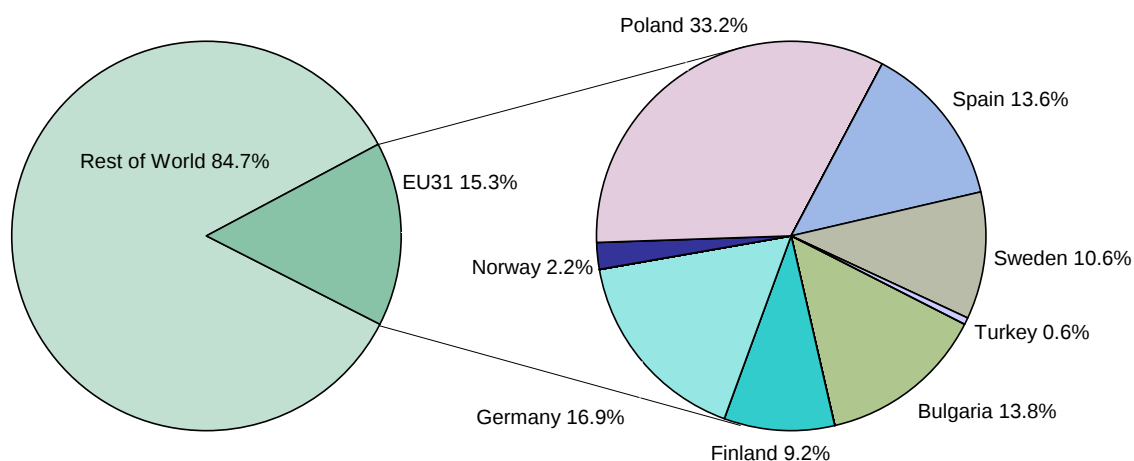
tonnes (metal content)

Country	2000	2001	2002	2003	2004
Bulgaria	93 200	97 100	84 400	80 240	79 600
Cyprus	5 200	4 600	3 700	2 500	-----
Finland	11 500	11 600	14 400	14 900	15 500
Poland	454 100	474 000	502 800	503 544	530 768
Portugal	76 300	82 965	77 227	77 581	95 700
Romania	16 099	19 185	19 323	23 389	18 767
Spain	24 804	9 800	1 248	635	1 308
Sweden	77 765	74 269	71 991	83 143	82 415
Turkey	76 053	56 820	48 217	43 245	49 900
EU31 Total	835 000	830 000	823 000	829 000	874 000

EU31 Mine production of copper 2000 - 04



EU31 Smelter production of copper 2004



Smelter production of copper

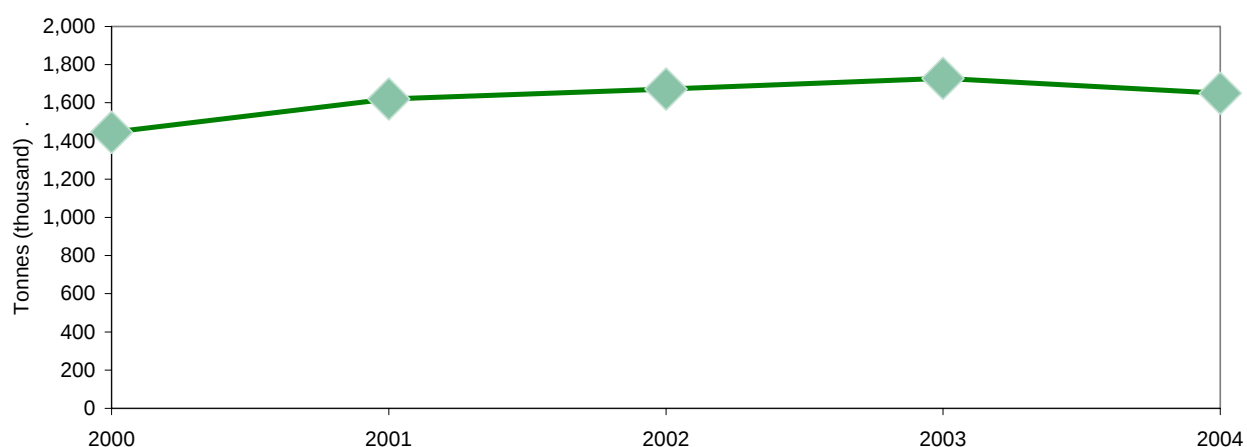
tonnes

Country	2000	2001	2002	2003	2004
Bulgaria	163 000	134 700	167 000	199 300	227 200
Finland	155 431	169 251	160 896	160 596	151 647
Germany	211 200	317 700	295 100	288 800	278 600
Norway	27 000	26 704	30 483	35 851	35 643
Poland	462 838	485 869	510 725	559 960	547 228
Romania	4 900	3 000	3 000	3 000	61
Spain	289 957	280 015	298 057	290 282	224 249
Sweden	105 088	179 364	186 984	175 475	174 459
Turkey	25 886	23 751	19 375	14 426	10 300
EU31 Total	1 445 000	1 620 000	1 672 000	1 728 000	1 649 000

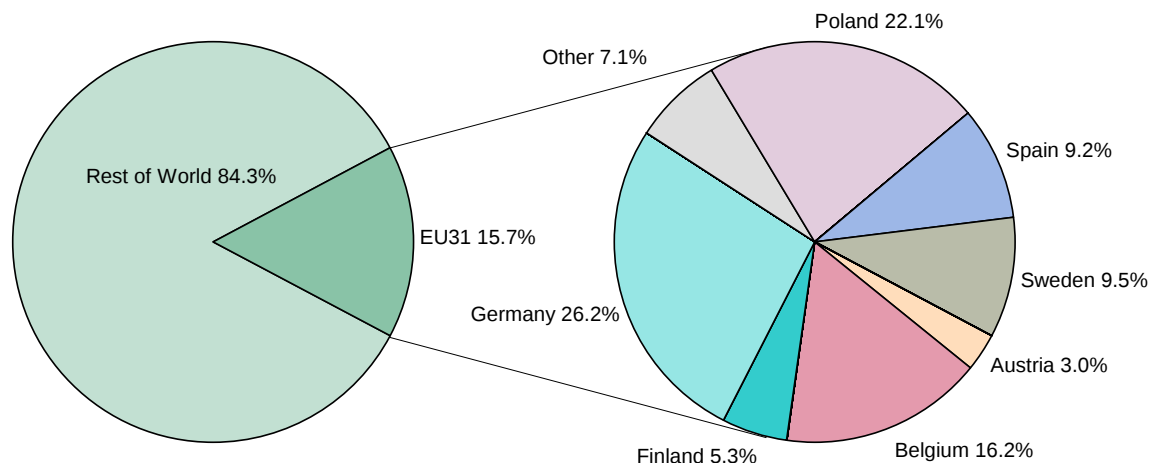
Note(s):-

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

EU31 Smelter production of copper 2000 - 04



EU31 Production of refined copper 2004



Production of refined copper

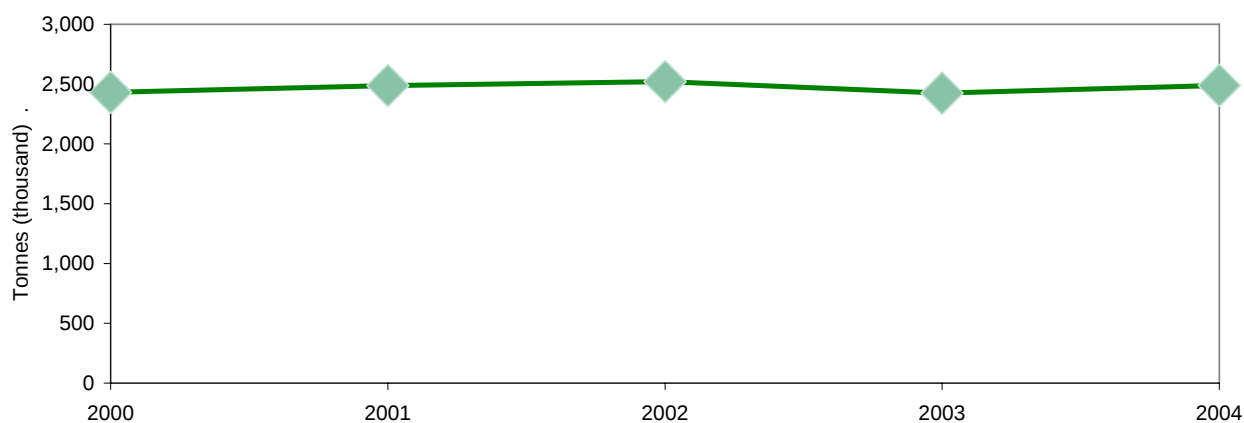
tonnes

Country	2000	2001	2002	2003	2004
Austria	73 873	66 154	64 900	65 100	74 200
Belgium	423 000	424 000	422 500	423 000	402 300
Bulgaria	32 500	34 500	40 700	45 900	55 300
Cyprus	5 088	4 604	3 695	2 552	1 344
Finland	114 000	115 500	126 016	135 713	132 384
Germany	709 472	693 714	695 741	597 531	652 600
Italy	33 000	30 200	32 400	26 700	33 600
Norway	25 300	26 700	30 600	35 852	35 643
Poland	486 002	498 451	508 674	529 616	550 066
Romania	15 303	17 654	11 453	16 739	24 383
Slovakia	-----	10 584	6 989	600	-----
Spain	315 734	290 630	312 145	293 495	228 466
Sweden	133 118	216 237	224 402	214 181	235 620
Turkey	64 100	58 400	41 000	36 900	63 000
EU31 Total	2 430 000	2 487 000	2 521 000	2 424 000	2 489 000

Note(s):-

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

EU31 Production of refined copper 2000 - 04



Exports of copper

Country	2000	2001	2002	2003	2004
Austria					
Unwrought	104 410	84 765	74 370	81 897	71 119
Unwrought alloys	1 509	1 121	916	907	580
Scrap	19 797	18 439	25 765	25 606	36 476
Belgium-Luxembourg					
Matte & cement	2 166	631	15 222	...	493
Unwrought, unrefined	17 675	12 322	3 537	10 521	19 942
Unwrought, refined	199 088	240 995	201 367	336 637	169 556
Unwrought alloys	24 856	20 265	14 815	21 710	13 556
Scrap	152 934	136 612	127 668	152 584	169 397
Bulgaria					
Ores & concentrates	97 589	96 065	83 032	72 861	78 563
Matte & cement	...	1 291	4 233	4 356	6 718
Unwrought	(a) *223 800	151 681	173 720	218 482	219 415
Scrap	(a) *10 200	8 736	9 459	9 507	9 480
Croatia					
Scrap	7 265	6 506	7 001	7 497	9 613
Cyprus					
Unwrought	5 105	5 015	3 697	2 610	1 322
Scrap	1 895	1 307	2 808	20 041	...
Czech Republic					
Unwrought	5 615	1 909	1 712	978	7 834
Scrap	37 390	39 516	38 121	36 874	53 086
Denmark					
Scrap	38 978	39 979	37 058	39 487	38 573
Estonia					
Scrap	8 819	7 981	7 285	6 857	6 479
Finland					
Unwrought, unrefined	41 580	51 804	43 523	33 180	25 618
Unwrought, refined	16 735	19 935	37 256	34 333	27 650
Unwrought alloys	847	1 382	1 002	724	903
Scrap	16 557	14 032	16 462	19 693	23 543
France					
Unwrought	12 421	27 912	15 723	32 947	60 745
Unwrought alloys	13 776	11 581	9 283	6 585	11 940
Scrap	203 291	190 041	192 020	180 294	243 074
Germany					
Ores & concentrates	26 023	19 053	15 630	48 674	49 617
Unwrought, unrefined	25	4 989	2 215	1 592	53
Unwrought, refined	94 125	108 224	90 919	117 566	137 238
Unwrought alloys	35 588	27 379	26 876	21 421	21 038
Scrap	289 766	261 464	300 340	363 762	373 809
Greece					
Scrap	6 298	6 558	6 520	9 460	8 517
Hungary					
Scrap	20 586	19 952	17 867	27 405	31 741
Irish Republic					
Scrap	11 790	8 835	9 043	17 824	16 118
Italy					
Matte & cement	677	4 377	5 982	561	366
Unwrought	12 084	28 074	7 528	13 371	22 988
Unwrought alloys	21 555	16 851	12 631	12 110	16 772
Scrap	66 030	55 930	46 184	53 184	97 964
Latvia					
Scrap	9 196	8 160	7 775	6 329	7 153
Lithuania					
Scrap	12 134	10 016	9 719	8 383	7 611
Netherlands					
Unwrought	6 702	5 444	10 075	18 605	32 548
Scrap	132 013	100 488	101 624	109 595	140 909
Norway					
Unwrought	25 968	24 681	32 302	35 392	35 632
Unwrought alloys	1 674	1 665	1 421	1 195	988
Scrap	17 248	17 394	15 814	25 382	21 256
Poland					
Unwrought	240 290	226 889	279 803	278 113	275 089
Unwrought alloys	6 121	4 680	5 020	5 329	5 007
Scrap	26 153	22 351	22 529	40 542	42 763

Copper

Exports continued

tonnes

Country	2000	2001	2002	2003	2004
Portugal					
Ores & concentrates	325 725	368 150	196 709	286 781	346 534
Unwrought	269	36	415	747	1 165
Scrap	20 006	14 353	18 236	24 440	35 927
Romania					
Ores & concentrates	19 489	64 002	87 299	94 668	81 485
Unwrought	13 064	14 740	3 826	1 185	815
Scrap	41 553	9 417	19 432	16 683	15 979
Slovakia					
Unwrought	343	1 280	1 151	7 094	15 680
Scrap	7 854	5 475	7 711	8 889	12 764
Slovenia					
Scrap	7 857	7 999	8 615	10 550	12 564
Spain					
Ores & concentrates	29 057	79 561	6 756	2 682	4 327
Unwrought, unrefined	27 068	35 090	21 126	37 437	50 901
Unwrought, refined	57 383	23 785	23 999	46 677	32 366
Unwrought alloys	7 502	7 465	7 124	9 747	11 724
Scrap	53 947	52 154	72 157	62 879	77 850
Sweden					
Ores & concentrates	28 758	14 829	...	125	29
Matte & cement	3 853	196	-----	25	30
Unwrought, refined	12 232	70 682	91 869	77 216	81 878
Unwrought alloys	8 712	8 827	6 486	7 104	5 040
Scrap	31 160	29 680	34 747	35 982	44 366
Switzerland					
Unwrought	4 313	128	907	1 163	1 872
Scrap	61 756	58 356	55 491	56 398	69 243
Turkey					
Ores & concentrates	190 007	136 702	209 656	151 667	180 609
Unwrought	5 899	20 176	22 324	18 709	12 846
Scrap	1 054	6 855	9 897	18 492	4 529
United Kingdom					
Ore & matte	6 741	11 075	10 724	2 729	...
Unwrought	10 571	10 315	32 276	2 924	7 384
Unwrought alloys	21 228	23 808	26 666	24 121	22 120
Scrap	217 016	156 121	163 579	210 169	247 813

Note(s):-

- (1) In this table the term 'unwrought' copper corresponds to items 7402, 7403, 7405 of the Harmonised System and includes both unrefined (including blister) and refined copper
- (2) 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 imports into certain countries

Imports of copper

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Unwrought, unrefined	5 419	-----	-----	-----	15 203
Unwrought, refined	36 391	35 845	24 707	29 479	18 429
Unwrought alloys	4 435	3 164	2 555	3 103	2 460
Scrap	81 509	59 281	80 512	82 015	87 807
Belgium-Luxembourg					
Matte & cement	74	16	-----	9	4 799
Unwrought, unrefined	215 056	148 800	209 172	291 190	291 111
Unwrought, refined	41 047	44 050	36 907	58 266	17 318
Unwrought alloys	3 683	3 657	1 659	1 641	1 510
Scrap	265 246	245 104	261 567	225 822	256 504
Bulgaria					
Ores & concentrates	244 823	316 840	281 687	454 875	561 613
Unwrought	7 879	15 655	8 392	3 880	8 599
Scrap	1 699	919	1 919	2 722	2 935

Imports continued

Country	2000	2001	2002	2003	2004
Czech Republic					
Unwrought	14 288	18 434	12 110	6 326	5 644
Scrap	3 133	2 759	1 656	2 080	5 601
Denmark					
Unwrought	2 825	2 600	2 560	2 324	2 065
Scrap	10 673	12 798	12 564	18 332	16 446
Finland					
Ores & concentrates	468 557	503 460	500 798	543 488	528 930
Unwrought, refined	9 631	5 489	347	82	11
Unwrought alloys	4 474	3 899	3 796	4 311	2 778
Scrap	7 576	3 624	3 190	2 472	1 735
France					
Matte & cement	151	390	58	1 651	386
Unwrought, unrefined	72	177	253	118	168
Unwrought, refined	585 829	564 415	576 398	578 525	590 304
Unwrought alloys	21 121	12 858	13 722	8 308	7 564
Scrap	87 946	70 698	65 362	70 422	78 853
Germany					
Ores & concentrates	708 614	1 034 722	1 037 247	880 332	1 141 843
Matte & cement	7 515	3 070	2 389	33 896	15 085
Unwrought, unrefined	32 370	26 579	38 455	17 319	11 635
Unwrought, refined	689 673	527 947	459 451	516 590	584 852
Unwrought alloys	44 175	35 661	26 887	38 410	24 066
Scrap	490 828	390 731	438 312	379 726	426 995
Greece					
Unwrought	135 629	129 818	126 027	107 425	120 088
Unwrought alloys	624	590	699	843	550
Scrap	7 841	2 627	2 672	1 979	1 864
Hungary					
Unwrought	29 877	19 937	18 994	14 327	11 365
Scrap	8 310	5 370	3 483	502	512
Irish Republic					
Scrap	1 354	1 080	1 087	514	16
Italy					
Unwrought, unrefined	2 763	1 455	636	310	216
Unwrought, refined	603 259	649 687	643 386	650 757	700 101
Unwrought alloys	20 460	21 575	19 779	21 862	16 723
Scrap	179 050	168 541	188 238	164 700	128 501
Netherlands					
Unwrought	155 553	123 138	156 095	123 682	135 495
Unwrought alloys	1 374	1 612	1 725	1 326	2 172
Scrap	78 166	65 053	70 660	80 262	76 679
Norway					
Matte & cement (a)	*18 000	...	...	...	...
Unwrought	3 594	3 500	3 645	1 190	2 594
Scrap	5 890	7 647	7 609	12 591	11 270
Poland					
Unwrought	8 099	2 135	1 484	2 257	3 071
Scrap	6 249	3 722	5 203	6 001	14 973
Portugal					
Unwrought	3 409	3 637	4 307	6 245	7 740
Scrap	487	1 265	838	1 383	1 874
Romania					
Ores & concentrates	41 206	127	----	...	1
Unwrought	15 938	25 611	12 248	2 225	7 255
Slovakia					
Ores & concentrates	*12 000	...	...	538	295
Unwrought	1 464	11 071	11 400	3 689	1 269
Scrap	386	5 462	5 604	8 448	20 776
Slovenia					
Unwrought	3 540	3 226	4 005	3 835	2 948
Scrap	3 755	3 300	3 119	3 787	3 743
Spain					
Ores & concentrates	936 207	902 428	1 057 377	1 052 115	776 980
Unwrought, unrefined	17 557	16 024	9 150	15 283	2 488
Unwrought, refined	30 885	42 505	28 095	33 781	74 277
Unwrought alloys	9 976	6 461	7 256	4 444	5 254
Scrap	81 310	82 473	83 664	57 315	112 934

Copper

Imports continued

tonnes

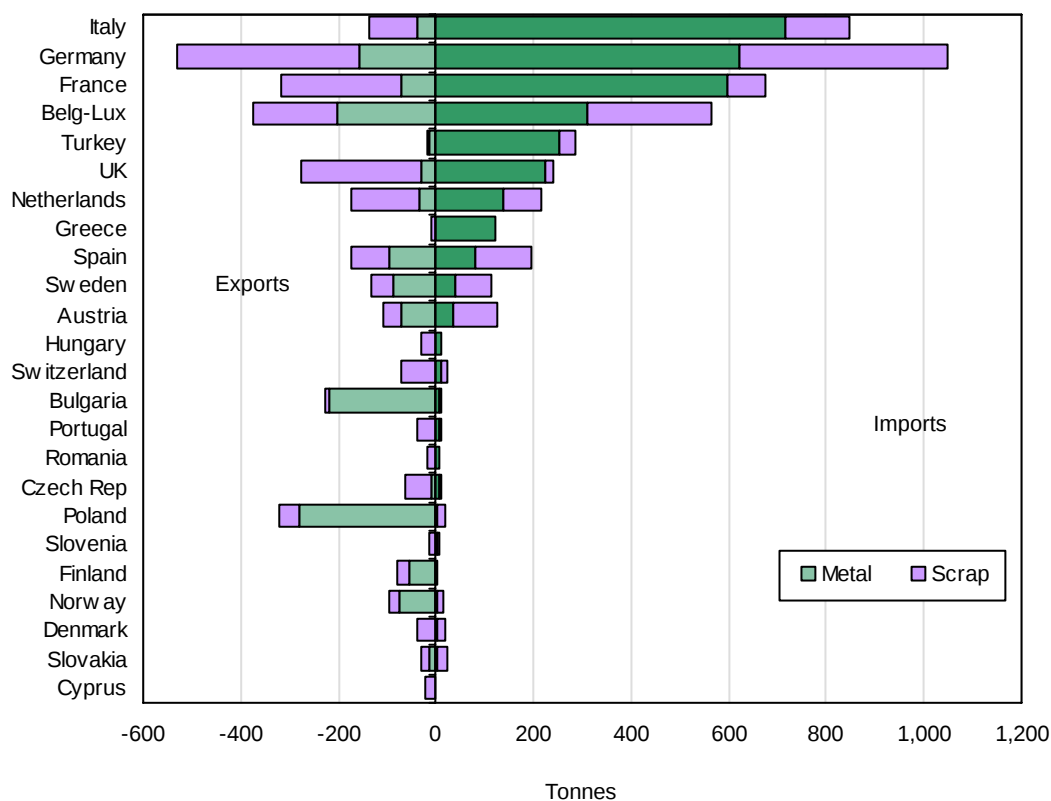
Country	2000	2001	2002	2003	2004
Sweden					
Ores & concentrates	152 426	324 398	349 409	300 566	340 858
Unwrought, refined	82 430	49 088	36 976	48 468	34 912
Unwrought alloys	3 968	3 815	4 622	2 947	2 762
Scrap	34 120	31 373	43 544	52 091	76 672
Switzerland					
Unwrought	7 604	8 621	5 899	5 206	6 779
Unwrought alloys	3 588	3 777	3 300	3 496	4 481
Scrap	16 675	13 800	8 406	9 469	11 881
Turkey					
Ores & concentrates	56 968	45 075	61 302	54 573	10 370
Unwrought, unrefined	10 290	12 815	7 117	100	29 555
Unwrought, refined	184 230	135 015	205 955	229 159	217 290
Unwrought alloys	1 377	321	1 107	3 768	4 685
Scrap	21 744	5 522	7 061	29 803	34 975
United Kingdom					
Unwrought, unrefined	1 085	290	89	14	122
Unwrought, refined	337 969	310 894	316 578	245 152	214 304
Unwrought alloys	7 325	7 249	5 480	6 160	8 020
Scrap	20 597	19 651	19 240	17 378	16 119

Note(s):-

- (1) In this table the term 'unwrought' copper corresponds to items 7402, 7403, 7405 of the Harmonised System and includes both unrefined (including blister) and refined copper
- (2) The term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys

(a) Cu content

Copper - EU31 trade in 2004



Diamond

- Diamond is a polymorph of carbon and is the hardest substance known. It is used in two main industries — jewellery, abrasives and cutting tools.
- Africa (chiefly Botswana, Congo D.R. and South Africa) dominates world production with 55% of all carats produced in 2004. However, Russia is the world's largest producing country (23% of world production). Australia is another significant diamond producer, however, its output is almost entirely industrial diamonds. There is no mine production of diamond in the EU31 but production of synthetic diamonds is important and Europe is a world centre for diamond trading.
- Gem quality diamonds are valued on an individual basis that takes into account unique qualities and are seldom priced at less than \$1000/carats. Industrial diamond prices range from around \$0.40/carats–\$200/carats for large stones but are typically around \$10/carats.

Exports of diamond

carats

Country	2000	2001	2002	2003	2004
Austria					
Unsorted	...	168 000	...	...	...
Dust	8 500 000	550 000	3 000 000	...	1 500 000
Belgium-Luxembourg					
Gem, rough	125 000 000	122 500 000	...	131 000 000	154 000 000
Gem, cut	3 500 000	4 500 000	8 000 000	6 500 000	6 000 000
Industrial	11 500 000	8 000 000	8 000 000	10 500 000	7 000 000
Dust	28 500 000	24 500 000	39 500 000	38 000 000	42 500 000
France					
Unsorted	£990 000	£1 320 000	£283 000	£398 000	£274 000
Gem, cut	£64 500 000	£80 140 000	£91 166 000	£44 616 000	£108 858 000
Industrial	£1 084 000	£3 438 000	£2 554 000	£16 848 000	£20 000
Dust	1 000 000	50 000	1 000 000	...	...
Germany					
Gem, cut	175 521	162 390	178 297	174 915	...
Industrial	48 843	30 722	17 171	6 876	...
Dust	46 500 000	41 500 000	10 000 000	17 000 000	13 500 000
Irish Republic					
Unsorted	...	...	...	...	5 785 000
Gem, rough	...	5 525 000	7 285 000	5 040 000	...
Industrial	24 430 000	5 140 000	7 120 000	2 275 000	3 395 000
Italy					
Unsorted	£744 000	£154 000	£42 000	£173 000	£483 000
Gem, cut	£12 151 000	£15 342 000	£15 982 000	£21 938 000	£26 708 000
Industrial	£309 000	£111 000	£607 000	£228 000	£565 000
Dust	...	57 190 000	104 155 000	42 170 000	49 130 000
Netherlands					
Unsorted	£2 016 000	£2 026 000	£1 672 000	£1 490 000	£1 883 000
Gem, rough	£14 000	£3 000	£64 000	£437 000	-----
Gem, cut	£6 466 000	£7 891 000	£10 491 000	£8 511 000	£9 806 000
Industrial	£2 951 000	£2 887 000	£758 000	£813 000	£188 000
Norway					
Gem, cut	...	21 000	60 000	530 000	40 000
Industrial	...	194 750 000	105 000 000	2 160 000	10 000
Portugal					
Gem, rough	...	£37 983 000	£1 793 000	£3 650 000	£96 000
Gem, cut	£19 186 000	£26 769 000	£23 412 000	£37 983 000	£45 779 000
Spain					
Unsorted	...	375 000	1 391 000	8 140 000	25 000
Gem, cut	£2 760 000	£1 890 000	...	£2 606 000	£1 855 000
Industrial	£241 000	£1 481 000	£613 000	£245 000	£212 000
Dust	...	235 000	615 000	385 000	...
Switzerland					
Unsorted	30 000	0	5 000	...	-----
Gem, rough	1 520 000	1 110 000	55 000	65 000	140 000
Gem, cut	720 000	1 130 000	650 000	427 033	338 524
Industrial	320 000	35 000	40 000	66 354	18 185
Dust	80 145 000	80 615 000	81 580 000	95 290 000	120 790 000

Diamond

Exports continued

Country	2000	2001	2002	2003	2004
United Kingdom					
Unsorted	8 616 140	4 030 600	...	9 744 443	6 389 942
Gem, rough	61 757 031	69 542 709	86 681 020	104 300 972	78 961 611
Gem, cut	795 268	899 959	394 881	828 103	1 590 995
Industrial	27 030 867	11 861 312	7 837 074	12 177 638	24 215 012
Dust	...	88 612 930	...	75 401 755	29 814 475

Note(s):-

- (1) 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
- (2) See explanatory notes at the front of the volume regarding currency conversion
- (3) In this table the term 'Dust' corresponds to item 7105.10 of the Harmonised System and includes both natural and synthetic diamond dust

Imports of diamond

carats

Country	2000	2001	2002	2003	2004
Austria					
Unsorted	13 864	...	...	...	...
Gem	14 137	...	...	...	...
Dust	33 500 000	33 000 000	20 000 000	15 000 000	24 000 000
Belgium-Luxembourg					
Unsorted	4 000 000	3 000 000	2 500 000	...	...
Gem, rough	120 500 000	123 000 000	...	126 000 000	121 500 000
Gem, cut	7 000 000	8 500 000	9 500 000	6 500 000	7 500 000
Industrial	27 000 000	25 000 000	26 500 000	19 500 000	15 000 000
Dust	62 500 000	56 500 000	72 000 000	21 000 000	26 500 000
Czech Republic					
Unsorted	£245 000	£156 000	£128 000	£187 000	£791 000
Gem, rough	£47 000	£141 000	£158 000	...	...
Gem, cut	£398 000	£226 000	£382 000	£802 000	£626 000
Industrial	£297 000	£430 000	£568 000	£360 000	£163 000
Dust	£702 000	£943 000	£886 000	£858 000	£776 000
Finland					
Unsorted	0	35 000	...	...	55 000
Gem, cut	105 000	160 000	...	...	235 000
Industrial	125 000	20 000	...	...	...
Dust	...	345 000	445 000	365 000	320 000
France					
Unsorted	10 500 000	9 500 000	12 500 000	17 000 000	...
Gem, cut	2 000 000	12 000 000	10 000 000	12 500 000	10 000 000
Industrial	2 000 000	1 500 000	5 500 000	3 000 000	9 000 000
Dust	12 000 000	24 000 000	10 500 000	10 500 000	10 000 000
Germany					
Gem, cut	530 657	476 717	556 534	431 612	481 924
Industrial	3 418 322	2 278 364	1 074 120	454 003	762 967
Dust	67 140 000	67 250 000	49 500 000	69 000 000	82 500 000
Greece					
Unsorted	£447 000	£223 000	£367 000	£340 000	£625 000
Gem, rough	£11 000	£6 000	£83 000	£166 000	£145 000
Gem, cut	£2 062 000	£1 824 000	£1 437 000	£1 130 000	£1 701 000
Industrial	£801 000	£58 000	£220 000	£456 000	£771 000
Dust	...	6 825 000	9 520 000	6 205 000	8 390 000
Hungary					
Dust	715 975	1 269 915	...	...	...
Irish Republic					
Unsorted	34 310 000	48 655 000	19 505 000	22 665 000	33 525 000
Gem, rough	1 910 000	2 140 000	...	8 225 000	1 815 000
Gem, cut	20 375 000	45 300 000	30 805 000	23 370 000	21 175 000
Industrial	8 565 000	46 820 000	95 650 000	3 930 000	26 740 000
Italy					
Unsorted	£1 612 000	£1 087 000	£1 680 000	£1 138 000	£1 655 000
Gem, rough	£631 000	£890 000	£1 425 000	£1 241 000	£928 000
Gem, cut	£236 883 000	£236 885 000	£176 777 000	£180 528 000	£210 629 000
Industrial	£7 469 000	£6 802 000	£6 699 000	£4 647 000	£5 949 000
Dust	12 585 000	101 940 000	147 020 000	117 845 000	135 820 000

Imports continued

Country	2000	2001	2002	2003	2004
Netherlands					
Unsorted	£8 713 000	£2 021 000	£2 276 000	£1 858 000	£3 327 000
Gem, rough	£184 000	£2 135 000	£2 950 000	£828 000	£108 000
Gem, cut	£26 503 000	£20 034 000	£17 776 000	£13 846 000	£14 630 000
Industrial	£236 000	£850 000	£827 000	£940 000	£907 000
Norway					
Unsorted	30 000	45 000	100 000	125 000	45 000
Gem	2 550 000	1 965 000	2 330 000	2 165 000	2 430 000
Industrial	90 000	90 000	80 000	80 000	75 000
Dust	290 000	220 000	500 000	105 000	310 000
Poland					
Unsorted	20 000	...	...	...	...
Gem	30 000	10 000	15 000	50 000	...
Industrial	235 000	165 000	105 000	75 000	...
Portugal					
Unsorted	£43 000	£78 000	£69 000	£30 000	£22 000
Gem, rough	£17 753 000	£20 914 000	£24 832 000	£26 362 000	£18 757 000
Gem, cut	£12 550 000	£8 758 000	£5 367 000	£3 926 000	£11 608 000
Industrial	£491 000	£738 000	£874 000	£803 000	£669 000
Dust	...	740 000	750 000	690 000	710 000
Slovenia					
Gem, cut	15 000	25 000	15 000	...	...
Industrial	110 000	90 000	50 000	...	...
Dust	1 730 000	1 505 000	2 040 000	...	...
Spain					
Unsorted	£3 264 000	£2 679 000	£4 900 000	£4 602 000	£5 431 000
Gem, cut	£30 064 000	£27 660 000	£25 162 000	£25 111 000	£41 732 000
Industrial	£2 246 000	£4 508 000	£1 674 000	£1 809 000	£1 412 000
Dust	270 000	6 555 000	3 435 000	5 545 000	89 035 000
Sweden					
Unsorted	£687 000	£84 000	£156 000	£203 000	£309 000
Gem, cut	£3 002 000	£3 634 000	£2 337 000	£3 456 000	£3 205 000
Industrial	£227 000	£116 000	£51 000	£30 000	£63 000
Dust	£4 797 000	£5 248 000	£2 554 000	£2 374 000	£2 823 000
Switzerland					
Unsorted	30 000	...	...	...	...
Gem, rough	4 435 000	3 475 000	75 000	80 344	144 707
Gem, cut	585 000	875 000	850 000	642 870	820 021
Industrial	930 000	735 000	1 160 000	213 535	56 907
Dust	83 965 000	89 730 000	94 935 000	103 005 000	126 815 000
Turkey					
Unsorted	974 245	25 000	...	...	...
Gem	4 873 050	2 725 000	...	...	1 225 000
Industrial	463 625	40 000	...	...	65 000
Dust	4 908 115	4 725 000	...	...	15 900 000
United Kingdom					
Unsorted	5 560 568	586 774	1 794 607	5 210 022	9 813 728
Gem, rough	79 691 733	81 302 570	70 336 037	77 712 486	68 231 897
Gem, cut	6 423 082	4 396 223	5 123 898	4 520 872	9 193 300
Industrial	16 208 556	7 344 542	7 804 225	21 518 053	29 209 014
Dust	98 133 490	74 756 325	68 359 660	92 290 565	129 250 000

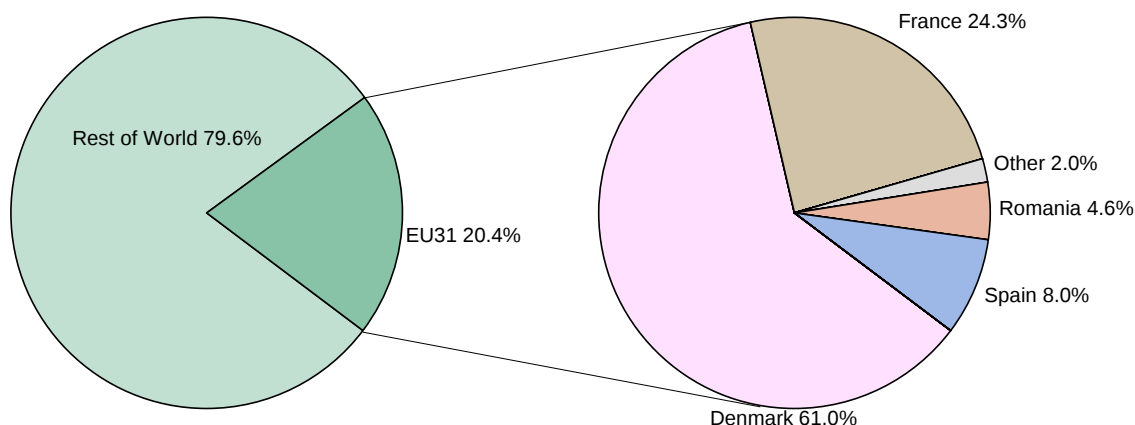
Note(s) :-

- (1) Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national figure has been converted to £ sterling
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- (3) In this table the term 'Dust' corresponds to item 7105.10 of the Harmonised System and includes both natural and synthetic diamond dust

Diatomite

- Diatomite is a siliceous sedimentary rock composed of the skeletons of fossilised diatoms (microscopic plants). Clay content of the rock has a strong control on the quality of the diatomite. Diatomite is valued for its high porosity, chemical inertness and ability to absorb liquids. It is used in industry within high-quality filters, as a filler and as an industrial absorbent
- The USA is the largest producer of diatomite, with 41% of the world production. EU31 production has been reasonably stable and is dominated by Denmark, which produces 61% of EU31 diatomite. Together, the EU31 countries in 2004 produced 20% of the world's diatomite.
- Diatomite (US calcined filter-aids delivered to the UK) traded between £370/tonne and £410/tonne throughout 2004.

EU31 Production of diatomite 2004



Production of diatomite

tonnes

Country	2000	2001	2002	2003	2004
Czech Republic	6 800	6 000	5 600	3 800	3 800
Denmark					
Moler (a)	189 000	192 000	211 000	221 000	188 000
France	*75 000	*75 000	*75 000	*75 000	*75 000
Hungary	1 878	1 323	1 656	1 770	1 640
Poland	*1 270	*1 000	*1 000	*700	*700
Portugal	686	387	-----	-----	-----
Romania	9 890	9 743	20 922	33 296	14 192
Spain (b)	66 770	70 000	53 558	57 934	24 799
EU31 Total	351 000	355 000	369 000	394 000	308 000

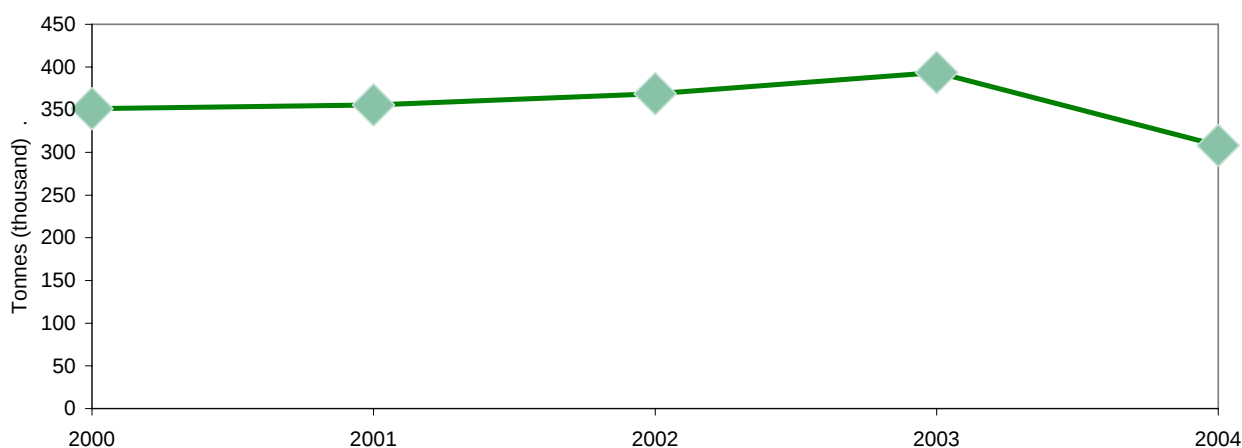
Note(s):-

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

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

(b) Including tripoli

EU31 Production of diatomite 2000 - 04



Exports of diatomite

tonnes

Country	2000	2001	2002	2003	2004
Austria	7 177	5 802	5 071	4 650	5 347
Belgium-Luxembourg	1 850	3 575	3 174	1 512	1 856
Czech Republic	5 976	5 493	5 288	5 083	4 734
Denmark	*85 000	*80 000	*90 000	*90 000	*90 000
France	35 585	28 149	27 647	30 199	26 043
Germany	5 209	5 267	13 061	20 036	20 312
Hungary	271	264	308	284	452
Italy	1 531	1 776	1 194	1 217	1 745
Netherlands	564	1 105	6 583	1 212	735
Portugal	...	...	...	2 050	7 755
Spain	2 243	4 467	6 829	5 385	5 278
Sweden	1 682	1 605	579	491	492
Switzerland	314	485	1 224	110	114
Turkey	496	387	4 653	11 294	14 581
United Kingdom	511	1 342	816	1 003	2 114

Imports of diatomite

tonnes

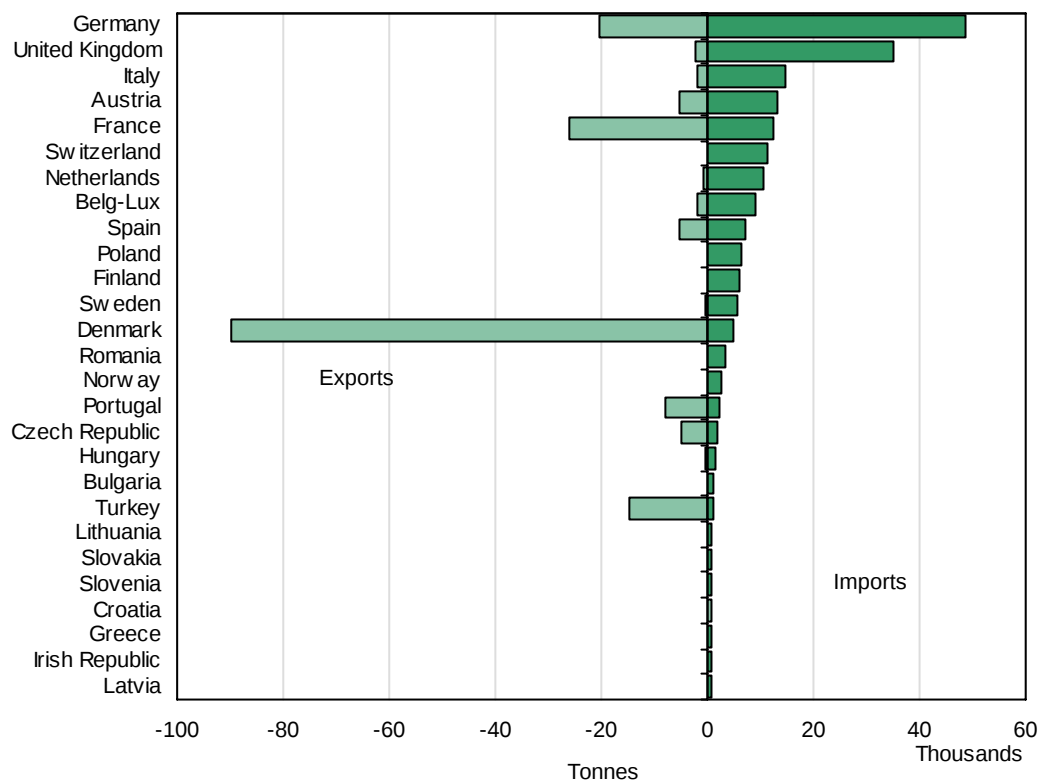
Country	2000	2001	2002	2003	2004
Austria	22 891	21 396	24 364	12 946	13 178
Belgium-Luxembourg	6 776	9 067	8 357	7 507	9 052
Bulgaria	1 141	1 198	8 478	1 139	1 292
Croatia	631	1 232	928	809	703
Czech Republic	1 895	1 695	1 647	1 562	1 969
Denmark	5 993	5 728	7 175	6 744	5 001
Finland	2 738	2 996	5 871	6 981	5 881
France	14 075	12 725	12 168	12 194	12 368
Germany	45 488	35 286	34 820	43 406	48 644
Greece	714	504	529	556	610
Hungary	2 975	2 845	1 633	1 593	1 390
Irish Republic	211	286	450	729	594
Italy	7 865	7 047	8 990	10 429	14 744
Latvia	211	263	236	392	592
Lithuania	364	319	503	1 499	917
Netherlands	20 654	11 800	12 979	12 069	10 515
Norway	1 974	2 021	1 400	1 596	2 500
Poland	7 150	7 284	6 961	6 394	6 387
Portugal	2 151	1 771	1 537	3 223	2 263
Romania	3 133	2 980	2 909	3 267	3 294
Slovakia	1 599	1 406	1 283	1 067	865
Slovenia	481	503	446	450	730
Spain	5 501	5 349	4 442	10 575	7 004

Diatomite

Imports continued

Country	2000	2001	2002	2003	2004
Sweden	5 964	4 684	3 913	4 143	5 475
Switzerland	3 869	4 332	3 534	5 425	11 204
Turkey	1 183	1 211	1 185	1 736	1 211
United Kingdom	35 561	33 474	34 490	37 217	35 188

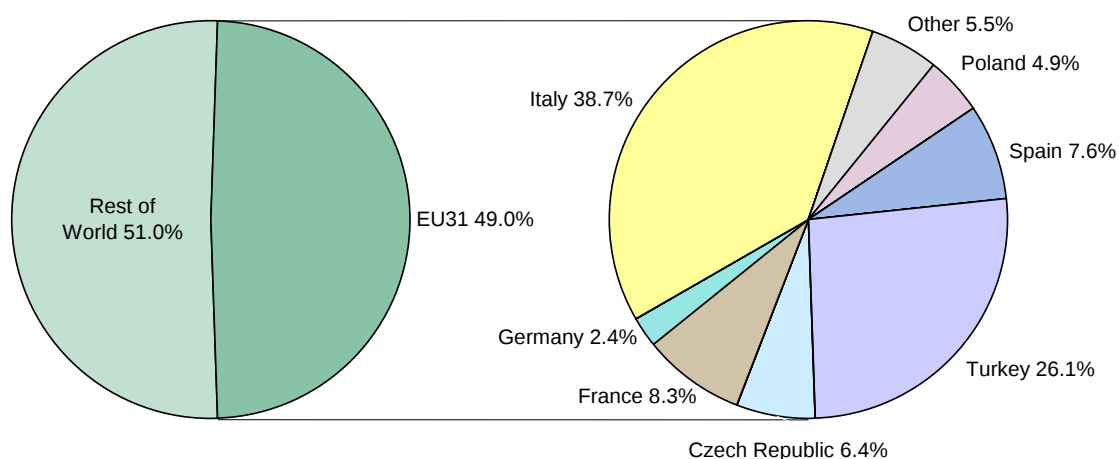
Diatomite - EU31 trade in 2004



Feldspar

- Feldspar is an abundant rock-forming aluminosilicate mineral. It is an essential component of glass and ceramic manufacture where it behaves as a flux and adds hardness, durability and resistance to corrosion.
- Italy, with its large glass manufacturing industry, is the largest world producer (19%). Together, the EU31 countries produced 49% of world feldspar production in 2004.
- Feldspar is traded in several forms, priced between \$13/tonne (crude)–\$205/tonne (micronised).

EU31 Production of feldspar 2004



Production of feldspar

tonnes

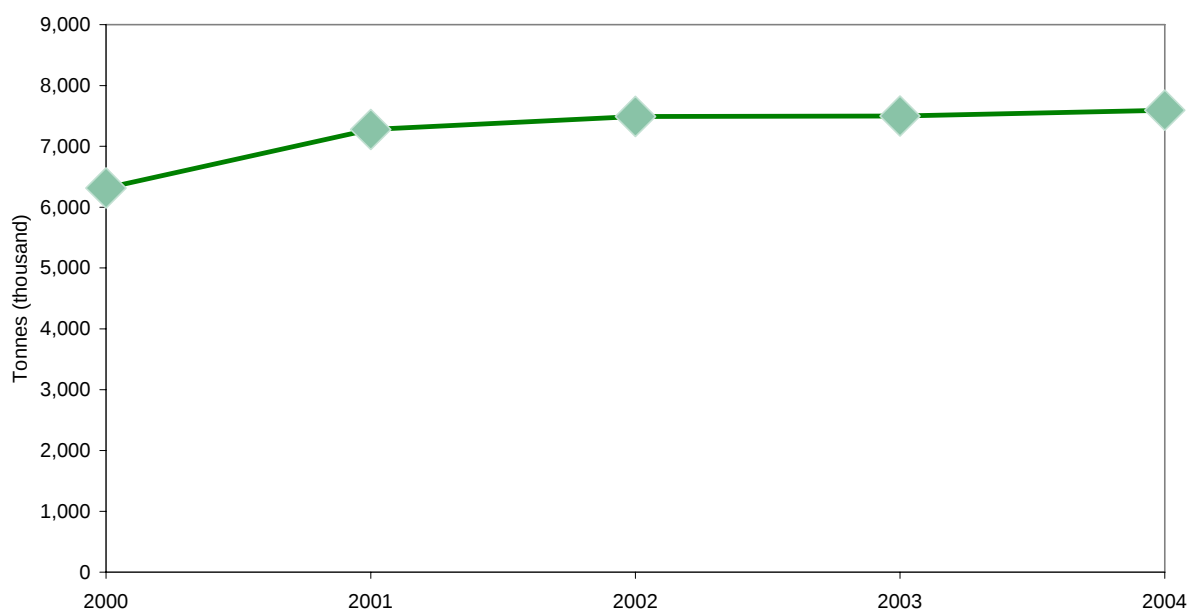
Country	2000	2001	2002	2003	2004
Bulgaria	22 000	23 000	*34 000	*35 000	*35 000
Czech Republic	337 000	373 000	401 000	421 000	488 000
Finland	38 609	36 145	39 552	59 362	44 495
France	642 000	720 000	659 000	654 000	628 000
Germany	322 116	302 650	243 368	233 028	182 842
Greece	94 700	126 400	124 100	102 800	88 274
Italy	2 851 289	3 240 457	3 159 569	2 972 187	2 941 272
Norway	72 000	79 510	75 184	70 000	51 000
Poland	95 588	145 980	209 226	276 264	373 459
Portugal	136 730	112 923	141 125	129 366	98 262
Romania	37 157	43 037	51 959	72 827	60 636
Spain	478 260	*520 000	548 964	563 580	580 000
Sweden	35 000	40 000	37 000	44 000	38 000
Turkey	1 150 706	1 510 293	1 766 387	1 862 310	1 983 336
United Kingdom (a)	3 645	2 995	1 896	1 309	2 274
EU31 Total	6 317 000	7 276 000	7 492 000	7 497 000	7 595 000

Note(s):-

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

(a) China stone

EU31 Production of feldspar 2000 - 04



Exports of feldspar

tonnes

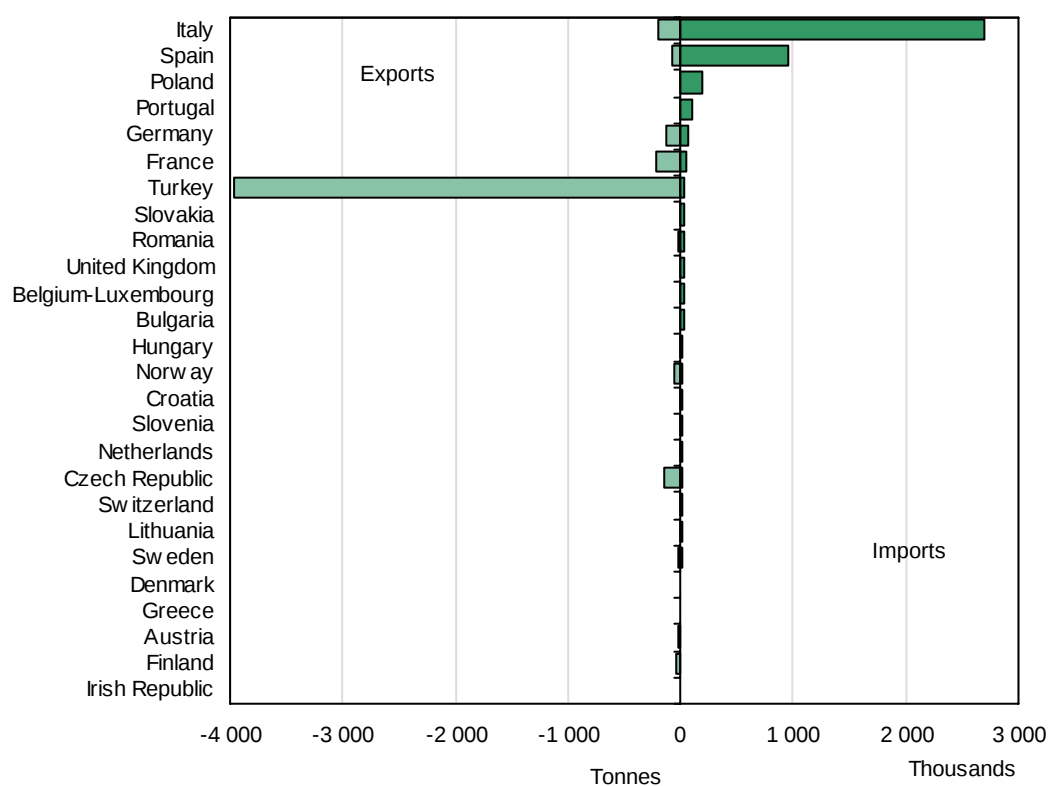
Country	2000	2001	2002	2003	2004
Austria	6 295	10 174	12 279	13 436	18 864
Czech Republic	85 931	131 699	122 206	133 868	143 941
Finland	28 985	32 570	30 444	33 632	42 612
France	296 491	385 161	290 340	286 371	219 741
Germany	60 691	63 736	134 033	102 472	118 838
Greece	68	67	16 764	25 176	8 515
Italy	122 154	128 544	159 403	165 128	204 096
Netherlands	810	693	808	749	81
Norway	71 154	82 030	74 549	68 076	60 972
Poland	831	562	649	1 626	1 441
Portugal	2 616	147	603	5	-----
Romania	22	2 977	15 465	33 265	28 820
Spain	57 316	52 161	79 520	65 385	71 993
Sweden	20 164	27 662	25 400	23 847	23 752
Turkey	2 114 432	1 208 808	2 162 841	3 027 769	3 971 725
United Kingdom	101	93	209	801	253

Imports of feldspar

tonnes

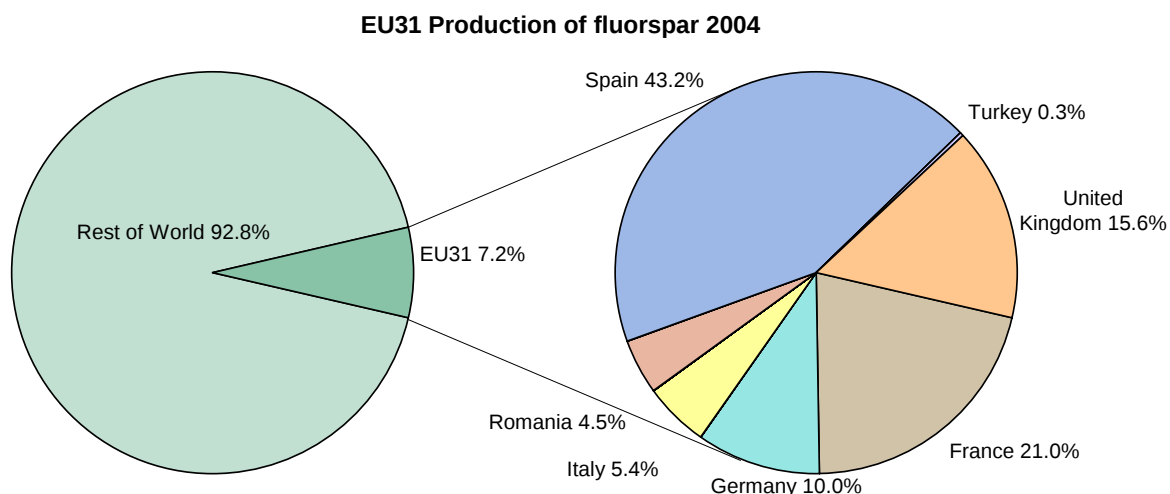
Country	2000	2001	2002	2003	2004
Austria	3 844	4 213	1 608	1 083	418
Belgium-Luxembourg	25 329	25 250	24 632	30 225	30 969
Bulgaria	18 920	22 072	21 852	23 367	30 805
Croatia	6 578	10 491	10 609	11 894	13 713
Czech Republic	7 658	7 226	7 975	7 388	8 785
Denmark	3 740	5 753	4 698	3 904	3 878
Finland	734	742	352	104	257
France	37 596	29 741	40 941	37 538	44 615
Germany	51 494	51 965	43 033	50 809	70 064
Greece	2 545	7 466	4 599	5 216	499
Hungary	24 276	19 213	20 250	19 131	19 205
Irish Republic	50	98	677	24	72
Italy	1 566 525	1 865 170	1 871 798	2 291 993	2 693 951
Lithuania	5 563	5 065	3 259	3 380	7 461
Netherlands	9 213	7 531	11 603	11 084	9 606
Norway	8 870	14 040	13 589	13 710	15 490
Poland	81 995	144 145	168 167	155 283	201 509
Portugal	50 280	72 198	87 177	79 521	96 049
Romania	19 694	34 378	35 924	41 385	38 470
Slovakia	26 213	29 202	27 596	48 100	39 689
Slovenia	3 923	5 232	4 870	8 605	10 045
Spain	552 152	501 395	593 452	760 473	955 039
Sweden	7 194	6 430	6 765	5 960	7 019
Switzerland	4 550	7 408	7 541	7 229	8 347
Turkey	18 840	19 803	5 269	26 977	40 733
United Kingdom	25 743	18 361	33 196	25 764	31 320

Feldspar - EU31 trade in 2004



Fluorspar

- Fluorspar is the commercial name for the mineral fluorite (calcium fluoride) and it is an important raw material source of fluorine. Most fluorspar production is used in the manufacture of hydrofluoric acid. Fluorspar is also used in steel and aluminium manufacture, although its use is declining.
- China dominated world production, producing 52% of all fluorspar in 2004. The EU31 countries represent 7% of world fluorspar production. Spain and France were the largest EU31 producers. France was the only EU31 net exporter in 2004.
- Fluorspar is more sensitive to price variability than most other industrial minerals. During 2004 the price was stable, trading between \$180–\$190/tonne FOB Gulf states (<5 ppm As).

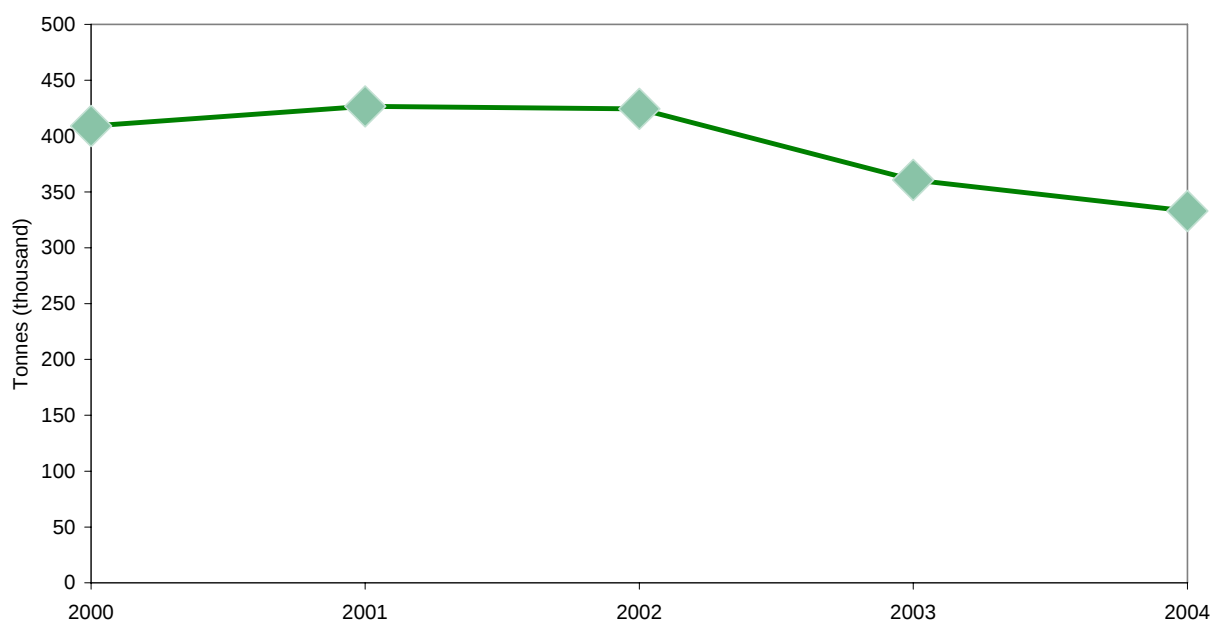


Production of fluorspar

tonnes

Country	2000	2001	2002	2003	2004
Bulgaria	200	300	-----	-----	-----
France	114 400	123 000	122 000	90 000	70 000
Germany	31 124	30 381	34 429	33 289	33 203
Italy	67 768	70 160	53 260	26 387	17 915
Romania	*15 000	*15 000	*15 000	*15 000	*15 000
Spain	140 466	134 039	141 434	139 266	143 824
Turkey	4 113	3 752	5 344	718	880
United Kingdom	*36 000	*50 000	*53 000	*56 000	*52 000
EU31 Total	409 000	427 000	424 000	361 000	333 000

EU31 Production of fluorspar 2000 - 04



Exports of fluorspar

tonnes

Country	2000	2001	2002	2003	2004
Austria	233	72	12	530	9
Belgium-Luxembourg	1 569	298	219	22 639	4 208
Czech Republic	13 658	9 442	8 131	23 471	10 073
France	35 342	38 023	47 439	18 519	12 002
Germany	18 875	16 634	22 274	17 105	17 594
Italy	13 443	20 709	31 142	28 222	20 607
Netherlands	2 825	7 399	12 752	19 186	3 019
Spain	8 920	1 132	1 106	1 745	2 221
Sweden	6 451	5 603	5 998	8 981	8 702
United Kingdom	4 879	2 373	636	519	2 916

Imports of fluorspar

tonnes

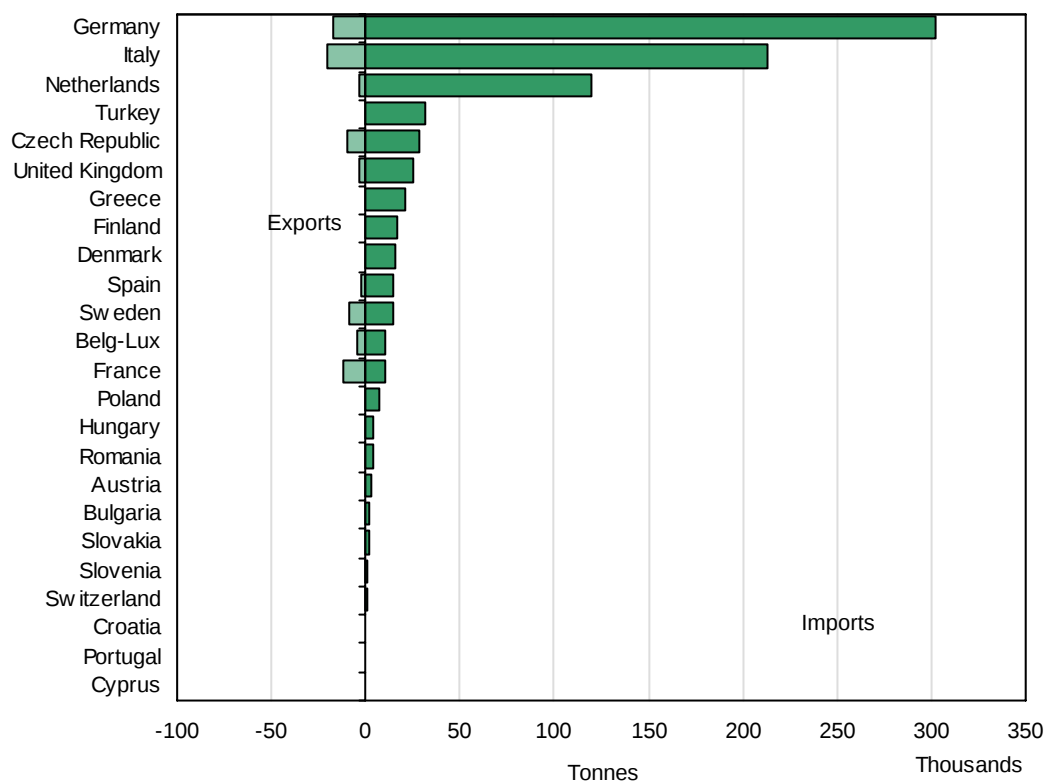
Country	2000	2001	2002	2003	2004
Austria	1 923	3 514	3 448	2 125	3 078
Belgium-Luxembourg	10 246	13 662	11 565	33 622	10 571
Bulgaria	19 232	22 601	1 296	2 143	1 882
Croatia	161	155	164	152	204
Cyprus	...	496	7 607	8 901	5
Czech Republic	31 903	27 785	18 182	16 628	28 408
Denmark	2 144	1 238	6 971	12 406	16 005
Finland	11 969	10 892	10 089	18 672	17 069
France	3 999	3 355	3 510	7 006	10 457
Germany	270 412	266 764	272 913	234 067	302 071
Greece	8 733	11 210	12 582	10 579	20 720
Hungary	545	6 006	3 626	3 907	4 366
Italy	209 326	209 672	162 510	226 780	212 975
Netherlands	50 999	65 422	55 212	63 896	119 665
Norway	47 415	38 862	13 589	-----	-----
Poland	5 387	4 789	5 609	5 858	7 501
Portugal	1 693	1 243	1 196	574	158
Romania	4 739	7 314	6 653	5 547	4 117
Slovakia	7 955	2 393	1 797	1 965	1 574
Slovenia	1 141	939	1 148	1 113	1 178
Spain	14 153	18 819	17 878	8 538	15 006

Fluorspar

Imports continued

Country	2000	2001	2002	2003	2004
Sweden	9 386	16 103	16 978	19 117	14 640
Switzerland	664	497	916	413	991
Turkey	19 263	16 100	13 790	18 208	31 908
United Kingdom	*40 000	34 999	26 690	21 360	25 147

Fluorspar - EU31 trade in 2004



Gold

- Gold is a soft, malleable metallic element unaffected by air or most reagents. It is highly valued as an investment commodity, in jewellery and in specialist electronic applications.
- South Africa, Australia and the USA were the three largest gold producers in 2004 with 34% of world production. In the EU31 Sweden (31%) and Spain (25%) were the largest producers in 2004. The EU31 produced less than 1% of world output in 2004. In Europe gold is chiefly a by-product of base metal mining.
- The gold market can be occasionally volatile and is subject to several key factors (the strongest of which seem to be investor confidence and the US dollar). In 2004, gold traded at an annual average of US\$409.17/oz. Gold prices continued to increase in 2004, breaking through the US\$450/oz barrier towards year-end, the highest level for 15 years.

Mine production of gold

kilograms (metal content)

Country	2000	2001	2002	2003	2004
Bulgaria	1 720	1 700	2 612	2 270	2 431
Finland	1 600	1 700	1 300	*1 000	*1 100
France	2 643	2 512	1 724	1 470	-----
Italy	820	522	631	*100	-----
Poland (a)	367	349	296	356	527
Romania	1 200	1 600	1 700	*1 700	*1 700
Slovakia	306	157	77	79	107
Spain	4 304	4 277	5 559	5 212	5 251
Sweden	3 570	4 986	5 757	5 900	6 564
Turkey	*500	*1 100	*4 500	5 370	3 260
EU31 Total	17 000	19 000	24 000	23 000	21 000

Note(s):-

(1) In several countries substantial amounts of gold produced in small operations are not recorded in the official statistics used when compiling this table

(2) Greece and Norway are believed to produce gold

(a) Metal production

Exports of gold

kilograms

Country	2000	2001	2002	2003	2004
Austria					
Metal	54 400	16 800	18 000	10 900	11 500
Waste & scrap	1 600	44 900	5 600	2 500	2 900
Belgium-Luxembourg					
Metal	5 100	3 200	2 000	500	1 200
Waste & scrap	£770 000	£1 365 000	...	£1 316 000	...
Cyprus					
Metal	10	28	28	56	41
Czech Republic					
Metal	3 573	4 431	5 468	5 113	12 247
Waste & scrap	811	1 373	2 453	24 224	31
Denmark					
Metal	1 297	854	4 979	894	...
Waste & scrap	7 028	7 789	807	343	1
Estonia					
Waste & scrap	4 389	8 044	9 895	8 812	...
Finland					
Waste & scrap	1 302	912	762	929	368
France					
Metal	17 300	31 900	29 700	34 600	31 500
Waste & scrap	47 100	77 800	40 800	33 700	70 500
Germany					
Metal	80 000	78 100	45 400	36 400	36 500
Waste & scrap	646 300	1 517 300	1 734 400	651 000	170 065
Greece					
Metal	352	219	509	4 714	15
Waste & scrap	...	...	...	...	65 955
Hungary					
Metal	1 092	1 110	928	...	826

Gold

Exports continued

Country	2000	2001	2002	2003	2004
Irish Republic					
Metal	£5 000	£35 000	£389 000	£784 000	£1 076 000
Waste & scrap	£2 900 000	£3 850 000	£1 623 000	£1 520 000	£1 672 000
Italy					
Metal	138 479	31 299	32 091	36 047	44 180
Latvia					
Waste & scrap	133	137	1	72	...
Lithuania					
Waste & scrap	9 148	10 140	20	100	...
Netherlands					
Metal	3 592	28 356	9 601	...	...
Waste & scrap	37 100	31 500	108 000	276 600	32 600
Norway					
Metal	1 621	2 647	2 554	2 527	2 293
Waste & scrap	1 215	5 007	1 102	174	127
Poland					
Metal	389	113	1 210	249	...
Waste & scrap	1 942	2 767	3 239	8 477	4 074
Slovakia					
Ores & concentrates	968 000	...	...	...	...
Metal	147	133	255	325	274
Waste & scrap	155	494	1 600	1 012	357
Slovenia					
Metal	128	160	1 287	681	254
Waste & scrap	0	5 973	-----	1 012	1 649
Spain					
Metal	4 053	2 046	3 867	4 793	6 490
Waste & scrap	36 797	14 030	1 126	784	2 908
Sweden					
Metal	4 000	6 000	12 000	10 000	19 000
Waste & scrap	6 000	79 000	24 000	...	20 000
Switzerland					
Metal	1 266 758	1 266 166	922 468	885 907	1 125 319
Waste & scrap	43 817	27 274	16 868	14 039	55 166
Turkey					
Metal	...	4 670	11 263	11 455	9 722
United Kingdom					
Metal	438 116	405 319	198 805	82 892	408 689
Waste & scrap	356 243	493 588	548 843	1 074 829	471 657

Note(s):-

(1) In this table the term 'metal' includes both unwrought and partly worked gold and alloys but excludes gold coin

Imports of gold

kilograms

Country	2000	2001	2002	2003	2004
Austria					
Metal	25 700	21 300	17 300	26 500	17 300
Waste & scrap	1 400	400	1 200	200	200
Belgium-Luxembourg					
Metal	800	2 300	3 200	9 100	12 400
Croatia					
Metal	...	...	1 316	5 034	1 193
Cyprus					
Metal	2 037	1 223	938	4 561	313
Czech Republic					
Metal	1 845	1 402	1 288	1 596	1 957
Waste & scrap	360	392	175	338	1 911
Denmark					
Metal	2 729	911	796	...	...
Waste & scrap	1 578	842	62	57	46
Estonia					
Metal	110	...	58	2 570	74
Finland					
Metal	1 294	1 677	1 132	1 230	1 332
Waste & scrap	...	...	46 928	90 780	67 582

Imports continued

Country	2000	2001	2002	2003	2004
France					
Metal	44 200	42 500	35 100	30 900	*30 000
Waste & scrap	31 100	335 000	4 600	12 500	...
Germany					
Metal	60 400	71 600	44 400	40 100	49 800
Waste & scrap	1 309 872	1 583 000	2 021 200	1 153 500	1 375 800
Greece					
Metal	...	757	1 497	8 276	37 484
Waste & scrap	14 425	5 149	1 126	79 288	-----
Hungary					
Metal	283	194	127	...	...
Irish Republic					
Metal	£9 094 000	£8 002 196	£6 057 000	£9 565 000	£7 480 000
Waste & scrap	12 435	6 158	120	2 322	4 880
Italy					
Metal	415 753	398 542	358 654	281 157	274 841
Waste & scrap	9 571	15 694	7 584	1 685	3 612
Malta					
Metal	...	5 926	3 835	3 927	3 607
Netherlands					
Metal	6 574	19 215	11 825	10 318	16 275
Waste & scrap	62 000	1 000	500	1 000	...
Norway					
Metal	2 197	3 501	2 927	1 599	1 253
Waste & scrap	322	1 115	1 613	776	987
Poland					
Metal	413	985	774	588	2 301
Portugal					
Metal	2 551	4 791	3 303	1 893	655
Slovakia					
Metal	495	545	654	421	...
Slovenia					
Metal	1 399	1 539	2 696	612	382
Spain					
Metal	22 968	30 100	26 690	27 662	29 702
Waste & scrap	742	3 182	818	411	5 018
Sweden					
Metal	£10 355 000	£7 671 705	£7 655 000	£8 382 000	£8 498 000
Waste & scrap	£76 000	£149 000	£1 126 000	-----	£5 726
Switzerland					
Metal	1 280 545	1 360 081	1 217 189	1 218 361	1 048 386
Waste & scrap	42 648	45 122	48 626	32 454	52 053
Turkey					
Metal	...	111 958	142 013	225 021	262 519
United Kingdom					
Metal	971 705	972 188	1 280 970	1 414 697	1 092 060
Waste & scrap	318 705	167 513	122 639	231 365	274 069

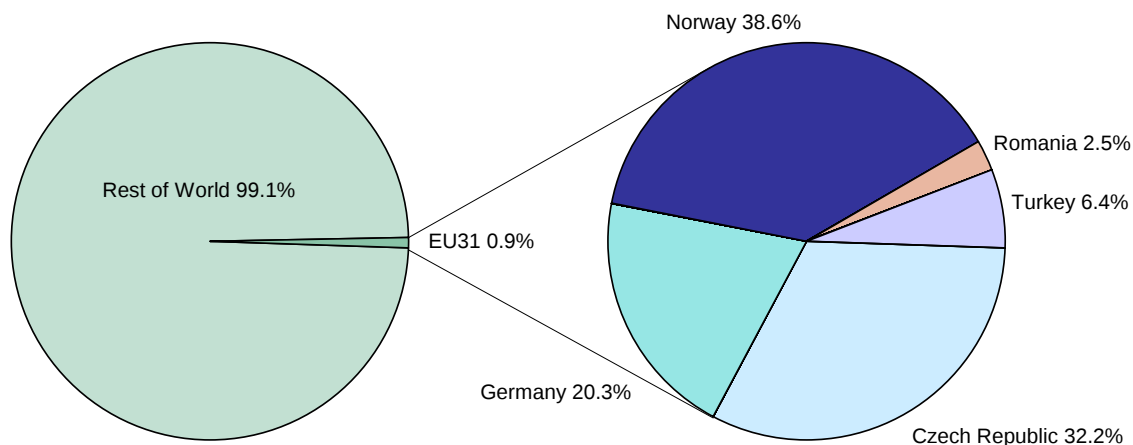
Note(s):-

(1) In this table the term 'metal' includes both unwrought and partly worked gold but excludes gold coin

Graphite

- Graphite is a stable form of pure carbon. It is soft, has low friction and is inert. The major use of graphite is in refractories that can withstand the temperature of molten metals and slags. The graphite imparts high thermal shock resistance, useful in furnace components and crucibles. Other uses include lubricants and in brake linings.
- There is minor EU31 production. China was the largest world producer in 2004 (82%). EU31 production has declined since 1997. This reflects a worldwide decline in graphite production, which has shrunk by 15% from over 2.0 million tonnes in 1997 to only 1.7 million tonnes in 2004.
- Graphite is traded in several different forms. During 2004 graphite traded between \$230 and \$750/tonne, depending mostly on flake size.

EU31 Production of graphite 2004



Production of graphite

tonnes

Country	2000	2001	2002	2003	2004
Austria (a)	669	116	-----	-----	-----
Czech Republic	23 000	17 000	16 000	9 000	5 000
Germany	3 414	3 190	3 312	2 840	3 155
Norway	8 392	9 070	8 600	1 000	6 000
Romania	1 251	1 176	1 001	1 014	395
Sweden	5 602	1 035	-----	-----	-----
Turkey	...	...	1 393	942	*1 000
EU31 Total	42 000	32 000	30 000	15 000	16 000

Note(s):-

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

(a) Crude

EU31 Production of graphite 2000 - 04



Exports of graphite

tonnes

Country	2000	2001	2002	2003	2004
Austria	3 655	3 631	3 384	4 574	5 094
Belgium-Luxembourg	4 848	4 878	5 653	9 097	581
Czech Republic	2 712	2 621	3 487	4 058	3 924
France	614	178	...	167	122
Germany	12 120	10 334	12 103	11 746	14 783
Italy	373	199	313	222	625
Netherlands	1 798	4 877	2 851	5 209	3 448
Norway	9 002	9 032	8 129	...	-----
Spain	13 134	14 299	8 521	9 288	27 634
Sweden	4 042	2 164	600	302	260
United Kingdom	2 429	2 635	2 816	4 158	4 210

Note(s):-

(1) This table excludes synthetic graphite

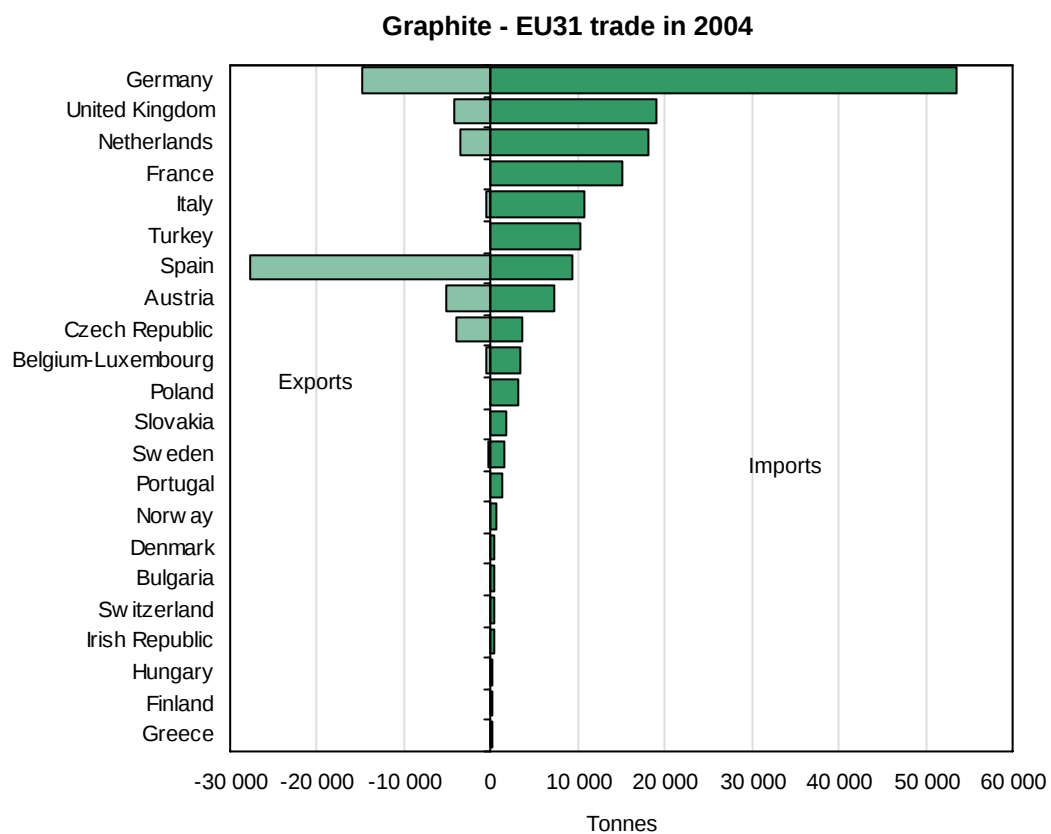
Imports of graphite

tonnes

Country	2000	2001	2002	2003	2004
Austria	7 611	5 521	6 004	4 971	7 229
Belgium-Luxembourg	9 847	9 948	10 638	12 414	3 301
Bulgaria	174	223	210	492	420
Czech Republic	975	1 518	1 476	2 765	3 663
Denmark	613	707	355	567	478
Finland	649	411	281	197	168
France	53 643	24 440	13 016	11 149	15 083
Germany	45 517	49 720	42 706	41 161	53 602
Greece	60	54	75	77	127
Hungary	571	474	528	517	234
Irish Republic	342	108	541	248	288
Italy	12 241	11 319	11 302	10 845	10 699
Netherlands	3 622	5 636	8 232	10 208	18 139
Norway	318	347	615	502	548
Poland	3 727	2 856	2 700	3 150	3 089
Portugal	678	1 297	1 436	1 129	1 317
Slovakia	5 199	1 992	2 633	2 209	1 667
Spain	8 296	7 675	8 119	7 363	9 402
Sweden	1 062	1 026	1 022	1 428	1 473
Switzerland	445	538	918	863	395
Turkey	6 250	6 431	7 010	7 429	10 212
United Kingdom	26 088	22 435	22 435	19 270	19 117

Note(s):-

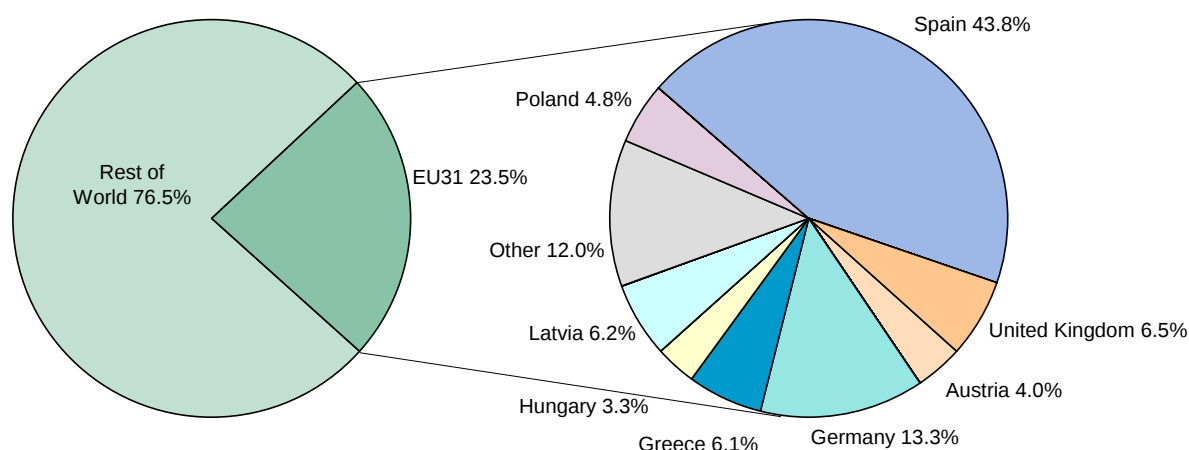
(1) This table excludes synthetic graphite



Gypsum

- Gypsum (calcium sulphate) is a common mineral that chiefly occurs as beds or seams in sedimentary rocks. Anhydrite is a similar mineral without combined water and is considered in the following tables with gypsum. Calcined gypsum is chiefly used (80%) to make building and decorative plaster. It is used as an additive to cement, in farming as a soil conditioner, as filler and in the chemical industry.
- The EU31 produced 23% of world gypsum (non-synthetic) in 2004. The largest EU31 producer is Spain which accounted for 44% of EU31 production. The USA was the largest gypsum producer in the world in 2004 (15%).
- The overall trade situation with gypsum is becoming difficult to follow as large quantities of synthetic gypsum are made during the desulphurisation of coal-fired power station fumes and this competes with natural gypsum production. Price of crude gypsum (ex-mine UK) averaged £11/tonne in 2004.

EU31 Production of gypsum 2004



Production of gypsum

tonnes

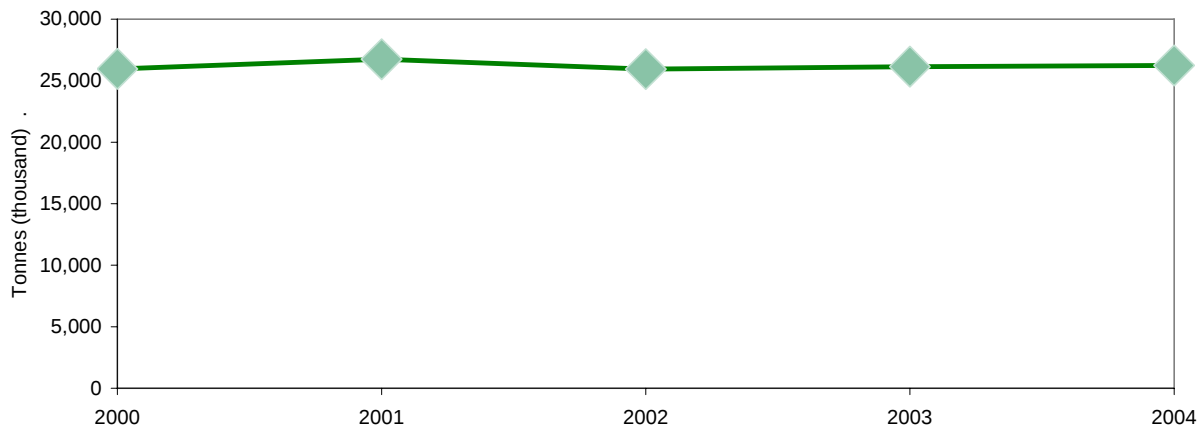
Country	2000	2001	2002	2003	2004
Austria					
Gypsum	825 077	790 478	847 117	889 727	920 809
Anhydrite	120 967	138 745	122 085	113 823	117 318
Bulgaria	169 571	166 838	156 400	165 500	176 000
Croatia	150 765	130 861	145 000	166 340	148 000
Cyprus	260 000	250 000	295 000	300 000	255 000
Czech Republic	82 000	24 000	108 000	104 000	71 000
France	*4 500 000	*4 500 000	*3 500 000	*3 500 000	*3 500 000
Germany (a)	2 344 000	1 966 000	1 761 000	1 748 000	1 600 000
Greece	801 025	808 890	890 148	731 785	856 606
Hungary (a)	251 000	231 000	108 000	62 000	55 000
Irish Republic	*500 000	*500 000	*500 000	*600 000	*650 000
Italy	1 511 650	1 558 882	1 531 477	1 783 903	1 615 287
Latvia	100 000	*100 000	(a) 220 000	(a) 160 000	(a) 230 000
Poland					
Gypsum	998 628	793 684	866 674	1 030 693	970 786
Anhydrite	284 683	300 356	280 031	297 088	301 161
Portugal	698 673	787 646	579 143	419 799	...
Romania	218 338	282 985	421 235	409 516	485 704
Slovakia (a)	108 000	168 800	121 680	93 800	127 100
Spain	9 929 478	*10 920 000	11 218 410	11 366 375	11 500 000
Switzerland	*300 000	*300 000	*300 000	*300 000	*300 000
Turkey	302 552	328 656	264 038	196 668	250 099
United Kingdom	*1 500 000	*1 700 000	*1 700 000	*1 700 000	*1 700 000
EU31 Total	26 000 000	26 700 000	25 900 000	26 100 000	26 200 000

Note(s):-

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

(a) Including anhydrite

EU31 Production of gypsum 2000 - 04



Exports of gypsum

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Crude	51 999	54 034	46 524	21 562	22 732
Calcined	87 510	72 827	82 493	97 840	100 444
Belgium-Luxembourg					
Crude	76 246	104 842	59 688	64 538	91 110
Calcined	4 859	3 998	3 628	2 556	175 496
Bulgaria					
Crude & calcined	...	2 841	2 406	1 868	2 231
Croatia					
Crude & calcined	23 301	20 032	28 318	...	...
Cyprus					
Crude & calcined	143 474	209 179	169 213	184 389	215 297
Czech Republic					
Crude	68 115	39 414	87 247	92 133	90 750
Calcined	11 083	6 674	3 967	4 718	5 563
Denmark					
Crude	23 909	86 764	110 317	83 754	81 318
Calcined	353 548	141 866	155 843	65 842	13 837
Finland					
Crude & calcined	4 177	4 710	5 026	981	440
France					
Crude	463 092	478 877	427 138	335 780	324 894
Calcined	276 847	282 629	286 568	297 326	311 437
Germany					
Crude	128 317	123 299	176 734	142 263	197 613
Calcined	693 861	705 776	695 565	1 070 873	1 033 057
Greece					
Crude	111 045	56 967	44 953	112 510	106 082
Irish Republic					
Crude	896	820	817	873	919
Calcined	35 199	37 919	22 181	33 382	40 636
Italy					
Crude	51 791	47 185	24 560	1 032	8 040
Calcined	113 041	74 209	54 393	38 778	42 223
Latvia					
Crude	37 150	35 302	55 225	58 186	24 782
Netherlands					
Crude	537	22 169	24 263	32 752	27 293
Calcined	2 885	2 350	26 463	7 905	7 231
Norway					
Crude	...	...	...	27 287	30 825
Crude & calcined	17 358	22 305	20 691	27 684	30 879
Calcined	...	...	...	...	54
Poland					
Crude & calcined	79 661	21 449	21 259	24 706	29 467
Romania					
Crude	5 191	6 115	6 473	10 539	14 277
Slovakia					
Crude & calcined	3 666	69	154	184	679

Exports continued

Country	2000	2001	2002	2003	2004
Spain					
Crude	3 080 386	2 590 879	2 818 090	2 732 211	2 820 367
Calcined	500 097	460 778	517 466	473 180	470 437
Sweden					
Crude & calcined	5 239	5 692	6 350	5 993	7 343
Switzerland					
Crude	24 560	25 122	1 709	44	158
Calcined	2 830	1 738	1 667	1 680	1 002
Turkey					
Crude & calcined	92 533	156 907	200 633	309 471	442 768
United Kingdom					
Crude	9 709	3 049	14 460	2 601	3 650
Calcined	31 474	29 474	44 827	39 515	50 648

Note(s):-

(1) In this table the term 'crude' may include some anhydrite

Imports of gypsum

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Crude	29 926	16 701	17 429	23 705	16 985
Calcined	31 735	41 988	48 808	59 897	70 261
Belgium-Luxembourg					
Crude	800 514	701 760	719 403	524 938	713 502
Calcined	350 278	329 502	322 930	290 348	366 504
Bulgaria					
Crude	46 566	33 737	47 984	38 119	49 426
Calcined	10 342	9 692	17 476	22 615	35 558
Croatia					
Crude	2 066	25 633	28 326	35 732	14 974
Calcined	18 294	20 046	29 147	33 419	37 499
Czech Republic					
Crude	8 628	9 523	14 790	20 266	29 328
Calcined	22 307	23 410	23 899	32 810	43 894
Denmark					
Crude	283 266	256 834	223 666	282 006	283 604
Calcined	7 080	8 952	34 509	36 882	38 650
Estonia					
Crude & calcined	15 852	13 236	20 355	23 314	80 834
Finland					
Crude	281 183	292 833	286 347	231 517	278 645
Calcined	31 374	7 725	7 682	7 066	7 010
France					
Crude	200 529	205 820	168 598	266 857	311 411
Calcined	47 813	44 697	48 920	45 214	85 845
Germany					
Crude	208 536	225 631	186 338	100 269	102 596
Calcined	46 851	34 767	59 707	91 143	116 628
Greece					
Crude	1 408	504	350	362	826
Calcined	23 025	26 386	1 501	1 361	13 614
Hungary					
Crude & calcined	51 481	48 842	53 147	59 741	64 726
Irish Republic					
Crude	8 639	8 615	10 931	373	536
Calcined	561	444	914	2 228	6 015
Italy					
Crude	2 304	2 479	2 391	1 947	5 024
Calcined	25 943	23 487	22 706	17 681	22 515
Latvia					
Crude & calcined	2 852	3 459	3 138	3 232	2 931
Lithuania					
Crude	24 843	22 275	36 355	1 495	39 653
Calcined	5 858	16 723	11 630	45 996	16 245

Gypsum

Imports continued

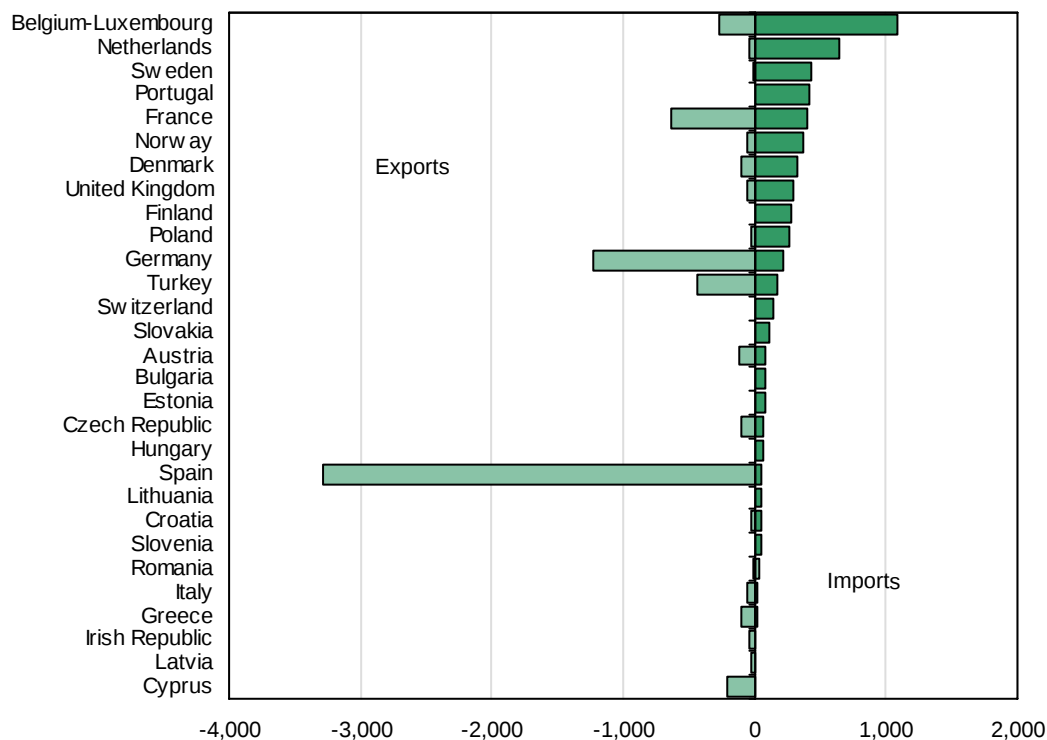
Country	2000	2001	2002	2003	2004
Netherlands					
Crude	175 167	222 337	208 013	132 882	160 621
Calcined	407 007	274 769	381 920	387 829	478 509
Norway					
Crude	23 851	36 175	59 945	49 398	109 069
Calcined	332 034	308 328	315 517	295 160	259 001
Poland					
Crude	78 372	22 813	46 123	101 589	163 227
Calcined	127 071	125 354	124 727	123 919	100 886
Portugal					
Crude	35 966	40 509	33 696	60 120	82 603
Calcined	374 538	374 719	371 705	338 228	340 665
Romania	36 947	109 719	102 708	48 336	37 805
Slovakia					
Crude & calcined	102 728	40 702	125 948	121 461	110 803
Slovenia	77 110	70 509	74 660	59 685	46 703
Spain					
Crude	43 375	47 567	51 797	65 152	43 004
Calcined	22 248	8 143	38 659	142 719	14 462
Sweden					
Crude	296 067	177 264	211 432	269 711	269 060
Calcined	59 347	87 144	82 831	103 481	160 784
Switzerland					
Crude	67 960	65 203	64 517	50 760	64 677
Calcined	71 517	66 156	72 876	75 394	81 971
Turkey	83 549	66 472	90 335	160 214	170 958
United Kingdom					
Crude	492 422	755 112	(a) 646 889	(a) 903 068	(a) 290 048
Calcined	62 728	31 481	...	...	...

Note(s):-

(1) In this table the term 'crude' may include some anhydrite

(a) Including calcined

Gypsum - EU31 trade in 2004



Iodine

- Iodine is a bluish-black lustrous, solid, non-metal with antiseptic and other medicinal properties, used in sanitation, animal feed and pharmaceutical products. It is also a catalyst.
- World production is dominated by Chile (63%). The EU31 are entirely import dependent for iodine.
- Crude iodine crystals (50 kg drums, 99.5% min I) traded in the range of \$17.20–20.0/kg during 2004.

Exports of iodine

kilograms

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg	1 570 900	1 908 400	2 351 000	4 904 400	3 646 100
Czech Republic	1 000	...	267	330	537
France	27 100	74 900	107 000	30 900	30 500
Germany	855 900	570 400	2 637 000	583 100	640 400
Irish Republic	27 742	2 500	2 000	9 600	-----
Italy	4 694	2 892	3 000	2 065	3 080
Lithuania	2 000	13 000	1 832	827	7 502
Netherlands	...	...	147 664	527 769	114 800
Norway	19 244	64	3 000	1 509	-----
Spain	74 721	300 485	115 000	27 811	31 156
Sweden	5 000	1 000	2 000	4 000	-----
Turkey	5 540	2 307	2 570	209	117
United Kingdom	385 000	507 363	207 341	169 145	106 950

Imports of iodine

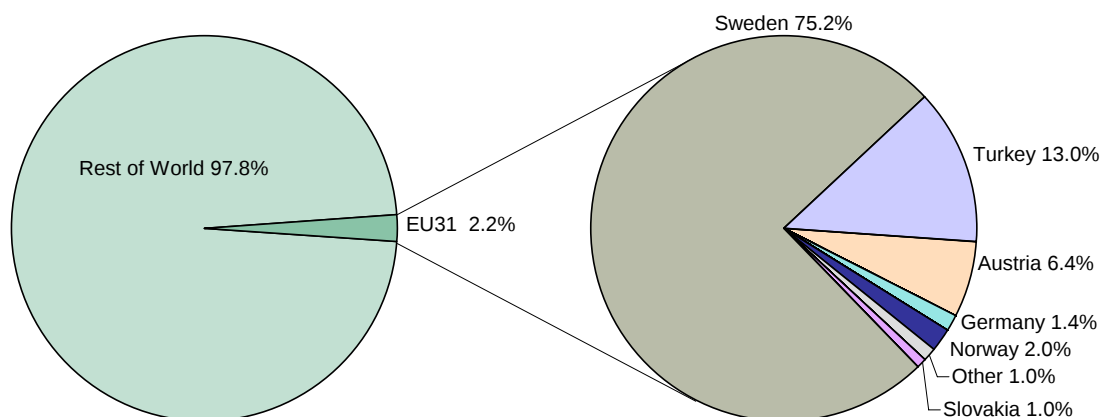
kilograms

Country	2000	2001	2002	2003	2004
Austria	69 300	101 600	81 000	85 500	124 100
Belgium-Luxembourg	1 501 800	2 006 900	2 357 000	4 817 700	3 419 800
Bulgaria	2 591	5 319	4 636	11 250	6 755
Cyprus	11 529	17 000	29 894	8 685	226
Czech Republic	21 000	24 000	18 819	29 637	31 428
Denmark	11 451	24 614	19 000	21 037	9 080
Finland	4 928	4 491	9 000	4 879	27 020
France	2 139 700	1 469 800	1 553 000	1 563 800	1 317 700
Germany	1 346 700	1 752 800	1 208 000	1 318 400	1 422 800
Greece	1 158	1 766	1 000	2 593	1 673
Irish Republic	17 582	44 664	5 000	8 712	18 215
Italy	749 474	1 049 291	1 218 000	1 167 573	1 127 906
Lithuania	4 000	7 000	1 376	1 050	1 796
Netherlands	2 380 900	2 156 800	1 269 000	632 000	460 600
Norway	228 029	118 903	684 000	1 105 811	1 294 934
Poland	17 773	20 000	13 312	23 875	18 687
Portugal	22 443	76 686	25 000	28 807	14 717
Slovenia	1 263	2 200	150	180	172
Spain	1 019 447	1 247 590	796 000	784 718	710 814
Sweden	3 000	1 000	5 000	5 000	1 000
Switzerland	18 949	28 203	14 000	27 226	7 428
Turkey	139 043	39 422	30 450	15 405	31 736
United Kingdom	1 304 692	1 015 061	744 234	825 813	804 508

Iron ore

- There are two main commercial ores of iron— magnetite and haematite (iron oxides). Iron is also recovered from pyrites (FeS_2). Iron ore is mined, processed and smelted chiefly to produce steel in integrated steel plants. Pig iron, for use as iron, is a minor part of production.
- The largest world producer was China (23%). World exports were dominated by Brazil and Australia. EU31 iron ore production was only 2% of the world total in 2004. Sweden is the largest EU31 producer (75%) and with Norway the only net exporter.
- In 2004 the price of Australian iron ore (Mt Newman High Grade Lump) was US\$45.93 per dry tonne, whilst on the international market iron ore was trading around US\$61/tonne, an 86% increase over 2003.

EU31 Production of iron ore 2004



Production of iron ore

tonnes

Country	2000	2001	2002	2003	2004
Austria (c)	1 859 449	1 843 275	1 941 759	2 124 787	1 889 419
Bulgaria	588 800	324 800	373 000	466 100	83 000
France	31 319	36 587	21 367	-----	-----
Germany (a) (b)	461 525	407 002	419 371	429 170	412 238
Norway	470 000	395 000	490 000	410 000	590 000
Portugal (a)	11 800	-----	-----	-----	-----
Romania	116 000	221 000	248 000	244 000	*202 500
Slovakia	447 055	435 492	326 300	287 000	305 072
Spain	75 054	55 058	24 489	571	10 879
Sweden	20 557 000	19 486 000	20 281 000	21 498 000	22 272 000
Turkey	4 076 257	4 434 621	3 432 775	3 429 070	3 856 536
United Kingdom	1 033	510	464	*500	*500
EU31 Total	28 695 000	27 639 000	27 559 000	28 889 000	29 622 000

Note(s):-

(a) Including manganiferous iron ore

(b) Used as aggregate in the construction industry

(c) Including micaceous iron oxide

Exports of iron ore

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg	32 755	43 578	70 035	43 752	23 450
France	21 148	38 116	16 649	43 473	38 413
Germany					
Iron ore	20 659	16 280	15 521	9 376	8 756
Burnt pyrites	4 587	6 112	6 907	6 491	3 241
Italy					
Burnt pyrites	96 060	57 643	46 294	30 848	11 086
Netherlands	157 231	29 724	42 244	20 881	1 384 740
Norway					
Iron ore	17 598	33 727	620 478	530 851	648 583
Burnt pyrites	45 081	46 323	62 214	62 315	117 389
Slovakia	115 628	112 227	127 174	76 957	135 398
Spain					
Iron Ore	26 227	1 702	53	94	259
Burnt pyrites	108 384	168 181	189 404	105 203	171 292
Sweden	16 323 925	13 619 293	14 233 450	15 559 741	17 336 835

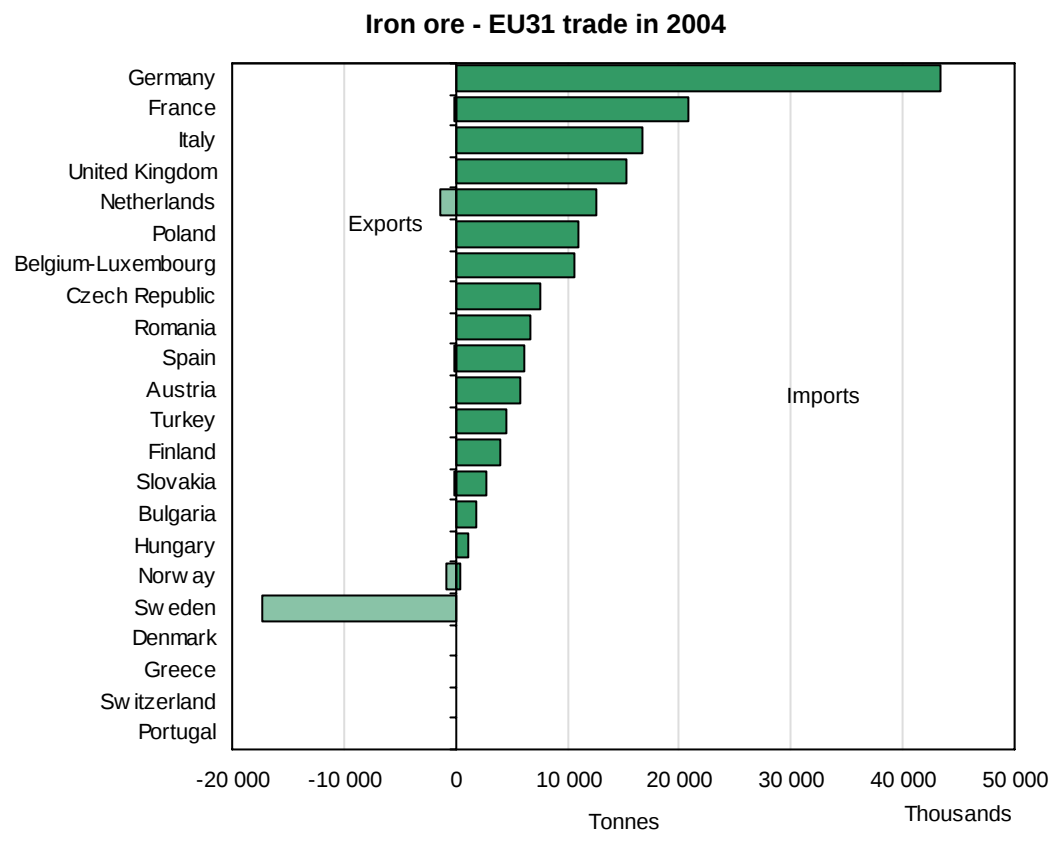
Imports of iron ore

tonnes

Country	2000	2001	2002	2003	2004
Austria	5 425 923	...	...	5 691 360	5 783 359
Belgium-Luxembourg	11 830 358	11 223 322	12 204 732	11 577 845	10 655 707
Bulgaria					
Iron ore	1 552 620	1 359 466	1 302 809	1 850 563	1 570 605
Burnt pyrites	...	2 666	1 307	128 640	357 898
Czech Republic	6 932 742	6 891 369	6 811 707	8 221 566	7 636 968
Denmark					
Burnt pyrites	59 326	47 038	60 659	52 806	81 071
Finland					
Iron ore	3 917 135	3 916 207	3 791 710	4 212 158	3 921 507
Burnt pyrites	0	56	13 132	26 163	63
France					
Iron ore	19 688 773	16 707 431	19 069 088	18 890 174	20 777 700
Burnt pyrites	4 228	24 758	0	3 348	65
Germany					
Iron ore	47 502 511	40 094 653	44 297 518	33 876 167	43 317 039
Burnt pyrites	76 415	55 380	44 838	56 249	37 194
Greece					
Burnt pyrites	156 876	125 242	58 666	132	4 601
Hungary	2 098 145	1 702 510	1 718 394	1 864 033	1 063 931
Italy (a)	17 619 370	15 813 643	14 898 058	15 231 519	16 715 081
Netherlands					
Iron ore	7 560 788	6 310 886	7 369 802	8 740 391	12 622 628
Burnt pyrites	47 175	106 277	23 596	22 545	26 717
Norway	187 630	224 442	206 650	178 025	495 047
Poland (a)	9 736 781	7 709 132	6 956 999	8 596 971	10 933 453
Portugal	580 178	141 064	829	421	448
Romania	5 049 180	3 874 940	6 198 085	6 977 977	6 609 026
Slovakia	4 741 501	3 269 165	4 990 546	5 704 522	2 745 925
Spain	6 265 454	6 641 053	6 158 325	5 765 648	6 118 975
Sweden					
Iron ore	94 483	108 597	115 528	110 920	102 101
Burnt pyrites	17 442	15 763	41 970	29 658	36 351
Switzerland					
Burnt pyrites	14 821	15 897	12 239	9 157	4 283
Turkey (a)	4 140 103	2 620 485	5 392 580	5 220 888	4 595 911
United Kingdom					
Iron ore	16 778 947	15 351 877	13 316 026	16 121 350	15 299 470
Burnt pyrites	29 446	17 130	...	19 230	2 436

Note(s):-

(a) Including burnt pyrites



Production of pig iron

tonnes

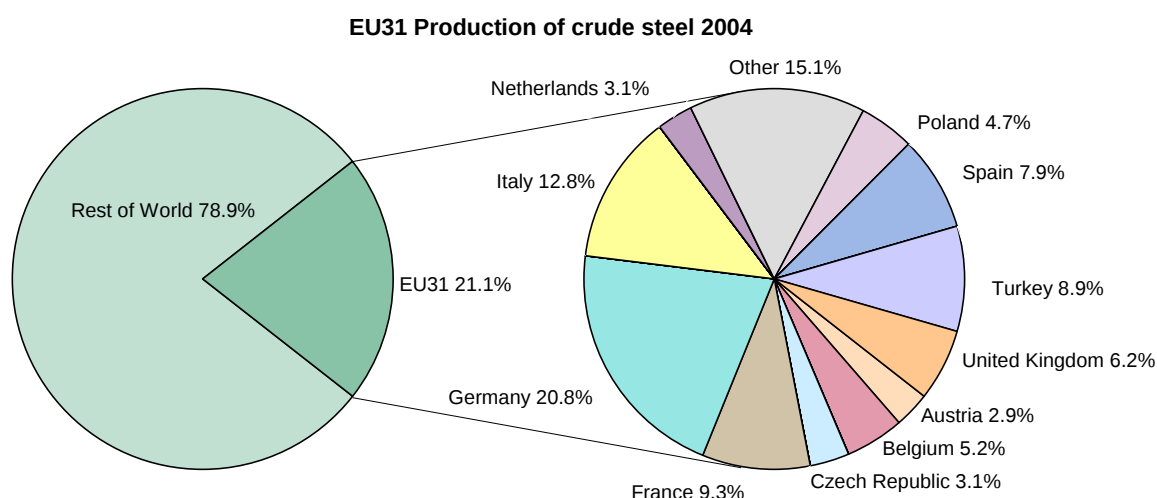
Country	2000	2001	2002	2003	2004
Austria	4 332 786	4 392 878	4 607 000	4 676 742	4 846 740
Belgium	8 471 214	7 732 111	7 988 396	7 812 593	8 224 000
Bulgaria	1 220 000	1 211 000	1 072 000	1 386 000	1 200 000
Czech Republic	4 621 500	4 670 700	4 839 880	5 207 000	5 385 000
Finland	2 982 787	2 851 821	2 828 275	3 092 051	3 036 566
France	13 506 955	11 884 224	13 093 042	12 615 893	13 087 705
Germany	31 300 000	29 394 000	29 967 000	30 071 000	30 628 000
Hungary	1 340 353	1 225 714	1 334 000	1 332 000	1 350 000
Italy	11 195 000	10 581 000	9 746 000	10 123 000	10 566 000
Netherlands	4 970 000	5 305 000	5 367 000	5 846 000	6 011 000
Norway	70 000	70 000	108 000	*110 000	*100 000
Poland	6 491 867	5 440 047	5 296 410	5 585 094	6 292 341
Portugal	382 000	82 000	-----	-----	-----
Romania	3 065 788	3 242 994	3 979 346	4 101 409	4 243 999
Slovakia	3 166 400	3 254 600	3 533 150	3 892 000	3 765 000
Spain	4 059 000	4 094 000	3 973 000	3 645 000	4 036 000
Sweden	3 270 000	3 725 000	3 815 000	3 819 000	3 992 000
Switzerland	*80 000	*80 000	*80 000	*80 000	*80 000
Turkey	5 333 000	5 289 000	5 003 000	5 706 000	5 836 000
United Kingdom	10 890 500	9 870 400	8 560 600	10 277 800	10 179 600
EU31 Total	120 750 000	114 400 000	115 190 000	119 380 000	122 860 000

Note(s):-

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

Crude steel

- Crude steel is the end result of smelting iron ore. It is produced in a wide variety of forms including slabs, coils, bars, rods and plates — depending on customer requirements. Steel is a ubiquitous product and has a multitude of applications. Alloying with other metals changes the fundamental properties of crude steel to meet specialised requirements. Recycled, or secondary, steel is a significant part of EU31 and world total steel production.
- The majority of industrialised countries in the world produce steel. In 2004 the largest producer was China (26%). In the EU31 the largest producer was Germany, which produced 21% of EU31 steel output.
- Stronger demand in 2004 strained the industry's capacity and caused shortages of some steel products, particularly flat products, driving steel prices sharply upwards during the first quarter of 2004. These exceptionally high prices were sustained through the rest of the year and the price of steel peaked at \$740/tonne on the U.S. spot market.



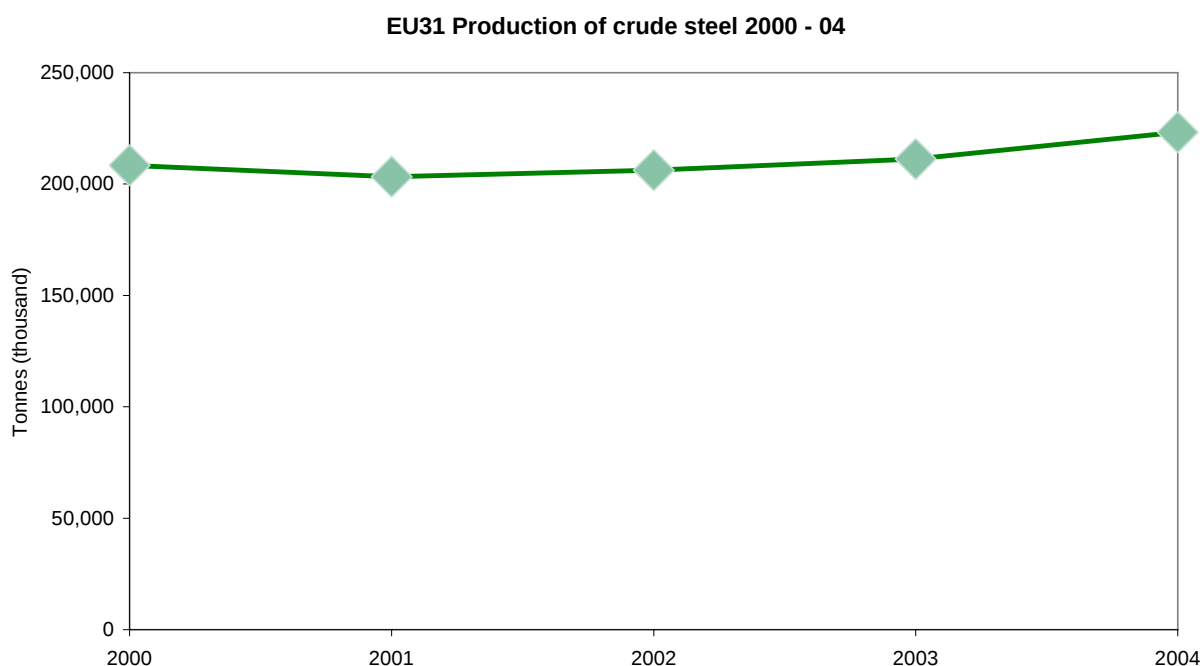
Production of crude steel

tonnes

Country	2000	2001	2002	2003	2004
Austria	5 722 000	5 870 000	6 189 000	6 261 000	6 530 000
Belgium	11 614 731	10 741 493	11 322 008	11 114 775	11 697 000
Bulgaria	2 022 000	1 972 000	1 860 000	1 950 000	2 106 000
Croatia	70 999	57 993	33 851	43 380	78 000
Czech Republic	6 215 800	6 315 900	6 511 970	6 783 000	7 033 000
Denmark	803 000	746 000	392 000	-----	-----
Finland	4 096 389	3 938 122	4 002 914	4 766 203	4 832 427
France	20 742 738	19 190 552	20 258 473	19 757 864	20 770 252
Germany	46 376 000	44 803 000	45 015 000	44 809 000	46 374 000
Greece	1 088 000	1 281 000	1 835 000	1 701 000	1 967 000
Hungary	1 969 821	2 064 507	2 138 146	2 044 526	1 944 017
Irish Republic	360 000	150 000	-----	-----	-----
Italy	26 759 000	26 544 000	26 302 000	26 832 000	28 479 000
Latvia	500 292	515 000	507 000	546 000	550 000
Luxembourg	2 571 243	2 724 679	2 736 000	2 675 000	2 684 000
Netherlands	5 492 000	5 902 000	6 117 000	6 561 000	6 848 000
Norway	679 000	635 000	694 000	703 000	725 000
Poland	10 498 262	8 809 211	8 367 434	9 107 384	10 578 482
Portugal	1 089 000	727 000	799 000	722 000	720 000
Romania	4 671 967	4 935 623	5 490 434	5 692 496	6 041 903
Slovakia	3 733 200	3 988 600	4 275 470	4 588 000	4 454 000
Slovenia	519 000	462 000	481 000	541 000	566 000
Spain	15 874 000	16 504 000	16 408 000	16 407 000	17 700 000
Sweden	5 228 700	5 518 100	5 753 300	5 707 300	5 976 900
Switzerland	*1 000 000	*1 000 000	*1 000 000	*1 000 000	*1 000 000
Turkey	13 571 563	14 382 257	16 045 522	17 644 020	19 868 118
United Kingdom	15 154 600	13 542 700	11 667 100	13 268 000	13 765 700
EU31 Total	208 423 000	203 321 000	206 202 000	211 225 000	223 289 000

Note(s):-

- (1) Unless otherwise indicated, these figures include production from scrap
 (2) Small amounts of steel are believed to be produced in Estonia



Ferro-alloys

- Ferro-alloys are alloys with iron of a number of metals used exclusively as additives to steel with the object of modifying its properties. Silicon metal is normally included with ferro-alloys as it is used for the same purpose.
- Ferro-alloy production is usually undertaken close to the mine site or at distant locations with cheap energy supplies.
- China is the largest producer but South Africa is the largest exporter – predominantly of ferro-chrome. In the EU31, Norway is the largest producer and exporter, based on imported metal ores and indigenous resources of silica.

Production of ferro-alloys

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Ferro-molybdenum	4 700	4 900	4 930	4 400	4 700
Ferro-nickel	3 300	2 600	2 150	2 000	1 900
Ferro-vanadium	5 900	5 800	5 500	5 300	5 800
Belgium					
Ferro-vanadium	2 194	926	1 492	...	...
Bulgaria					
Ferro-silicon	*8 000	*8 000	*8 000	*8 000	*8 000
Croatia					
Ferro-chrome	15 753	361	-----	-----	-----
Czech Republic					
Ferro-vanadium	*2 500	*2 500	*3 000	*3 000	*3 500
Finland					
Ferro-chrome	260 605	236 000	248 000	250 000	264 492
France					
Ferro-manganese & spiegeleisen	409 169	414 200	416 569	*300 000	*106 000
Ferro-silico-manganese	32 773	65 248	66 215	*107 000	*64 000
Ferro-silicon	*110 000	*100 000	*100 000	*100 000	*100 000
Silicon metal	94 127	89 896	84 768	*85 000	*85 000
Germany					
Ferro-chrome	21 600	19 308	20 018	18 318	24 857
Other ferro-alloys	*30 000	*30 000	*30 000	*30 000	*30 000
Silicon metal	27 119	28 379	26 049	28 663	28 773
Greece					
Ferro-nickel	81 662	88 755	96 000	90 000	91 000
Italy					
Ferro-manganese	*40 000	*40 000	*40 000	*40 000	*40 000
Ferro-silico-manganese	*100 000	*100 000	*100 000	*100 000	*100 000
Silicon metal	9 590	-----	-----	-----	-----
Norway					
Ferro-chrome	153 500	82 600	61 100	-----	-----
Ferro-manganese	150 585	111 823	126 960	*130 000	*130 000
Ferro-silico-manganese	198 671	277 938	252 723	*250 000	*260 000
Ferro-silicon	450 364	427 590	359 944	...	389 599
Other ferro-alloys	54 639	47 600	48 500	*50 000	*50 000
Silicon metal	138 139	134 958	152 981	...	193 566
Poland					
Ferro-chrome	-----	-----	106	188	-----
Ferro-manganese	0	497	602	979	46 898
Ferro-silico-manganese	18 997	20 007	7 338	*7 000	...
Ferro-silicon	55 969	48 608	41 759	92 687	83 552
Other ferro-alloys	4 174	4 039	4 200	-----	-----
Romania					
Ferro-manganese	1 989	384	-----	-----	-----
Ferro-silico-manganese	62 320	71 921	84 720	141 899	194 945
Ferro-silicon	8 309	5 823	-----	-----	-----
Slovakia					
Ferro-chrome	17 658	5 968	5 695	1 924	1 784
Ferro-silico-manganese	52 141	46 288	62 084	52 733	64 842
Ferro-silicon	59 443	55 577	35 920	41 539	34 600
Other ferro-alloys	50 508	46 357	24 657	44 589	68 096
Slovenia					
Ferro-silicon	*9 000	*9 000	*9 000	*12 000	*18 000

Production continued

Country	2000	2001	2002	2003	2004
Spain					
Ferro-chrome	905	-----	-----	-----	-----
Ferro-manganese	26 815	24 804	33 218	*35 000	*35 000
Ferro-silico-manganese	128 197	102 110	103 494	*100 000	*100 000
Ferro-silicon	50 071	53 427	56 994	*60 000	*60 000
Silicon metal	28 215	29 114	26 071	*25 000	*25 000
Sweden					
Ferro-chrome	106 399	107 036	118 800	106 100	127 300
Ferro-silicon	18 948	21 197	21 500	17 100	18 500
Turkey					
Ferro-chrome	97 240	50 735	11 200	35 393	28 701
Ferro-silico-chrome	7 170	5 895	7 245	6 805	5 560

Exports of iron, steel and ferro-alloys

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Ferro-alloys	3 310	6 154	16 390	17 202	5 999
Silicon metal	71	140	470	751	598
Ingots, blooms, billets	248 303	177 057	217 580	256 981	334 124
Scrap	789 435	754 489	777 267	842 323	1 099 278
Belgium-Luxembourg					
Pig iron	180 780	116 359	172 175	227 815	225 486
Sponge & powder	3 797	4 395	13 263	18 741	29 127
Ferro-chrome	39 754	39 937	41 565	39 778	32 998
Ferro-silico-chrome	...	...	3 593	10 381	7 214
Ferro-silico-magnesium	3 271	1 171	38	79	39
Ferro-manganese	21 737	24 367	23 985	16 246	9 621
Ferro-silico-manganese	31 690	31 139	29 953	38 032	41 307
Ferro-molybdenum	...	...	...	...	19 219
Ferro-silicon	24 591	30 427	30 962	18 856	31 000
Ferro-titanium & Fe-Si-Ti	244	29	7	6	7
Other ferro-alloys	1 296	9 106	4 335	9 672	6 438
Silicon metal	7 741	12 440	5 873	8 227	6 078
Ingots, blooms, billets	615 783	498 122	548 174	395 499	368 589
Scrap	1 974 795	1 799 938	1 821 636	2 310 658	2 851 040
Bulgaria					
Ferro-alloys	2 779	4 225	5 088	8 045	5 646
Ingots, blooms, billets	102 033	410 940	111 719	355 397	277 332
Scrap	386 591	375 118	459 322	572 559	769 559
Croatia					
Ferro-chrome	15 468	-----	434	...	...
Scrap	106 021	133 451	197 532	235 322	279 852
Cyprus					
Scrap	17 341	26 839	38 154	41 926	46 316
Czech Republic					
Pig iron	32 820	25 352	28 844	50 125	55 687
Ferro-chrome	1 190	2 300	287	77	1 016
Ferro-vanadium	2 940	2 195	2 949	3 012	3 417
Other ferro-alloys	3 165	2 412	4 445	6 630	12 098
Silicon metal	915	816	859	778	4 488
Ingots, blooms, billets	262 130	250 740	287 557	249 522	267 912
Scrap	987 452	1 000 515	1 057 822	1 178 514	1 930 343
Denmark					
Ingots, blooms, billets	143 030	59 258	21 432	8 119	16 223
Scrap	658 353	770 311	1 058 048	1 310 175	1 564 469
Estonia					
Pig iron (b)	*65 500	*700	*500	...	...
Ferro-chrome	18 804	2 283	-----	5 695	...
Other ferro-alloys	3 639	4 269	10 270	17 725	1 193
Silicon metal	20 052	21	1	...	...
Scrap	502 495	380 328	326 407	376 554	358 185

Exports continued

Country	2000	2001	2002	2003	2004
Finland					
Ferro-chrome	...	...	...	33 496	35 780
Ferro-chrome & ferro-silico-chrome	43 887	82 590	80 026	33 499	*35 780
Ingots, blooms, billets	144 538	130 066	186 989	501 945	624 170
Scrap	394 218	362 373	359 153	374 778	315 977
France					
Pig iron	520	4 426	3 378	153	679
Sponge & powder	7 864	6 895	5 983	6 231	5 221
Ferro-chrome	5 965	2 478	3 747	1 456	1 074
Ferro-silico-magnesium	5 929	5 714	6 521	5 262	5 521
Ferro-manganese	19 275	26 049	26 302	28 094	14 360
Ferro-silico-manganese	15 750	62 877	73 647	53 270	63 483
Ferro-molybdenum	530	410	348	300	538
Ferro-nickel	872	712	104	2	7
Ferro-niobium	735	784	361	926	521
Ferro-silicon	50 247	43 956	53 682	65 871	65 881
Ferro-titanium & Fe-Si-Ti	1 123	1 842	1 434	1 463	1 305
Ferro-vanadium	70	21	25	50	53
Other ferro-alloys	36 008	45 650	35 746	37 534	34 781
Ingots, blooms, billets	2 447 574	2 621 568	3 419 270	3 420 829	3 833 258
Scrap	4 537 161	4 161 312	4 656 513	4 990 462	5 578 148
Germany					
Pig iron	116 513	75 137	67 365	56 571	112 911
Sponge & powder	27 258	30 585	83 354	95 612	148 734
Ferro-chrome	47 714	34 379	33 992	30 640	22 758
Ferro-silico-chrome	251	3 115	608	1	79
Ferro-silico-magnesium	4 894	6 912	6 825	5 551	13 887
Ferro-manganese	19 071	19 346	13 036	8 937	13 776
Ferro-silico-manganese	11 082	13 743	11 520	10 306	9 286
Ferro-molybdenum	765	903	1 283	2 054	2 597
Ferro-nickel	42	...	57	94	625
Ferro-niobium	1 066	816	828	713	1 076
Ferro-phosphorus	1 704	1 149	1 163	691	786
Ferro-silicon	50 904	66 920	64 000	60 016	61 239
Ferro-titanium & Fe-Si-Ti	2 585	2 877	3 607	2 478	3 069
Ferro-tungsten & Fe-Si-W	310	112	106	268	178
Ferro-vanadium	299	373	634	653	600
Other ferro-alloys	11 272	20 321	22 860	21 610	27 285
Silicon metal	10 736	10 632	10 060	16 141	18 064
Ingots, blooms, billets	2 451 015	2 032 350	2 011 458	2 563 182	2 104 580
Scrap	6 878 310	6 598 673	6 880 778	6 718 904	6 956 839
Greece					
Ferro-alloys	12 794	10 175	7 976	1 742	5 528
Ingots, blooms, billets	2 363	5 083	1 157	2 908	64 105
Scrap	35 747	47 721	39 806	56 047	59 502
Hungary					
Ferro-alloys	1 573	651	694	436	701
Ingots, blooms, billets	23 843	47 954	87 994	32 452	24 042
Scrap	631 088	462 209	553 847	618 827	887 069
Irish Republic					
Scrap	61 401	133 287	228 807	292 971	347 479
Italy					
Pig iron	26 986	47 031	58 982	40 069	41 068
Sponge & powder	215	2 095	651	130	62
Ferro-chrome	2 693	1 843	9 576	7 290	8 411
Ferro-silico-magnesium	57	10	2 119	1 673	3 163
Ferro-manganese	20 413	17 472	5 382	6 322	8 857
Ferro-silico-manganese	6 876	3 371	2 055	1 392	3 167
Ferro-molybdenum	186	525	351	352	162
Ferro-silicon	2 248	3 143	2 697	3 287	3 594
Ferro-vanadium	1 669	1 023	2 873	817	63
Other ferro-alloys	340	1 107	975	488	2 859
Silicon metal	1 197	743	1 092	583	1 667
Ingots, blooms, billets	841 283	770 001	786 800	546 474	402 967
Scrap	166 125	151 196	153 190	173 616	211 385
Latvia					
Ferro-chrome	8 800	24 000	11 000	20	19
Scrap	96 674	37 885	6 328	6 415	64 936

Exports continued

Country	2000	2001	2002	2003	2004
Lithuania					
Scrap	396 627	563 394	704 948	618 231	677 727
Malta					
Scrap	11 197	...	...	...	...
Netherlands					
Pig iron	62 714	62 667	5 131	7 377	31 821
Sponge & powder	87 650	76 545	107 474	15 255	15 794
Ferro-chrome	24 952	27 898	9 122	38 469	70 272
Ferro-silico-chrome	25	32	5	68	18
Ferro-manganese	28 383	26 335	23 131	25 842	53 367
Ferro-silico-manganese	9 105	25 958	7 037	20 830	16 109
Ferro-molybdenum	4 282	3 401	1 242	1 610	2 712
Ferro-nickel	12 525	10 796	4 159	4 112	9 855
Ferro-niobium	10 281	7 512	130	131	47
Ferro-silicon	1 351	4 937	9 899	27 511	27 328
Ferro-titanium & Fe-Si-Ti	...	780	225	213	660
Ferro-tungsten & Fe-Si-W	215	380	217	264	193
Ferro-vanadium	1 083	2 194	910	2 838	2 901
Other ferro-alloys	2 162	9 767	9 379	10 519	5 925
Silicon metal	2 098	14 014	8 819	15 957	10 319
Ingots, blooms, billets	511 537	312 200	538 825	239 603	309 454
Scrap	3 101 130	3 072 052	3 064 283	3 242 779	3 859 394
Norway					
Pig iron (b)	*27 900	*46 600	*119 400	*118 400	*123 700
Ferro-chrome (b)	*172 700	*76 100	*87 500	*1 900	*600
Ferro-manganese (b)	*205 400	*193 000	*169 400	*214 100	*332 500
Ferro-silico-manganese	232 125	275 291	240 477	255 243	264 163
Ferro-silicon	407 164	324 858	251 252	194 246	256 018
Other ferro-alloys	54 776	48 994	49 366	53 913	59 696
Silicon metal	154 807	153 017	150 681	151 476	176 458
Ingots, blooms, billets	177 302	110 888	126 094	160 127	148 514
Scrap	139 044	150 020	227 592	263 510	270 903
Poland					
Pig iron	137 667	40 670	3 003	16 023	57 696
Ferro-manganese & Fe-Si-Mn	...	20	3 637	1 451	66 666
Ferro-silicon	50 497	50 649	43 021	84 406	85 538
Other ferro-alloys	9 298	10 522	96	86	195
Ingots, blooms, billets	1 256 739	948 473	1 034 776	975 777	1 585 494
Scrap	987 895	1 269 594	1 535 305	1 804 181	1 973 116
Portugal					
Ingots, blooms, billets	107 702	44 980	15 058	33 032	184 547
Scrap	172 330	246 777	231 761	201 189	259 297
Romania					
Pig iron	7 473	2 548	2 686	6 367	3 339
Sponge & powder	7 767	7 264	7 797	6 886	9 187
Ferro-alloys	61 255	66 286	...	127 086	...
Ferro-silico-manganese	(a) ...	(a) ...	(a) ...	124 557	179 788
Other ferro-alloys	61 255	66 286	88 368	2 529	3 891
Ingots, blooms, billets	59 291	435 748	162 991	130 415	161 438
Scrap	2 289 430	1 679 265	2 070 119	2 386 017	2 394 490
Slovakia					
Pig iron	37 392	23 551	13 213	37 145	73 303
Ferro-manganese	39 221	36 573	47 074	37 139	57 440
Ferro-silico-manganese	51 409	47 734	56 484	54 945	66 902
Ferro-silicon	58 058	53 701	39 550	42 018	40 135
Other ferro-alloys	25 904	18 111	14 541	10 013	11 834
Ingots, blooms, billets	53 720	202 645	191 414	125 822	286 072
Scrap	274 525	375 552	450 126	497 645	544 714
Slovenia					
Ferro-alloys	25 967	27 200	31 083	34 420	37 714
Silicon metal	0	...	40	188	1 608
Ingots, blooms, billets	13 638	11 953	8 292	13 311	15 327
Scrap	114 018	136 041	126 233	113 448	186 726

Exports continued

Country	2000	2001	2002	2003	2004
Spain					
Pig iron	2 065	2 900	4 177	2 751	3 258
Sponge & powder	3 074	4 956	3 920	4 447	4 914
Ferro-chrome	1 257	466	472	369	551
Ferro-manganese	42 861	66 834	73 506	62 260	82 733
Ferro-silico-manganese	27 949	34 622	29 297	44 214	40 130
Ferro-molybdenum	362	120	326	342	60
Ferro-silicon	4 666	5 826	14 730	13 140	19 332
Other ferro-alloys	304	1 120	750	891	558
Silicon metal	15 379	14 027	17 621	11 035	13 254
Ingots, blooms, billets	376 331	263 813	241 944	182 247	130 079
Scrap	52 770	45 419	93 970	103 413	205 298
Sweden					
Pig iron	27 611	35 593	30 079	118 378	116 550
Sponge & powder	13 929	11 324	11 356	9 311	12 306
Ferro-chrome	53 700	1 023	617	1 070	1 830
Ferro-silico-magnesium	2 636	1 102	392	479	235
Ferro-manganese & Fe-Si-Mn	1 050	1 189	6 903	1 159	1 605
Ferro-molybdenum	134	65	745	71	87
Ferro-phosphorus	565	399	1 203	463	281
Ferro-silicon	564	762	736	182	441
Ferro-vanadium	30	24	427	27	99
Other ferro-alloys	458	3 138	6 903	1 527	2 796
Silicon metal	475	1 766	6 742	2 790	6 387
Ingots, blooms, billets	92 258	197 800	297 913	166 876	367 562
Scrap	473 534	560 297	722 509	708 654	741 254
Switzerland					
Ingots, blooms, billets	2 470	2 459	31 317	51 008	51 639
Scrap	401 561	457 523	412 341	451 452	539 629
Turkey					
Pig iron	94 231	109 862	12 895	1 060	50 165
Ferro-chrome	68 597	15 446	61 163	53 695	16 286
Other ferro-alloys	742	673	1 156	5 361	5 092
Ingots, blooms, billets	1 262 574	2 132 421	2 734 188	3 178 909	3 769 934
Scrap	28 583	28 937	34 512	48 741	82 460
United Kingdom					
Pig iron	679	6 749	3 376	1 459	957
Sponge & powder	2 231	3 164	3 134	3 666	3 884
Ferro-chrome & ferro-silico-chrome	876	1 206	814	1 711	1 850
Ferro-manganese	1 327	792	1 874	434	1 444
Ferro-silico-manganese	1 307	8	116	42	7 658
Ferro-molybdenum	7 251	9 278	11 965	14 081	14 401
Ferro-nickel	9	104	368	424	126
Ferro-niobium	107	280	46	59	37
Ferro-phosphorus	22	26	57	109	1 409
Ferro-silicon	1 400	2 247	3 155	1 845	2 699
Ferro-titanium & Fe-Si-Ti	18 839	16 422	16 334	14 676	20 868
Ferro-vanadium	49	118	55	39	17
Other ferro-alloys	6 818	6 013	9 226	6 349	5 784
Silicon metal	1 577	1 914	4 050	2 699	1 511
Ingots, blooms, billets	520 306	746 730	560 796	1 305 976	1 721 824
Scrap	4 378 117	4 821 840	5 538 569	7 174 934	6 779 611

Note(s):-

(1) In this table the term 'ingots, blooms, billets' corresponds to items 7206, 7207, 7218 and 7224 of the Harmonised System which includes those of alloy and high carbon steel

(a) Included with 'other ferro-alloys'

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

Imports of iron, steel and ferro-alloys

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Pig iron	29 401	34 724	30 284	34 462	66 196
Sponge & powder	11 258	10 385	14 873	12 042	10 917
Ferro-chrome	31 129	33 710	24 412	32 874	43 438
Ferro-silico-magnesium	969	829	877	969	627
Ferro-manganese	18 565	24 511	37 772	34 748	39 026
Ferro-silico-manganese	3 615	5 054	4 829	11 795	6 817
Ferro-molybdenum	1 524	1 087	1 348	1 066	1 011
Ferro-niobium & ferro-niobium-tantalum	361	543	781	1 669	934
Ferro-phosphorus	1 876	990	1 023	1 645	1 433
Ferro-silicon	18 929	20 884	23 493	36 918	47 223
Ferro-titanium & Fe-Si-Ti	865	737	1 136	1 427	961
Ferro-tungsten & Fe-Si-W	868	845	562	712	589
Ferro-vanadium	1 575	622	571	643	587
Other ferro-alloys	1 816	3 640	3 083	3 631	3 321
Silicon metal	6 659	8 478	10 273	9 822	9 127
Ingots, blooms, billets	183 202	163 944	120 409	99 393	156 796
Scrap	695 834	833 909	865 061	936 512	1 017 497
Belgium-Luxembourg					
Pig iron	334 225	233 325	270 015	291 507	396 174
Sponge & powder	47 970	8 425	13 234	26 084	107 639
Ferro-chrome	178 130	155 561	176 217	198 691	215 638
Ferro-silico-chrome	2 393	7 992	3 426	12 392	7 435
Ferro-silico-magnesium	3 424	1 414	425	327	993
Ferro-manganese	63 097	63 766	67 683	54 564	49 305
Ferro-silico-manganese	58 256	58 555	56 769	54 676	56 622
Ferro-molybdenum	2 748	2 355	3 573	5 141	4 317
Ferro-nickel	32 285	36 455	42 337	32 673	51 796
Ferro-niobium	701	849	720	719	712
Ferro-phosphorus	816	604	769	1 124	1 237
Ferro-silicon	59 406	67 460	73 251	63 474	93 591
Ferro-titanium & Fe-Si-Ti	1 851	1 436	1 761	2 069	1 677
Ferro-vanadium	241	331	182	412	568
Other ferro-alloys	1 524	4 791	8 591	5 186	9 673
Silicon metal	14 238	12 750	14 985	15 579	15 136
Ingots, blooms, billets	3 530 375	2 631 575	2 383 948	3 894 592	2 814 705
Scrap	2 727 227	2 740 480	3 146 151	3 896 924	4 413 160
Bulgaria					
Pig iron	44 989	21 281	16 304	45 935	14 228
Ferro-manganese	5 596	4 707	2 047	5 152	5 116
Other ferro-alloys	6 531	7 256	4 440	9 232	7 441
Silicon metal	...	...	137	232	663
Ingots, blooms, billets	...	62 056	7 951	116 005	280 895
Scrap	84 179	55 376	43 260	74 445	90 491
Croatia					
Pig iron	10 449	12 560	14 124	14 821	15 175
Ferro-alloys	2 313	1 706	2 265	2 421	2 980
Silicon metal	357	438	391	350	510
Ingots, blooms, billets	23 638	22 673	13 527	18 523	3 562
Scrap	8 099	7 569	3 937	5 361	7 156
Czech Republic					
Pig iron	66 334	91 906	90 568	72 151	88 014
Sponge & powder	724	670	5 739	21 478	5 661
Ferro-chrome	44 880	39 975	43 181	13 193	16 248
Ferro-manganese	17 569	20 716	21 055	24 154	27 051
Ferro-silico-manganese	22 291	25 660	26 130	55 989	59 361
Ferro-molybdenum	898	1 157	1 054	1 346	1 710
Ferro-silicon	20 666	20 640	20 570	26 721	34 812
Ferro-vanadium	283	278	250	225	395
Other ferro-alloys	6 638	8 092	7 851	8 745	9 817
Silicon metal	4 099	2 832	2 713	4 095	8 401
Ingots, blooms, billets	188 542	272 751	263 839	268 231	352 672
Scrap	182 992	347 858	372 348	506 094	593 330

Imports continued

Country	2000	2001	2002	2003	2004
Denmark					
Pig iron	148 640	112 108	59 866	5 678	14 844
Sponge & powder	1 436	1 943	14 155	6 471	103 479
Ferro-manganese	3 735	3 497	1 674	16	38
Ferro-silico-manganese	5 284	6 079	2 071	...	...
Ferro-silicon	2 768	2 479	337	2 495	3 564
Other ferro-alloys	2 522	13 822	784	459	712
Silicon metal	2 410	1 686	2 179	1 521	1 061
Ingots, blooms, billets	4 351	11 604	75 117	588 317	598 552
Scrap	279 695	326 574	325 841	237 035	250 551
Estonia					
Ferro-alloys	16 033	12 273	9 905	16 840	2 132
Silicon metal	19 378	649	946	1 827	574
Scrap	265 312	28 995	17 142	35 654	85 689
Finland					
Pig iron	32 759	42 707	72 083	41 213	30 453
Sponge & powder	16 983	12 235	16 335	28 412	16 906
Ferro-chrome	3 828	5 073	5 690	9 395	6 562
Ferro-manganese	12 840	13 199	12 744	16 237	15 805
Ferro-silico-manganese	28 682	29 989	32 832	41 466	40 800
Ferro-molybdenum	1 764	1 873	2 333	2 776	2 709
Ferro-nickel	51 634	61 421	61 244	71 996	60 213
Ferro-niobium	469	426	485	494	470
Ferro-phosphorus	217	221	139	506	570
Ferro-silicon	15 500	18 928	20 729	37 976	32 507
Ferro-titanium & Fe-Si-Ti	833	1 271	1 271	1 632	2 063
Ferro-vanadium	171	175	222	238	250
Other ferro-alloys	2 521	4 767	3 162	3 640	4 448
Silicon metal	3 622	3 007	2 397	1 601	2 097
Ingots, blooms, billets	323 548	448 017	350 229	196 611	253 730
Scrap	465 528	482 372	476 516	781 633	865 142
France					
Pig iron	294 402	235 212	225 850	254 512	237 824
Sponge & powder	23 054	124 727	140 863	148 215	151 090
Ferro-chrome	314 783	253 110	310 760	260 231	224 722
Ferro-silico-chrome	87	127	2 116	1 524	59
Ferro-silico-magnesium	2 167	2 006	2 166	1 840	1 524
Ferro-manganese	47 814	42 103	57 442	46 048	96 276
Ferro-silico-manganese	69 823	53 527	64 538	73 362	61 446
Ferro-molybdenum	5 885	5 803	4 839	4 643	5 474
Ferro-nickel	25 071	27 640	36 725	28 974	10 966
Ferro-niobium	2 044	2 133	1 703	2 286	2 297
Ferro-phosphorus	3 136	2 550	2 464	2 160	2 942
Ferro-silicon	74 807	68 969	87 071	70 729	62 260
Ferro-titanium & Fe-Si-Ti	4 706	5 259	5 441	4 828	4 768
Ferro-tungsten & Fe-Si-W	569	622	283	485	346
Ferro-vanadium	1 008	1 401	940	1 063	1 031
Other ferro-alloys	13 234	42 196	16 543	16 253	18 670
Silicon metal	19 555	22 084	19 212	16 489	19 299
Ingots, blooms, billets	1 765 134	2 120 903	1 777 677	1 595 528	1 803 335
Scrap	3 236 091	2 934 281	2 833 589	3 019 857	3 449 108

Imports continued

Country	2000	2001	2002	2003	2004
Germany					
Pig iron	256 621	280 829	229 592	221 451	342 152
Sponge & powder	140 416	288 427	80 690	142 967	180 615
Ferro-chrome	420 503	381 746	383 712	478 203	440 993
Ferro-silico-chrome	8 144	6 087	2 740	8 354	11 367
Ferro-silico-magnesium	11 926	12 538	12 651	1 103	1 722
Ferro-manganese	197 356	198 415	183 336	178 917	175 176
Ferro-silico-manganese	133 257	130 975	147 113	144 637	172 164
Ferro-molybdenum	11 119	11 104	12 126	10 369	13 214
Ferro-nickel	58 291	80 666	89 782	82 618	90 614
Ferro-niobium	3 236	3 268	3 746	3 197	3 864
Ferro-phosphorus	6 176	5 285	5 807	4 728	4 131
Ferro-silicon	196 017	209 195	195 233	231 346	237 700
Ferro-titanium & Fe-Si-Ti	7 921	8 310	11 188	8 862	6 845
Ferro-tungsten & Fe-Si-W	403	561	498	486	400
Ferro-vanadium	5 263	6 832	4 767	5 471	4 006
Other ferro-alloys	14 481	33 594	43 225	25 367	22 754
Silicon metal	98 318	94 338	108 062	120 821	130 408
Ingots, blooms, billets	1 778 789	1 310 471	1 160 168	1 306 210	1 945 817
Scrap	3 523 681	3 560 264	3 804 881	4 364 130	5 411 710
Greece					
Pig iron	4 864	14 682	15 085	10 844	15 494
Ferro-manganese	2 971	2 188	1 695	2 454	2 604
Ferro-silico-manganese	8 827	15 462	24 110	19 505	23 808
Ferro-silicon	1 987	11 059	3 990	7 353	7 899
Other ferro-alloys	649	163	642	540	1 022
Silicon metal	915	873	856	1 140	1 055
Ingots, blooms, billets	711 253	505 889	148 798	211 021	229 854
Scrap	309 235	776 523	1 179 017	1 138 900	1 178 451
Hungary					
Pig iron	25 167	23 983	23 881	19 312	14 429
Ferro-manganese	11 584	10 441	10 908	11 503	9 152
Ferro-silicon	5 830	5 736	5 173	5 530	5 295
Other ferro-alloys	4 309	5 764	6 406	4 089	4 376
Silicon metal	2 766	2 772	3 567	4 686	5 196
Ingots, blooms, billets	210 739	168 833	82 919	91 664	82 336
Scrap	40 299	111 440	135 594	112 463	62 753
Irish Republic					
Pig iron	5 475	3 401	5 120	4 808	3 812
Ferro-alloys	626	3 772	663	224	286
Silicon metal	1 366	1 032	219	431	367
Ingots, blooms, billets	1 222	1 203	1 601	1 291	1 487
Scrap	88 914	26 285	1 420	786	1 277
Italy					
Pig iron	1 103 642	1 308 092	1 121 250	1 209 778	1 304 367
Sponge & powder	202 669	220 836	289 728	316 524	206 956
Ferro-chrome	294 176	303 726	378 402	368 649	400 159
Ferro-silico-chrome	347	...	189	30	5
Ferro-silico-magnesium	6 628	4 570	7 651	6 601	7 826
Ferro-manganese	72 812	74 801	77 121	69 901	79 827
Ferro-silico-manganese	83 192	95 270	151 140	150 805	182 945
Ferro-molybdenum	4 886	5 063	3 866	4 954	7 289
Ferro-nickel	23 913	36 887	60 680	59 367	82 107
Ferro-niobium	1 285	1 431	1 523	1 408	1 403
Ferro-phosphorus	1 653	917	1 021	662	830
Ferro-silicon	118 396	134 547	114 779	130 582	119 820
Ferro-titanium & Fe-Si-Ti	3 735	3 120	2 462	3 065	3 379
Ferro-tungsten & Fe-Si-W	180	177	108	123	229
Ferro-vanadium	1 380	2 014	2 180	1 759	1 890
Other ferro-alloys	8 562	14 245	17 338	15 096	17 062
Silicon metal	44 411	42 596	37 799	48 298	46 108
Ingots, blooms, billets	2 070 840	2 270 890	2 138 491	2 510 222	3 874 346
Scrap	4 056 830	4 348 543	4 045 986	4 380 744	5 606 124

Imports continued

Country	2000	2001	2002	2003	2004
Latvia					
Pig iron	200	14 209	14 351	79 359	75 448
Ferro-alloys	14 474	7 585	8 980	10 920	16 240
Silicon metal	1 793	1 895	2 572	5 638	2 220
Ingots, blooms, billets	64 766	91 262	99 588	172 092	195 467
Scrap	214 024	178 503	160 459	174 272	171 941
Lithuania					
Scrap	8 286	32 421	96 950	30 508	82 325
Netherlands					
Pig iron	127 682	132 065	144 375	63 821	71 664
Sponge & powder	95 375	42 829	114 868	71 606	60 793
Ferro-chrome	132 868	126 622	114 878	68 424	176 862
Ferro-silico-chrome	3 545	2 487	398	6	616
Ferro-silico-magnesium	502	318	3 212	1 305	...
Ferro-manganese	59 362	42 022	42 054	72 916	112 073
Ferro-silico-manganese	26 395	35 316	40 133	54 901	33 492
Ferro-molybdenum	7 956	8 781	1 457	1 800	5 282
Ferro-nickel	29 130	23 658	12 428	9 213	38 872
Ferro-niobium	6 575	7 888	31	16	16
Ferro-phosphorus	1 520	2 720	1 976	1 421	...
Ferro-silicon	81 450	90 882	129 678	110 329	153 435
Ferro-titanium & Fe-Si-Ti	2 389	1 736	1 565	2 083	4 272
Ferro-tungsten & Fe-Si-W	2 380	370	393	405	625
Ferro-vanadium	2 477	1 969	3 240	3 565	3 608
Other ferro-alloys	2 330	4 798	6 654	4 002	5 680
Silicon metal	42 360	32 276	33 395	43 195	36 792
Ingots, blooms, billets	279 573	119 504	102 428	124 817	302 637
Scrap	1 167 772	1 272 600	1 378 767	1 751 693	2 250 964
Norway					
Pig iron	15 874	18 207	16 844	14 639	8 823
Sponge & powder	42 414	44 037	48 170	45 271	38 519
Ferro-chrome	844	762	499	571	860
Ferro-manganese	17 467	10 848	3 987	5 921	9 703
Ferro-silico-manganese	438	19	716	3 560	933
Ferro-silicon	7 057	13 610	14 177	19 180	11 684
Other ferro-alloys	1 152	2 145	1 543	2 016	1 679
Silicon metal	7 898	8 649	8 629	13 424	17 653
Ingots, blooms, billets	176 632	161 217	132 220	101 819	150 611
Scrap	368 454	334 136	347 080	381 683	416 062
Poland					
Pig iron	11 745	146 508	103 349	86 108	150 163
Sponge & powder	2 103	1 876	13 193	34 091	34 456
Ferro-chrome	10 388	7 729	7 716	8 073	10 352
Ferro-silico-magnesium	2 313	...	...	...	...
Ferro-manganese	63 562	43 277	42 851	37 530	46 414
Ferro-silico-manganese	33 705	28 401	40 023	53 968	64 985
Ferro-molybdenum	795	809	833	829	1 138
Ferro-phosphorus	1 104	...	...	...	...
Ferro-silicon	25 762	24 657	25 664	27 132	29 551
Ferro-vanadium	541	386	308	228	393
Other ferro-alloys	3 500	6 424	6 431	6 322	7 454
Silicon metal	6 764	5 665	6 208	10 586	9 967
Ingots, blooms, billets	43 331	48 142	31 962	85 027	191 722
Scrap	170 108	104 820	69 947	96 426	278 271
Portugal					
Pig iron	24 253	23 395	25 139	12 763	16 089
Ferro-manganese	1 180	603	490	779	889
Ferro-silico-manganese	6 877	3 204	2 331	5 757	1 742
Ferro-silicon	3 749	3 439	2 296	2 339	1 881
Other ferro-alloys	5 922	5 942	4 762	3 894	2 981
Ingots, blooms, billets	46 558	73 499	123 087	5 829	7 167
Scrap	227 168	184 327	218 978	353 646	292 753
Romania					
Ferro-alloys	61 774	59 826	66 087	69 411	92 302
Silicon metal	2 460	1 759	1 590	5 888	3 401
Ingots, blooms, billets	512 266	648 391	724 751	510 940	559 793

Imports continued

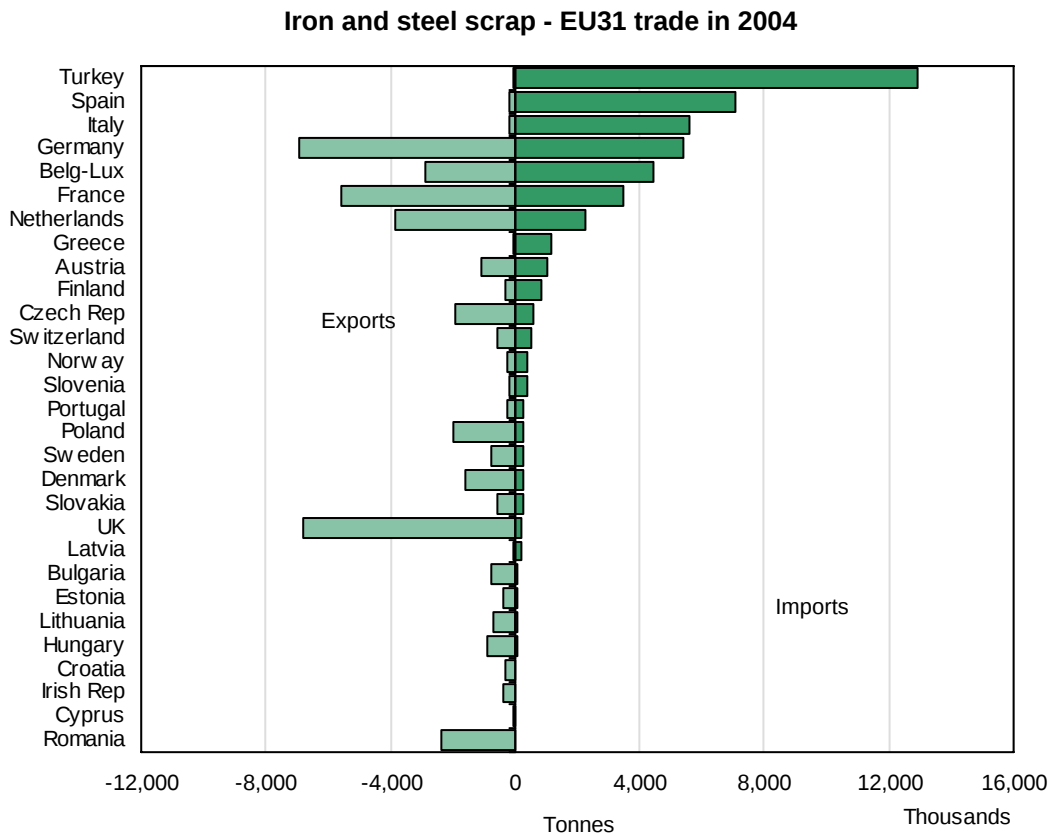
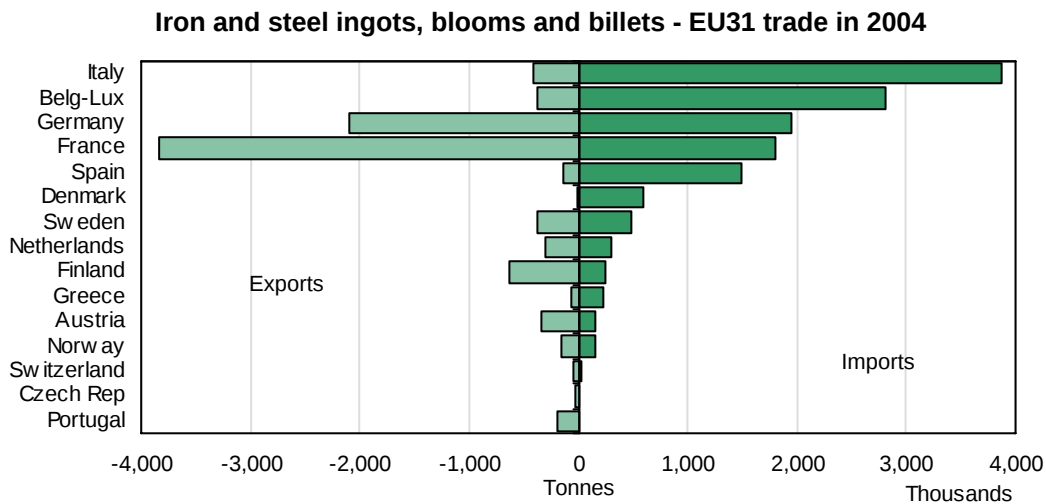
Country	2000	2001	2002	2003	2004
Slovakia					
Pig iron	17 889	19 209	20 219	14 998	29 498
Sponge & powder	8 483	26	15 318	11 704	11 141
Ferro-alloys	18 946	24 870	31 332	36 038	35 878
Silicon metal	5 348	50	6 496	7 593	8 199
Ingots, blooms, billets	19 599	4 015	29 081	17 534	15 927
Scrap	219 213	383 068	475 898	389 383	241 718
Slovenia					
Pig iron	14 265	13 497	14 851	19 260	27 783
Ferro-alloys	28 058	28 298	32 616	34 959	44 254
Silicon metal	2 564	3 547	4 059	6 483	10 171
Ingots, blooms, billets	4 057	5 800	3 620	3 312	3 199
Scrap	250 090	249 517	262 294	316 188	386 832
Spain					
Pig iron	387 778	321 671	397 194	434 682	593 588
Sponge & powder	860 410	738 608	640 298	593 176	670 063
Ferro-chrome	215 228	246 756	229 425	579 714	221 156
Ferro-silico-chrome	4 186	2 951	1 878	...	48
Ferro-silico-magnesium	2 493	4 035	3 529	3 979	6 183
Ferro-manganese	32 615	53 221	45 100	27 846	19 817
Ferro-silico-manganese	15 121	26 375	28 237	56 110	75 061
Ferro-molybdenum	2 186	3 077	3 486	4 042	3 456
Ferro-nickel	43 770	49 769	51 626	60 141	58 664
Ferro-niobium	221	271	335	348	491
Ferro-phosphorus	1 841	2 127	2 051	2 020	2 072
Ferro-silicon	39 884	50 862	43 230	56 258	56 736
Ferro-titanium & Fe-Si-Ti	1 044	1 059	496	1 017	1 212
Ferro-vanadium	567	1 688	971	1 050	1 077
Other ferro-alloys	10 015	11 130	9 865	6 818	11 175
Silicon metal	3 328	3 816	4 528	3 677	5 660
Ingots, blooms, billets	772 207	855 775	1 062 109	1 524 971	1 495 840
Scrap	6 127 787	6 290 607	5 533 584	6 389 902	7 093 195
Sweden					
Pig iron	100 988	40 289	26 215	24 894	29 369
Sponge & powder	12 168	3 704	2 667	2 746	3 074
Ferro-chrome	85 046	92 574	109 391	85 830	72 926
Ferro-silico-chrome	5 244	3 239	2 789	1 094	2 521
Ferro-silico-magnesium	3 977	2 180	1 195	1 060	932
Ferro-manganese	29 280	33 034	33 238	37 190	32 782
Ferro-silico-manganese	28 840	17 309	13 357	19 493	17 887
Ferro-molybdenum	3 269	3 585	3 728	3 797	4 369
Ferro-nickel	12 756	12 418	8 765	8 738	948
Ferro-niobium	671	623	747	732	809
Ferro-phosphorus	1 114	777	1 553	739	920
Ferro-silicon	35 802	42 809	41 278	41 098	38 534
Ferro-titanium & Fe-Si-Ti	2 340	1 736	1 709	1 405	1 627
Ferro-tungsten & Fe-Si-W	510	867	183	321	564
Ferro-vanadium	1 209	855	1 037	1 059	1 375
Other ferro-alloys	2 257	7 631	5 822	4 519	6 534
Silicon metal	4 416	5 095	10 639	6 316	10 542
Ingots, blooms, billets	477 366	366 264	426 018	495 734	491 102
Scrap	490 184	376 456	429 341	351 024	271 041
Switzerland					
Pig iron	30 806	33 986	19 466	22 120	22 954
Sponge & powder	9 073	6 176	6 163	6 792	7 631
Ferro-aluminium	4	1	48	24	...
Ferro-chrome	1 412	1 020	978	1 504	1 161
Ferro-manganese	5 927	6 161	7 567	7 406	7 884
Ferro-silico-manganese	5 786	4 655	5 156	4 444	6 481
Ferro-silicon	5 944	5 952	4 291	5 417	5 194
Other ferro-alloys	1 971	1 511	1 198	1 070	1 203
Silicon metal	696	701	1 168	716	694
Ingots, blooms, billets	69 174	44 303	16 032	17 132	20 896
Scrap	239 387	246 179	347 211	412 584	544 911

Imports continued

Country	2000	2001	2002	2003	2004
Turkey					
Pig iron	226 951	155 350	324 368	306 901	286 589
Sponge & powder	20 281	22 674	84 443	75 798	18 084
Ferro-manganese	43 147	34 409	48 178	70 866	44 406
Ferro-silico-manganese	97 763	78 749	157 650	178 594	189 294
Ferro-silicon	58 630	44 864	55 575	126 532	82 543
Other ferro-alloys	11 385	10 041	11 587	12 068	14 975
Silicon metal	1 985	1 468	2 730	7 968	4 649
Ingots, blooms, billets	1 923 083	1 039 166	896 891	1 618 384	1 531 529
Scrap	7 457 315	4 993 240	9 749 780	12 818 350	12 892 546
United Kingdom					
Pig iron	133 734	159 725	124 682	116 724	103 729
Sponge & powder	40 061	23 551	23 673	21 503	20 783
Ferro-chrome	107 044	98 994	112 898	68 405	112 335
Ferro-silico-chrome	7 415	5 136	2 309	63	-----
Ferro-silico-magnesium	6 965	5 318	5 820	5 663	4 961
Ferro-manganese	91 053	73 507	86 681	76 686	69 872
Ferro-silico-manganese	66 279	53 747	64 565	53 421	41 314
Ferro-molybdenum	490	351	338	434	824
Ferro-nickel	2 503	7 166	11 010	16 437	14 665
Ferro-niobium	1 548	1 261	1 029	1 148	1 269
Ferro-phosphorus	2 310	2 163	1 503	2 124	1 687
Ferro-silicon	67 821	72 663	76 046	75 469	58 252
Ferro-titanium & Fe-Si-Ti	2 672	2 465	2 729	2 042	2 448
Ferro-tungsten & Fe-Si-W	63	96	32	60	10
Ferro-vanadium	1 443	727	748	1 071	1 279
Other ferro-alloys	4 086	4 073	4 258	2 195	2 289
Silicon metal	78 089	86 026	80 766	100 472	70 563
Ingots, blooms, billets	518 194	388 350	1 453 884	540 537	764 472
Scrap	201 251	178 923	113 107	139 089	225 970

Note(s):-

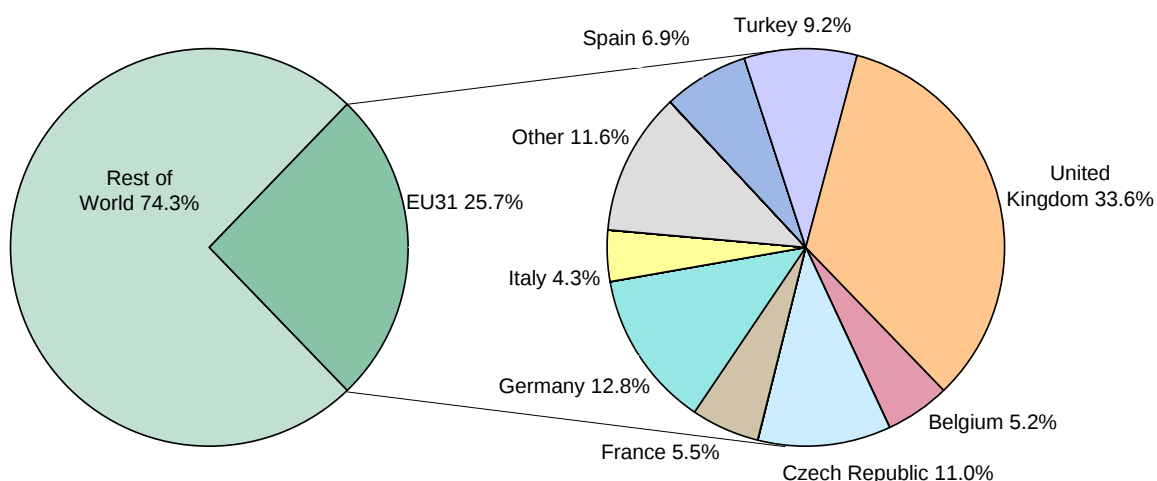
- (1) In this table the term 'ingots, blooms, billets' corresponds to items 7206, 7207, 7218 and 7224 of the Harmonised System which includes those of alloy and high carbon steel



Kaolin

- Kaolin is the market name for the clay mineral kaolinite. Unlike ceramic and refractory clays, kaolinite is usually processed to eliminate impurities and to tailor the product for end-use. Kaolin has many industrial applications; the main ones are in the manufacture of paper, ceramics, rubber, plastics, paint, cement and glass-fibres. Paper manufacture is the largest end-use of kaolin, up to 30% of printing paper can be kaolin.
- Kaolin production is fairly stable in the EU31 countries, which in 2004 produced 26% of world kaolin. The UK is the largest producer and exporter in the EU31 and third biggest in the world. Because of its paper industry, the largest EU31 consumer is Finland.
- Kaolin is traded in several different forms; in 2004 refined, ex-works ranged from £40/tonne–£100/tonne.

EU31 Production of kaolin 2004



Production of kaolin

tonnes

Country	2000	2001	2002	2003	2004
Austria	25 066	20 047	21 212	15 034	16 345
Belgium	*300 000	*300 000	*300 000	*300 000	*300 000
Bulgaria	*150 000	*140 000	*150 000	*120 000	*190 000
Czech Republic (c)	564 000	562 000	562 000	582 000	639 000
France	385 000	377 000	339 000	335 000	316 000
Germany (b)	714 936	696 832	740 821	738 123	740 000
Greece	54 226	60 075	57 885	59 680	53 438
Italy	284 148	295 263	174 990	224 755	246 608
Poland (d)	90 139	103 220	89 372	106 761	130 596
Portugal	162 674	148 706	147 448	169 669	*170 000
Romania	18 942	21 867	22 517	25 741	22 337
Slovakia	21 000	34 730	24 600	24 800	89 424
Spain (d)	353 355	*400 000	419 483	427 193	402 347
Turkey	390 830	505 773	372 344	370 455	536 008
United Kingdom (a) (e)	2 376 057	2 204 156	2 162 815	2 097 137	1 944 955
EU31 Total	5 900 000	5 900 000	5 600 000	5 600 000	5 800 000

Note(s):-

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

(a) Sales

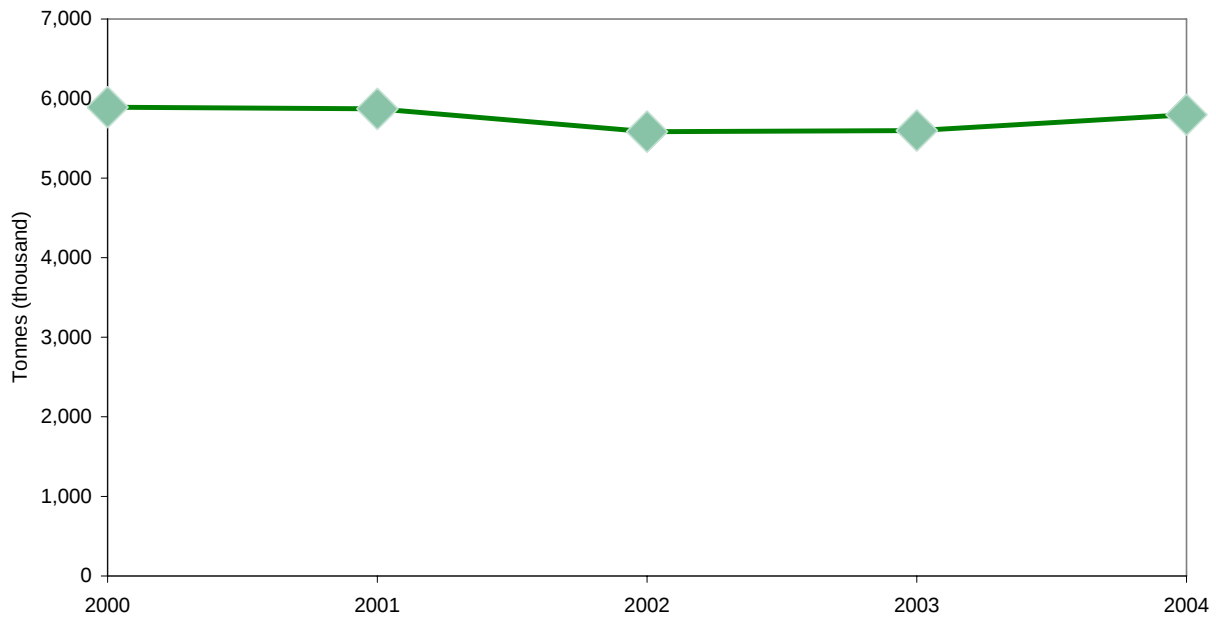
(b) Washed and dried

(c) Beneficiated

(d) Washed

(e) Dry weight

EU31 Production of kaolin 2000 - 04



Exports of kaolin

tonnes

Country	2000	2001	2002	2003	2004
Austria	3 235	2 998	3 105	1 870	2 277
Belgium-Luxembourg	324 267	357 363	332 718	539 940	664 743
Bulgaria	155 429	115 257	113 538	124 396	114 399
Croatia	3 080	2 620	5 319	4 362	351
Czech Republic	442 934	455 089	443 674	441 545	483 636
Denmark	1 045	1 050	688	583	461
Finland	6 915	7 561	10 698	10 032	8 111
France	348 868	290 332	325 323	1 613 484	484 554
Germany	367 230	350 804	333 927	359 926	369 141
Greece	4 252	723	884	976	131
Hungary	2 229	3 121	3 539	2 388	7 180
Italy	56 689	58 835	47 652	37 357	29 995
Netherlands	233 688	282 035	234 669	335 299	307 337
Poland	1 903	6 321	3 538	10 408	9 941
Portugal	10 287	11 944	15 318	10 131	11 383
Spain	130 290	155 446	159 759	172 414	154 667
Sweden	11 491	7 199	8 200	8 791	15 544
Turkey	272 128	227 159	190 404	299 843	267 817
United Kingdom (a)	2 074 548	1 928 230	1 899 220	1 862 437	1 728 161

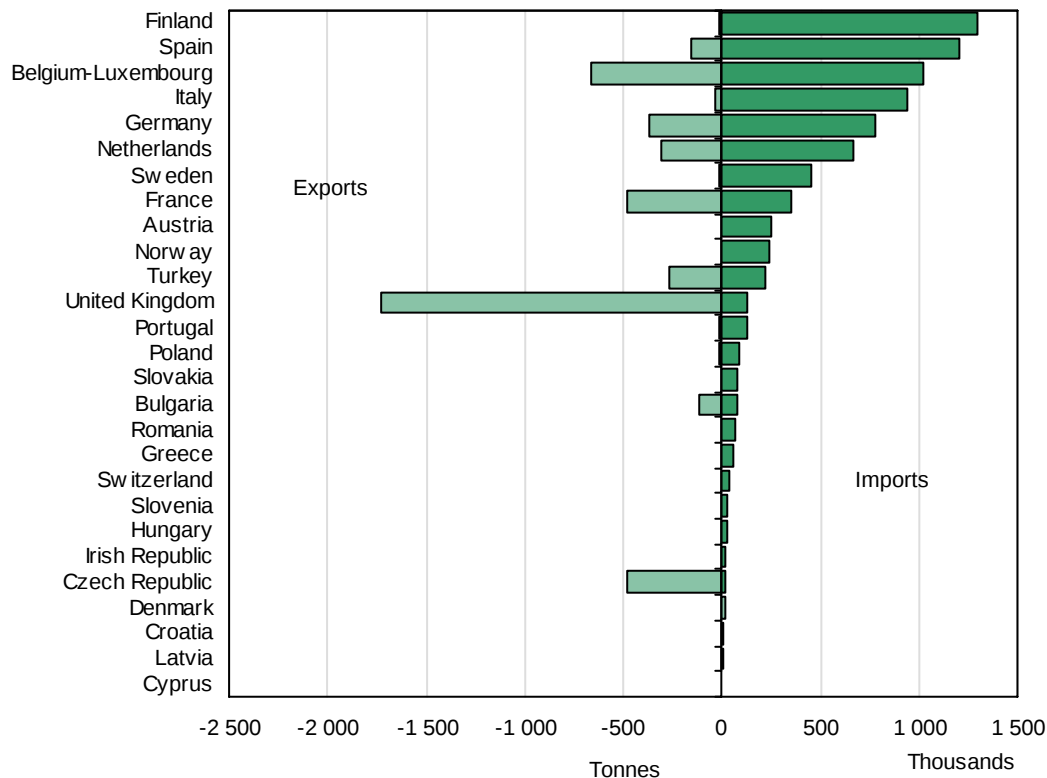
Note(s):-

(a) Dry weight

Imports of kaolin

Country	2000	2001	2002	2003	2004
Austria	250 552	254 030	249 132	228 674	249 353
Belgium-Luxembourg	470 979	467 193	607 908	890 277	1 023 999
Bulgaria	26 072	26 805	28 486	36 360	75 425
Croatia	5 513	6 357	6 046	6 303	6 472
Cyprus	3 712	369	380	487	299
Czech Republic	17 649	19 514	12 791	15 466	14 034
Denmark	18 505	19 369	34 441	20 987	13 056
Finland	1 493 786	1 355 460	1 207 343	1 305 240	1 301 806
France	379 697	380 166	386 197	325 358	349 353
Germany	809 665	749 260	750 621	771 902	774 307
Greece	43 835	23 933	43 586	52 833	56 380
Hungary	28 869	34 000	30 130	28 472	23 417
Irish Republic	12 539	11 505	20 919	19 186	22 213
Italy	1 108 281	1 020 131	952 526	947 116	939 832
Latvia	2 607	3 386	4 933	4 962	5 096
Netherlands	560 760	455 737	444 622	560 878	667 968
Norway	274 484	251 950	234 592	241 975	237 725
Poland	53 027	66 759	77 155	81 181	89 139
Portugal	140 863	151 525	125 201	135 681	124 508
Romania	68 404	71 015	71 628	82 981	71 987
Slovakia	81 985	93 735	111 841	88 513	76 440
Slovenia	28 703	25 583	27 112	29 449	28 782
Spain	797 987	796 040	792 920	999 504	1 209 303
Sweden	548 460	422 071	437 528	467 111	452 215
Switzerland	45 273	37 383	37 298	45 012	41 350
Turkey	198 837	117 550	149 559	197 684	218 838
United Kingdom	50 300	102 839	58 993	72 719	126 644

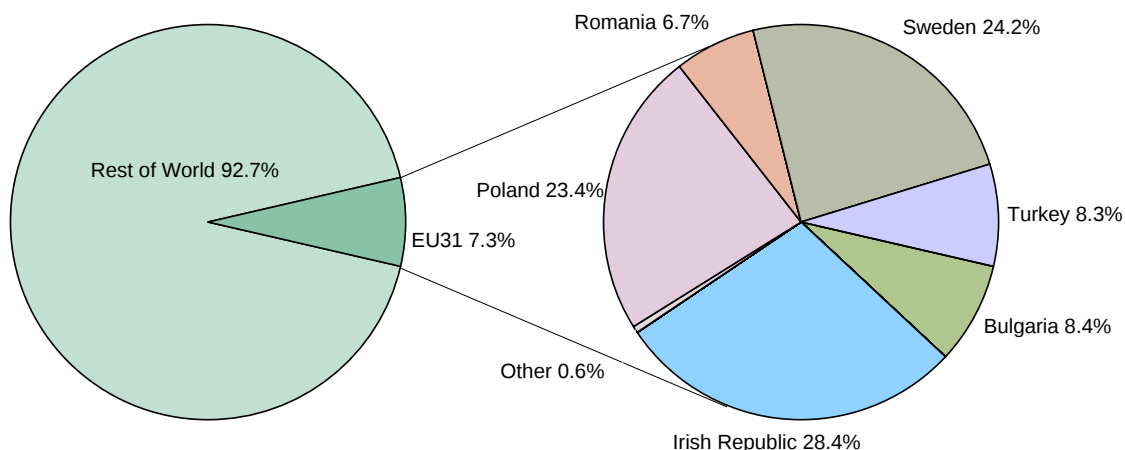
Kaolin - EU31 trade in 2004



Lead

- Lead is a very soft, highly malleable, ductile metallic element with low electrical conductivity. It is also very dense and strongly resistant to corrosion, although it tarnishes rapidly in air. The main use is in lead-acid batteries, although lead is also widely used in architecture, plumbing, ordinance, solder, radiation shielding and insecticides.
- China was the largest producer of lead in 2004 (31%), although many countries refine this metal. In the EU31 the largest mine producer of lead was the Republic of Ireland (28%) and the largest producers of refined lead, based on imported materials and recycling, were Germany (25%) and the UK (17%).
- At the start of 2004, the lead price was at a seven-year high. The price during 2004 continued to rise at a gradual rate with LME November 2004 prices ranging from a low of \$896/tonne to a high of over \$1000/tonne.

EU31 Mine production of lead 2004

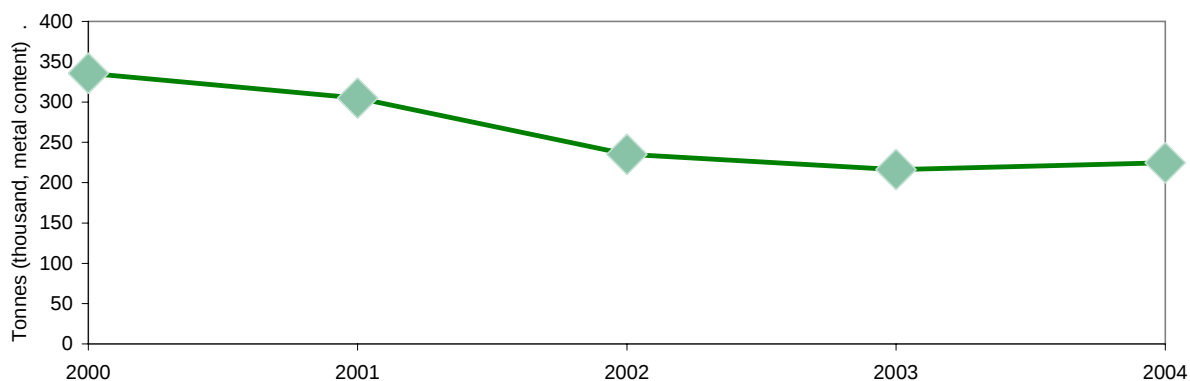


Mine production of lead

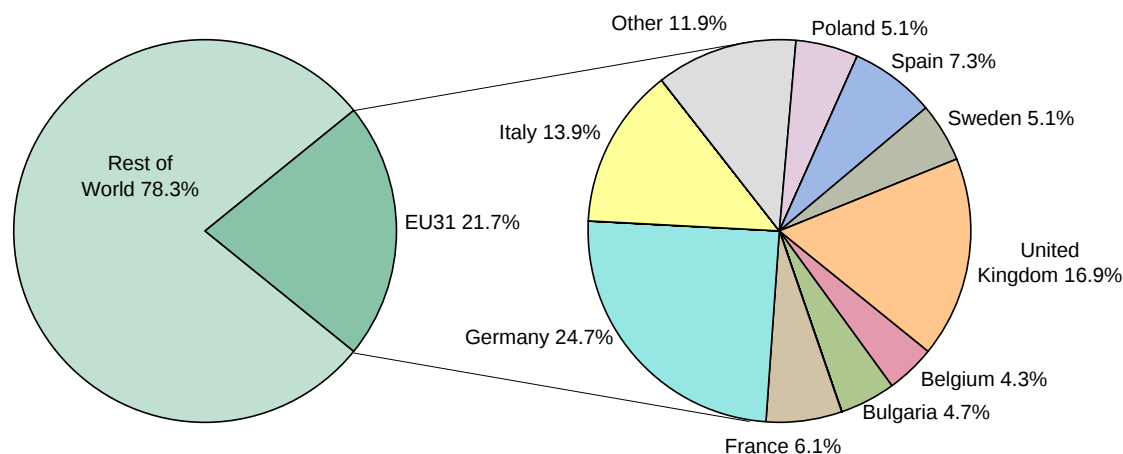
tonnes (metal content)

Country	2000	2001	2002	2003	2004
Bulgaria	13 700	18 500	19 800	19 950	18 970
Finland	380	-----	-----	-----	-----
Greece	15 554	26 588	29 300	2 000	-----
Irish Republic	57 500	44 500	41 700	50 300	63 800
Italy	3 300	2 700	3 200	2 700	800
Poland	51 200	52 600	56 600	54 700	52 700
Romania	18 750	19 676	17 500	15 747	14 952
Spain	51 793	35 573	6 171	1 765	-----
Sweden	106 584	85 975	42 954	50 962	54 347
Turkey	15 888	17 884	17 277	17 446	18 700
United Kingdom	*1 000	*800	*700	*700	*500
EU31 Total	335 600	304 800	235 200	216 300	224 800

EU31 Mine production of lead 2000 - 04



EU31 Production of refined lead 2004



Production of refined lead

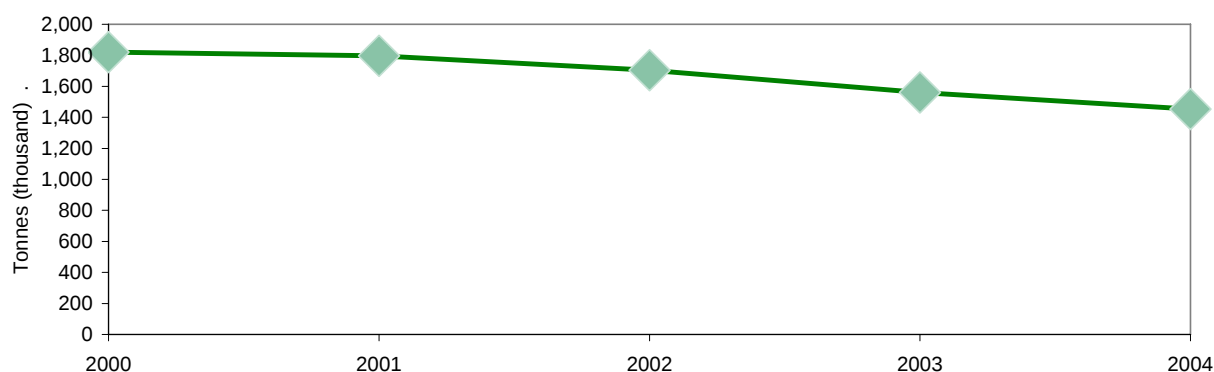
tonnes

Country	2000	2001	2002	2003	2004
Austria	23 773	23 666	*23 000	*20 000	*26 000
Belgium	119 000	100 000	88 000	65 000	62 000
Bulgaria	84 100	83 000	71 000	74 000	69 000
Czech Republic	28 700	30 500	*30 500	*30 000	*30 000
Estonia	-----	-----	-----	-----	3 000
France	263 200	231 400	203 400	91 000	89 000
Germany	386 658	373 397	379 905	356 900	359 200
Greece	*6 000	*6 000	*6 000	*6 000	*6 000
Irish Republic	8 500	9 800	6 600	7 800	19 600
Italy	233 900	226 500	196 000	214 100	201 600
Netherlands	21 000	20 000	18 000	17 000	17 000
Poland	55 900	66 000	65 800	74 300	73 900
Portugal	*6 000	*6 000	*6 000	*6 000	*6 000
Romania	23 555	22 000	23 000	28 000	32 000
Slovenia	15 300	15 400	15 400	15 000	*15 000
Spain	120 000	121 600	115 552	99 100	105 600
Sweden	78 068	75 608	63 451	73 340	73 548
Switzerland	10 007	10 250	8 700	9 600	9 300
Turkey	*9 000	*9 000	*9 000	*9 000	*9 000
United Kingdom	327 904	366 305	374 646	364 574	245 938
EU31 Total	1 821 000	1 796 000	1 704 000	1 561 000	1 453 000

Note(s):-

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

EU31 Production of refined lead 2000 - 04



Exports of lead

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Unwrought	4 519	6 375	7 831	8 988	14 504
Belgium-Luxembourg					
Ores & concentrates	126 905	96 613	104 187	84 545	109 580
Unwrought	122 509	96 885	84 303	104 827	93 316
Scrap	8 979	9 465	6 981	6 307	12 736
Bulgaria					
Unwrought	72 777	68 749	58 789	61 799	54 686
Croatia					
Scrap	590	809	749	750	853
Cyprus					
Scrap	2 371	1 965	1 874	2 073	1 711
Czech Republic					
Unwrought	9 200	6 786	5 724	7 112	7 230
Scrap	4 152	3 750	3 346	2 926	3 059
Denmark					
Unwrought	2 186	3 090	3 048	3 011	1 930
Scrap	1 959	1 864	1 338	1 885	1 805
Estonia					
Scrap	278	459	437	520	1 414
Finland					
Scrap	12 653	811	338	159	884
France					
Unwrought	76 757	62 680	60 095	12 868	6 182
Scrap	20 275	21 979	23 473	27 789	27 003
Germany					
Ores & concentrates	27 765	8 868	22 024	31 512	3 423
Unwrought	117 138	160 412	169 142	129 550	120 361
Scrap	13 112	12 669	13 646	15 468	12 412
Greece					
Unwrought	3 671	6 127	1 712	107	51 638
Hungary					
Scrap	1 718	1 944	1 421	1 237	2 377
Irish Republic					
Ores & concentrates	48 056	58 150	21 069	56 141	84 115
Italy					
Unwrought	24 103	8 646	20 987	26 711	28 295
Scrap	5 595	2 716	4 792	5 652	1 262
Lithuania					
Scrap	779	1 129	931	3 239	6 613
Netherlands					
Unwrought	3 532	1 256	1 263	23 942	34 426
Scrap	24 706	26 188	5 670	8 732	10 215
Norway					
Scrap	15 329	15 693	5 188	987	601
Poland					
Ores & concentrates	59 977	73 989	77 493	86 395	94 126
Unwrought	41 381	44 691	38 602	42 518	39 287
Scrap	1 501	1 921	2 107	2 408	963
Portugal					
Unwrought	60	567	3 769	2 367	1 988
Scrap	2 827	3 506	2 733	3 502	3 452
Romania					
Ores & concentrates	26 003	15 585	36 089	30 390	25 092
Unwrought	18 260	16 142	16 544	23 388	20 894
Scrap	6 083	1 483	1 518	964	1 689
Slovakia					
Unwrought	3 311	2 873	984	3 124	(b) *2 000
Slovenia					
Unwrought	6 392	6 587	3 757	5 136	4 701
Spain					
Ores & concentrates	113 715	97 594	13	5 057	6 057
Unwrought	5 842	6 098	9 458	6 219	8 301
Scrap	2 706	3 684	6 797	7 028	6 399
Sweden					
Ores & concentrates	127 922	118 723	63 204	59 340	60 105
Unwrought	67 565	54 414	61 079	71 217	68 215
Scrap	73	545	424	237	554

Exports continued

Country	2000	2001	2002	2003	2004
Switzerland					
Unwrought	5 730	4 074	7 160	7 086	5 407
Scrap	4 883	4 479	2 565	2 267	1 320
Turkey					
Ores & concentrates (a)	20 915	11 172	42 390	18 619	27 179
Unwrought	1 890	4 985	4 728	1 484	6 190
United Kingdom					
Unwrought	82 539	93 552	101 832	61 682	34 925
Unwrought alloys	35 145	42 308	57 249	44 091	31 664
Scrap	7 352	10 700	17 116	28 569	32 934

Note(s):-

(1) In this table the term 'unwrought' lead corresponds to item 7801 of the Harmonised System and comprises base bullion, pigs, unwrought bars, etc.

(2) The term 'unwrought' as used here includes alloys unless these are separately specified

(a) Complex lead-zinc ore

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

Imports of lead

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Unwrought	40 438	46 677	44 878	37 927	39 533
Scrap	2 538	1 921	1 844	2 672	2 192
Belgium-Luxembourg					
Ores & concentrates	117 528	101 613	115 471	80 203	117 597
Unwrought	28 653	30 894	27 490	20 874	27 042
Scrap	32 043	38 002	25 527	28 028	26 904
Bulgaria					
Ores & concentrates	88 338	83 051	52 368	64 751	74 163
Unwrought	...	2 252	2 218	1 759	5 558
Scrap	...	1 714	2 800	816	441
Croatia					
Unwrought	2 365	841	1 635	988	1 460
Cyprus					
Unwrought	1 927	2 359	2 367	918	317
Czech Republic					
Unwrought	52 886	58 777	56 941	55 699	73 472
Denmark					
Unwrought	3 364	3 447	2 073	816	2 072
Scrap	2 032	1 535	2 489	2 237	2 366
Finland					
Unwrought	3 425	1 825	3 032	2 753	2 582
Scrap	181	287	137	139	41
France					
Ores & concentrates	222 259	182 072	146 270	...	...
Unwrought	87 602	80 869	80 812	103 439	91 979
Scrap	48 198	40 099	44 079	30 508	34 513
Germany					
Ores & concentrates	209 758	267 848	228 055	193 156	202 309
Unwrought	134 230	189 697	158 048	159 860	112 975
Scrap	18 724	19 056	19 472	9 075	11 757
Greece					
Unwrought	3 764	5 970	5 309	4 633	28 460
Scrap	1 350	882	3 349	5 496	1 284
Hungary					
Unwrought	11 577	10 117	6 552	7 148	4 545
Irish Republic					
Unwrought	21 083	24 432	35 376	28 438	26 896
Scrap	5 974	9 163	9 985	7 798	18 290
Italy					
Ores & concentrates	158 478	109 714	98 430	86 985	99 015
Unwrought	88 093	90 537	111 214	88 333	114 546
Scrap	1 965	6 346	4 737	3 669	3 877

Lead

Imports continued

Country	2000	2001	2002	2003	2004
Netherlands					
Unwrought	12 184	9 316	17 070	66 405	83 391
Scrap	11 164	8 427	8 824	8 034	7 818
Norway					
Unwrought	4 111	3 213	3 971	2 024	2 970
Poland					
Unwrought	33 525	33 400	43 821	47 030	50 189
Portugal					
Unwrought	18 053	20 604	16 952	15 624	18 885
Romania					
Ores & concentrates	32 615	30 678	32 043	14 899	26 920
Unwrought	4 377	3 767	2 811	1 111	1 667
Slovenia					
Unwrought	10 923	10 738	12 629	13 604	12 854
Scrap	91	215	783	538	1 223
Spain					
Unwrought	106 245	117 501	178 929	129 925	154 828
Scrap	8 903	13 311	19 914	21 943	27 866
Sweden					
Unwrought	6 940	6 777	5 023	4 190	6 088
Scrap	2 152	2 548	1 970	2 463	4 062
Switzerland					
Unwrought	6 976	7 098	5 943	6 047	7 831
Turkey					
Unwrought	56 168	41 970	64 513	71 665	71 606
United Kingdom					
Ores & concentrates (a)	*34 000	*33 000	*30 000	*5 000	-----
Unwrought , base bullion (b)	140 344	184 518	184 060	168 228	128 011
Unwrought, other	109 102	33 202	32 468	28 132	53 706
Scrap	10 849	15 633	4 946	6 043	7 811

Note(s):-

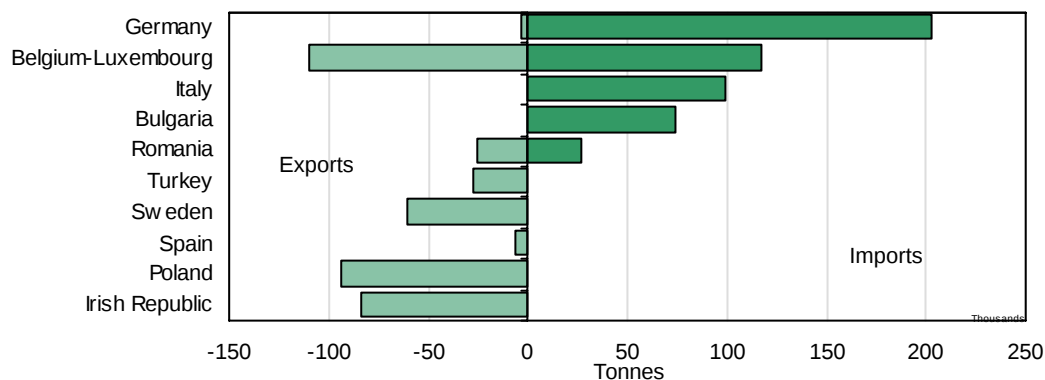
(1) In this table the term 'unwrought' lead corresponds to item 7801 of the Harmonised System and comprises base bullion, pigs, unwrought bars, etc.

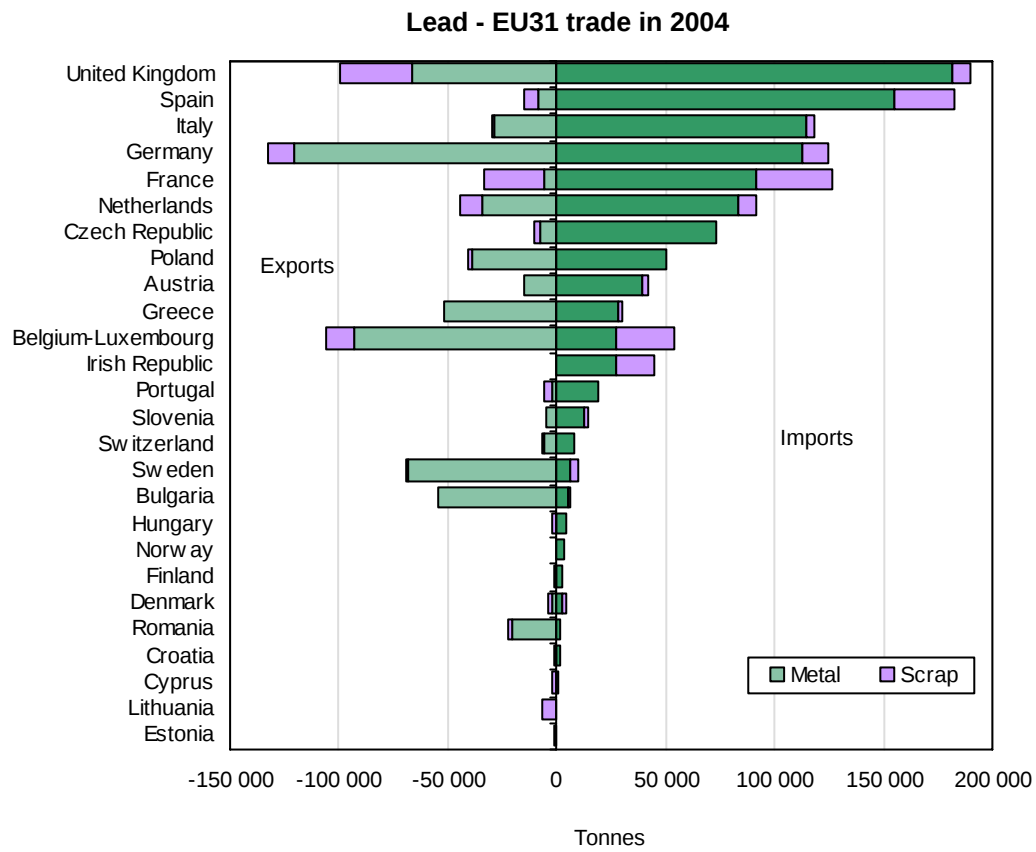
(2) The term 'unwrought' as used here includes alloys unless these are separately specified

(a) Pb content

(b) Includes a substantial precious metal content, mainly silver

Lead ore - EU31 trade in 2004





Lithium minerals

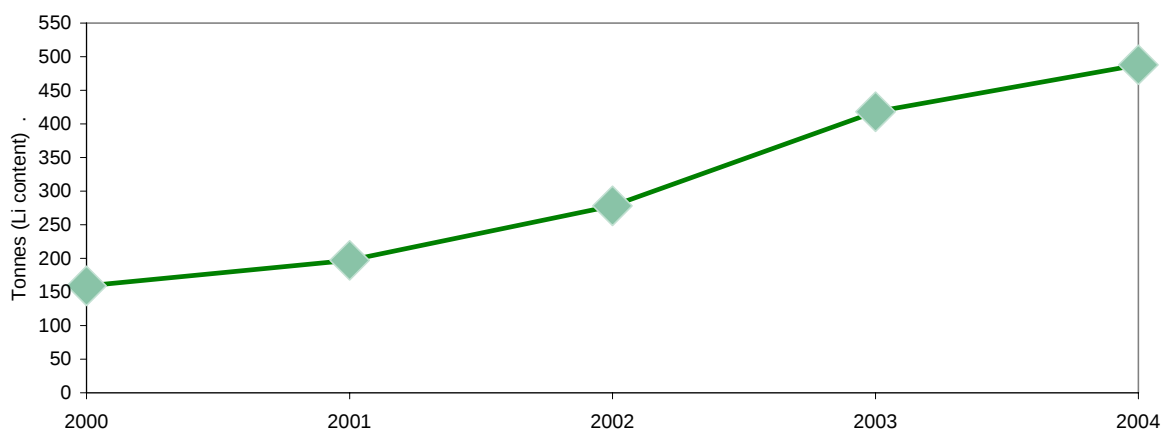
- Lithium is a very light metallic element. It is mainly used as lithium compounds that act as fluxes in the ceramics and glass industries, and in lubricants. The metal is an important alloying agent in primary aluminium. Lithium is increasingly being used in rechargeable batteries.
- Lithium is produced in only a few countries of which Australia was the largest lithium mineral producer in 2004 (approximately 40% of world production). Chile was the largest producer by lithium content (53% of world production). In the EU31 Portugal is the only country producing lithium.
- The lithium minerals spodumene and petalite, with lithium carbonate, are the usual traded forms. Prices were stable throughout

Production of lithium minerals

tonnes

Country	2000	2001	2002	2003	2004
Portugal					
Lepidolite	9 352	11 571	16 325	24 606	28 696
EU31 Total (Li content)	159	197	278	418	488

EU31 Production of lithium minerals 2000 - 04



Exports of lithium

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg					
Oxides	406	470	548	982	1 837
Carbonate	3 549	3 392	3 935	4 000	10 053
France					
Oxides	90	19	10	7	4
Carbonate	2 819	3 130	2 955	2 382	1 166
Germany					
Oxides	740	647	532	649	625
Carbonate	1 690	1 771	1 768	2 484	2 660
Italy					
Oxides	5	8	58	47	11
Carbonate	124	87	138	162	206
Netherlands					
Oxides	380	590	203	190	187
Carbonate	142	205	104	89	199
Slovenia					
Carbonate	67	91	68	64	89
Spain					
Carbonate	6 839	1 617	639	373	3 157
Switzerland					
Oxides	9	96	53	78	80
United Kingdom					
Oxides	116	95	186	169	303
Carbonate	285	214	147	193	161

Imports of lithium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Carbonate	118	114	113	118	115
Belgium-Luxembourg					
Oxides	793	784	1 159	1 197	(a) *2 000
Carbonate	5 542	5 136	5 879	5 086	6 108
France					
Oxides	432	420	329	347	407
Carbonate	1 333	1 133	1 612	1 381	1 484
Germany					
Oxides	5 529	5 100	3 198	4 405	3 699
Carbonate	4 026	4 187	4 825	6 018	7 189
Italy					
Oxides	165	168	209	237	148
Carbonate	1 662	1 659	1 581	1 686	1 505
Netherlands					
Oxides	332	539	217	237	270
Carbonate	952	897	854	956	1 081
Poland					
Oxides	87	39	69	74	132
Carbonate	44	46	55	56	117
Slovenia					
Oxides	82	116	80	88	127
Spain					
Oxides	243	347	357	436	329
Carbonate	469	713	1 046	983	759
Sweden					
Oxides	126	130	155	113	162
Carbonate	126	183	179	186	208
Switzerland					
Oxides	67	91	97	89	89
Turkey					
Oxides	113	70	136	120	179
Carbonate	107	134	157	278	417
United Kingdom					
Oxides	376	374	409	554	379
Carbonate	779	499	626	687	492

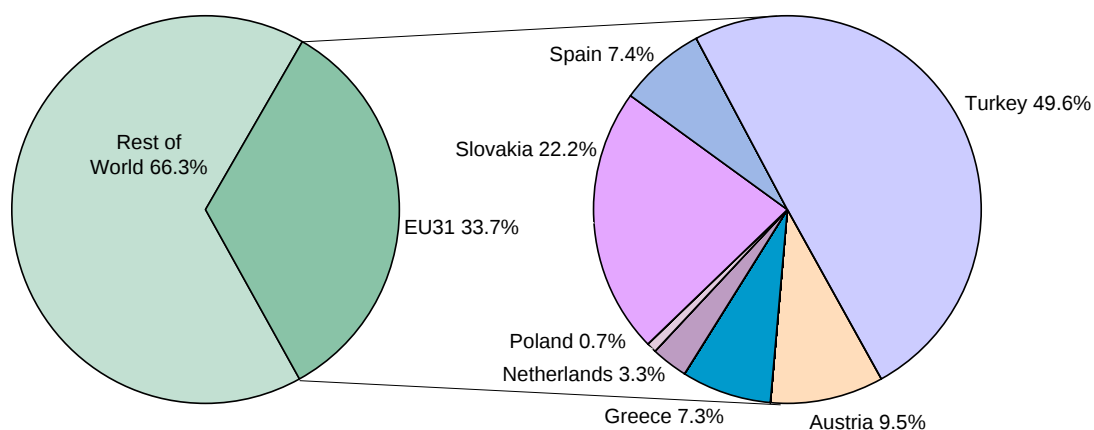
Note(s):-

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

Magnesite

- Magnesite is the commonly used name for magnesium carbonate rock. Magnesite has excellent thermal resistance and is most commonly used as refractory bricks in furnaces. It is also used in fertilisers.
- Economic deposits of magnesite are rare. Only 22 countries produced magnesite in 2004, of which China was the largest (approximately 45% of world production). The largest EU31 producer was Turkey (50%).
- The price of dead burned magnesia rose by over 25% in 2004, which was the first increase since the late 1990s. Chinese dead burned, 94–95% MgO, lump, FOB China traded between \$122/tonne and \$130/tonne.

EU31 Production of magnesite 2004



Production of magnesite

tonnes

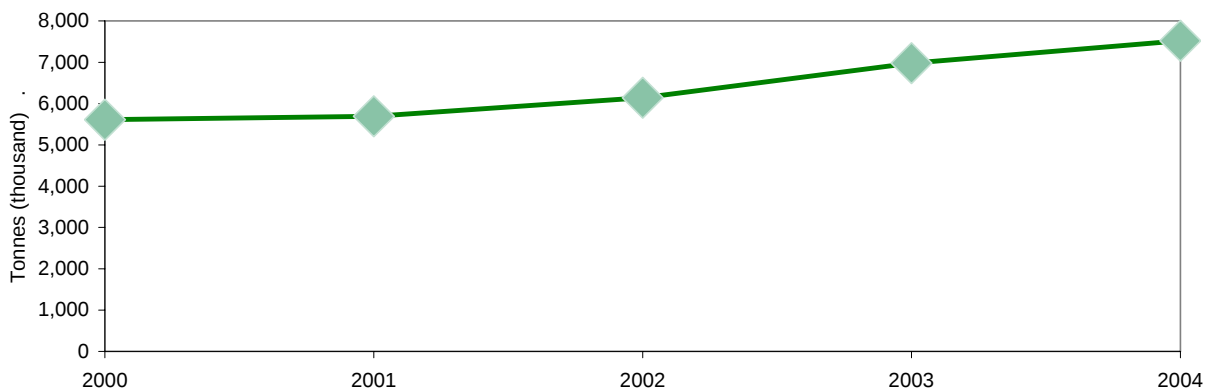
Country	2000	2001	2002	2003	2004
Austria	725 832	680 534	728 235	766 525	715 459
Greece	414 400	442 800	553 700	542 800	552 300
Netherlands (a)	233 000	250 000	226 000	261 194	245 495
Poland	26 140	22 200	22 100	27 200	*52 000
Slovakia	1 000 211	961 212	929 630	1 640 900	1 668 900
Spain	534 234	598 000	637 024	517 030	556 500
Turkey	2 673 525	2 738 086	3 044 440	3 224 278	3 732 952
EU31 Total	5 607 000	5 693 000	6 141 000	6 980 000	7 524 000

Note(s):-

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

(a) Chloride produced from solution mining

EU31 Production of magnesite 2000 - 04



Exports of magnesite and magnesite

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Magnesite	7 713	82	5 489	2 401	642
Magnesia	33 490	54 021	44 729	50 263	73 037
Belgium-Luxembourg					
Magnesite	883	276	440	7 061	512
Magnesia	47 634	60 846	73 182	134 268	53 755
Czech Republic	(a) *4 400	702	59	1 924	3 790
France					
Magnesia	11 743	9 561	14 126	23 037	37 930
Germany					
Magnesite	217	233	186	878	218
Magnesia	56 707	90 154	66 559	45 840	66 422
Greece					
Magnesite	19 205	18 555	35 594	40	-----
Magnesia	135 809	128 124	94 668	65 673	130 910
Irish Republic	1 177	1 541	65 428	65 601	69 111
Italy					
Magnesite	3 016	2 521	3 170	2 141	2 868
Magnesia	68 596	57 158	52 206	17 414	9 779
Netherlands					
Magnesite	562	2 502	2 944	12 352	8 704
Magnesia	69 044	448 602	438 407	384 711	431 175
Slovakia	385 032	377 755	343 123	396 477	414 176
Spain					
Magnesite	23 270	9 201	24 152	23 640	25 557
Magnesia	151 712	150 632	154 661	158 844	185 811
Sweden	170	355	797	674	1 447
Turkey					
Magnesite	28 266	37 723	52 446	45 534	39 670
Magnesia	207 486	190 347	213 384	196 613	230 675
United Kingdom					
Magnesite	89	78	337	34	47
Magnesia	43 835	40 023	26 460	26 248	24 977

Note(s):-

(1) The term 'magnesite', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material

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

Imports of magnesite and magnesite

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Magnesite	135 281	...	...	...	...
Magnesia	30 013	26 220	20 545	9 325	181 050
Belgium-Luxembourg					
Magnesite	8 732	12 733	2 547	7 167	505
Magnesia	67 637	90 663	73 514	151 590	65 125
Bulgaria	6 905	5 463	6 544	5 815	6 354
Croatia	666	764	949	1 006	1 479
Czech Republic					
Magnesite	1 522	4 362	3 516	5 528	5 973
Magnesia	34 156	33 375	32 090	34 377	42 226
Denmark					
Magnesite	2 841	1 204	1 085	2 499	1 984
Magnesia	4 803	4 770	3 731	2 297	2 575
Finland					
Magnesia	14 770	12 856	10 159	17 096	11 567
France					
Magnesite	23 738	13 047	9 434	3 193	1 701
Magnesia	164 453	148 516	146 526	149 468	148 780
Germany					
Magnesite	17 337	16 285	19 665	7 724	4 684
Magnesia	493 512	451 522	453 680	348 042	348 766

Magnesite and Magnesite

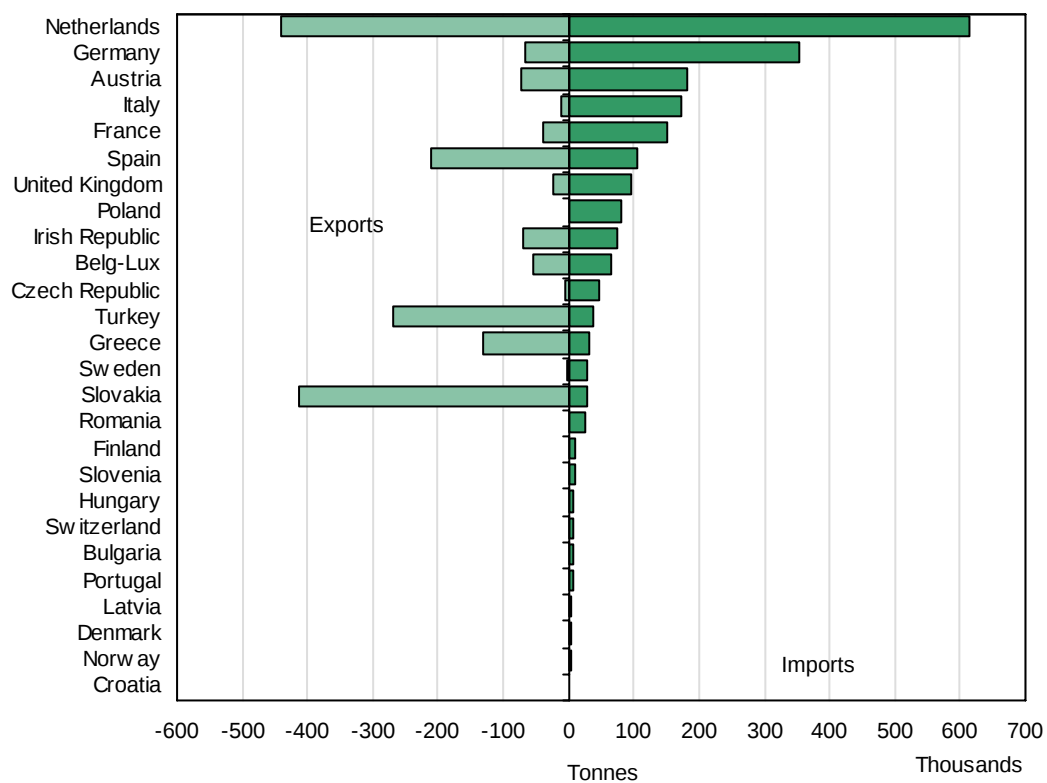
Imports continued

Country	2000	2001	2002	2003	2004
Greece					
Magnesite	5 505	13 087	19 308	23 470	20 579
Magnesia	1 358	11 507	7 442	10 427	11 985
Hungary	11 963	12 032	32 296	10 463	7 003
Irish Republic					
Magnesite	296	108	1 500	15 449	25 886
Magnesia	56 551	47 947	59 905	43 802	49 664
Italy					
Magnesite	29 864	32 911	18 687	17 326	9 429
Magnesia	106 661	106 250	120 820	129 672	163 273
Latvia	3 322	3 071	3 021	3 518	5 297
Netherlands					
Magnesite	5 562	2 242	5 758	13 139	24 206
Magnesia	286 232	377 804	362 706	392 299	591 172
Norway					
Magnesite	6 594	4 013	3 148	3 736	2 587
Magnesia	368	403	130	190	1 643
Poland	95 007	69 772	73 266	77 830	82 164
Portugal					
Magnesite	2 892	1 888	909	885	969
Magnesia	2 288	18 635	6 078	5 855	4 808
Romania	23 280	31 707	35 478	23 255	26 209
Slovakia	34 249	36 609	32 571	31 606	27 698
Slovenia	7 584	8 406	9 377	9 732	9 560
Spain					
Magnesite	6 924	1 521	1 303	3 608	2 901
Magnesia	104 268	112 201	101 620	367 117	102 418
Sweden					
Magnesia	34 884	40 361	26 875	28 074	29 455
Switzerland					
Magnesite	547	394	228	225	294
Magnesia	4 278	4 600	4 521	5 744	6 538
Turkey					
Magnesia	30 964	23 373	50 238	56 000	38 084
United Kingdom					
Magnesite	24 541	7 122	9 252	20 287	11 186
Magnesia	127 360	108 988	98 075	82 100	84 241

Note(s):-

(1) The term 'magnesite', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material

Magnesite and magnesia - EU31 trade in 2004



Manganese ore

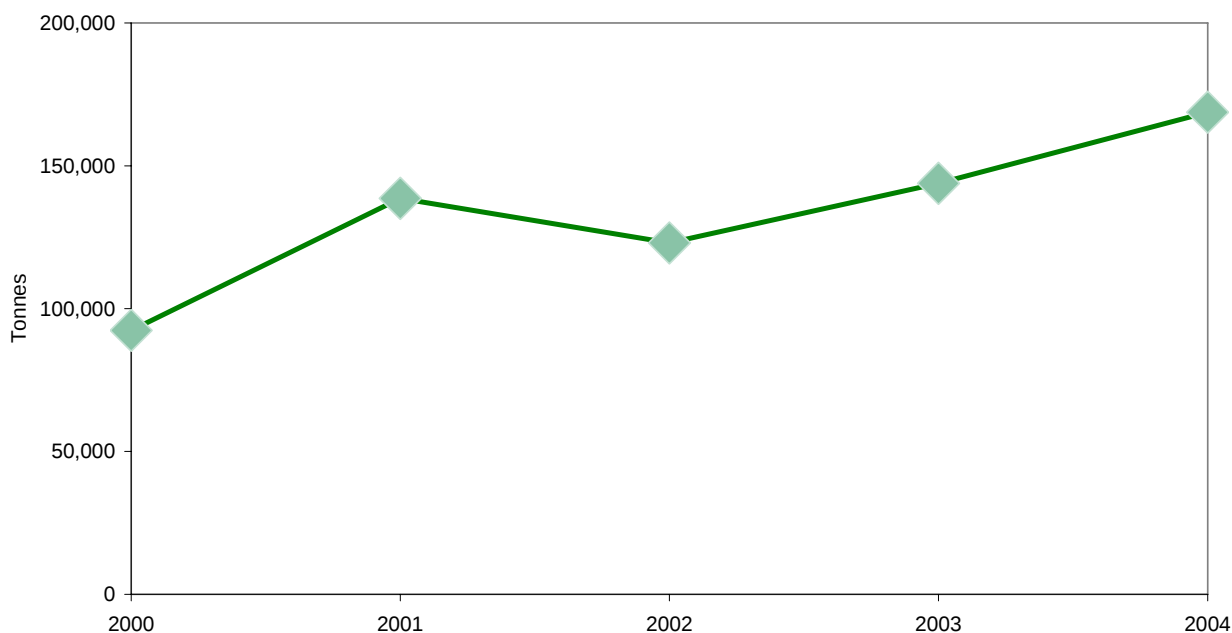
- Manganese is a hard and brittle metal. The chief ores are pyrolusite and other manganese dioxides. The principal use is in the steel industry as a desulphuriser and an alloying agent, where it imparts hardness and wear resistance. Manganese is also an important constituent of many aluminium alloys. Manganese dioxide is a component of dry-cell batteries; other compounds are used in the chemical industry.
- Economic concentrations of manganese are relatively rare and production is confined to 21 countries, although 56% of world production comes from China, South Africa, Australia and Brazil. Production of manganese in the EU31 is limited and Romania is the largest producer (approximately 46%).
- Manganese ore, ferro-manganese, electrolytic manganese dioxide and manganese metal are the chief forms in international trade. During 2004 prices for standard ferro-manganese (78% Mn, 7.5% C) increased considerably from around \$470/tonne to \$1300/tonne towards the year-end. Manganese metal (electrolytic manganese flake) ranged from around \$1300/tonne–\$1750/tonne.

Production of manganese ore

tonnes

Country	2000	2001	2002	2003	2004
Bulgaria	-----	1 515	4	4 200	27 800
Hungary	41 000	43 000	43 000	48 000	49 000
Italy	1 038	803	867	763	714
Romania	27 080	73 276	59 148	72 931	*77 500
Turkey	23 300	20 000	20 000	18 000	13 751
EU31 Total	92 000	139 000	123 000	144 000	169 000

EU31 Production of manganese ore 2000 - 04



Exports of manganese

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	21 614	28 326	29 058	18 923	11 575
Belgium-Luxembourg					
Ores & Concentrates	21 966	47 237	16 949	13 476	11 300
Metal	1 652	4 129	3 216	3 091	1 377
Bulgaria					
Ores & Concentrates	21 104	832	...	6 402	42 122
Estonia					
Metal	820	490	923	1 320	...
France					
Ores & Concentrates (a)	303 274	382 914	413 461	332 067	272 815
Metal	431	261	168	424	745
Germany					
Metal	11 747	10 186	11 548	10 703	12 261
Italy					
Metal	84	62	120	37	113
Netherlands					
Ores & Concentrates	13 617	9 889	14 115	12 041	15 143
Metal	6 503	9 614	3 869	7 365	12 548
Slovenia					
Metal	5	3	104	185	143
Spain					
Ores & Concentrates	3 588	11 474	1 208	855	989
Metal	5 331	6 113	5 727	4 791	6 117
Sweden					
Ores & Concentrates	12 524	1	25	3	3
Metal	116	99	425	352	196
Turkey					
Ores & Concentrates	-----	560	5 655	...	12 817
United Kingdom					
Metal	*3 800	(b) *6 000	(b) *4 300	(b) *3 000	(b) *3 100

Note(s):-

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

(a) Including manganiferous iron ore

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

Imports of manganese

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	14 288	19 889	18 223	10 024	6 497
Belgium-Luxembourg					
Ores & Concentrates	78 179	106 749	72 216	79 645	73 953
Metal	5 884	8 136	5 413	4 480	2 466
Bulgaria					
Ores & Concentrates	315	8 612	1 125	234 401	46 768
Croatia					
Metal	49	58	57	50	93
Czech Republic					
Ores & Concentrates	10 436	7 314	11 507	11 966	11 663
Metal	244	206	376	386	593
Denmark					
Metal	79	76	115	152	164
Estonia					
Metal	847	821	155	1 201	401
Finland					
Ores & Concentrates	25 093	10 538	36 014	9 983	20 381
Metal	4 896	259	997	717	547
France					
Ores & Concentrates (a)	1 618 372	1 390 507	968 498	892 176	626 061
Metal	10 132	11 081	8 693	7 613	8 851
Germany					
Ores & Concentrates (a)	8 644	7 380	6 629	6 917	8 034
Metal	47 498	45 296	45 208	21 229	22 435

Manganese

Imports continued

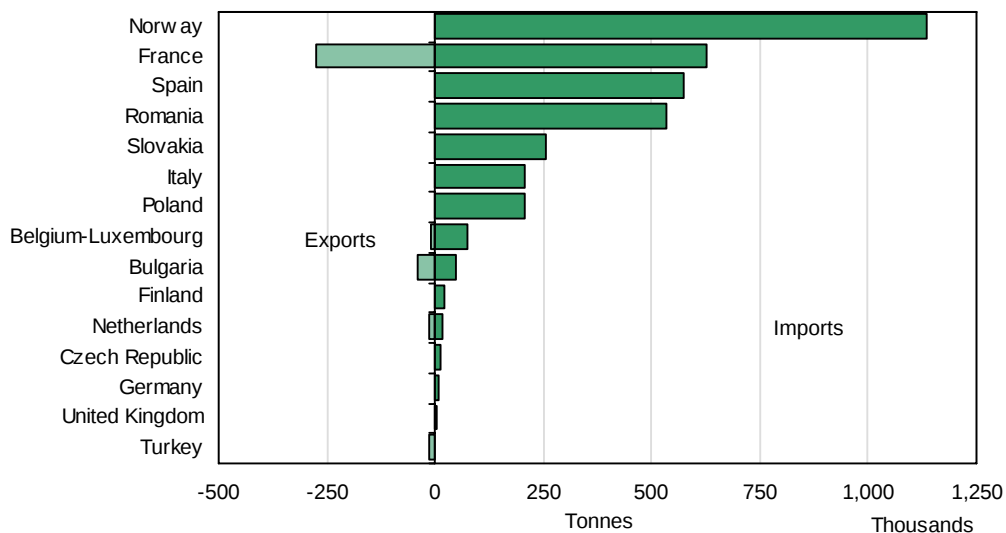
Country	2000	2001	2002	2003	2004
Greece					
Ores & Concentrates	20 853	22 329	2	24 985	1
Metal	546	681	1 289	389	1 510
Hungary					
Metal	453	476	677	568	111
Irish Republic					
Ores & Concentrates (a)	54 840	38 977	27 456	19 306	268
Metal	59	49	23	9	5
Italy					
Ores & Concentrates (a)	253 215	100 908	111 716	100 796	206 249
Metal	3 466	10 089	4 723	3 673	4 970
Netherlands					
Ores & Concentrates	11 984	10 209	7 086	9 129	17 158
Metal	14 471	9 661	4 533	9 112	14 347
Norway					
Ores & Concentrates	608 216	711 545	660 348	803 971	1 132 985
Metal	2 284	1 699	2 155	3 069	3 610
Poland					
Ores & Concentrates	38 975	43 603	14 597	10 037	205 290
Metal	345	1 834	821	432	652
Romania					
Ores & Concentrates	127 114	128 961	209 891	380 043	534 014
Metal	137	158	230	297	303
Slovakia					
Ores & Concentrates	132 601	...	186 061	176 511	257 331
Metal	101	185	121	147	...
Slovenia					
Metal	70	42	154	152	296
Spain					
Ores & Concentrates	420 908	352 275	431 720	437 088	575 518
Metal	6 913	12 475	8 174	10 569	9 786
Sweden					
Ores & Concentrates	6 298	1 871	98	91	62
Metal	8 164	8 072	6 660	3 618	2 641
Switzerland					
Metal	553	449	404	501	484
Turkey					
Metal	85	34	182	137	495
United Kingdom					
Ores & Concentrates (a)	2 956	2 701	1 218	2 102	2 526
Metal	8 620	9 636	7 600	8 250	9 208

Note(s):-

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

(a) Including manganiferous iron ore

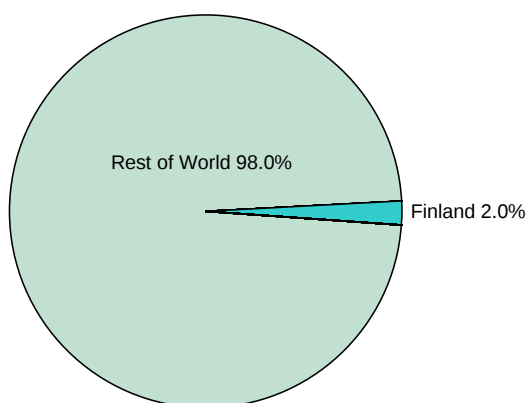
Manganese ores and concentrates - EU31 trade in 2004



Mercury

- Mercury is the only metallic element that is liquid at room temperature. The chief economic sources are deposits of the mineral cinnabar but mercury is also recovered from base metal refining. Mercury's main uses are in electrical switches and other control apparatus, and in dental amalgam. Large amounts remain in use in chlor-alkali plants and in batteries but these applications are being phased out.
- Only eleven countries commercially extracted mercury in 2004. Spain was the largest mercury producer in the world up to 2003. However, with the closure of the Almaden mine and associated metallurgical works, Kyrgyzstan is now the world's largest producer and responsible for 41% of total world output.
- Mercury prices increased considerably in 2004 to levels not seen since 1988. Reported prices for mercury rose from the \$180–\$220/flask (1 flask is approximately 76 lb) range at the start of the year to over \$400/flask in September, before ending the year in the \$600–\$700/flask range.

EU31 Production of mercury 2004



Production of mercury

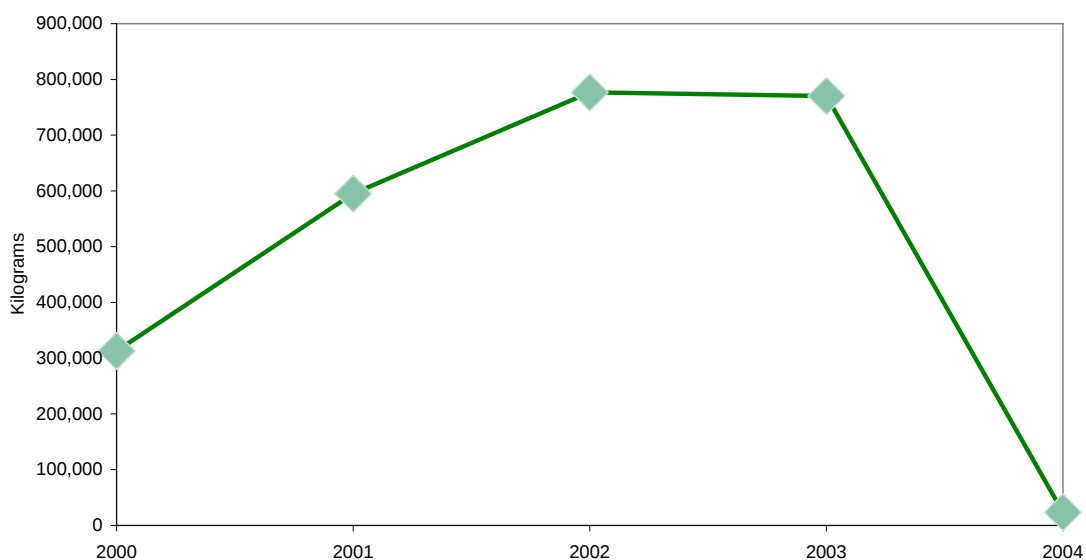
kilograms

Country	2000	2001	2002	2003	2004
Finland	76 100	71 200	50 600	25 000	23 500
Spain	236 600	524 000	726 139	745 260	-----
EU31 Total	312 700	595 200	776 700	770 300	23 500

Note(s):-

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

EU31 Production of mercury 2000 - 04



Exports of mercury

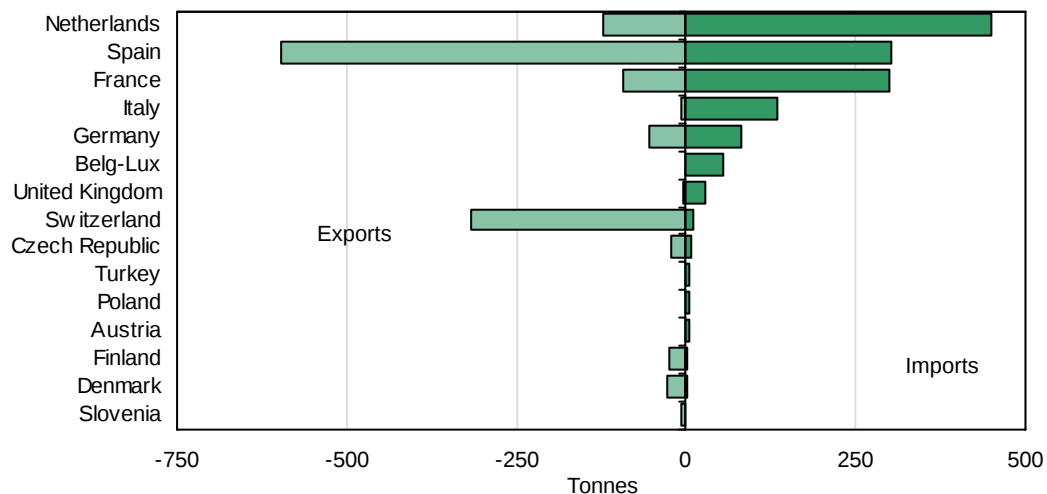
kilograms

Country	2000	2001	2002	2003	2004
Austria	8 400	24 100	900	800	1 700
Belgium-Luxembourg	...	54 100	15 900	17 000	1 300
Czech Republic	19 000	12 000	16 542	9 970	22 172
Denmark	126	865	3 642	10 554	27 458
Estonia	...	...	2 476	2 500	...
Finland	82 808	77 627	54 859	25 530	23 462
France	11 400	12 500	7 100	6 800	93 800
Germany	567 400	412 000	59 500	48 900	55 500
Italy	28 325	21 968	274 624	20 153	6 952
Netherlands	426 300	298 000	344 400	105 100	123 400
Poland	94 317	82 000	24 000	...	2
Slovakia	1 000	34 000	1 188	2 437	0
Slovenia	831	1 446	1 312	15 826	7 327
Spain	956 655	569 833	820 527	836 784	596 739
Sweden	-----	23 000	...	...	0
Switzerland	60 114	92 862	36 900	7 793	316 631
United Kingdom	3 069	17 299	6 226	851	3 037

Imports of mercury

kilograms

Country	2000	2001	2002	2003	2004
Austria	300	2 400	5 700	4 000	3 900
Belgium-Luxembourg	21 000	18 000	22 600	29 200	54 700
Czech Republic	3 000	1 000	1 875	2 531	7 300
Denmark	587	1 276	796	260	403
Finland	77	177	158	214	554
France	31 400	23 100	25 200	57 900	299 200
Germany	59 300	68 300	19 900	39 500	80 600
Greece	20 940	125 335	291	11 617	187
Irish Republic	1 298	2 401	1 008	11 604	61
Italy	48 484	32 672	15 389	27 140	135 119
Netherlands	560 000	908 200	517 600	143 200	449 500
Norway	180	347	99	38	42
Poland	5 287	7 000	21 976	3 875	4 456
Portugal	749	7 546	533	523	291
Slovakia	8 022	4 000	3 677	2 230	2 738
Spain	143 032	734 351	318 263	350 266	301 097
Sweden	...	2 096	4 004	3 022	4 000
Switzerland	27 379	24 309	18 901	9 354	9 704
Turkey	3 981	10 602	5 358	8 152	6 044
United Kingdom	18 719	5 042	23 302	29 673	28 038

Mercury - EU31 trade in 2004

Mica

- Micas are a group of chemically complex rock-forming minerals recognisable by a perfect cleavage (i.e. they are naturally flaky). Sheet mica is used predominantly in electrical insulation and ground mica has a very wide variety of uses including filler, dusting agent, absorbent, fire insulator, strength enhancer in plastics and decorative material.
- Although a very common mineral, commercial concentrations of mica are relatively rare. Production is limited to about 23 countries. Of these, China (25%) was the largest producer in 2004. Mica is produced in four EU31 countries, of which the largest producer is France (46%).
- Because of the wide variety of micas there are many trading categories that are very sensitive to quality. Prices ranged from \$210–\$1300/tonne in 2004.

Production of mica

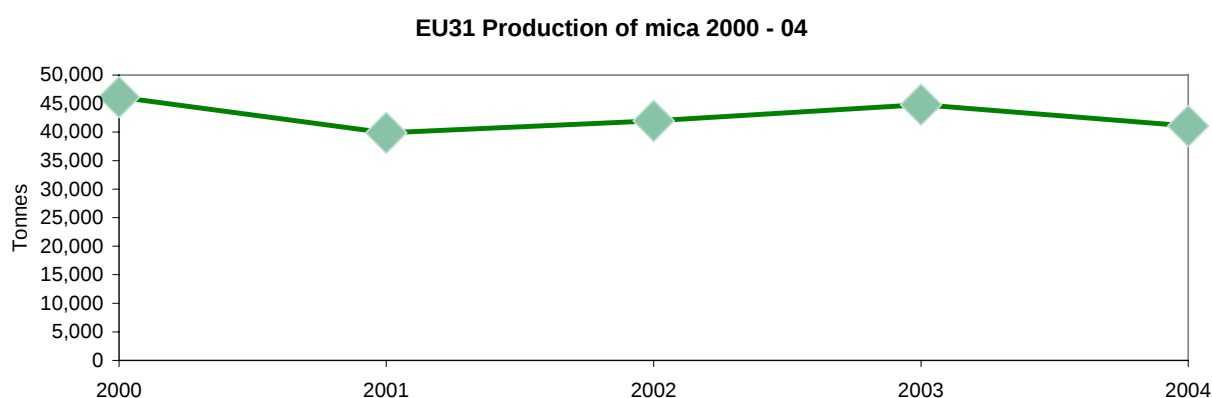
tonnes

Country	2000	2001	2002	2003	2004
Austria	...	...	...	5 646	5 832
Finland	10 035	8 983	7 170	9 337	9 225
France (a)	21 000	15 000	17 000	18 000	19 000
Spain (a)	10 086	9 874	11 783	11 800	7 000
EU31 Total	46 000	40 000	42 000	45 000	41 000

Note(s):-

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

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



Exports of mica

tonnes

Country	2000	2001	2002	2003	2004
Austria	2 629	2 951	3 512	3 767	3 917
Belgium-Luxembourg	416	829	915	1 907	1 635
Finland	8 331	7 362	5 514	8 099	7 511
France	4 649	2 836	4 387	114 464	14 323
Germany	2 173	1 922	2 018	2 457	3 655
Greece	46	121	179	4 239	2 769
Italy	352	349	667	371	623
Netherlands	4 589	1 397	4 384	5 359	7 532
Norway	1 833	1 760	2 155	2 413	2 076
Spain	1 925	1 856	2 001	3 996	3 075
Sweden	87	102	89	51	58
Turkey	296	338	503	546	15 975
United Kingdom					
Unmanufactured	68	22	20	34	----
Ground	3 638	3 758	4 023	4 740	8 537
Waste	56	17	46	0	----

Note(s):-

(1) 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'

Imports of mica

tonnes

Country	2000	2001	2002	2003	2004
Austria	483	570	599	899	645
Belgium-Luxembourg					
Unmanufactured	29	...	276	89	1 588
Ground	1 138	1 033	1 359	3 223	4 311
Czech Republic	707	890	926	764	879
Denmark	254	241	408	305	369
Finland	1 118	1 818	2 621	3 664	2 861
France					
Ground (a)	1 596	1 689	1 241	3 182	1 358
Waste	2 470	981	2 001	1 043	546
Germany					
Unmanufactured	1 453	387	227	205	237
Ground	19 428	21 498	23 488	24 993	28 784
Waste	56	468	345	840	1 212
Greece	119	48	114	203	94
Irish Republic	657	639	463	364	551
Italy					
Unmanufactured	121	62	52	106	65
Ground	2 741	2 594	2 586	2 759	3 473
Netherlands	4 005	3 383	6 320	8 540	11 950
Norway	2 051	2 426	1 174	1 759	1 559
Poland	883	820	557	486	878
Portugal	57	56	113	198	311
Romania					
Mica	42	72	...	590	828
Spain	1 287	1 185	5 447	1 810	1 641
Sweden	713	562	547	566	514
Switzerland	297	300	289	357	426
Turkey	117	136	33	169	215
United Kingdom					
Unmanufactured	203	344	240	424	1 769
Ground	5 355	7 258	9 349	8 327	6 292
Waste	8 119	4 016	4 224	5 050	4 373

Note(s):-

(1) 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) Including unmanufactured

Molybdenum

- Molybdenum is a hard metal. It is an important component of high tensile steel where it imparts hardness, tolerance of high temperatures and resistance to corrosion. Molybdenum disulphide is used as a dry lubricant.
- Molybdenum is generally produced as a by-product of copper mining. Production in 2004 was confined to only 13 countries, of which the USA, Chile and China together produced 75%.
- Molybdenum is marketed mainly as concentrate, oxide and ferro-molybdenum. Molybdenum prices rose steadily in 2004 spiking in April, and then rising steadily through November before spiking again in December. The oxide monthly average price ranged from \$17/kg in January to \$54/kg in November, and the ferro-molybdenum monthly average price ranged from \$19/kg in January to \$57/kg in November. In December the oxide monthly average price spiked at over \$68/kg, and the ferro-molybdenum price spiked at over \$76/kg.

Exports of molybdenum

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	1 864	2 023	2 123	(a) *2 200	(a) *2 100
Oxides	36	0	0	5	125
Belgium-Luxembourg					
Ores & concentrates	11 951	9 864	9 271	11 690	16 219
Metal	802	543	199	314	221
Oxides	132	242	1 621	820	571
Bulgaria					
Metal	...	...	37	49	546
Estonia					
Metal	106	76	1	47	1
France					
Metal	161	93	65	15	436
Oxides	27	11	20	27	31
Germany					
Ores & concentrates	39	157	240	905	2 309
Metal	1 337	1 220	1 274	1 465	2 014
Oxides	3 863	4 441	2 523	2 894	-----
Italy					
Metal	34	98	57	250	171
Netherlands					
Ores & concentrates	7 303	16 092	52 237	17 141	30 424
Metal	380	829	81	161	120
Oxides	2 109	2 014	1 920	1 640	3 125
United Kingdom					
Ores & concentrates	317	297	418	84	181
Metal	277	1 046	326	230	331

Note(s):-

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

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

Imports of molybdenum

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	198	197	356	382	865
Belgium-Luxembourg					
Ores & concentrates	19 268	19 527	24 746	36 903	45 922
Metal	374	1 196	277	179	277
Oxides	388	635	730	2 702	1 519
Czech Republic					
Metal	39	45	29	42	66
Estonia					
Metal	128	102	0	43	4
Finland					
Ores & concentrates	3 591	3 296	3 581	4 868	5 603
France					
Ores & concentrates	2 384	2 126	1 604	1 591	1 492
Metal	817	635	686	727	762
Oxides	104	119	284	371	664
Germany					
Ores & concentrates	10 866	10 814	8 663	9 800	12 221
Metal	2 159	2 364	2 406	1 878	3 043
Oxides	311	318	397	545	703
Greece					
Metal	1	12	21	1	13
Hungary					
Metal	150	114	105	121	129
Italy					
Ores & concentrates	3 140	4 065	4 097	4 119	4 719
Metal	241	284	163	122	105
Oxides	92	74	141	172	247
Netherlands					
Ores & concentrates	25 656	25 896	21 723	29 337	39 710
Metal	530	192	285	459	747
Oxides	1 758	1 958	1 891	1 577	2 032
Poland					
Ores & concentrates	144	111	16	1	8
Metal	75	54	84	36	142
Portugal					
Metal	17	14	15	15	24
Slovenia					
Ores & concentrates	247	95	0	42	524
Spain					
Ores & concentrates	3 578	3 811	4 226	3 917	3 805
Metal	45	34	91	45	30
Sweden					
Ores & concentrates	5 742	5 409	6 132	5 235	5 826
Metal	208	249	219	252	458
Oxides	784	659	791	784	594
Switzerland					
Metal	30	25	21	26	25
Turkey					
Metal	5	2	4	4	10
Oxides	...	66	54	84	130
United Kingdom					
Ores & concentrates	12 457	16 373	21 437	18 884	18 506
Metal	846	1 165	1 220	1 169	1 845
Oxides	34	60	106	7	2

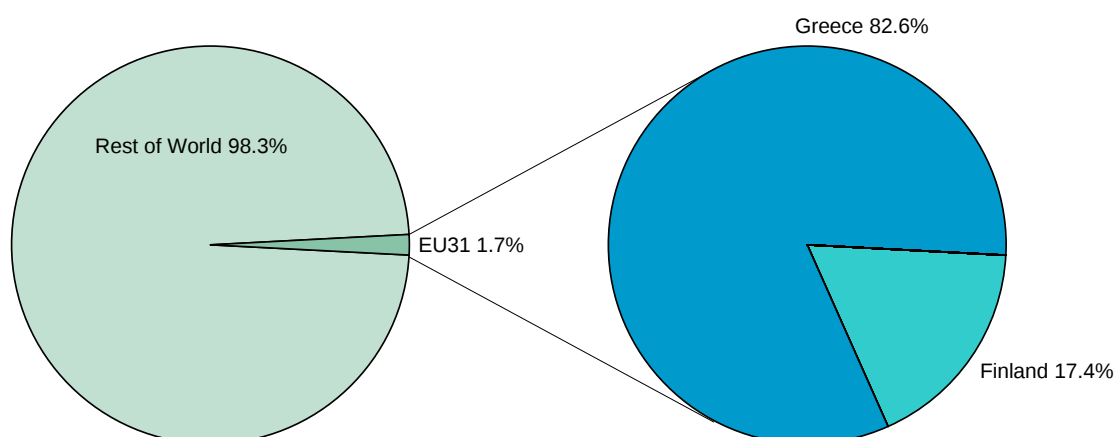
Note(s):-

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

Nickel

- Nickel is a hard, strong, corrosion-resistant malleable and ductile metal that is a good conductor of heat and electricity. Its most important use is in steel alloys where it imparts strength and toughness. It is also widely used in plating, both metals and plastics, and combined with copper in cupro-nickel alloys.
- Almost half of world nickel mine production in 2004 was supplied by Russia, Australia and Canada. Greece is the only significant mine producer in the EU31 but several countries refine nickel based on imported raw materials. Norway was the largest EU31 refined nickel producer in 2004.
- As a result of a relatively small production base, the refined nickel price can be quite volatile. The nickel market enjoyed strong growth in 2004, with average LME nickel prices increasing from US\$9640/tonne in 2003 to US\$13830/tonne in 2004.

EU31 Mine production of nickel 2004

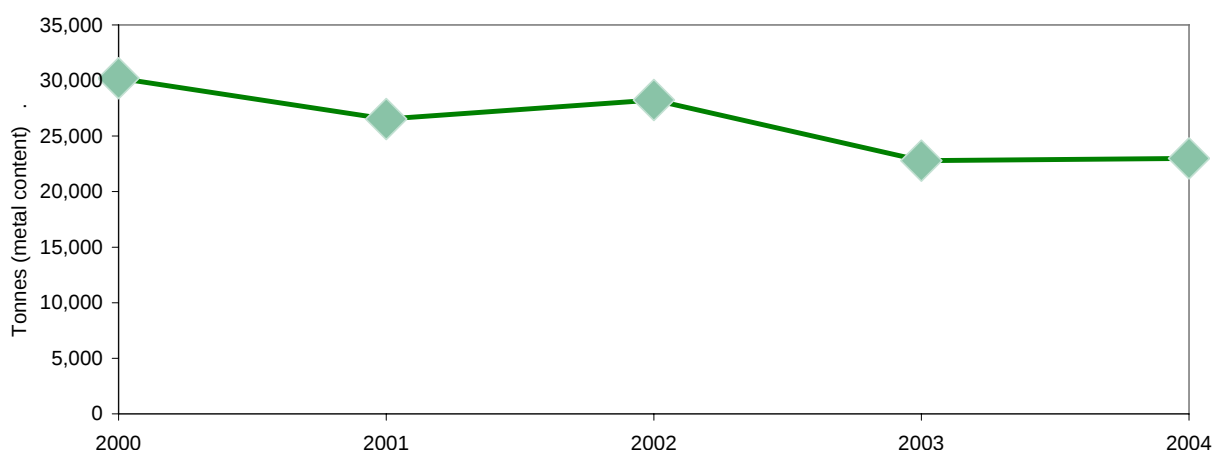


Mine production of nickel

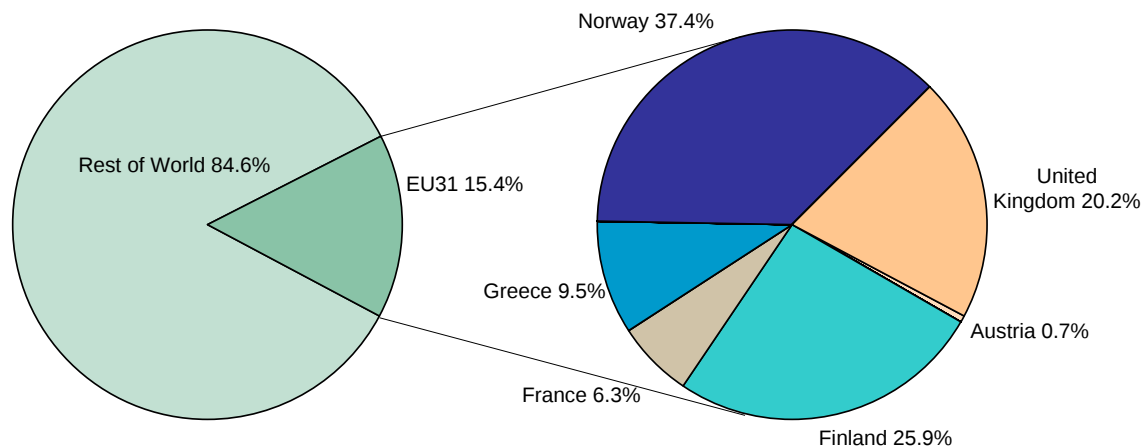
tonnes (metal content)

Country	2000	2001	2002	2003	2004
Finland	*4 300	*3 000	*3 500	*3 700	*4 000
Greece	23 365	20 742	22 700	19 100	19 000
Norway	2 536	2 800	2 052	-----	-----
EU31 Total	30 200	26 500	28 300	22 800	23 000

EU31 Mine production of nickel 2000 - 04



EU31 Smelter/refinery production of nickel 2004



Smelter/refinery production of nickel

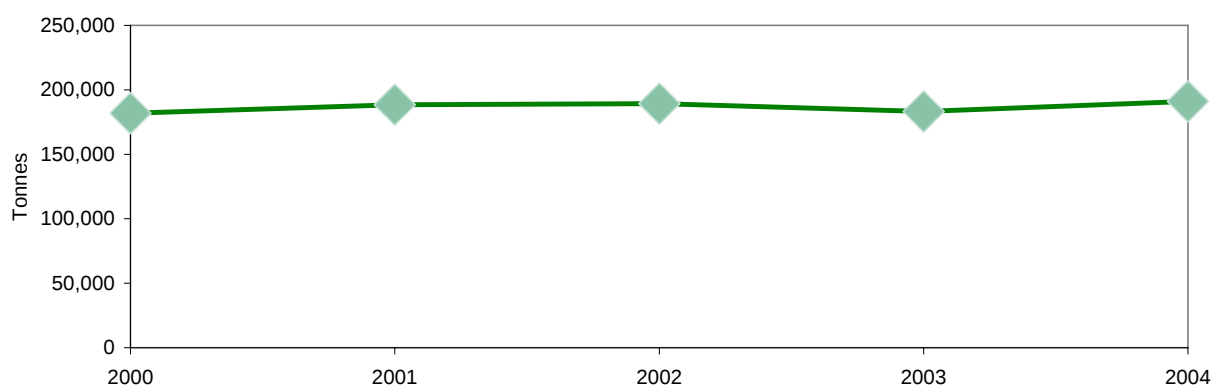
tonnes

Country	2000	2001	2002	2003	2004
Austria	1 300	1 300	*1 000	*1 500	*1 300
Finland	54 429	54 600	55 348	50 989	49 580
France	12 300	13 036	11 444	11 370	12 103
Greece	17 126	17 675	19 230	18 000	18 116
Norway	58 700	68 200	68 500	77 183	71 410
United Kingdom	37 980	33 800	33 800	24 200	38 600
EU31 Total	181 800	188 600	189 300	183 200	191 100

Note(s):-

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

EU31 Smelter/refinery production of nickel 2000 - 04



Exports of nickel

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Mattes, sinters etc.	99	153	288	47	9
Unwrought (a)	908	532	570	206	297
Scrap	307	495	377	440	1 520
Belgium-Luxembourg					
Unwrought	12 143	12 265	12 351	9 848	16 290
Unwrought alloys	1 978	2 531	1 752	1 947	2 843
Scrap	1 021	2 595	6 118	1 114	1 694
Oxides	28	380	712	268	772

Exports continued

Country	2000	2001	2002	2003	2004
Czech Republic					
Unwrought (a)	71	42	211	186	967
Scrap	218	237	219	417	525
Oxides	231	126	159	358	296
Denmark					
Scrap	322	280	190	593	777
Estonia					
Mattes, sinters etc.	1 011	938	0	86	...
Unwrought (a)	412	619	-----	999	...
Scrap	224	1 587	195	108	296
Finland					
Ores & concentrates	25 804	30 711	11 939	1 459	-----
Unwrought	28 504	36 815	39 367	37 416	36 458
Scrap	218	50	118	...	26
Oxides	1 664	...	(b) *2 000	(b) *600	(b) *700
France					
Unwrought	9 950	9 094	7 460	8 396	9 203
Unwrought alloys	1 187	434	294	542	1 455
Scrap	7 190	9 134	6 625	8 306	6 618
Oxides	387	551	24	359	1 140
Germany					
Ores & concentrates	8 914	8 083	12 229	10 884	10 717
Unwrought	7 346	8 418	5 582	5 225	5 549
Unwrought alloys	7 190	6 328	5 837	6 011	8 732
Scrap	26 627	10 826	8 277	8 091	8 096
Oxides	77	670	505	246	105
Irish Republic					
Scrap	833	674	701	664	797
Italy					
Unwrought (a)	2 472	2 102	2 701	2 923	1 637
Scrap	1 354	1 057	552	351	644
Latvia					
Scrap	4 303	2 293	1 004	853	170
Lithuania					
Scrap	711	739	759	996	770
Netherlands					
Mattes, sinters etc. (b)	*9 200	*8 200	*19 300	*8 100	*11 700
Unwrought (a)	27 901	54 127	25 214	33 096	24 467
Scrap	2 042	1 365	1 494	3 602	2 745
Oxides	1 817	...	2 528	0	28 549
Norway					
Ores & concentrates	24 999	30 142	25 902	6 268	9 575
Unwrought	59 956	65 829	67 718	78 389	71 982
Scrap	173	255	139	264	909
Poland					
Oxides	95	125	146	339	468
Slovenia					
Unwrought (a)	850	225	262	116	144
Spain					
Unwrought (a)	3 743	169	609	126	177
Scrap	190	385	208	420	363
Sweden					
Unwrought (a)	1 040	613	1 905	386	133
Scrap	696	432	1 661	1 096	1 138
Oxides	146	125	142	181	317
Switzerland					
Unwrought (a)	103	179	105	125	49
Scrap	917	492	587	880	1 106
United Kingdom					
Mattes, sinters etc.	1 634	136	128	200	964
Unwrought	21 678	21 670	19 775	19 200	38 451
Unwrought alloys	5 203	5 955	4 257	4 899	4 711
Scrap	7 015	7 736	7 912	7 861	10 784

Note(s):-

- (1) In this table the term 'unwrought' nickel corresponds to item 7502 of the Harmonised System 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

Imports of nickel

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Mattes, sinters etc.	197	552	737	401	369
Unwrought (a)	7 296	5 150	4 554	5 251	6 772
Scrap	620	540	641	520	632
Oxides	765	853	609	430	293
Belgium-Luxembourg					
Mattes, sinters etc.	213	33	216	61	162
Unwrought	31 107	33 851	32 016	41 648	42 387
Unwrought alloys	460	682	488	636	979
Scrap	835	2 577	2 611	828	1 644
Oxides	341	292	326	497	366
Czech Republic					
Unwrought (a)	1 758	2 231	1 825	2 158	2 574
Oxides	251	177	236	465	712
Denmark					
Unwrought (a)	157	202	114	96	112
Estonia					
Mattes, sinters etc.	962	1 779	1 075	1 696	46
Unwrought (a)	427	691	315	1 328	163
Scrap	289	1 641	211	100	331
Finland					
Ores & concentrates	217 154	250 973	178 968	146 122	169 170
Mattes, sinters etc.	26 654	30 946	57 571	51 225	42 944
Unwrought (a)	5 880	9 809	14 977	24 289	24 307
Scrap	379	31	90	200	1 332
Oxides	0	48	6 093	0	11
France					
Mattes, sinters etc.	16 638	19 437	15 496	15 087	12 329
Unwrought	40 991	34 347	39 979	30 995	26 842
Unwrought alloys	5 491	7 372	2 269	3 192	5 350
Scrap	3 351	1 848	2 048	2 210	2 068
Oxides	317	219	140	200	166
Germany					
Mattes, sinters etc.	10 701	9 525	23 006	4 030	7 264
Unwrought	94 153	81 674	84 677	72 571	72 788
Unwrought alloys	4 335	1 660	1 625	1 933	1 646
Scrap	12 599	9 254	11 197	10 889	11 347
Oxides	701	590	668	563	517
Greece					
Ores & concentrates	10 975	31 111	...	10 480	6
Unwrought	226	126	67	60	61
Irish Republic					
Unwrought (a)	1 154	1 834	1 361	1 558	1 493
Italy					
Mattes, sinters etc.	77	225	515	306	353
Unwrought	46 241	50 142	49 803	51 276	41 944
Unwrought alloys	1 640	1 845	1 577	1 211	2 664
Scrap	5 970	2 141	559	2 248	3 075
Netherlands					
Mattes, sinters etc.	...	...	10 394	8 566	9 144
Unwrought	65 684	59 920	61 898	65 504	61 516
Unwrought alloys	59	401	47	266	314
Scrap	2 368	3 083	4 398	5 585	6 507
Oxides	752	1 728	6 764	7 683	4 632
Norway					
Mattes, sinters etc.	118 719	131 096	145 072	158 897	136 200
Unwrought (a)	175	134	138	46	222
Poland					
Unwrought (a)	2 052	2 307	1 561	1 589	2 207
Portugal					
Unwrought (a)	282	315	293	184	310
Romania					
Unwrought (a)	467	671	457	280	563
Slovenia					
Unwrought (a)	3 718	2 954	1 595	992	959
Spain					
Mattes, sinters etc.	42	18	31	11	9
Unwrought (a)	20 849	31 752	32 795	27 346	28 234
Oxides	231	231	306	225	210

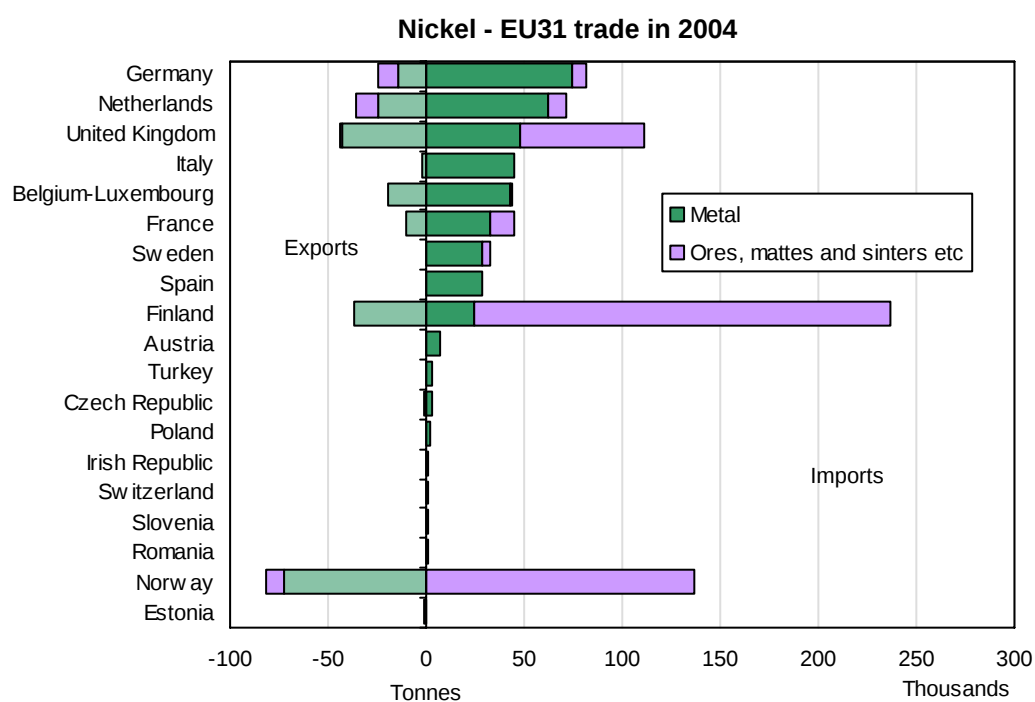
Imports continued

Country	2000	2001	2002	2003	2004
Sweden					
Mattes, sinters etc.	5 756	6 124	12 476	4 032	4 051
Unwrought	28 583	24 547	24 982	25 423	27 687
Unwrought alloys	687	942	863	857	1 076
Scrap	12 901	13 495	18 399	12 543	10 523
Switzerland					
Unwrought (a)	1 511	1 591	1 417	1 392	1 333
Scrap	122	61	54	84	12
Turkey					
Unwrought (a)	1 459	1 584	1 919	2 415	3 353
Oxides	94	92	160	162	144
United Kingdom					
Mattes, sinters etc.	54 768	51 963	52 514	43 968	64 192
Unwrought	18 825	47 030	46 610	34 162	45 264
Unwrought alloys	2 095	2 788	1 868	31 491	2 238
Scrap	22 644	14 963	25 270	20 038	9 060
Oxides	131	145	130	47	85

Note(s) :-

- (1) In this table the term 'unwrought' nickel corresponds to item 7502 of the Harmonised System which excludes all electro-plating anodes
- (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

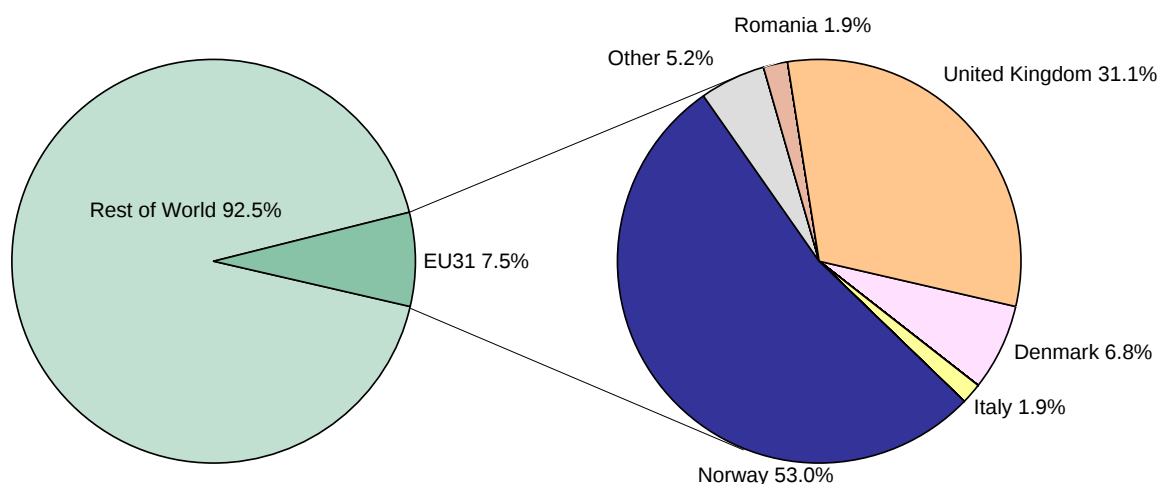
(a) Including alloys



Crude petroleum

- Petroleum ('oil') is a fundamental energy resource and raw material for lubricants, olefins, polymers (plastics) and other synthetic materials.
- In 2004 a total of 3826 million tonnes of crude petroleum were produced. The largest producing country was Saudi Arabia (13%). In Europe the largest producer was Norway (53% of EU31 production). Despite the volume of oil produced from European fields (8% of the world total), the EU31 is a net importer of oil by a large margin.
- In 2004 the price of Brent crude averaged \$38.27/barrel. Prices began to rise in February and then accelerated through the summer before peaking above \$52/barrel in October.

EU31 Production of crude petroleum 2004



Production of crude petroleum

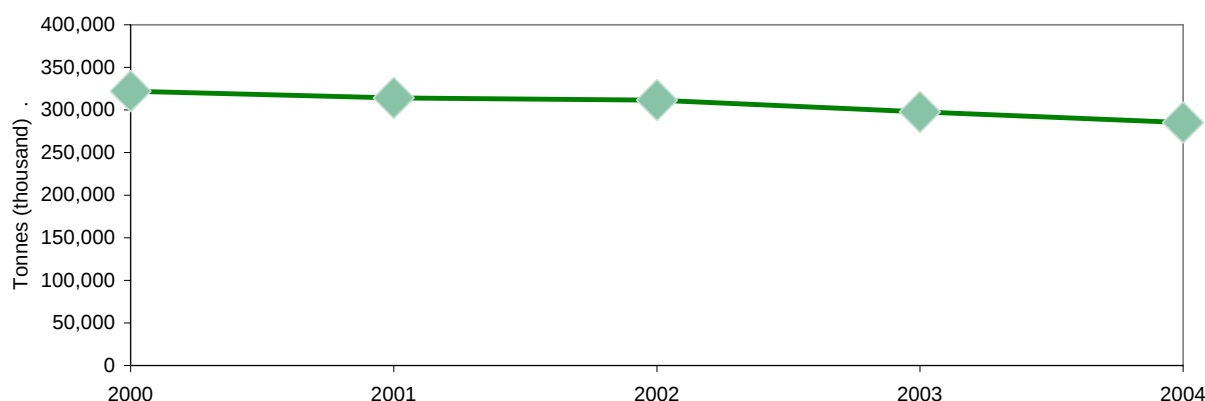
tonnes

Country	2000	2001	2002	2003	2004
Austria	1 056 183	1 050 355	1 032 204	1 014 716	981 588
Bulgaria	42 456	33 888	33 000	27 900	30 000
Croatia	907 154	1 120 797	1 108 434	1 052 121	1 005 000
Czech Republic	168 000	178 000	253 000	310 000	299 000
Denmark	18 175 000	17 378 000	18 494 000	18 341 000	19 448 000
France	1 417 568	1 382 646	1 316 890	1 219 000	1 138 000
Germany	3 119 592	3 569 290	3 768 054	3 799 864	3 515 537
Greece	256 000	293 000	207 000	162 000	162 000
Hungary	1 130 850	1 058 060	1 049 770	1 134 245	1 076 844
Italy	4 586 000	4 097 000	5 531 000	5 570 000	5 445 000
Lithuania	316 000	470 000	433 700	382 400	301 900
Netherlands	2 350 758	2 263 590	3 073 924	3 076 398	2 890 979
Norway	160 804 000	162 099 000	157 847 000	153 508 000	151 221 000
Poland	652 696	767 004	727 973	764 806	886 188
Romania	6 042 000	6 011 000	5 810 000	5 651 000	5 465 000
Slovakia	56 940	54 115	51 921	47 953	42 140
Spain	226 422	344 074	326 197	329 171	262 802
Turkey	2 747 630	2 551 647	2 440 202	2 375 082	2 275 529
United Kingdom	118 064 000	109 491 000	108 023 000	98 998 000	88 708 000
EU31 Total	322 100 000	314 200 000	311 500 000	297 800 000	285 100 000

Note(s):-

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

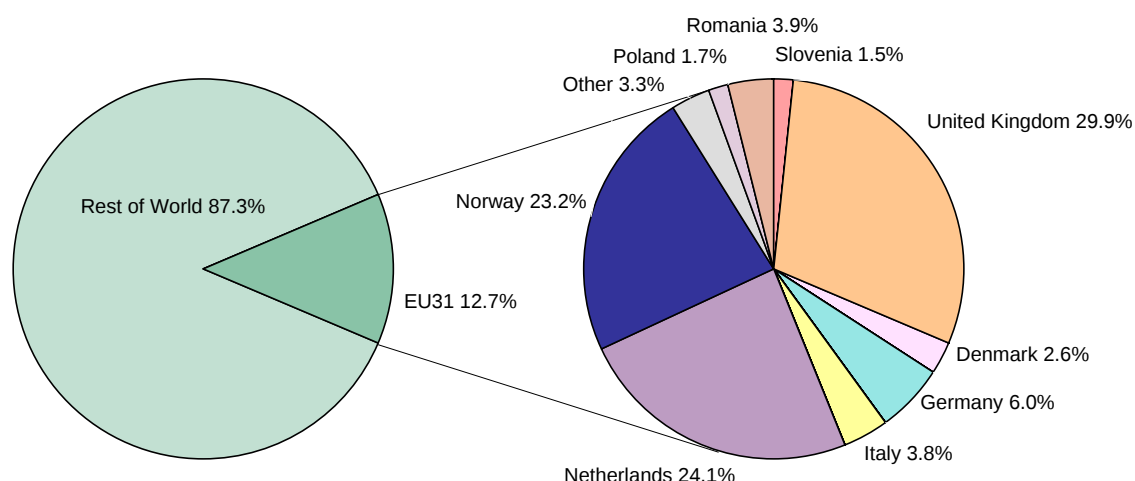
EU31 Production of crude petroleum 2000 - 04



Natural gas

- Natural gas is an increasingly important fundamental energy resource. It is used chiefly as a fuel but also a basic feedstock for chemicals such as propane and butane, and in the manufacture of ammonia and fertilisers.
- It is transported either by pipeline, often over transcontinental distances, or by ships in the form of liquefied natural gas (LNG).
- Russia (23%) and the USA (19%) are the largest producers. The UK was the largest producer in the EU31 (30%) and the fourth-largest world producer (4%).

EU31 Production of natural gas 2004



Production of natural gas

million m³

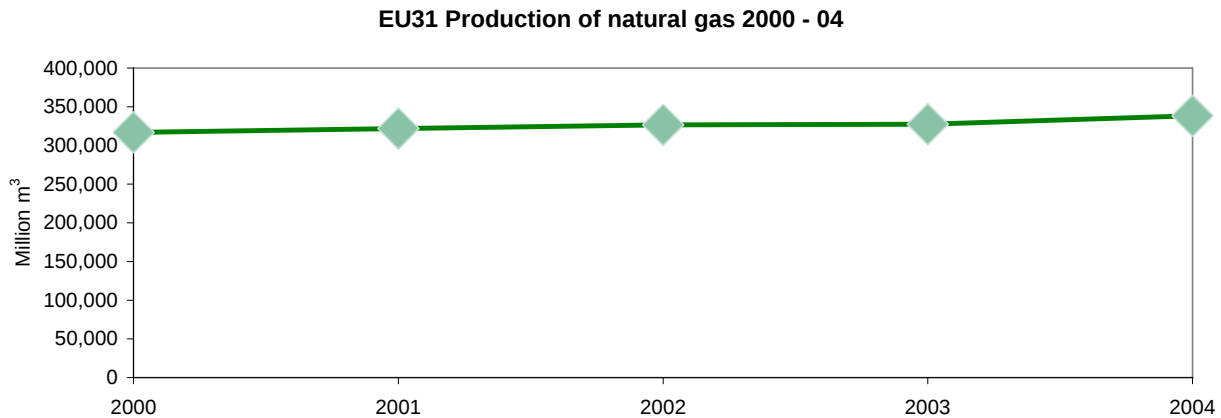
Country	2000	2001	2002	2003	2004
Austria	1 805	1 954	2 015	2 029	2 011
Bulgaria	12	21	11	11	333
Croatia	1 768	2 009	2 122	2 190	2 201
Czech Republic	118	101	91	131	175
Denmark	7 751	7 930	7 947	7 555	8 946
France	1 883	1 809	1 751	1 523	1 325
Germany	21 576	21 545	21 422	22 092	20 270
Greece	36	32	36	27	23
Hungary	3 349	3 286	3 130	3 145	3 200
Irish Republic	1 187	816	839	640	1 127
Italy	16 633	15 242	14 623	13 885	12 921
Netherlands	69 158	74 323	71 786	69 114	81 499
Norway	49 748	53 895	65 501	72 905	78 351
Poland	4 956	5 179	5 263	5 315	5 630
Romania	14 607	14 090	13 647	13 174	13 290
Slovakia	203	212	212	201	178

Production continued

Country	2000	2001	2002	2003	2004
Slovenia	6 800	6 100	5 704	4 926	5 040
Spain	179	557	553	268	372
Turkey	493	266	242	276	344
United Kingdom	114 557	112 567	109 816	108 088	100 966
EU31 Total	316 800	321 900	326 700	327 500	338 200

Note(s):-

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



Exports of crude petroleum

tonnes

Country	2000	2001	2002	2003	2004
Austria	57 085	60 151	...	-----	-----
Belgium-Luxembourg	1 417 209	328 893	2 319 755	2 263 897	2 967 608
Croatia	5 685	15 001	1	...	20 000
Czech Republic	110 672	118 714	129 275	155 258	64 315
Denmark	11 393 325	11 645 846	13 073 624	13 015 898	14 324 704
Estonia (a)	*555 000	*1 031 000	*648 000	*283 000	*321 000
France	134 324	55 631	90 903	91 091	39
Germany	313 476	907 924	656 861	1 741 465	1 253 391
Greece	695 163	596 613	4	-----	-----
Italy	167 922	250 353	871 391	802 524	824 206
Latvia	...	10 999	10 477	10 162	19 892
Lithuania	311 983	349 491	134 180	273 187	197 709
Netherlands	17 545	177 964	849	54 938	136 202
Norway	139 954 502	146 645 926	139 103 257	135 201 186	129 935 579
Poland	128 931	439 625	450 000	161 074	138 253
Slovakia	14 668	16 895	13 013	16 699	113 305
United Kingdom	78 022 274	82 057 946	79 943 787	69 617 507	60 743 679

Note(s):-

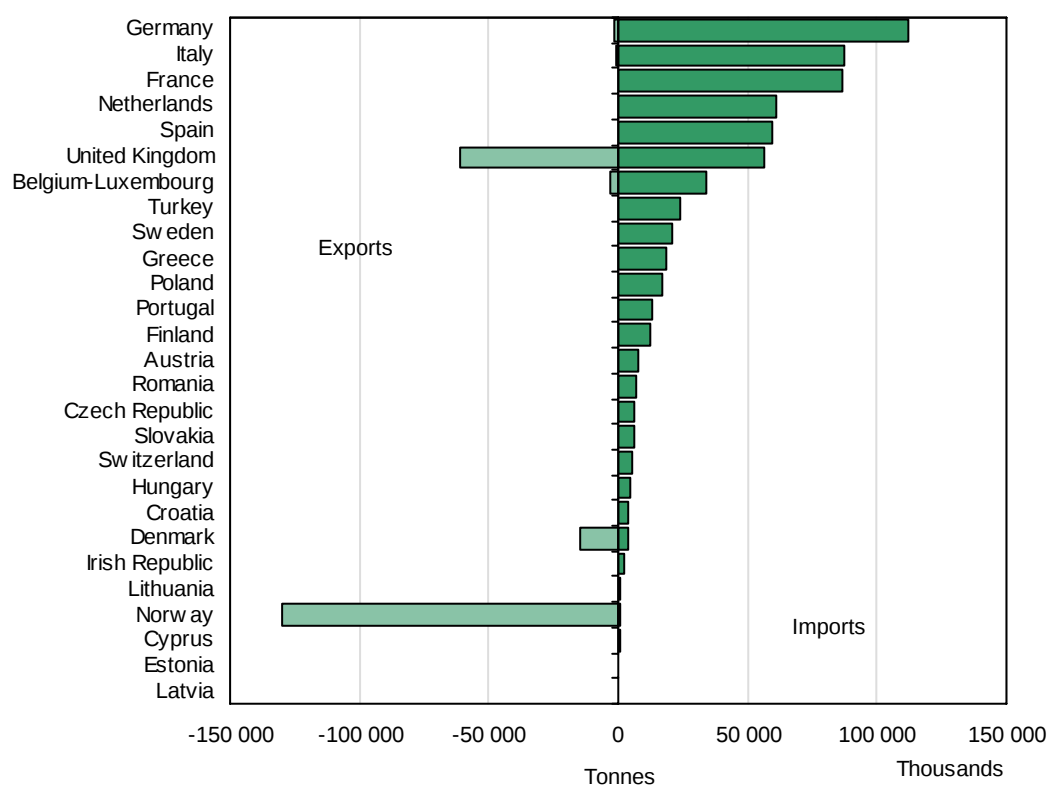
(a) BGS estimates, based on known imports into certain countries

Imports of crude petroleum

tonnes

Country	2000	2001	2002	2003	2004
Austria	7 314 935	7 858 165	8 128 843	7 819 276	7 539 310
Belgium-Luxembourg	32 114 347	38 628 736	37 490 772	42 731 484	34 210 727
Croatia	3 835 167	4 012 709	4 009 452	3 776 305	4 197 554
Cyprus	1 154 746	1 048 256	1 143 649	838 280	417 475
Czech Republic	5 819 443	6 004 685	5 548 002	7 380 375	6 530 733
Denmark	5 664 799	2 853 538	3 193 530	3 517 270	3 725 978
Finland	11 616 731	10 951 956	11 745 754	12 019 477	12 249 366
France	83 394 974	85 259 764	80 589 846	84 181 898	86 416 072
Germany	105 292 890	104 631 624	104 331 841	107 268 878	112 096 299
Greece	18 301 453	20 112 238	18 653 052	18 976 807	18 390 500
Hungary	...	...	5 029 814	...	5 001 714
Irish Republic	2 128 504	2 475 545	1 112 511	1 378 494	2 128 991
Italy	83 272 202	83 971 514	81 043 087	84 724 010	87 208 954
Lithuania	4 690 000	6 117 000	6 219 137	7 075 694	837 578
Netherlands	55 718 885	60 427 836	54 968 223	56 463 347	61 377 494
Norway	915 314	956 019	590 064	562 851	440 346
Poland	18 039 804	17 558 327	16 400 000	17 448 290	17 316 135
Portugal	11 422 174	12 517 253	11 635 480	12 544 785	13 081 242
Romania	4 641 598	5 543 644	5 690 063	5 216 636	7 314 284
Slovakia	5 329 492	5 408 523	5 554 324	5 603 952	5 858 911
Slovenia	128 439	1	0	0	0
Spain	57 954 412	56 824 754	57 489 130	57 578 507	59 343 873
Sweden	20 723 480	18 262 971	18 665 040	20 436 192	20 873 087
Switzerland	4 578 217	4 773 040	4 869 479	4 551 511	5 086 184
Turkey	...	23 141 640	21 626 643	24 028 666	23 917 019
United Kingdom	36 552 593	38 542 685	40 838 161	44 511 352	56 128 686

Crude petroleum - EU31 trade in 2004



Phosphate rock

- Phosphate rock is the term given to a range of phosphorus-bearing minerals that are commercially exploited. Over 90% of phosphate rock is used to produce fertilisers. The remainder is used in the manufacture of detergents, animal feedstock and many other minor applications.
- 62% of the total production of phosphate rock is from China, USA and Morocco. Morocco is the largest exporter. There is limited production in the EU31, which is almost entirely dependent on extra-EU31 imports.
- Phosphate rock (70–72% BPL, FAS Casablanca) traded at \$46/tonne in 2004.

Production of phosphate rock

tonnes

Country	2000	2001	2002	2003	2004
Finland	751 291	767 020	799 814	799 339	838 000

Exports of phosphate rock

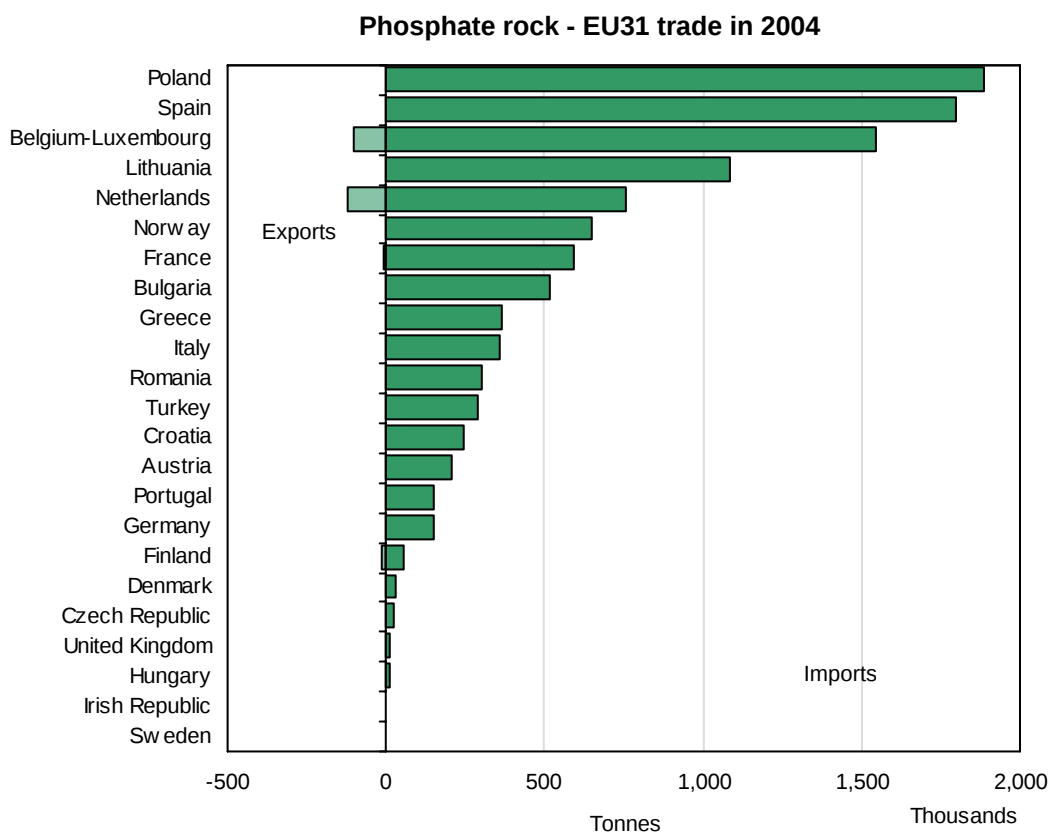
tonnes

Country	2000	2001	2002	2003	2004
Austria	1 397	1 320	906	1 280	802
Belgium-Luxembourg	39 501	43 858	54 563	75 856	101 115
Finland	0	...	40	1 626	16 375
France	1 523	2 536	1 488	1 018	6 362
Germany	678	674	302	66	43
Italy	820	794	513	475	4 417
Netherlands	120 824	65 689	181 928	94 541	122 866
Poland	14 989	2 700	2 511	...	507
United Kingdom	1 295	317	386	111	33

Imports of phosphate rock

tonnes

Country	2000	2001	2002	2003	2004
Austria	...	...	...	237 605	210 010
Belgium-Luxembourg	1 304 103	1 395 630	1 668 206	1 664 247	1 545 478
Bulgaria	341 800	393 280	490 935	550 013	515 889
Croatia	233 427	173 144	177 728	181 534	245 224
Czech Republic	45 473	48 539	27 955	24 299	24 282
Denmark	76 537	44 643	57 813	80 114	30 425
Finland	72 966	46 352	55 716	55 555	57 184
France	1 072 594	923 926	919 097	773 860	593 253
Germany	140 251	155 278	167 297	120 231	148 082
Greece	264 934	328 110	338 443	336 893	364 398
Hungary	23 144	14 793	14 730	9 140	...
Irish Republic	2 227	2 144	9 717	440	1 159
Italy	198 434	263 295	278 389	296 497	359 090
Lithuania	836 797	485 429	899 042	1 079 502	1 082 901
Netherlands	1 178 614	822 583	964 035	922 349	757 700
Norway	615 940	638 449	664 834	666 188	646 319
Poland	1 472 050	1 636 053	1 407 541	1 452 726	1 885 350
Portugal	141 161	158 684	134 664	141 740	149 365
Romania	344 152	278 348	249 271	264 547	303 713
Spain	1 862 774	2 062 062	1 805 229	1 790 138	1 800 329
Sweden	67 416	81 983	66 930	18 346	129
Turkey	667 998	497 120	746 033	610 286	291 245
United Kingdom	13 808	9 223	10 275	1 242	11 377



Platinum group elements

- The platinum group elements (PGEs) are platinum, palladium, rhodium, ruthenium, osmium and iridium. Of these, platinum and palladium are the most commercially significant. Platinum and palladium have important applications as catalysts (catalytic converters), and in electronics and jewellery and are also investment commodities.
- Mine production is confined to only a handful of countries. The largest producers in 2004 were South Africa (58% - chiefly platinum) and Russia (31% - chiefly palladium). There is no EU31 mine production but the UK is a major exporter of refined PGEs due to its processing industry based on imported materials and recycling.
- The average annual platinum price reached an all time high of \$848.76/troy ounce, a more than 22% increase compared with the average annual 2003 price. The 2004 annual average price of palladium was \$232.93/troy ounce, which was a 15% increase over 2003. Palladium prices had been trending down since 2000 when the price was \$692/troy ounce.

Exports of platinum group metals

kilograms

Country	2000	2001	2002	2003	2004
Austria					
Platinum & platinum metals	£1 853 000	£2 785 000	£2 827 000	£4 556 000	£8 114 000
Belgium-Luxembourg					
Platinum	2 800	3 000	3 200	2 000	1 000
Platinum metals	10 000	8 300	7 300	2 100	4 400
Waste & scrap	517 100	762 100	319 342	239 700	245 596
Bulgaria					
Waste & scrap (a)	*34 500	*28 500	*35 800	*17 500	*24 000
Czech Republic					
Platinum & platinum metals	...	...	79 408	(a) *22 000	(a) *47 000
Waste & scrap	(a) *34 000	(a) *86 900	2 818	5 316	4 158
Denmark					
Platinum & platinum metals	295	751	115	208	...
Estonia					
Waste & scrap	176 740	216 839	41 383	3 706	3 981
France					
Platinum	5 800	6 900	5 300	3 800	2 800
Platinum metals	14 400	7 000	4 600	3 400	5 200
Waste & scrap	76 100	91 300	107 500	35 400	44 182
Germany					
Platinum	23 500	28 500	21 400	26 300	31 900
Palladium	19 900	19 600	40 200	22 000	15 900
Other platinum metals	4 300	3 400	4 000	2 900	4 600
Waste & scrap	575 900	1 040 875	1 067 200	803 500	815 821
Irish Republic					
Platinum & platinum metals	239	74	20	...	...
Waste & scrap	3 559	12 292	22 983	5 544	13 100
Italy					
Platinum	3 443	31 775	3 546	10 430	6 277
Platinum metals	6 159	6 133	13 337	8 310	4 207
Waste & scrap	2 167	23 155	61 441	96 968	105 220
Latvia					
Waste & scrap	550	2	407	567	716
Lithuania					
Waste & scrap	6 750	9 867	2 982	7 980	6 019
Netherlands					
Platinum	£25 074 000	£21 776 000	£17 686 000	£19 007 000	£18 570 000
Platinum metals	£2 069 000	...	£634 000	£1 015 000	£1 377 000
Waste & scrap	46 500	23 800	10 900	9 200	201 129
Norway					
Platinum & platinum metals	5 668	6 659	10 986	11 150	13 360
Waste & scrap	851	2 639	76 801	616	384
Poland					
Platinum & platinum metals	795	43	872	308	470
Waste & scrap	7 958	27 622	6 543	52 366	33 019
Slovakia					
Platinum & platinum metals	...	...	257	310	308
Slovenia					
Platinum & platinum metals	201	322	919	817	1 083
Spain					
Platinum & platinum metals	4 617	256	285	104	1 054
Waste & scrap	216	616	253	7 479	1 893

Exports continued

Country	2000	2001	2002	2003	2004
Sweden					
Platinum & platinum metals	£897 000	£952 000	£610 000	£280 000	£1 037 000
Waste & scrap	2 521	46 465	27 536	27 000	29 000
Switzerland					
Platinum	61 609	63 640	73 384	67 305	57 268
Palladium	100 220	44 317	73 072	47 110	61 960
Other platinum metals	257	324	829	203	1 703
Waste & scrap	57 207	49 289	122 380	85 301	118 241
United Kingdom					
Platinum	31 660	31 859	69 955	37 874	47 738
Palladium	17 018	22 845	19 176	27 669	63 539
Other platinum metals	7 537	5 604	6 002	9 631	14 070
Waste & scrap	1 156 462	1 124 414	914 126	1 862 845	2 771 402

Note(s):-

(1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys

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

Imports of platinum group metals

kilograms

Country	2000	2001	2002	2003	2004
Austria					
Platinum & platinum metals	1 600	600	2 900	9 400	9 400
Belgium-Luxembourg					
Platinum	...	500	...	100	200
Platinum metals	...	500	200	200	200
Waste & scrap	£54 153 000	£129 469 000	...	...	...
Croatia					
Platinum & platinum metals	649	2 989	604	...	839
Cyprus					
Platinum & platinum metals	415	110	40	35	78
Czech Republic					
Platinum & platinum metals	...	...	1 147	5 249	51 832
Denmark					
Platinum & platinum metals	740	381	530	...	1 324
Waste & scrap	4	77	...	4	1
Estonia					
Waste & scrap	5 040	8 171	8 790	7 250	...
Finland					
Platinum & platinum metals	425	248	296	773	231
France					
Platinum	11 400	12 600	8 500	5 100	6 200
Platinum metals	27 300	22 800	12 100	15 400	17 900
Waste & scrap	28 800	104 000	200 100	334 300	40 700
Germany					
Platinum	38 900	39 800	34 300	44 800	39 600
Palladium	34 400	25 200	45 000	31 600	20 700
Other platinum metals	5 100	4 600	5 600	6 100	6 400
Waste & scrap	3 957 300	5 274 800	4 500 100	3 837 500	3 713 700
Greece					
Platinum & platinum metals	372	1 001	449	156	179
Hungary					
Platinum & platinum metals	88	117	140	274	168
Irish Republic					
Platinum & platinum metals	1 410	3 694	2 342	1 829	2 626
Italy					
Platinum	10 925	9 394	17 518	10 551	12 087
Platinum metals	34 483	30 150	26 602	20 085	21 430
Waste & scrap	255	988	5	39	278
Netherlands					
Platinum	£13 510 000	£16 677 000	£13 377 000	£14 194 000	£11 484 000
Platinum metals	£12 436 000	£7 361 000	£8 134 000	£5 463 000	£6 930 000
Waste & scrap	300	4 100	100	300	4 000

Platinum metals

Imports continued

Country	2000	2001	2002	2003	2004
Norway					
Platinum & platinum metals	1 138	1 231	984	747	973
Waste & scrap	1 327	641	840	87	59
Poland					
Platinum & platinum metals	1 550	293	208	402	...
Waste & scrap	2 609	...	...	23	16
Portugal					
Waste & scrap	1 804	13	...	...	-----
Slovenia					
Platinum & platinum metals	656	1 411	1 018	1 033	430
Spain					
Platinum & platinum metals	4 186	4 830	3 311	1 612	1 402
Waste & scrap	2 742	166	32	31	298
Sweden					
Platinum & platinum metals	£5 196 000	£5 430 000	£6 134 000	£6 531 000	£4 984 969
Waste & scrap	6 000	1 000	265	339 000	273 000
Switzerland					
Platinum	59 331	68 461	56 039	69 111	47 742
Palladium	87 714	94 074	106 412	54 805	96 530
Other platinum metals	521	538	1 063	816	3 725
Waste & scrap	34 405	19 435	49 569	129 698	161 433
Turkey					
Platinum & platinum metals	259	321	393	378	231
United Kingdom					
Platinum	35 968	17 825	12 030	13 827	47 717
Palladium	34 022	19 724	22 072	48 106	24 657
Other platinum metals	9 715	5 602	4 772	8 636	8 268
Waste & scrap	593 208	729 250	775 673	367 327	617 569

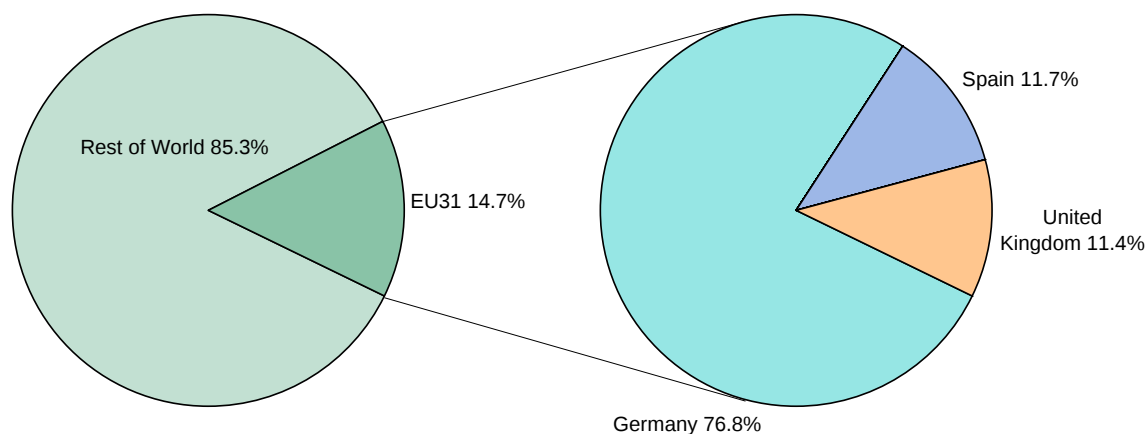
Note(s):-

(1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys

Potash

- Potash is the name for a range of potassium-bearing minerals and processed chemical products. Potassium is essential in fertilisers and is widely used in the chemicals industry and in explosives.
- Economic potash deposits are rare. Only fourteen countries produced potash in 2004, of which Canada, Russia, Belarus and Germany generated 76% of world production. The EU31 is a major producer of potash, producing 4.7 million tonnes in 2004 (15% of world production).
- World potash market prices have been relatively stable for the past decade. However, potash prices increased in 2004 after a decade of stable prices. In 2004, the contract price for KCl standard grade f.o.b. Vancouver was \$105–\$131/tonne for the first 10 months, before increasing to \$105–\$148/tonne in November and \$131–\$148/tonne in December.

EU31 Production of potash 2004

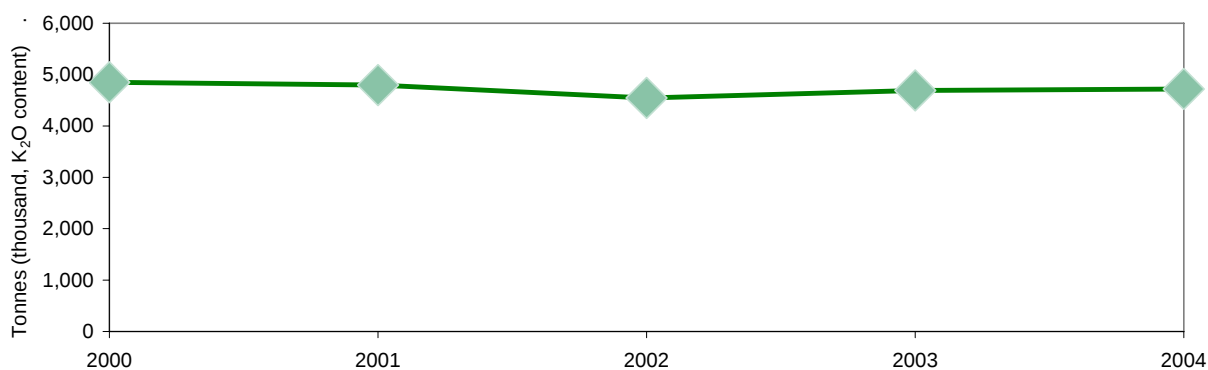


Production of Potash

tonnes (K₂O content)

Country	2000	2001	2002	2003	2004
France					
Potassic salts	321 000	244 000	128 000	-----	-----
Germany					
Potassic salts	3 407 467	3 548 665	3 471 763	3 563 932	3 626 510
Spain					
Chloride	521 984	470 933	406 571	505 527	553 237
United Kingdom					
Chloride	600 800	531 900	540 100	621 400	539 500
EU31 Total	4 851 000	4 795 000	4 546 000	4 691 000	4 719 000

EU31 Production of potash 2000 - 04



Exports of potash

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg					
Fertiliser salts	7 299	3 172	5 313	1 193	441
Sulphate (b)	*346 800	*399 600	*444 600	*490 000	*521 000
Chloride	183 220	184 145	211 383	142 227	140 950
Other potassic fertilisers	4 537	4 561	5 803	4 756	7 993
Finland					
Sulphate (b)	*6 900	*14 000	*33 300	*51 300	*34 900
Other potassic fertilisers	...	4 368	3 075	710	1 094
France					
Sulphate	576	508	740	860	8 248
Chloride	97 419	134 868	95 248	41 600	19 459
Other potassic fertilisers	44 925	988	536	660	1 271
Germany					
Fertiliser salts (a) (c)	2 856 180	2 916 428	2 998 738	3 103 009	3 077 154
Greece					
Potassic fertilisers	...	451	2 119	2 107	4 083
Hungary					
Potassic fertilisers	2 776	6 617	221	61	2 512
Italy					
Potassic fertilisers	1 965	804	1 502	2 415	1 169
Lithuania					
Potassic fertilisers	9 386	9 243	7 705	7 128	8 037
Netherlands					
Chloride	42 219	74 347	243 242	219 413	197 731
Norway					
Potassic fertilisers	4 033	12 006	3 869	10 964	10 107
Spain					
Sulphate	62 178	57 091	15 635	11 628	3 958
Chloride	542 664	418 155	350 315	502 348	675 140
Sweden					
Sulphate	78 362	141 298	136 917	127 687	70 066
United Kingdom					
Chloride	*630 000	*530 000	*440 000	*630 000	*512 000
Other potassic fertilisers	1 143	1 141	740	609	416

Note(s):-

(a) K₂O content

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

(c) Including sulphate, chloride and other potassic fertilisers

Imports of potash

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Fertiliser salts	20 647	17 357	19 531	20 424	23 040
Chloride	3 387	3 618	5 318	159 216	145 757
Other potassic fertilisers	4 707	5 874	4 685	17 997	22 629
Belgium-Luxembourg					
Fertiliser salts	33 302	22 677	23 295	24 355	26 328
Sulphate	179 570	183 131	203 971	213 779	212 176
Chloride	1 105 179	1 014 654	1 175 981	1 163 936	1 276 732
Other potassic fertilisers	20 398	18 801	19 044	21 700	22 357
Bulgaria					
Potassic fertilisers	20 717	25 284	11 724	3 453	4 725
Croatia					
Chloride	168 656	144 977	124 881	146 692	168 015
Czech Republic					
Potassic fertilisers	98 553	92 242	83 492	78 801	111 694
Denmark					
Sulphate	15 981	11 689	7 028	14 654	18 006
Chloride	160 991	135 815	146 234	166 236	119 153
Other potassic fertilisers	11 746	12 535	13 373	11 254	13 099
Estonia					
Potassic fertilisers	16 660	24 891	*18 000	19 986	23 469

Imports continued

Country	2000	2001	2002	2003	2004
Finland					
Chloride (a)	149 400	168 200	156 100	177 100	156 100
France					
Fertiliser salts	1 916	1 660	2 337	1 807	1 988
Sulphate	95 023	80 698	93 051	90 543	77 441
Chloride	1 682 073	1 444 445	1 463 860	1 755 346	1 866 149
Other potassic fertilisers	25 318	25 096	25 410	32 600	31 959
Germany					
Chloride	79 841	86 916	89 067	85 597	97 924
Other potassic fertilisers	...	5 724	6 206	5 810	4 996
Greece					
Sulphate	109 584	25 433	59 315	55 208	92 816
Chloride	23 925	27 415	32 834	36 469	29 191
Other potassic fertilisers	3 880	2 251	3 057	5 256	6 411
Hungary					
Potassic fertilisers	108 643	112 995	124 330	121 815	143 465
Irish Republic					
Chloride	76 443	36 186	17 160	3 790	30 456
Other potassic fertilisers	1 485	2 170	2 483	6 156	4 924
Italy					
Sulphate	90 920	87 150	84 724	102 855	96 904
Chloride	448 256	425 575	445 906	422 469	392 833
Other potassic fertilisers	19 572	17 701	21 604	16 491	29 902
Latvia					
Potassic fertilisers	18 747	20 692	17 241	22 764	26 368
Lithuania					
Fertiliser salts	12 989	6 264	...	...	...
Chloride	77 322	116 995	141 946	160 334	172 622
Other potassic fertilisers	8 460	450	6 767	7 384	12 978
Netherlands					
Sulphate	...	...	12 505	12 777	23 765
Chloride	(b) 191 669	(b) 215 193	180 033	467 219	387 637
Other potassic fertilisers	...	...	4 949	6 018	4 321
Norway					
Sulphate	204 059	211 169	200 407	249 307	267 653
Chloride	335 274	331 063	339 431	310 954	309 061
Poland					
Fertiliser salts	...	...	1 245	948	2 264
Sulphate	...	...	18 752	19 967	24 143
Chloride	(c) 770 508	(c) 742 114	754 473	821 469	1 098 679
Other potassic fertilisers	...	...	2 877	5 223	4 174
Portugal					
Sulphate	6 133	1 950	2 144	4 457	7 526
Chloride	55 774	55 972	73 748	55 775	79 232
Romania					
Sulphate	9	71	2 174	41 698	8 070
Chloride	71 311	76 450	58 108	33 920	53 008
Slovakia					
Potassic fertilisers	30 294	821	39 452	30 582	36 256
Spain					
Sulphate	21 804	32 543	71 719	37 444	48 174
Chloride	313 204	268 306	245 620	249 881	269 278
Other potassic fertilisers	5 378	2 862	9 304	10 427	22 019
Sweden					
Sulphate	5 380	3 958	4 755	884	2 819
Chloride	87 518	54 531	44 086	33 748	68 457
Other potassic fertilisers	5 150	4 651	2 285	9 862	4 409
Switzerland					
Sulphate	2 844	1 815	2 496	2 621	2 170
Chloride	21 100	19 144	23 053	15 792	19 185
Other potassic fertilisers	2 738	1 922	3 983	3 721	3 039
Turkey					
Sulphate	15 152	26 753	31 362	51 467	59 381
Chloride	101 485	82 849	111 780	107 412	130 748

Potash

Imports continued

Country	2000	2001	2002	2003	2004
United Kingdom					
Fertiliser salts	18 050	16 154	19 366	12 751	9 209
Chloride	255 572	335 398	372 031	246 164	205 175
Other potassic fertilisers	10 890	14 506	8 804	5 439	12 706

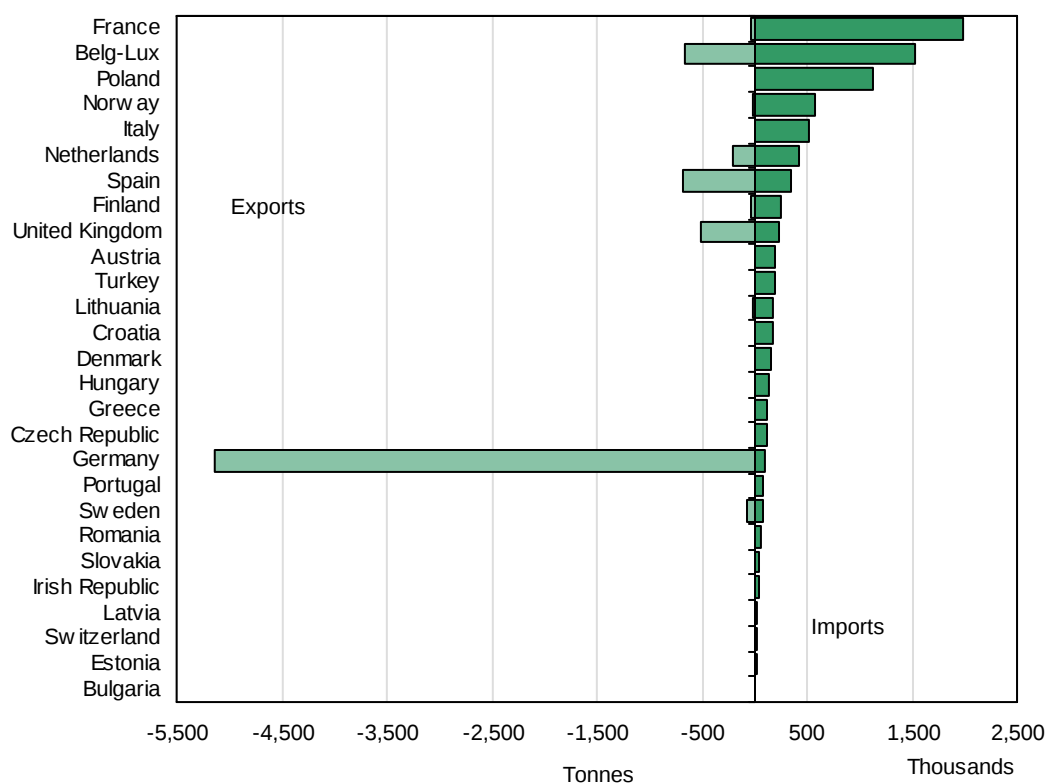
Note(s):-

(a) K₂O content

(b) Including sulphate

(c) Including sulphate and fertiliser salts

Potash - EU31 trade in 2004



Rare earth minerals

- Rare earth elements (REE), which occur chiefly in the minerals bastnaesite and monazite, are a group of 15 metallic elements of which cerium, lanthanum and neodymium are the most commonly used. Rare earths are widely used in automotive catalysts, as metallurgical additives and in glass and ceramics.
- Production of rare earths is limited to only five countries of which China is the largest producer (>90%) and exporter. There is no EU31 production, thus Europe is entirely import dependent.
- Despite the limited production base, REE prices are remarkably stable. Through 2004, bastnaesite concentrate (70% leached) traded at \$2.25/lb rare earth oxides (REO). Yttria (99.99% Y_2O_3) traded between \$9–\$12/kg. The price for lanthanum oxide (99%) ranged from \$3–3.5/kg.

Exports of rare earths

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Cerium compounds	1 420	...	(a) *2 500	1 750	1 564
Other rare earth compounds	5 714	...	(a) *7 000	6 144	6 415
Metals	558	...	...	417	456
Belgium-Luxembourg					
Rare earth compounds	260	1 060	452	743	721
Ferro-cerium & other pyrophoric alloys	37	9	7	2	0
Metals	264	265	160	158	237
Estonia					
Rare earth compounds	27	784	4 156	2 129	1 064
Metals	...	5	...	30	14
France					
Rare earth compounds	1 151	638	314	1 660	8 588
Ferro-cerium & other pyrophoric alloys	129	105	94	109	125
Metals	33	26	231	58	65
Germany					
Rare earth compounds	106	225	102	115	108
Ferro-cerium & other pyrophoric alloys	4	0	3	0	0
Metals	31	16	8	10	4
Irish Republic					
Rare earth compounds	87	182	64	107	85
Ferro-cerium & other pyrophoric alloys	100	142	...	362	...
Italy					
Metals	11	18	19	15	81
Netherlands					
Ferro-cerium & other pyrophoric alloys	34	2	14	...	...
Metals	63	15	17	58	124
Spain					
Ferro-cerium & other pyrophoric alloys	13	56	85	...	...
United Kingdom					
Cerium compounds	317	415	88	118	46
Other rare earth compounds	354	329	1 128	1 105	1 163
Ferro-cerium & other pyrophoric alloys	26	9	19	768	225
Metals	60	51	148	16	10

Note(s):-

(1) Rare earths are here taken to include yttrium and scandium

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

Imports of rare earths

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Cerium compounds	1 781	2 287	2 025	2 810	2 034
Other rare earth compounds	3 188	5 534	3 128	3 062	3 973
Metals	929	409	324	457	463
Belgium-Luxembourg					
Cerium compounds	572	831	639	843	615
Other rare earth compounds	78	375	126	143	287
Ferro-cerium & other pyrophoric alloys	55	89	30	6	7
Metals	287	279	225	195	226

Rare Earths

Imports continued

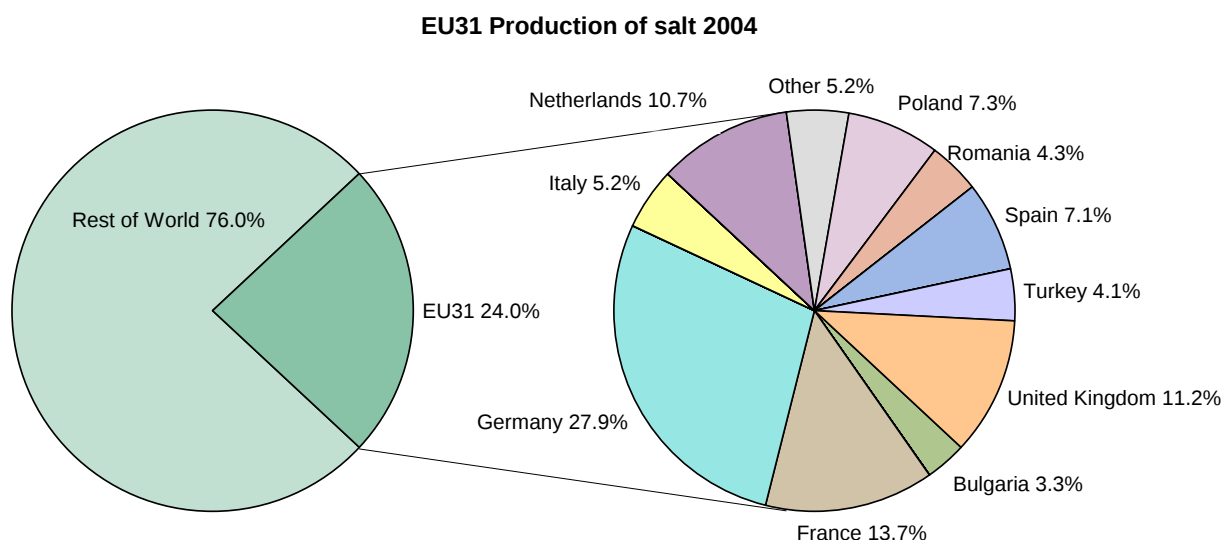
Country	2000	2001	2002	2003	2004
Czech Republic					
Rare earth compounds	...	...	212	177	92
Estonia					
Rare earth compounds	0	3	609	1 734	3 208
France					
Cerium compounds	18 159	15 049	9 914	10 315	11 710
Other rare earth compounds	679	1 407	382	1 480	1 037
Ferro-cerium & other pyrophoric alloys	8	14	29	2	1
Metals	382	230	169	279	251
Germany					
Cerium compounds	1 390	1 351	1 208	1 115	1 082
Other rare earth compounds	4 674	7 555	7 811	7 810	7 776
Ferro-cerium & other pyrophoric alloys	6	27	15	...	214
Metals	895	564	218	358	285
Hungary					
Rare earth compounds	188	216	202	114	158
Irish Republic					
Rare earth compounds	58	46	44	245	74
Metals	66	66	63	64	4
Italy					
Rare earth compounds	755	669	637	656	932
Metals	27	17	4	102	108
Netherlands					
Cerium compounds	93	138	44	135	103
Other rare earth compounds	2 972	3 793	1 380	2 222	2 254
Ferro-cerium & other pyrophoric alloys	490	406	27	2	7
Metals	105	57	25	38	10
Norway					
Metals	751	775	558	713	702
Poland					
Rare earth compounds	79	70	77	245	61
Metals	23	1	1	...	3
Slovenia					
Metals	55	74	71	80	107
Spain					
Rare earth compounds	456	522	523	548	692
Ferro-cerium & other pyrophoric alloys	27	44	28	87	...
Metals	14	59	92	90	84
Sweden					
Rare earth compounds	...	...	...	75	58
Metals	18	28	39	48	56
Turkey					
Rare earth compounds	170	104	155	201	171
Ferro-cerium & other pyrophoric alloys	7	1	...	...	253
United Kingdom					
Cerium compounds	2 388	2 227	3 070	2 519	1 909
Other rare earth compounds	466	403	491	471	773
Ferro-cerium & other pyrophoric alloys	14	1	34	1	8
Metals	226	172	64	115	135

Note(s):-

(1) Rare earths are here taken to include yttrium and scandium

Salt

- Salt (sodium chloride) is a fundamental chemical of life. However, human consumption accounts for a small fraction of salt usage. Industrial use is far higher, particularly in the chemical industry as a source of soda and chlorine. Salt is also used to 'grit' roads to prevent the formation of ice between 0°C and -6°C.
- Most countries in the world have some salt production from rock salt, brine or seawater. In 2004 the largest producer was USA (20%). In Europe the largest producer was Germany (28% of total EU31 production).
- Because of its wide availability, salt markets tend to be very stable. In the UK ground rock salt, 15–20 tonne lots, delivered to the UK, traded between £20–£30/tonne.



Production of salt

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Rock salt	1 280	1 384	1 491	1 610	1 228
Salt in brine	640 000	646 000	641 634	723 286	745 670
Bulgaria	1 700 000	1 931 000	1 800 000	1 882 000	1 800 000
Croatia	33 668	32 585	30 483	32 533	23 000
Denmark	586 500	587 000	*590 000	*600 000	*600 000
France					
Rock salt	536 000	596 000	434 000	320 000	406 000
Brine salt	1 476 000	1 452 000	1 456 000	1 409 000	1 433 000
Salt in brine	3 306 000	4 023 000	4 056 000	4 351 000	4 371 000
Sea salt	1 294 000	1 536 000	848 000	1 302 000	1 365 000
Germany					
Rock salt	5 360 000	5 326 000	6 134 000	6 178 000	7 268 000
Brine salt	1 206 000	1 211 000	1 249 000	1 123 000	974 000
Salt in brine	6 023 000	6 196 000	6 310 000	6 668 000	7 212 000
Greece	244 709	208 776	126 118	192 161	187 522
Italy					
Rock salt & brine salt	3 332 901	3 301 173	3 342 992	2 922 251	2 876 469
Netherlands	5 564 000	5 717 000	5 773 000	5 980 000	5 896 000
Poland					
Rock salt	841 340	786 609	838 858	847 880	1 099 072
Brine salt	2 652 042	2 688 929	2 719 131	2 790 996	2 940 169
Portugal					
Rock salt	584 516	625 785	604 969	602 035	661 704
Sea salt	74 027	76 653	40 139	86 603	86 603
Romania	2 307 806	2 225 052	2 257 886	2 416 970	2 398 324
Slovakia	121 700	123 000	97 400	133 100	100 420
Slovenia	5 000	2 000	5 200	3 632	3 632
Spain					
Rock salt	2 328 464	2 319 800	2 559 760	2 562 832	2 541 000
Sea salt	1 436 345	1 420 000	1 234 679	1 327 108	1 300 000
Other salt	105 187	100 000	97 945	97 730	100 000

Salt

Production continued

Country	2000	2001	2002	2003	2004
Switzerland	452 000	384 000	400 000	461 000	486 000
Turkey					
Rock salt	84 080	46 362	55 305	10 205	*10 000
Sea salt	592 283	522 364	411 646	556 652	*559 000
Other salt	1 450 008	1 202 025	1 729 686	1 675 915	*1 681 000
United Kingdom					
Rock salt	*1 700 000	*1 900 000	*1 500 000	*1 700 000	*2 000 000
Brine salt	*1 100 000	*1 100 000	*1 000 000	*1 000 000	*1 000 000
Salt in brine (a)	*3 000 000	*3 000 000	*3 200 000	*3 200 000	*3 200 000
EU31 Total	50 100 000	51 300 000	51 500 000	53 200 000	55 300 000

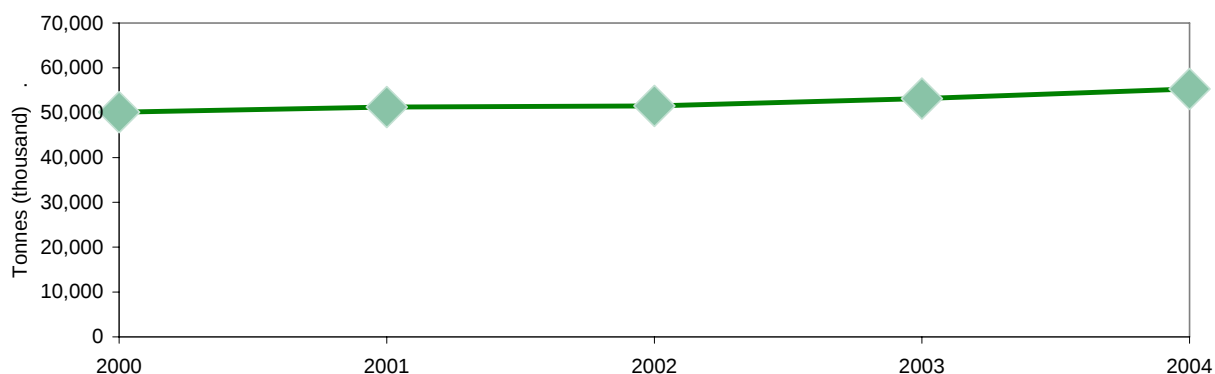
Note(s):-

(1) This table does not include production of refined salt

(2) Salt is known to be produced in many countries for which statistics are not available

(a) Used for purposes other than salt-making

EU31 Production of salt 2000 - 04



Exports of salt

tonnes

Country	2000	2001	2002	2003	2004
Austria	...	...	...	253 791	183 850
Belgium-Luxembourg	40 176	68 728	129 726	117 806	105 680
Bulgaria	2 423	1 898	4 938	2 625	8 586
Croatia	1 508	1 609	4 242	5 530	9 226
Cyprus	530	236	1 729	508	559
Czech Republic	13 252	7 135	7 768	10 490	12 986
Denmark	367 871	327 344	340 177	376 794	350 587
France	452 653	423 727	437 847	497 458	506 431
Germany	2 753 620	3 023 135	3 340 569	3 695 084	3 201 549
Greece	40 445	34 429	36 450	42 976	44 664
Hungary	446	232	629	2 987	576
Italy	168 498	170 027	326 123	325 395	289 415
Latvia	632	730	668	411	5 169
Lithuania	1 496	1 822	2 887	3 377	5 457
Netherlands	2 863 204	2 689 600	3 641 444	3 679 323	3 212 606
Norway	4 114	1 994	3 687	4 657	4 948
Poland	426 860	375 944	339 140	419 201	493 259
Portugal	1 892	3 656	4 413	3 952	4 444
Romania	465 106	349 112	393 787	546 390	497 826
Slovakia	39 930	50 441	45 612	47 199	51 539
Slovenia	3 957	3 513	4 400	4 814	5 253
Spain	845 033	785 056	617 170	695 177	744 750
Sweden	8 420	1 849	20 208	156 140	10 354
Switzerland	15 388	10 146	28 394	52 482	41 044
Turkey	36 334	31 967	46 398	43 317	30 898
United Kingdom	307 899	299 607	326 760	537 497	708 943

Imports of salt

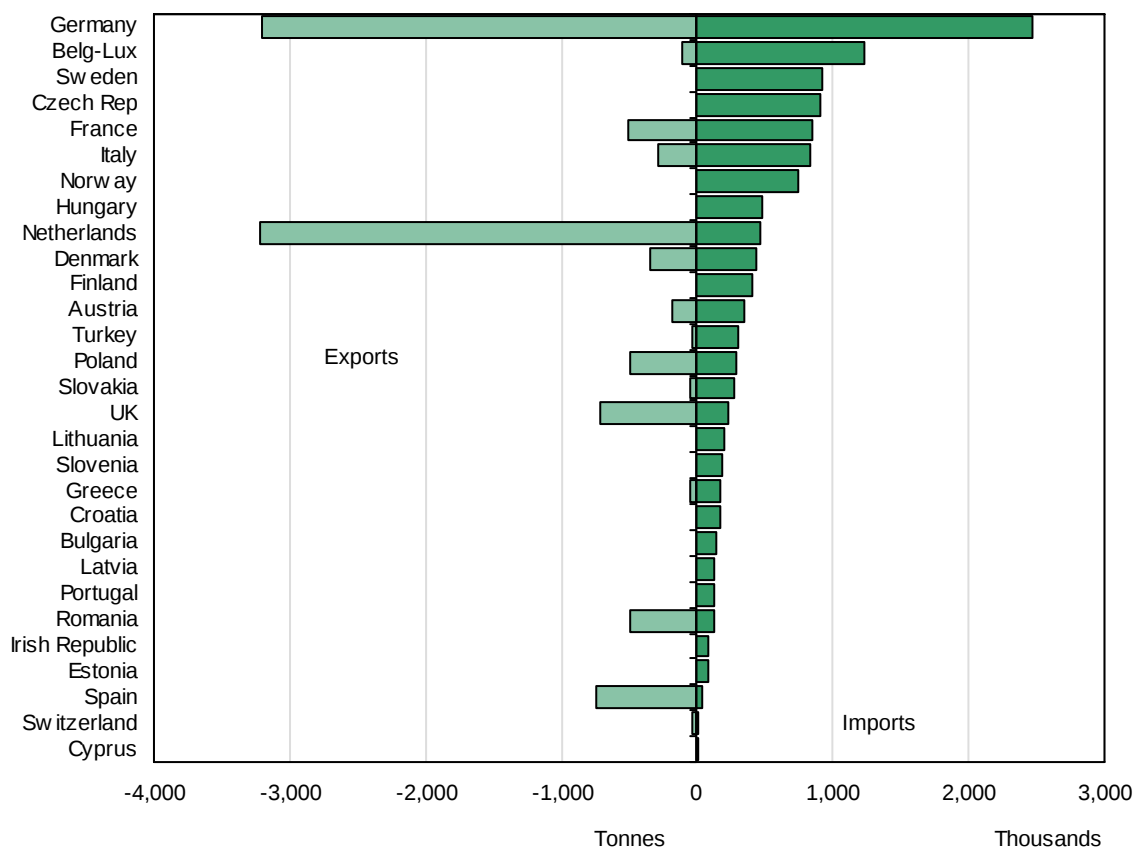
tonnes

Country	2000	2001	2002	2003	2004
Austria	122 300	59 742	92 209	206 355	350 903
Belgium-Luxembourg	3 675 526	3 285 692	3 411 148	1 895 987	1 236 192
Bulgaria	125 322	105 676	125 613	116 840	138 631
Croatia	85 873	84 219	139 989	164 046	165 277
Cyprus	9 002	11 616	10 530	14 053	8 650
Czech Republic	649 768	602 712	622 455	681 134	909 966
Denmark	245 086	255 671	317 692	376 122	440 020
Estonia	71 313	72 431	78 085	78 883	78 849
Finland	427 247	366 217	447 703	395 727	408 367
France	533 225	457 520	564 159	753 902	850 703
Germany	2 062 758	1 824 730	2 391 447	2 366 521	2 467 276
Greece	131 417	98 438	102 103	218 991	173 729
Hungary	527 154	395 106	468 704	557 050	486 695
Irish Republic	82 940	107 438	110 654	77 992	83 789
Italy	565 098	771 298	685 681	745 388	833 790
Latvia	88 877	91 525	100 542	100 459	122 251
Lithuania	142 384	157 181	166 252	187 050	204 839
Malta	1 319	1 722	...	...	...
Netherlands	98 806	224 608	432 437	489 369	461 283
Norway	691 422	718 394	725 887	702 713	741 959
Poland	113 806	95 520	156 461	156 406	294 590
Portugal	104 476	116 508	119 892	139 720	121 621
Romania	6 242	23 077	59 231	99 679	120 787
Slovakia	193 174	158 752	200 614	213 250	266 601
Slovenia	98 702	107 755	128 212	155 881	178 531
Spain	44 723	31 179	42 431	47 011	36 494
Sweden	910 232	908 355	1 030 471	828 845	929 193
Switzerland	9 040	7 216	7 692	13 984	9 299
Turkey	26 341	12 118	78 204	202 349	307 039
United Kingdom	(a) *200 000	(a) *235 000	306 488	217 009	232 466

Note(s):-

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

Salt - EU31 trade in 2004



Sillimanite minerals

- Sillimanite minerals are a group of three anhydrous aluminium silicate minerals (andalusite, kyanite and sillimanite) that are chiefly used as refractories. Bricks and mortar used to line furnaces and kilns usually contain a proportion of these minerals.
- Despite being common minerals in high-grade metamorphic rocks, economic concentrations of these minerals are rare. In 2004, production was restricted to only nine countries, of which South Africa was the largest producer. China is also believed to be a significant producer of sillimanite minerals. The only major producer in the EU31 is France.
- The market for sillimanite minerals was very stable during 2004. Kyanite, ex-works, USA (54–60% Al_2O_3 , 18-tonne lots) traded at between \$225–\$268/tonne throughout the year and andalusite, FOB Transvaal (57–58% Al_2O_3 , 2000 tonne bulk) ranged from €180–210/tonne.

Production of sillimanite minerals

tonnes

Country	2000	2001	2002	2003	2004
France					
Andalusite	63 000	61 000	59 000	62 000	68 000
Spain					
Andalusite	*260	*250	*250	*200	*200

Note(s):-

(1) A number of other countries produce sillimanite minerals but details of output are not reported

(2) In addition to the countries listed above as producing sillimanite minerals, synthetic mullite is known to be produced in Denmark, France, Hungary and the United Kingdom

Exports of sillimanite minerals

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg	6 081	6 368	5 783	22 825	49 319
France	48 687	56 510	46 454	49 958	51 653
Germany	7 026	8 092	10 565	12 413	14 382
Hungary					
Mullite	2 703	...	2 728	3 869	6 108
Italy	100	248	240	7	123
Netherlands	7 318	10 932	5 604	6 400	11 761
United Kingdom	6 742	6 895	4 554	3 238	2 060

Note(s):-

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

Imports of sillimanite minerals

tonnes

Country	2000	2001	2002	2003	2004
Austria	1 471	3 531	2 499	2 660	1 981
Belgium-Luxembourg	13 899	10 972	10 499	29 333	53 146
Czech Republic	4 049	3 785	2 673	3 480	3 779
Denmark	2 842	3 518	2 726	3 414	2 274
Finland	168	298	338	299	302
France	2 864	2 518	2 685	3 411	3 360
Germany	56 898	56 821	62 654	63 602	60 782
Hungary	...	...	1 370	2 045	2 396
Irish Republic	9 521	14 377	5 795	10	89
Italy	28 898	15 859	18 193	14 669	15 132
Netherlands	25 485	29 657	37 966	24 106	13 824
Norway	2 609	4 793	2 537	2 004	3 605
Poland					
Sillimanite minerals	8 697	11 872	16 182	17 682	14 928
Mullite	1 425	963	659	1 974	1 355
Portugal	568	566	405	330	337
Slovakia	3 668	1 770	2 385	2 690	2 459
Spain	20 724	12 885	13 581	15 782	15 262
Sweden	11 519	14 145	12 308	14 155	5 470
Switzerland	456	350	246	253	315
Turkey	1 343	3 920	3 386	3 486	5 110
United Kingdom					
Sillimanite minerals	28 081	28 470	18 588	22 649	24 568
Mullite	5 198	5 174	10 006	8 656	12 677

Note(s):-

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

Silver

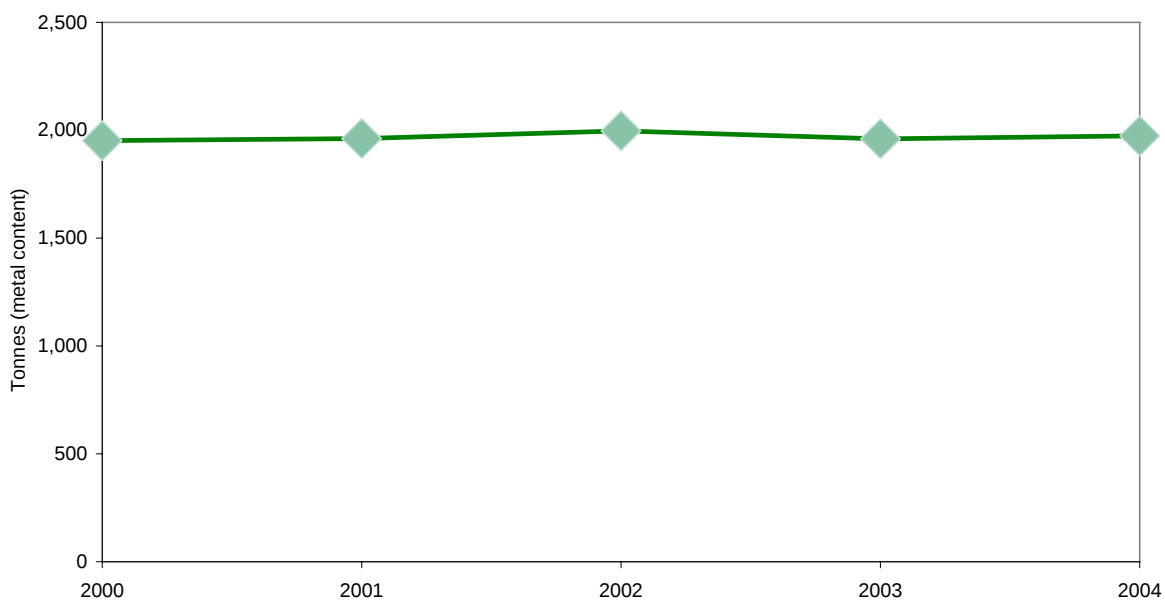
- Silver is a ductile and malleable metallic element that has the highest electrical and thermal conductivity of all the metals. It is widely used in electronics although the most important uses are in photography (silver nitrate) and making mirrors.
- Silver is more common than the other precious metals, although still much rarer than base and ferrous metals. It is rarely mined in its own right, and is chiefly produced as a by-product of lead, tin or copper mining. In 2004 the world's largest producers were Peru, Mexico and China together accounting for 41% of world production. The largest EU31 producer was Poland (70% of EU31 production).
- During 2004 silver traded between \$5.50–\$8.29/troy oz, with an annual average price of \$6.69/troy oz, 36% above the 2003 average price of \$4.91/troy oz.

Mine production of silver

kilograms (metal content)

Country	2000	2001	2002	2003	2004
Bulgaria	54 534	56 806	60 000	*60 000	*60 000
Finland	*10 000	*11 000	*15 000	*20 000	*20 000
France	723	929	709	495	682
Greece	30 644	62 400	74 800	7 000	-----
Irish Republic	16 700	8 700	7 500	8 500	5 200
Italy	*1 000	*1 000	*1 000	*1 000	-----
Poland	1 163 600	1 230 700	1 343 000	1 332 200	1 372 700
Portugal	20 430	23 100	19 500	21 100	24 400
Romania	*18 000	*18 000	*18 000	*18 000	*18 000
Spain	114 537	55 000	12 792	2 173	3 581
Sweden	328 737	306 029	320 823	340 701	319 563
Turkey	193 000	188 000	124 000	149 000	*150 000
EU31 Total	1 952 000	1 962 000	1 997 000	1 960 000	1 974 000

EU31 Mine production of silver 2000 - 04



Exports of silver

kilograms

Country	2000	2001	2002	2003	2004
Austria					
Metal	50 900	116 900	101 000	87 800	77 400
Belgium-Luxembourg					
Ores & concentrates	18 000	...	1 128 700	56 900	29 800
Metal	8 600	27 300	67 500	47 600	24 100
Czech Republic					
Metal	...	...	140 057	171 398	291 519
Denmark					
Metal	12 445	17 229	13 532	...	...
Estonia					
Metal	378	83	364	...	13
Finland					
Ores & concentrates	571 820	220 037	530 720	357 250	507 350
Metal	12 708	20 207	6 886	6 882	9 804
France					
Metal	532 500	658 600	584 600	465 300	404 600
Germany					
Metal	2 306 500	2 446 100	2 638 400	3 032 700	2 814 700
Greece					
Metal	3 047	215	71	351	3 299
Hungary					
Metal	746	1 204	962	1 300	2 516
Italy					
Metal	478 031	399 772	442 900	677 683	616 861
Netherlands					
Metal	£8 867 000	£6 398 000	£6 378 000	£16 904 000	£12 360 000
Norway					
Metal	112 502	74 774	64 962	62 669	69 207
Poland					
Metal	1 041 874	1 094 153	1 135 000	1 251 194	821 501
Slovakia					
Metal	...	...	8 498	7 985	6 465
Slovenia					
Metal	1 020	1 775	1 367	3 948	2 699
Spain					
Metal	369 220	14 145	51 246	115 059	43 448
Sweden					
Metal	315 000	291 000	408 000	433 000	473 000
Switzerland					
Metal	2 480 600	1 627 403	1 306 190	1 544 676	1 416 770
Turkey					
Metal	45	75	303	947	2 731
United Kingdom					
Metal	3 461 018	2 282 355	1 497 995	3 429 247	1 941 711

Note(s):-

(1) This table excludes silver coin but includes silver shipped for minting

(2) In this table the term 'metal' includes both unwrought and partly worked silver and alloys

Imports of silver

kilograms

Country	2000	2001	2002	2003	2004
Austria					
Metal	136 700	138 500	100 900	109 300	127 600
Belgium-Luxembourg					
Metal	928 500	875 300	652 200	735 100	476 800
Croatia					
Metal	4 292	4 573	4 000	*3 500	3 340
Cyprus					
Metal	11 631	9 624	8 614	8 461	5 135
Czech Republic					
Metal	...	...	173 805	238 756	422 971
Denmark					
Metal	23 506	19 137	13 512	*7 000	...
Estonia					
Metal	8 175	8 089	9 575	8 892	10 512
Finland					
Metal	87 460	89 015	87 543	56 470	75 350
France					
Metal	1 439 100	1 421 400	954 400	970 000	675 000
Germany					
Metal	1 584 400	1 894 000	1 844 300	2 185 300	1 434 200
Greece					
Metal	39 023	25 686	38 516	49 225	95 318
Hungary					
Metal	17 843	19 541	15 444	17 695	33 178
Irish Republic					
Metal	3 115	2 940	2 960	2 247	2 709
Italy					
Metal	2 226 980	2 030 362	1 705 431	1 724 000	1 776 385
Lithuania					
Metal	...	...	3 058	1 771	5 885
Netherlands					
Metal	£13 873 000	£12 117 066	£15 277 000	£13 948 000	£18 592 000
Norway					
Metal	128 551	84 784	60 995	72 647	86 037
Poland					
Metal	22 562	22 372	18 297	36 266	34 563
Portugal					
Metal	...	599	64	2 520	2 237
Slovakia					
Metal	13 002	...	13 268	13 073	17 735
Slovenia					
Metal	36 769	32 378	35 827	36 253	307 045
Spain					
Ores & concentrates	31 406	43 638	75 862	59 205	54 295
Metal	941 883	175 430	307 864	133 844	158 529
Sweden					
Metal	148 000	153 000	116 000	111 000	161 000
Switzerland					
Metal	2 748 848	1 476 601	1 028 138	746 184	1 082 664
Turkey					
Metal	136 321	90 014	169 098	199 226	269 009
United Kingdom					
Metal	2 541 673	3 471 871	3 780 907	2 484 101	2 100 474

Note(s):-

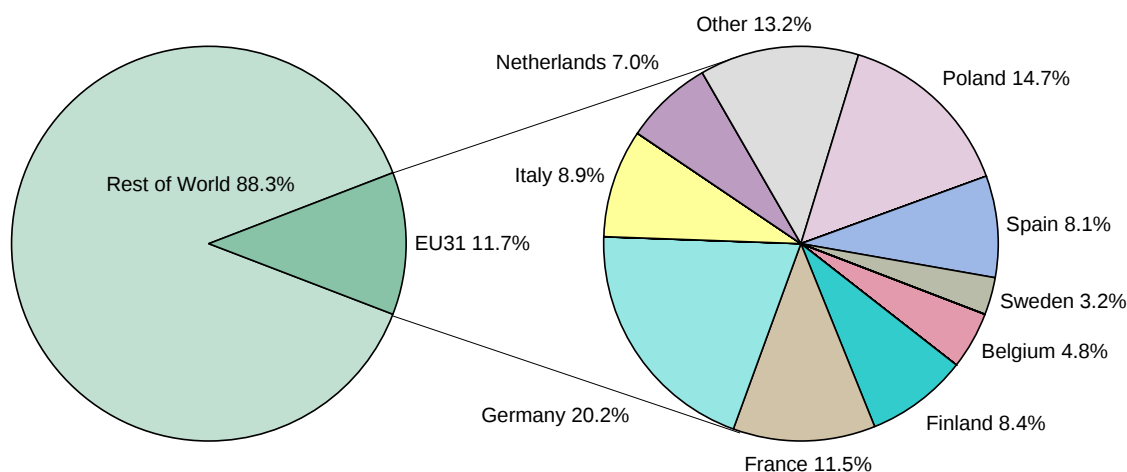
(1) This table excludes silver coin but includes silver shipped for minting

(2) In this table the term 'metal' includes both unwrought and partly worked silver and alloys

Sulphur and pyrites

- Sulphur is one of the fundamental feedstocks to the chemical industry, usually as sulphuric acid. The chief sources of sulphur are petroleum refining, natural gas, base metal sulphide processing and pyrites (iron sulphide).
- Most industrialised countries in the world have some sulphur production. The largest producers in 2004 were USA (15%) and Canada (14%). In the EU31 the largest producer was Germany (20% of EU31 production).
- In 2004, sulphur prices remained relatively stable. The contract prices for elemental sulfur at terminals in Tampa, FL, began the year trading at \$67–\$70/tonne. In the summer, prices decreased to between \$63–\$66/tonne. They traded at this price until November when they fell to \$61–\$64/tonne and remained at that price for the rest of the year.

EU31 Production of sulphur and pyrites 2004



Production of sulphur and pyrites

tonnes (sulphur content)

Country	2000	2001	2002	2003	2004
Austria					
Recovered (b)	50 377	50 135	54 925	50 568	55 322
Belgium					
Recovered (a) (b)	410 000	368 000	359 000	383 000	371 000
Bulgaria					
Recovered (a)	209 000	203 000	245 000	260 000	118 000
Recovered (b)	30 000	30 000	30 000	30 000	25 000
Croatia					
Recovered (b)	9 000	7 000	7 069	7 471	9 000
Czech Republic					
Recovered (b)	45 000	40 000	40 000	45 000	60 000
Denmark					
Recovered (b)	4 041	3 981	4 386	4 751	4 660
Finland					
Pyrites	360 000	260 000	235 000	276 200	283 700
Recovered (a)	293 241	311 430	307 924	304 044	301 226
Recovered (b)	46 000	46 000	55 000	61 000	65 000
France					
Recovered (b)	801 600	840 000	795 600	710 400	698 400
Recovered (c)	*250 000	*260 000	229 000	196 000	196 000
Germany					
Recovered (a)	80 128	80 000	46 000	-----	-----
Recovered (b)	1 611 792	1 640 000	1 657 200	1 619 900	1 526 700
Recovered (c)	42 518	40 000	41 900	43 900	40 000
Greece					
Recovered (b)	150 000	153 000	157 000	162 000	160 000
Hungary					
Recovered (b)	34 082	43 000	52 000	51 000	51 000
Italy					
Recovered (a)	203 000	203 000	142 000	127 000	113 000
Recovered (b)	490 000	540 000	560 000	565 000	575 000
Lithuania					
Recovered (b)	28 000	47 000	49 824	48 515	67 094
Netherlands					
Recovered (a)	123 000	126 000	124 000	131 000	137 000
Recovered (b)	428 000	384 000	373 000	408 000	410 000

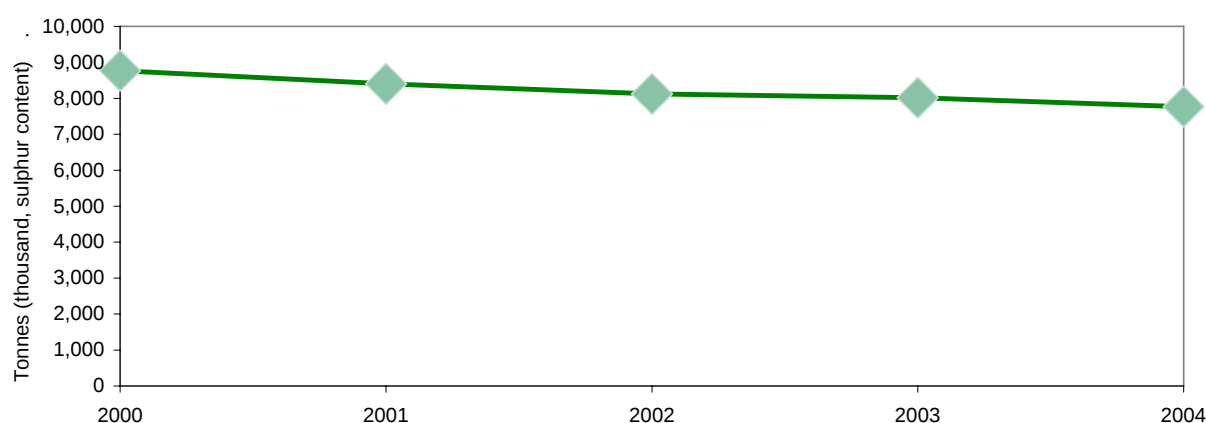
Production continued

Country	2000	2001	2002	2003	2004
Norway					
Recovered (a)	*90 000	*95 000	95 000	100 000	*100 000
Recovered (b)	18 000	18 000	19 000	20 000	18 000
Poland					
Frasch	1 369 259	942 252	760 320	762 689	821 489
Recovered (a)	*278 600	*280 000	*275 000	293 700	*300 000
Recovered (b)	16 483	27 602	22 777	23 384	23 767
Portugal					
Recovered	28 000	35 000	28 000	27 000	25 000
Romania					
Pyrites	9 883	1 835	-----	-----	-----
Recovered	35 000	41 000	29 000	49 000	53 000
Slovakia					
Recovered (a)	5 000	5 000	5 000	5 000	5 000
Recovered (b)	51 000	57 000	61 000	60 000	65 000
Spain					
Pyrites	94 222	89 796	-----	-----	-----
Recovered (a)	454 000	461 000	544 000	560 000	488 000
Recovered (b)	115 000	135 000	140 000	145 000	145 000
Sweden					
Recovered (a)	95 800	160 100	177 600	180 200	185 800
Recovered (b)	58 521	54 530	51 065	62 454	62 238
Turkey					
Pyrites	45 000	26 000	34 000	28 000	20 000
Recovered (b) (c)	118 000	126 000	123 000	94 000	68 000
United Kingdom					
Recovered (a)	51 400	62 400	66 400	4 800	-----
Recovered (b)	140 000	111 000	125 000	115 000	120 000
EU31 Total					
Pyrites	509 000	378 000	361 000	304 000	304 000
Frasch	1 369 259	942 252	760 320	762 689	821 489
Recovered	6 900 000	7 080 000	7 090 000	6 950 000	6 640 000

Note(s):-

- (a) From metal sulphide processing
(b) From petroleum refining and/or natural gas
(c) Other

EU31 Production of sulphur and pyrites 2000 - 04



Exports of sulphur and pyrites

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Sulphur, sublimed & precipitated	5 998	6 707	14 596	9 265	8 435
Belgium-Luxembourg					
Pyrites	2 392	55	37	19	1
Sulphur	12 427	41 761	44 882	40 984	36 824
Sulphur, sublimed & precipitated	240	239	291	350	338
Bulgaria					
Sulphur	10 862	17 274	25 306	21 478	20 103
Croatia					
Sulphur	7 152	6 386	7 150	7 505	8 505
Czech Republic					
Sulphur	4 294	2 398	7 410	10 087	9 787
Sulphur, sublimed & precipitated	5 875	3 069	118	134	1 581
Denmark					
Sulphur	2 406	1 044	1 182	1 598	2 608
Finland					
Pyrites (a)	*288 100	*250 700	*282 000	*266 000	*276 000
France					
Sulphur, crude	444 447	559 527	385 326	382 273	481 226
Sulphur, refined	4 959	1 354	10 988	16 851	16 076
Sulphur, sublimed & precipitated	818	753	764	652	562
Germany					
Pyrites	457	511	483	389	339
Sulphur, crude	1 013 806	976 781	943 122	856 707	854 548
Sulphur, refined	31 354	36 859	35 614	41 163	40 135
Sulphur, sublimed & precipitated	18 962	14 862	5 184	4 021	276
Hungary					
Sulphur	...	...	28 389	...	22 607
Italy					
Pyrites	22 810	9 455	9 547	8 185	7 384
Sulphur	107 740	179 324	155 173	151 075	165 618
Sulphur, sublimed & precipitated	176	352	251	5 693	930
Lithuania					
Sulphur	354	5 660	14 094	16 724	13 960
Netherlands					
Pyrites	119 675	93 095	16 401	...	...
Sulphur, crude	52 565	186 059	118 053	223 880	133 553
Sulphur, refined	84 609	105 723	143 272	98 196	170 473
Sulphur, sublimed & precipitated	46	26	38	105	2
Norway					
Sulphur, sublimed & precipitated	10 694	11 504	11 630	12 194	2 671
Poland					
Sulphur	1 023 400	773 373	597 905	530 180	560 340
Portugal					
Sulphur	7 367	14 009	20 172	9 847	10 838
Sulphur, sublimed & precipitated	2	1	509	408	121
Romania					
Sulphur	320	79	5 505	12 974	20 682
Spain					
Sulphur, crude	40 984	49 385	39 389	29 959	45 034
Sulphur, refined	20 960	19 318	13 476	12 746	8 704
Sulphur, sublimed & precipitated	474	52	69	575	79
Sweden					
Sulphur	2 056	1 453	493	9 572	4 542
Sulphur, sublimed & precipitated	-----	2	2	0	139
Turkey					
Sulphur	1 604	2 722	2 530	1 251	534
Sulphur, sublimed & precipitated	434	880	1 641	141	75
United Kingdom					
Sulphur	10 824	1 563	580	476	705
Sulphur, sublimed & precipitated	379	386	657	836	1 387

Note(s):-

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

Imports of sulphur and pyrites

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Pyrites	731	1 040	1 064	2 107	3 126
Sulphur	15 346	22 055	44 365	64 198	58 218
Sulphur, sublimed & precipitated	3 642	314	237	388	6 339
Belgium-Luxembourg					
Sulphur, crude	182 044	162 134	155 665	152 598	152 830
Sulphur, refined	207 656	277 195	218 830	241 917	305 518
Sulphur, sublimed & precipitated	16 252	178	25	103	28
Croatia					
Sulphur	65 234	53 025	39 190	46 017	63 606
Sulphur, sublimed & precipitated	278	299	1 738	3 611	4 817
Cyprus					
Sulphur	1 300	1 222	939	1 370	1 226
Czech Republic					
Sulphur	68 252	56 621	51 922	52 784	34 787
Sulphur, sublimed & precipitated	46 615	45 665	39 772	49 164	70 159
Denmark					
Sulphur	8 000	9 358	8 616	8 210	7 883
Finland					
Sulphur	38 785	35 387	26 123	19 575	8 238
France					
Pyrites	12 396	4 229	7 314	3 359	5 643
Sulphur, crude	97 992	55 620	42 855	50 147	43 846
Sulphur, refined	75 859	68 001	74 225	56 388	27 041
Sulphur, sublimed & precipitated	25 216	8 194	2 622	2 488	12 555
Germany					
Pyrites	84 043	77 260	51 479	42 170	53 264
Sulphur	21 207	31 498	31 481	45 962	56 272
Sulphur, sublimed & precipitated	2 133	1 837	1 121	1 448	12 782
Greece					
Sulphur, crude	127 790	90 126	90 577	106 897	83 711
Hungary					
Sulphur	7 270	4 339	1 853	1 426	1 088
Sulphur, sublimed & precipitated	289	287	134	67	296
Irish Republic					
Sulphur, sublimed & precipitated	274	1 281	194	898	1 371
Italy					
Pyrites	13 177	9 174	15 021	12 067	8 929
Sulphur, crude	123 667	43 335	53 623	11 975	8 646
Sulphur, refined	5 887	8 086	8 330	8 478	10 279
Sulphur, sublimed & precipitated	770	3 939	820	483	281
Lithuania					
Sulphur	263 058	66 675	269 602	316 359	255 917
Netherlands					
Pyrites	73 366	...	...	...	...
Sulphur	21 193	30 101	58 270	29 631	35 441
Sulphur, sublimed & precipitated	27 801	34 161	55 027	210 984	104 818
Norway					
Pyrites	216 882	151 438	225 139	225 492	225 513
Sulphur	-----	1 542	1 567	628	4 559
Poland					
Pyrites	294	402	504	1 933	1 061
Sulphur	49 273	70 246	98 279	88 544	78 292
Sulphur, sublimed & precipitated	560	239	120	97	11
Portugal					
Sulphur	2 302	3 306	5 981	6 333	3 532
Sulphur, sublimed & precipitated	7	103	5	5	431
Romania					
Sulphur	54 047	22 311	357	5 660	2 075
Sulphur, sublimed & precipitated	69	146	13	30	9
Slovakia					
Sulphur	15 022	21 142	18 738	7 439	3 582
Slovenia					
Pyrites	294	379	426	399	375
Sulphur	47 621	51 734	49 560	46 289	49 649

Sulphur and Pyrites

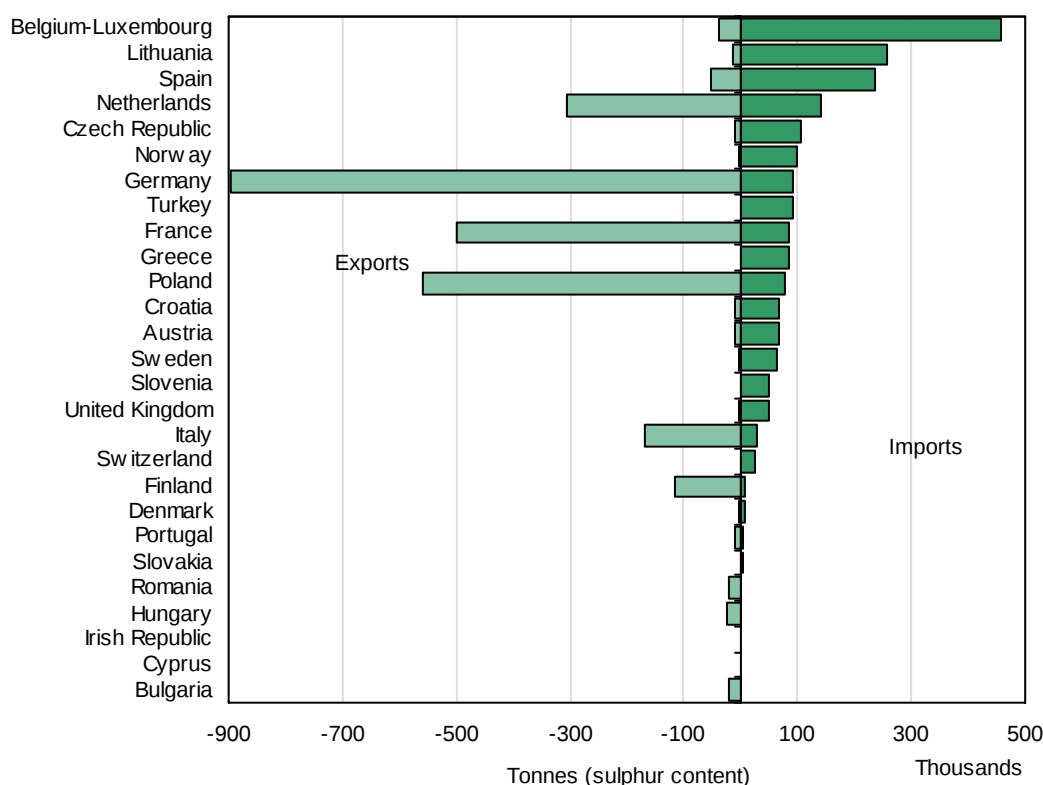
Imports continued

Country	2000	2001	2002	2003	2004
Spain					
Sulphur, crude	174 499	221 786	205 049	210 794	220 662
Sulphur, refined	8 261	5 869	8 219	5 936	13 582
Sulphur, sublimed & precipitated	209	220	238	753	533
Sweden					
Pyrites	389	482	386	291	699
Sulphur	70 113	69 293	63 948	89 505	61 305
Sulphur, sublimed & precipitated	5 600	7 141	5 010	5 632	2 693
Switzerland					
Pyrites	220	217	239	207	117
Sulphur	40 195	40 754	30 140	25 968	24 940
Sulphur, sublimed & precipitated	67	24	93	193	120
Turkey					
Sulphur	107 173	67 396	127 779	124 243	90 502
Sulphur, sublimed & precipitated	96	73	2 008	4 899	138
United Kingdom					
Sulphur, crude	(a) 211 888	(a) 170 055	(a) 87 260	23 469	44 963
Sulphur, refined	...	...	...	5 560	3 984
Sulphur, sublimed & precipitated	94	390	355	544	675

Note(s):-

(a) Including refined

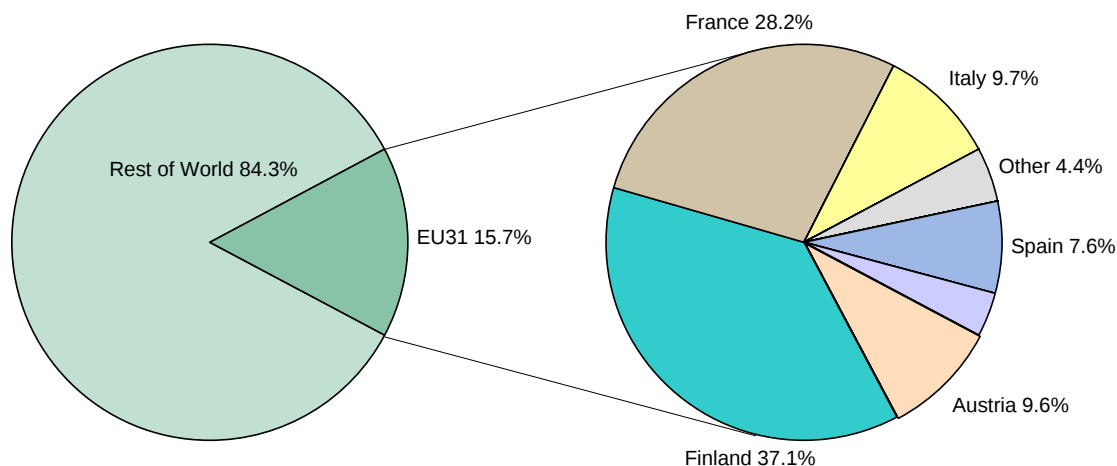
Sulphur and pyrites - EU31 trade in 2004



Talc

- Talc is a soft hydrous magnesium silicate mineral. It is frequently coloured by the presence of iron-bearing minerals and trace elements but usually turns white upon fine grinding. The familiar use of talc as a cosmetic powder is minor compared to industrial usage. Talc is chiefly used as a filler in paint, plastics, pharmaceuticals, adhesives and rubber. It is also extensively used in ceramics manufacture and as a filler and coater in the paper industry.
- During 2004 the largest world producer was China (estimated 33% of world production). Within Europe the largest producer is Finland, which produced 37% of EU31 production.
- Talc is traded in a variety of forms and as a result of widespread production markets are very stable. During 2004 Norwegian, ex-store UK talc traded at between £142–£294/tonne depending on grade.

EU31 Production of talc 2004

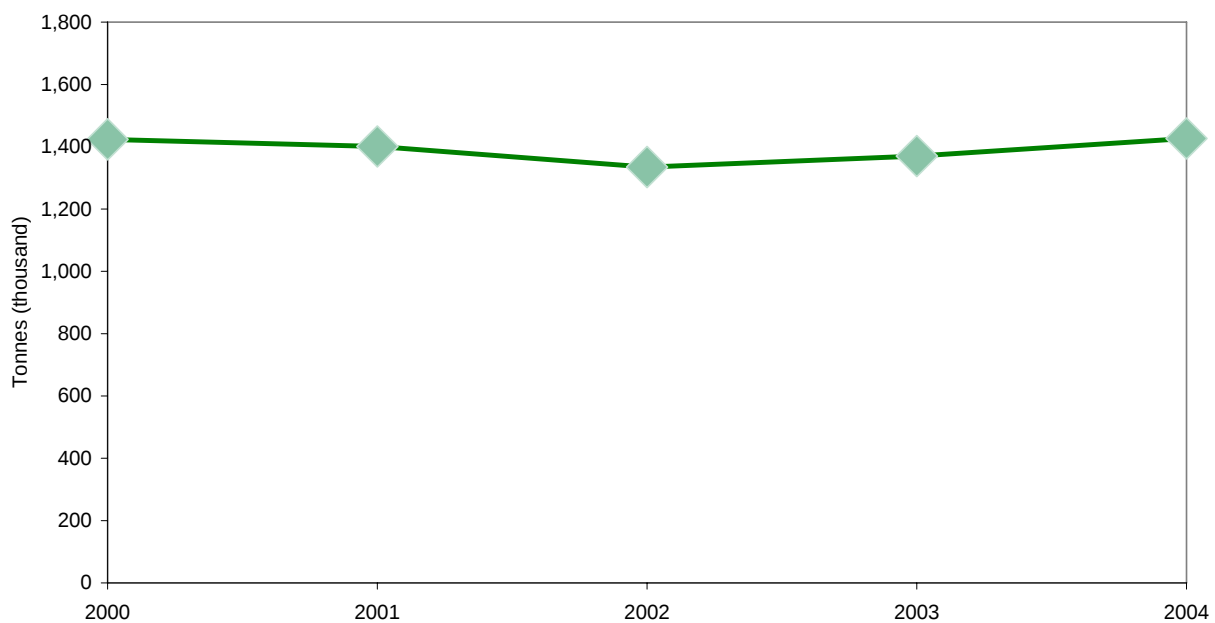


Production of talc

tonnes

Country	2000	2001	2002	2003	2004
Austria	133 060	137 776	138 195	137 596	136 305
Finland	502 000	476 620	477 229	501 658	528 943
France	409 000	417 000	359 000	394 000	402 000
Germany	*15 000	*9 000	*8 000	3 859	...
Greece	2 300	2 073	670	500	200
Italy	121 068	126 868	125 040	122 849	138 367
Norway	26 660	24 626	23 564	*24 000	23 725
Portugal	9 895	8 362	8 279	5 460	6 231
Romania	7 850	7 270	7 310	10 082	9 725
Slovakia	1 800	2 600	2 290	4 200	7 100
Spain					
Talc	115 154	119 000	108 312	101 739	107 829
Pyrophyllite	...	...	...	900	700
Sweden	20 000	14 000	20 000	7 000	8 000
Turkey					
Pyrophyllite	54 278	...	...	...	...
United Kingdom	4 832	4 947	6 194	6 494	4 000
EU31 Total	1 424 000	1 401 000	1 335 000	1 370 000	1 427 000

EU31 Production of talc 2000 - 04



Exports of talc

tonnes

Country	2000	2001	2002	2003	2004
Austria	129 226	162 302	142 879	174 590	151 022
Belgium-Luxembourg	86 536	81 767	86 924	92 350	128 120
Finland (a)	*213 000	*135 000	*120 000	*227 000	*276 000
France	229 681	191 750	222 699	226 550	262 147
Germany	5 216	6 048	7 088	5 285	3 862
Greece	1 413	31 989	1 853	990	2 566
Hungary	...	...	15	314	1 533
Italy	98 344	89 839	108 467	116 739	118 131
Netherlands	162 006	145 951	164 515	177 554	245 245
Norway	31 249	30 480	32 894	32 520	30 279
Portugal	245	93	150	204	1 117
Slovakia	1 510	1 549	1 322	1 205	...
Spain	58 247	63 657	67 921	67 748	60 832
Sweden	10 884	5 138	14 370	8 061	9 388
Switzerland	1 048	1 070	847	1 777	72
Turkey	56	120	249	436	1 963
United Kingdom	3 812	4 034	3 833	3 325	3 570

Note(s):-

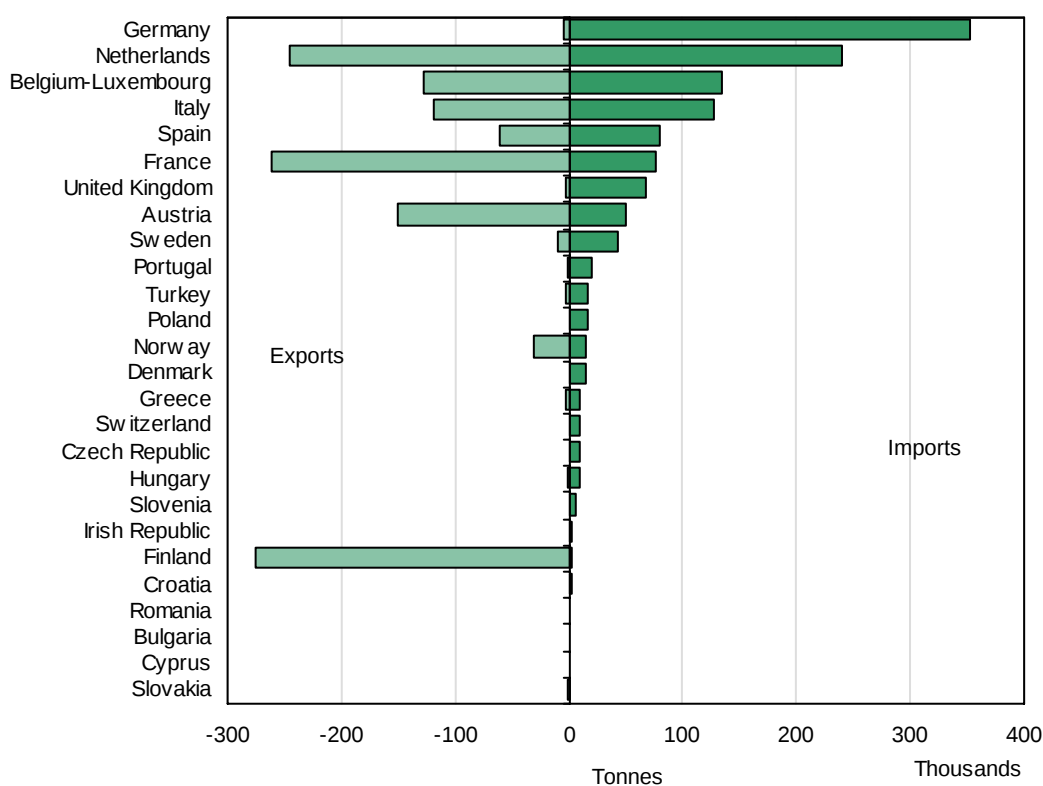
(a) BGS estimates, based on known imports into certain countries

Imports of talc

tonnes

Country	2000	2001	2002	2003	2004
Austria	25 441	50 199	46 833	30 831	49 930
Belgium-Luxembourg	104 074	105 971	115 112	124 455	135 046
Bulgaria	...	455	404	465	487
Croatia	1 055	1 397	1 587	1 531	1 726
Cyprus	186	181	202	255	242
Czech Republic	8 659	9 082	9 299	10 278	9 426
Denmark	13 476	13 156	16 577	14 407	14 085
Finland	4 881	4 027	3 251	3 971	1 827
France	41 304	41 095	43 342	40 650	77 240
Germany	258 529	244 678	263 988	307 374	352 177
Greece	10 325	6 528	4 206	5 316	10 061
Hungary	10 224	9 698	9 576	10 070	9 178
Irish Republic	1 783	1 848	2 224	2 008	2 508
Italy	99 879	133 646	117 688	127 855	126 745
Netherlands	167 896	89 378	95 121	220 448	240 799
Norway	12 722	8 762	11 557	14 737	14 522
Poland	13 450	14 274	17 989	18 342	16 155
Portugal	14 873	14 354	16 685	17 721	20 203
Romania	804	1 038	1 200	1 187	1 609
Slovakia	433	711	382	369	192
Slovenia	3 639	3 990	4 706	5 251	5 628
Spain	60 728	63 627	65 691	68 760	80 626
Sweden	42 571	34 297	42 307	45 509	43 288
Switzerland	15 159	15 385	12 916	11 490	9 579
Turkey	12 809	7 026	10 937	11 227	16 810
United Kingdom	61 975	66 737	66 119	59 172	68 209

Talc - EU31 trade in 2004



Tantalum and niobium

- Tantalum and niobium are produced from their ores, sometimes combined in one mineral, and (tantalum) from tin refinery slags. Tantalum is a heavy, very hard, ductile metallic element that has a very high melting point (2996°C) and is strongly resistant to chemical attack. It is used chiefly in electronic applications, especially in miniature capacitors. Niobium is a soft and ductile metallic element that is used mainly in special steels and superalloys.
- World production of tantalum in 2004 was dominated by Australia (approximately 65%) and the largest producer of niobium ores was Brazil (approximately 88%). There was no production in the EU31, which is entirely import dependent.
- Tantalum is normally traded in oxide form (tantalite). During 2004 the average price for tantalite was stable (Greenbushes 40% basis), trading at \$40/lb Ta₂O₅ throughout the year.

Exports of tantalum and niobium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Tantalum	118	98	43	...	-----
Czech Republic					
Tantalum	276	106	40	55	84
Estonia					
Tantalum	8	1	...	25	39
France					
Tantalum	59	32	207	3	20
Germany					
Niobium & tantalum ores	739	379	545	174	93
Tantalum	336	258	719	323	337
Italy					
Tantalum	14	3	50	1	2
Netherlands					
Tantalum	...	31	21	23	24
Portugal					
Tantalum	33	24	...	18	42
United Kingdom					
Tantalum	569	395	280	278	79

Note(s):-

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

Imports of tantalum and niobium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Tantalum	2	12	3	54	64
Belgium-Luxembourg					
Tantalum	121	1	7	41	20
Czech Republic					
Tantalum	250	147	128	168	261
France					
Tantalum	16	20	42	41	67
Germany					
Tantalum	298	259	274	239	281
Irish Republic					
Tantalum	23	7	2	2	2
Netherlands					
Tantalum	72	63	15	4	34
Poland					
Tantalum	5	14	0	...	1
Portugal					
Tantalum	71	99	171	69	68
United Kingdom					
Tantalum	979	1 610	3 480	842	240

Note(s):-

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

Tin

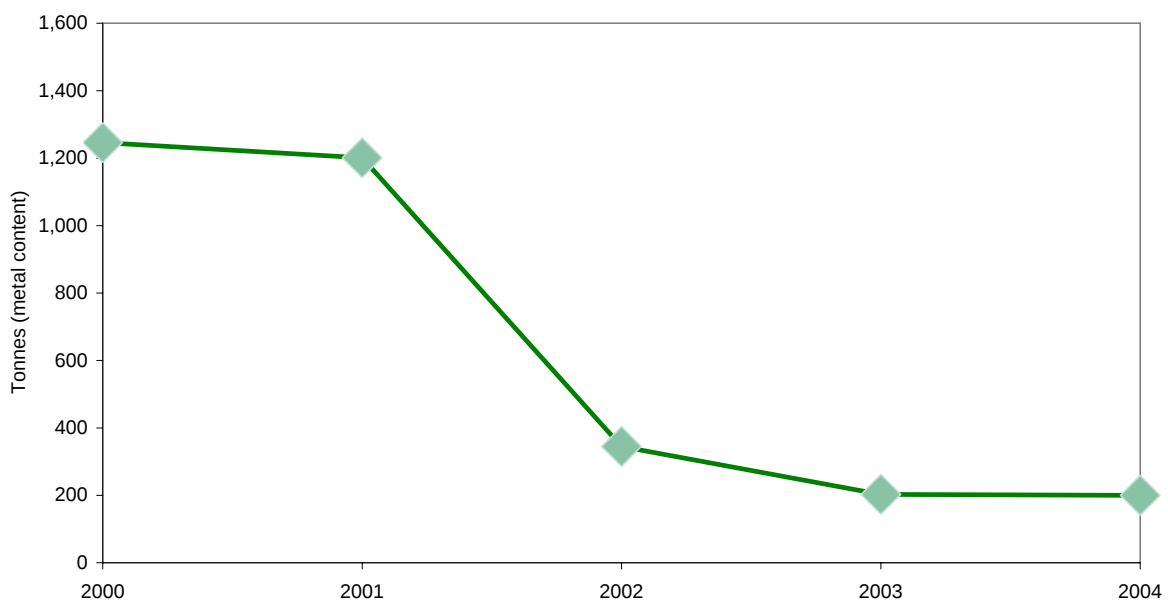
- Tin is a malleable and ductile metal that is resistant to corrosion. The chief use of tin is to coat metals that are more susceptible to corrosion, especially steel. It is also widely used as an alloying agent (i.e. with lead to make pewter) and its use in solders is rapidly growing as it replaces lead. Tin chemicals are used as fungicides and other biocides.
- World mine production is restricted to eighteen countries, of which China was the largest producer during 2004 (43% of world total). There is minor EU31 production from Portugal.
- The LME tin price at the beginning of 2004 was \$ 6,585/tonne and finished the year at US\$ 7,765/tonne. During this period, the price fluctuated between a high of \$10,100/tonne and a low of \$6,265/tonne.

Mine production of tin

tonnes (metal content)

Country	2000	2001	2002	2003	2004
Portugal	1 246	1 201	345	203	200

EU31 Mine production of tin 2000 - 04



Exports of tin

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Unwrought (a)	51	80	115	151	153
Scrap	167	206	363	153	278
Belgium-Luxembourg					
Unwrought	8 031	7 897	8 883	7 538	8 803
Unwrought alloys	433	338	138	171	184
Scrap	108	116	28	601	607
Czech Republic					
Unwrought (a)	20	38	20	66	191
Denmark					
Scrap	113	94	90	110	178
Estonia					
Scrap	592	54	18	8	7
Finland					
Unwrought alloys	17	91	33	9	46
Scrap	173	83	104	126	86
France					
Unwrought	282	350	354	577	430
Unwrought alloys	378	627	659	612	527
Scrap	1 612	1 484	618	279	457

Tin

Exports continued

Country	2000	2001	2002	2003	2004
Germany					
Unwrought	575	1 089	1 137	909	978
Unwrought alloys	1 108	1 178	1 077	481	408
Scrap	309	507	719	849	994
Irish Republic					
Unwrought (a)	106	281	77	29	103
Scrap	207	304	109	21	140
Italy					
Unwrought (a)	248	268	497	458	406
Scrap	195	222	191	201	180
Netherlands					
Unwrought	2 976	1 845	4 138	4 278	3 921
Unwrought alloys	449	102	205	240	1 430
Scrap	483	511	643	344	685
Portugal					
Concentrates	2 332	2 395	537	266	147
Spain					
Unwrought (a)	669	218	738	179	205
Scrap	94	111	1 169	198	221
Sweden					
Unwrought (a)	390	329	313	238	261
Scrap	305	125	178	88	161
Switzerland					
Unwrought (a)	64	84	25	112	72
Scrap	97	105	60	73	107
United Kingdom					
Concentrates	121	59	24	29	0
Unwrought	146	426	381	283	561
Unwrought alloys	2 993	2 485	2 165	2 152	933
Scrap	1 322	2 256	2 821	4 499	7 862

Note(s):-

(1) In this table the term 'unwrought' tin corresponds to item 8001 of the Harmonised System and comprises ingots, pigs, unwrought bars, sticks, etc.

(a) Including alloys

Imports of tin

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Unwrought (a)	875	838	906	702	765
Scrap	136	186	208	174	170
Belgium-Luxembourg					
Unwrought	983	1 050	1 223	490	1 686
Unwrought alloys	2 128	2 208	2 464	2 737	3 421
Scrap	4 186	3 312	4 756	4 816	5 726
Croatia					
Unwrought (a)	74	114	89	95	67
Czech Republic					
Unwrought (a)	556	592	531	635	550
Estonia					
Unwrought	83	301	...	12	16
Finland					
Unwrought (a)	127	199	149	151	126
France					
Concentrates	37	65	0	43	3
Unwrought	7 722	8 637	9 044	9 693	9 167
Unwrought alloys	614	409	169	701	638
Scrap	1 236	1 555	541	148	24
Germany					
Unwrought	21 519	23 984	20 524	20 904	21 258
Unwrought alloys	528	847	744	381	453
Scrap	758	681	400	505	408
Greece					
Unwrought (a)	307	503	382	598	671

Imports continued

Country	2000	2001	2002	2003	2004
Hungary					
Unwrought (a)	562	292	219	91	155
Irish Republic					
Unwrought (a)	435	655	271	171	462
Italy					
Unwrought	6 068	6 171	6 507	6 201	5 610
Unwrought alloys	185	204	190	105	95
Netherlands					
Unwrought	5 603	4 346	7 008	7 368	6 801
Unwrought alloys	888	1 007	1 162	1 330	1 830
Scrap	1 008	609	388	202	155
Norway					
Unwrought	457	560	458	382	47
Unwrought alloys	96	111	176	71	79
Poland					
Unwrought (a)	1 194	1 010	1 344	1 077	1 367
Portugal					
Unwrought	1 505	780	1 223	781	434
Unwrought alloys	246	210	29	63	71
Romania					
Unwrought (a)	191	333	245	291	188
Slovakia					
Unwrought (a)	651	624	800	1 091	2 034
Spain					
Concentrates	436	399	225	101	160
Unwrought	4 875	6 313	6 967	8 072	7 860
Unwrought alloys	600	175	58	90	292
Scrap	2 242	2 830	4 842	2 400	2 111
Sweden					
Unwrought	807	608	596	421	468
Unwrought alloys	358	364	400	379	256
Scrap	62	130	57	71	39
Switzerland					
Unwrought (a)	824	1 017	893	803	726
Turkey					
Unwrought (a)	1 864	1 275	1 801	1 966	2 314
United Kingdom					
Unwrought	9 190	6 857	7 151	7 488	5 863
Unwrought alloys	1 760	2 442	1 437	2 378	1 103
Scrap	388	179	188	168	234

Note(s):-

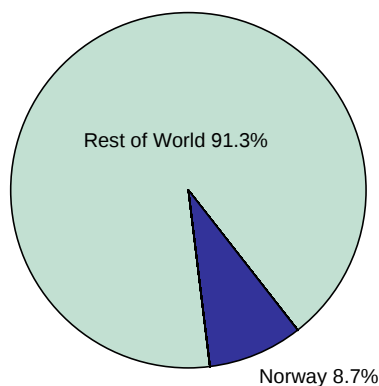
(1) In this table the term 'unwrought' tin corresponds to item 8001 of the Harmonised System and comprises ingots, pigs, unwrought bars, sticks, etc.

(a) Including alloys

Titanium minerals

- The titanium minerals ilmenite and rutile are the main sources of titanium, a low density, strong and corrosion resistant metal that is important in the aerospace industry. However, the chief use (94%) of titanium minerals is in the form of titanium dioxide, a white pigment used in paint, plastics, rubber and paper.
- In 2004 Australia was the world's largest producer of titanium minerals; Canada and South Africa were also major producers. EU31 production is restricted to Norway, which produced about 9% of the world total in 2004.
- At the close of 2004, ilmenite (Australian, min 54% TiO₂, FOB, bulk concentrates) traded at \$70/tonne–\$95/tonne. Rutile, which has a higher TiO₂ content (Australian concentrate, min. 95% TiO₂ FOB, bulk pigment grade), traded between \$430–\$480/tonne, a moderate increase compared with that of 2003.

EU31 Production of titanium minerals 2004



Production of titanium minerals

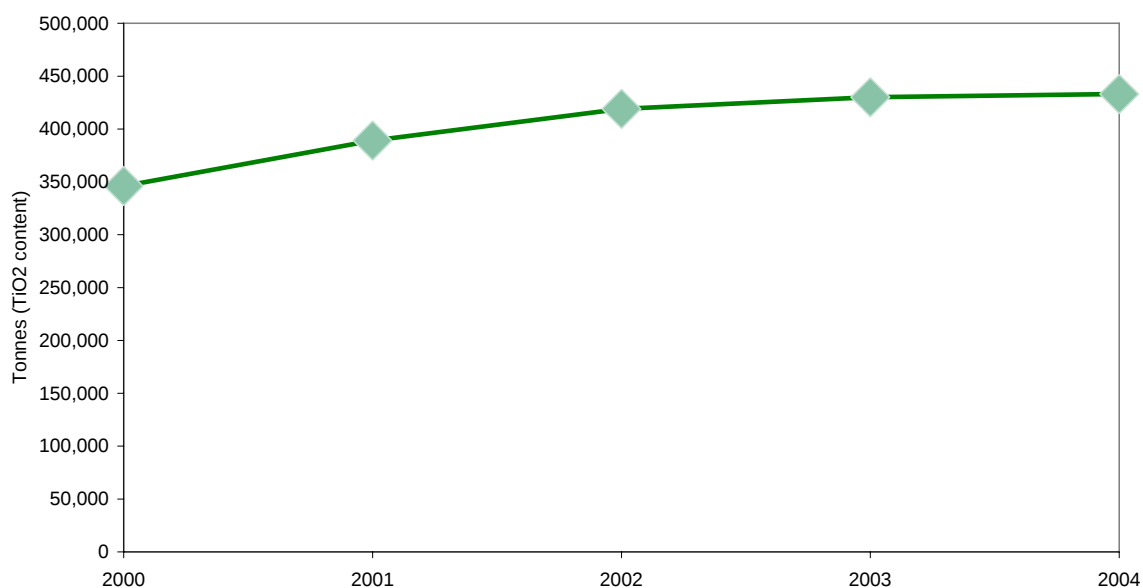
tonnes

Country	2000	2001	2002	2003	2004
Norway					
Ilmenite	690 900	777 000	837 000	859 000	867 000
EU31 Total (TiO ₂ content)	346 000	389 000	419 000	430 000	433 000

Note(s):-

(1) The figures in this table refer to gross tonnage of titanium concentrates

EU31 Production of titanium minerals 2000 - 04



Exports of titanium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	204	298	300	340	397
Oxides	2 487	2 876	3 000	2 404	2 640
Belgium-Luxembourg					
Titanium minerals	52 545	2 718	113 342	123 823	139 393
Metal	986	1 348	1 296	1 214	1 031
Oxides	312 795	286 659	314 469	348 005	397 481
Czech Republic					
Metal	32	59	82	239	191
Oxides	29 376	26 626	34 258	33 354	37 673
Denmark					
Metal	56	170	120	185	166
Oxides	569	1 128	1 000	578	1 304
Estonia					
Metal	83	145	316	336	188
Finland					
Metal	311	109	26	30	22
Oxides (a)	*83 900	*128 700	*127 000	*84 000	*90 000
France					
Metal	5 081	5 636	4 180	3 722	4 086
Oxides	198 541	180 271	199 744	180 080	172 796
Germany					
Titanium minerals	164	475	541	778	319
Metal	6 578	6 257	6 581	6 705	8 048
Oxides	299 268	290 191	323 059	331 806	356 007
Greece					
Oxides	1 281	1 380	1 412	1 624	1 835
Italy					
Metal	4 676	5 102	3 727	3 159	4 439
Oxides	26 858	24 393	28 434	28 323	28 476
Latvia					
Metal	28	180	16	45	61
Netherlands					
Titanium minerals	1 806	1 935	1 093	3 611	4 050
Metal	1 482	1 532	2 344	2 015	1 846
Oxides	(a) *73 000	(a) *68 100	80 663	(a) *65 100	89 130
Norway					
Titanium minerals	455 450	429 000	443 833	500 000	...
Metal	176	117	103	214	182
Oxides (a)	*25 900	*28 300	*28 700	*30 700	*33 000
Poland					
Oxides	21 280	24 215	30 457	23 977	20 818
Romania					
Metal	...	23	80	94	277
Slovenia					
Oxides	42 369	32 782	38 484	35 655	38 497
Spain					
Metal	308	434	376	697	483
Oxides	74 071	79 643	73 320	70 052	85 867
Sweden					
Metal	1 295	1 494	1 256	1 004	1 737
Oxides	8 401	13 653	11 058	11 713	13 912
Switzerland					
Metal	332	465	400	398	562
Oxides	1 723	525	666	499	740
Turkey					
Metal	245	92	2	7	20
United Kingdom					
Metal	14 152	13 597	11 511	10 084	12 081
Oxides	209 583	207 483	238 884	242 541	234 373

Note(s):-

- (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 Harmonised System items 2823 and 3206.10
- (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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

Imports of titanium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	683	1 594	1 062	441	943
Oxides	18 838	19 343	19 478	18 528	18 612
Belgium-Luxembourg					
Ilmenite	18 612	71	9 889	11 632	...
Other titanium minerals	115 497	56 785	132 921	164 624	165 288
Titanium slag	29 418	44 909	41 594	...	...
Metal	1 341	1 791	1 516	1 712	1 868
Oxides	224 621	224 507	271 627	272 441	339 444
Bulgaria					
Oxides	...	2 646	2 448	3 156	3 332
Croatia					
Oxides	1 922	2 142	2 081	2 327	2 401
Cyprus					
Oxides	881	859	1 032	1 172	1 172
Czech Republic					
Titanium minerals	75 502	78 515	60 976	74 709	53 570
Metal	189	111	372	620	800
Oxides	3 970	4 394	4 307	5 462	6 773
Denmark					
Metal	823	891	737	745	778
Oxides	20 517	20 799	23 967	21 022	22 269
Estonia					
Metal	47	57	302	234	113
Oxides	1 085	1 273	1 090	1 082	235
Finland					
Metal	250	112	84	107	258
Oxides	8 808	9 007	10 335	11 390	13 163
France					
Ilmenite	182 583	112 466	151 799	127 083	48 930
Other titanium minerals	17 288	41 040	12 291	34 984	81 141
Titanium slag	48 117	256 420	123 144	...	61 456
Metal	7 757	8 459	6 461	5 689	8 259
Oxides	143 436	127 843	138 316	151 809	140 068
Germany					
Ilmenite	387 707	272 849	307 791	349 819	315 214
Other titanium minerals	170 381	132 952	131 844	175 660	225 849
Titanium slag	130 353	137 542	52 787	41 319	----
Metal	9 595	9 774	10 532	10 044	14 756
Oxides	196 901	189 674	192 414	211 539	237 464
Greece					
Titanium minerals	742	529	816	313	563
Oxides	20 719	18 389	17 646	22 801	27 241
Hungary					
Metal	345	49	215	367	387
Oxides	7 605	6 976	7 941	8 247	8 677
Irish Republic					
Oxides	4 101	3 931	5 070	5 095	5 685
Italy					
Titanium minerals	85 910	112 828	99 830	123 862	88 361
Metal	5 904	6 126	5 052	4 738	6 580
Oxides	163 705	149 841	157 476	149 238	158 592
Latvia					
Oxides	873	998	1 132	2 032	1 232
Netherlands					
Ilmenite	55 587	33 524	40 286	46 568	...
Other titanium minerals	42 479	70 438	64 024	76 539	(a) 154 460
Titanium slag	9 877	9 848	...	...	...
Metal	4 101	3 099	2 806	2 676	2 835
Oxides	52 786	47 008	44 525	33 290	47 957
Norway					
Metal	407	623	386	557	505
Oxides	8 626	9 617	7 931	8 729	10 026
Poland					
Titanium minerals	87 393	95 674	73 655	101 284	98 214
Metal	186	182	163	151	271
Oxides	26 324	24 027	30 029	30 546	29 710

Imports continued

tonnes

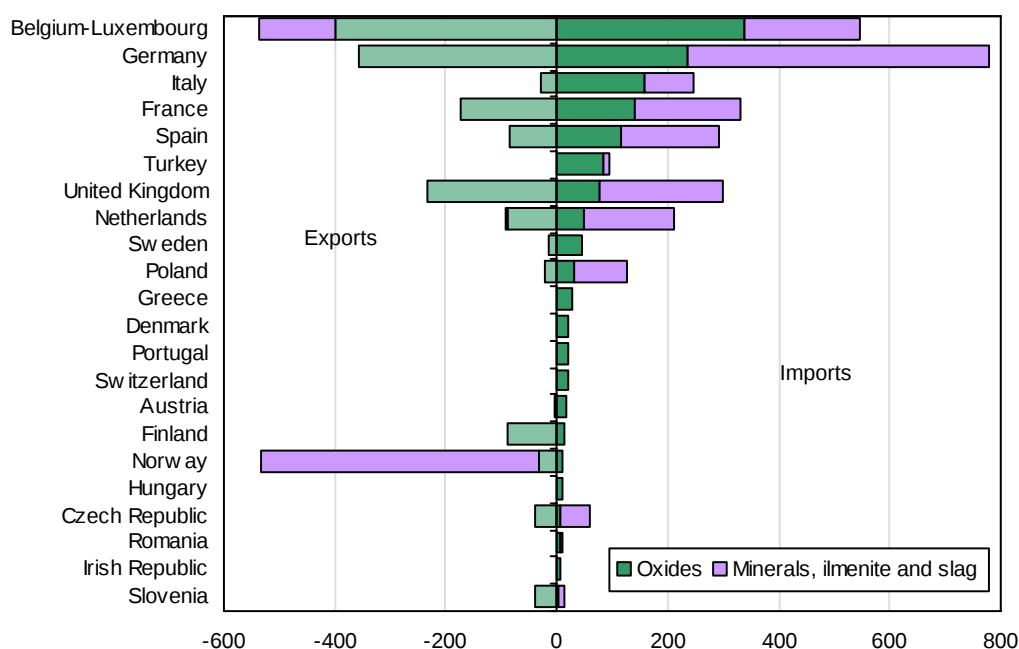
Country	2000	2001	2002	2003	2004
Portugal					
Oxides	17 227	17 341	20 230	18 922	20 120
Romania					
Titanium minerals	3 017	2 544	1 993	2 192	2 334
Oxides	3 992	4 621	4 742	5 454	6 378
Slovakia					
Metal	335	142	103	111	101
Oxides	2 047	530	429	2 701	2 173
Slovenia					
Titanium minerals	12 462	18 676	7 805	24 652	11 610
Metal	67	68	127	118	300
Oxides	2 444	2 282	2 936	3 219	3 033
Spain					
Ilmenite	170 723	130 991	153 688	128 692	172 431
Other titanium minerals	2 020	1 844	2 315	2 296	2 316
Metal	1 498	3 407	3 241	2 974	3 722
Oxides	87 837	99 887	107 418	100 814	116 397
Sweden					
Titanium minerals	225	610	439	320	389
Metal	1 604	1 929	2 000	1 707	1 856
Oxides	40 747	45 034	43 260	44 721	44 812
Switzerland					
Metal	503	641	621	535	735
Oxides	21 423	17 678	18 265	18 689	19 349
Turkey					
Titanium minerals	6 077	2 953	5 876	5 591	10 435
Oxides	59 446	38 734	61 927	68 613	85 832
United Kingdom					
Ilmenite	134 861	112 447	106 177	113 852	110 600
Other titanium minerals	70 348	110 526	82 303	111 754	113 862
Titanium slag	160 738	110 697	157 020	44 890	151
Metal	27 331	30 752	25 319	25 126	28 137
Oxides	80 087	82 852	95 583	74 138	75 331

Note(s):-

- (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 Harmonised System items 2823 and 3206.10
- (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Including ilmenite

Titanium - EU31 trade in 2004



Tungsten

- Tungsten is a corrosion resistant metallic element with an extremely high melting point. Its largest use is as cemented carbides in cutting tools; it is also used as an alloying agent with steel to make high-speed tool steel, and in superalloys. Its most familiar use is in light bulb filaments.
- China's tungsten production in 2004 was 86% of the world total, and it was also the largest exporter. There was a small production from Austria and Portugal but overall the EU31 is import dependent. Tungsten is traded in several forms but the bulk of exports were from China, and thus the largest component of international trade, was of ammonium paratungstate (APT).
- The average monthly price for tungsten concentrate in 2004 ranged from \$46/metric tonne unit (mtu) to \$63/mtu. Ammonium paratungstate prices increased during 2004 and annual average prices were considerably higher than those of 2003, trading in the range of \$65/mtu–\$95/mtu. 1mtu = 10kg of tungsten trioxide, or 7.93kg of tungsten content.

Mine production of tungsten

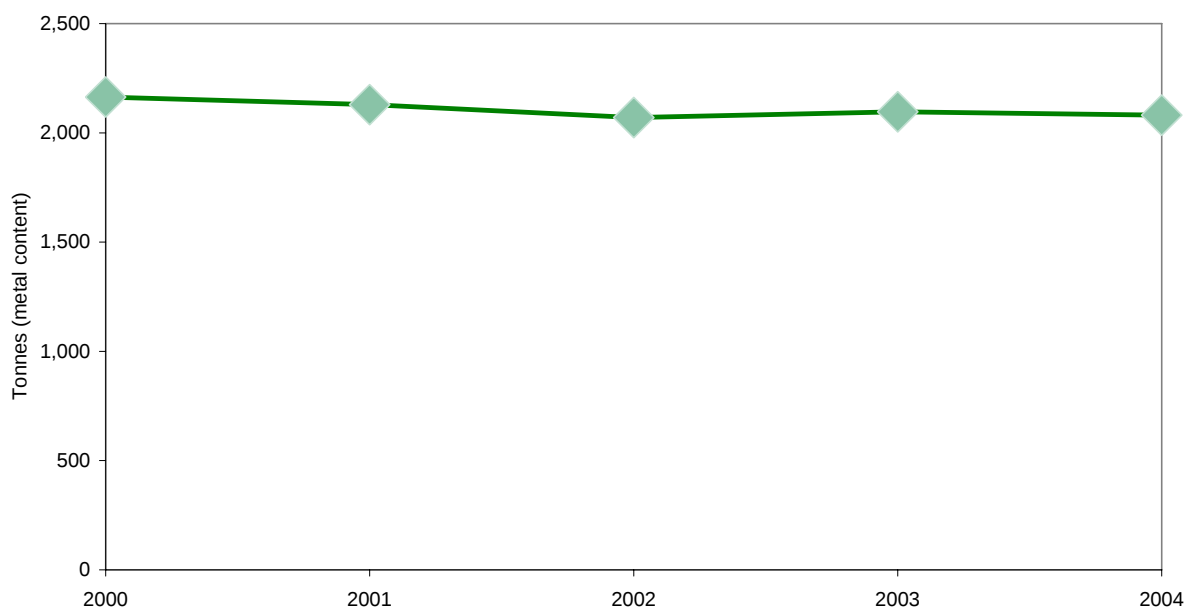
tonnes (metal content)

Country	2000	2001	2002	2003	2004
Austria	1 421	1 429	1 377	1 381	1 335
Portugal (a)	743	700	693	715	746
EU31 Total	2 164	2 129	2 070	2 096	2 081

Note(s):-

(a) Wolframite and scheelite

EU31 Mine production of tungsten 2000 - 04



Exports of tungsten

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	1 062	967	813	...	...
Belgium-Luxembourg					
Metal	255	448	259	374	404
Carbide	31	26	21	35	39
Czech Republic					
Metal	372	413	251	108	133
Denmark					
Metal	29	10	37	13	26
Estonia					
Ores & concentrates	224	71	2	127	...
Metal	287	307	4	196	1

Exports continued

Country	2000	2001	2002	2003	2004
Finland					
Metal	11	28	49	67	91
France					
Metal	2 755	911	624	538	571
Carbide	394	366	348	241	251
Germany					
Metal	1 942	2 418	1 735	2 209	2 816
Hungary					
Metal	41	53	74	56	64
Irish Republic					
Metal	194	96	38	41	72
Italy					
Metal	171	245	129	191	357
Latvia					
Metal	...	...	42	84	32
Netherlands					
Ores & concentrates	10	55	16	1	16
Metal	182	380	469	237	520
Poland					
Metal	147	113	1	34	89
Portugal					
Ores & concentrates	715	914	588	...	900
Metal	546	415	693	143	217
Spain					
Metal	185	56	109	158	141
Sweden					
Metal	14	32	364	334	102
Carbide	444	561	385	68	114
Switzerland					
Metal	154	121	185	244	268
United Kingdom					
Metal	4 647	1 874	1 667	2 053	1 303
Carbide	8	20	5	70	92

Note(s):-

- (1) Significant 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

Imports of tungsten

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Metal	358	399	235	271	400
Carbide	449	703	399	...	...
Belgium-Luxembourg					
Metal	384	405	279	404	372
Carbide	36	39	70	51	42
Czech Republic					
Metal	184	136	65	73	116
Denmark					
Metal	109	5	15	5	103
Estonia					
Ores & concentrates	132	68	-----	121	...
Metal	277	408	2	130	3
Finland					
Metal	100	119	113	169	119
France					
Metal	744	889	422	448	568
Carbide	534	628	604	695	692
Germany					
Ores & concentrates	77	378	129	195	389
Metal	4 392	4 914	3 024	4 874	4 976
Carbide	1 182	1 664	1 103	1 419	1 520
Irish Republic					
Metal	79	45	152	331	177

Tungsten

Imports continued

Country	2000	2001	2002	2003	2004
Italy					
Metal	292	301	236	258	321
Carbide	360	363	324	318	299
Netherlands					
Ores & concentrates	397	144	195	342	265
Metal	247	584	80	217	210
Carbide	74	77	44	18	56
Poland					
Metal	178	276	68	42	46
Portugal					
Metal	...	...	28	103	153
Carbide	75	82	79	96	109
Spain					
Metal	556	68	83	179	259
Carbide	39	77	64	48	59
Sweden					
Metal	356	990	136	470	559
Carbide	1 036	1 239	688	665	747
Switzerland					
Metal	113	220	152	139	170
United Kingdom					
Metal	2 176	2 538	2 121	1 932	1 880
Carbide	829	1 381	759	1 232	819

Note(s):-

- (1) Significant 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

Vanadium

- Vanadium is a soft, ductile, metallic element that is very corrosion resistant. The chief use is an additive in alloy steels where it imparts strength and corrosion resistance. Other uses are in titanium alloys and as a catalyst.
- Mine production is confined to five countries of which Russia (38%) and South Africa (estimated 36%) are the largest producers. There is no EU31 mine production. In the USA vanadium is a significant by-product from the refining of heavy crude oils.
- Vanadium is traded chiefly as vanadiferous slags and other residues, vanadium pentoxide and ferro-vanadium. In 2004 the European price for ferro-vanadium increased, ranging from \$15–\$52/kg. US prices for domestic V_2O_5 ranged between \$2.75–\$9.80/lb in 2004.

Exports of vanadium

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg					
Vanadiferous residues	5 281	4 408	3 414	3 129	...
Ores & concentrates	...	...	218	748	1 456
Pentoxide	49	26	46	22	9
Denmark					
Vanadium-titanium pig iron	125	134	193	...	...
France					
Pentoxide	13	10	8	183	138
Metal	16	0	0	0	26
Germany					
Vanadiferous residues	358	630	...	...	...
Ores & concentrates	...	...	...	127	1 060
Pentoxide	91	83	81	102	296
Metal	336	359	351	483	522
Italy					
Ores & concentrates	774	3 964	2 401	1 691	1 267
Netherlands					
Vanadiferous residues	291	207	...	...	...
Pentoxide	222	253	87	219	1 575
Metal	339	179	71	379	5
Turkey					
Pentoxide	...	...	...	680	900
United Kingdom					
Metal	1 790	1 405	1 425	1 137	1 075

Note(s):-

(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

Imports of vanadium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Vanadiferous residues	*27 000	*26 000	*25 000	*25 000	*27 000
Ores & concentrates	506	527	488	459	467
Pentoxide	2 206	1 477	1 042	(a) *400	(a) *1 000
Metal	12	0	7	2	9
Belgium-Luxembourg					
Vanadiferous residues	911	1 286	...	...	...
Ores & concentrates	...	...	483	1 379	1 116
Pentoxide	3 142	2 142	2 981	57	3
Metal	18	32	501	238	32
Czech Republic					
Pentoxide	5 495	5 172	4 162	4 898	5 429
Metal	40	...	0	0	0
France					
Ores & concentrates	162	...	126	1	...
Pentoxide	461	328	382	496	441
Metal	130	54	54	34	72
Germany					
Pentoxide	614	657	538	802	648
Metal	20	60	88	106	159
Italy					
Pentoxide	74	199	153	129	134
Netherlands					
Vanadiferous residues	127	251	...	...	...
Pentoxide	1 312	653	815	865	1 832
Norway					
Metal	58	51	41	55	32
Sweden					
Metal	49	77	49	49	46
United Kingdom					
Pentoxide	277	319	962	363	306
Metal	272	381	171	256	340

Note(s):-

(1) In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any

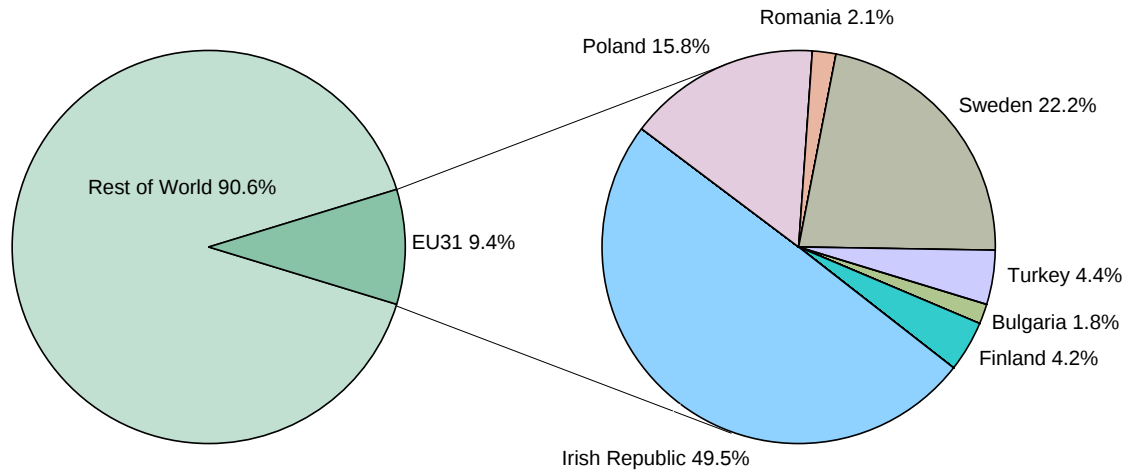
(2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

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

Zinc

- Zinc is a metal that is brittle at ordinary temperatures but malleable at temperatures above 100°C. It is corrosion resistant and this property is exploited in its chief use as a steel coating (galvanising). Its other main uses are as zinc die-castings and alloyed with copper to make brass, which is widely used in the electrical, engineering and construction industries.
- Zinc is produced by many countries from mines, or in refineries that process imported zinc concentrates. China (24%) was the world's largest mine producer during 2004. The Irish Republic was the largest mine producer in the EU31 (49%) and a number of EU31 countries have major zinc refineries.
- The average zinc price for 2004 reached US\$1047.83/tonne, up 21% from \$828.39/tonne in 2003. On the LME zinc started trading in the \$1000/tonne price range at the beginning of the year. After peaking at \$1155/tonne prices began to drop reaching \$943/tonne in September. Prices increased during the final quarter, reaching a four-year high in December, of \$1270/tonne.

EU31 Mine production of zinc 2004

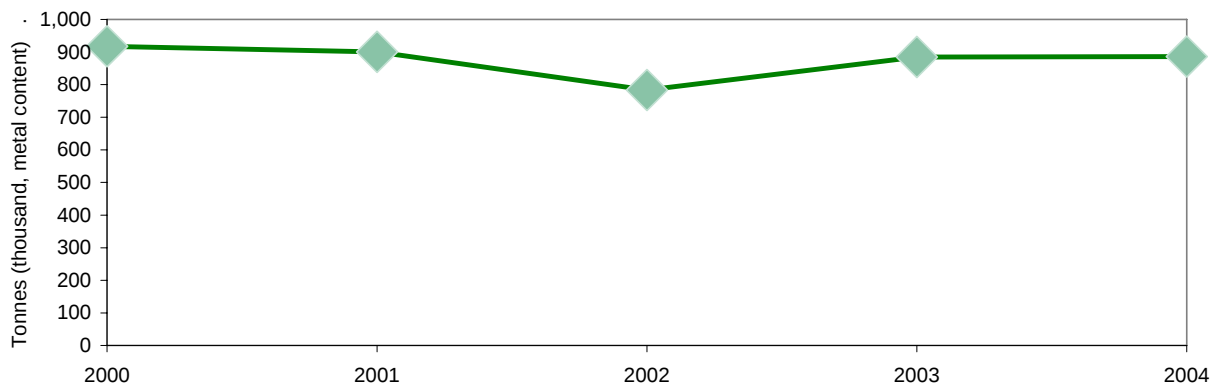


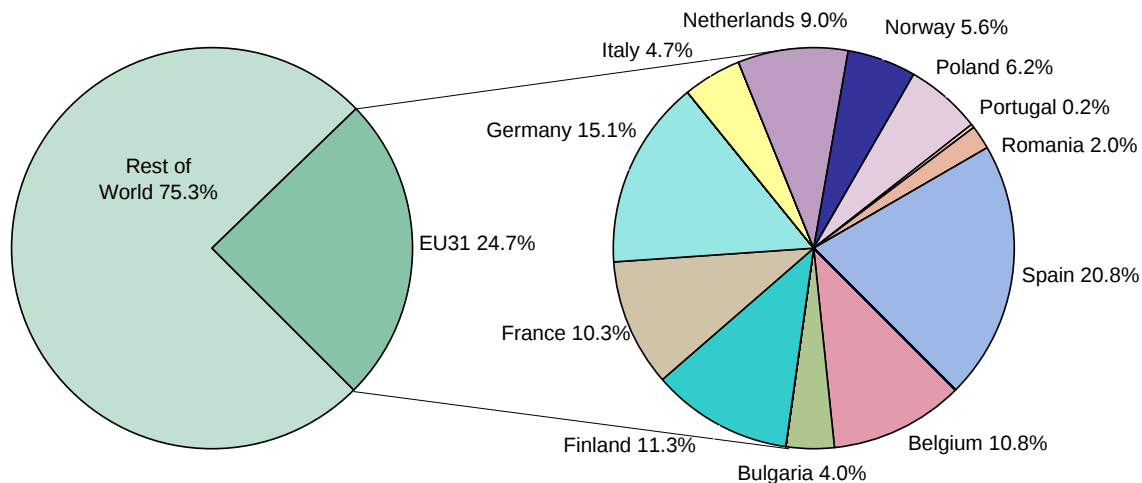
Mine production of zinc

tonnes (metal content)

Country	2000	2001	2002	2003	2004
Bulgaria	10 100	10 600	12 900	13 000	15 548
Finland	16 100	20 100	34 100	38 800	37 200
Greece	16 834	31 737	35 000	3 000	-----
Irish Republic	263 000	298 100	276 700	419 000	438 300
Poland	156 900	152 700	152 100	154 277	140 381
Romania	27 452	29 786	21 512	22 081	18 604
Spain	202 360	165 568	69 926	15 140	-----
Sweden	176 788	156 334	148 620	185 884	197 034
Turkey	48 000	36 000	33 100	33 600	39 000
EU31 Total	918 000	901 000	784 000	885 000	886 000

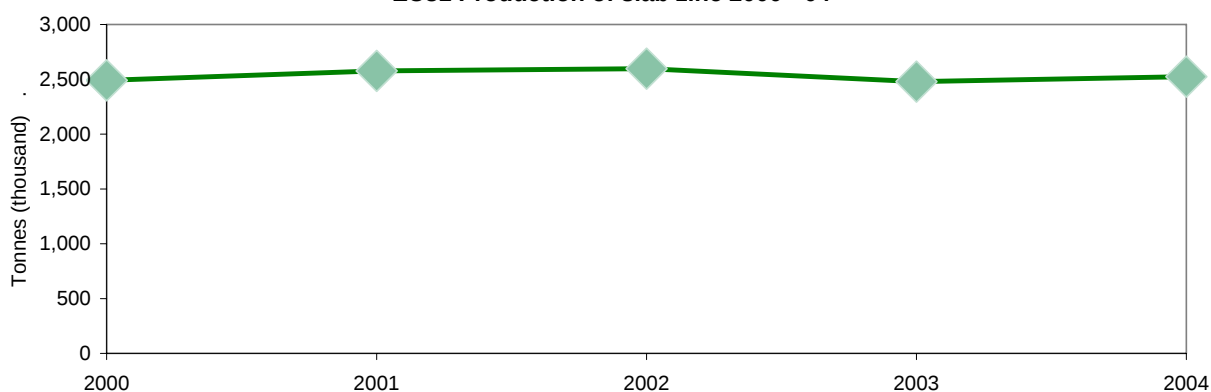
EU31 Mine production of zinc 2000 - 04



EU31 Production of slab zinc 2004**Production of slab zinc**

tonnes

Country	2000	2001	2002	2003	2004
Belgium	263 800	256 400	238 700	244 400	272 500
Bulgaria	84 000	88 000	83 000	86 800	101 500
Finland	222 900	248 800	235 300	265 900	284 525
France	318 100	328 900	333 300	257 000	260 000
Germany	356 516	361 348	378 561	388 131	382 020
Italy	170 300	178 600	175 800	123 100	118 400
Netherlands	216 768	204 794	203 460	224 000	228 100
Norway	138 390	144 694	144 538	143 627	140 901
Poland	173 000	174 700	158 900	154 200	155 500
Portugal	*4 000	*4 000	*4 000	*4 000	*4 000
Romania	51 929	48 000	38 000	51 000	*50 000
Spain	391 000	437 000	503 000	519 000	525 000
United Kingdom	99 600	99 600	99 600	16 600	-----
EU31 Total	2 490 000	2 575 000	2 596 000	2 478 000	2 522 000

EU31 Production of slab zinc 2000 - 04

Exports of zinc

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Unwrought (a)	20 746	15 461	34 705	36 012	37 304
Scrap	3 345	2 089	3 763	2 984	2 000
Belgium-Luxembourg					
Ores & concentrates	531 616	332 101	101 157	232 845	384 652
Unwrought	102 816	89 817	114 430	130 356	136 768
Scrap	18 849	22 938	28 597	19 485	26 546
Bulgaria					
Unwrought (a)	(b) *89 700	73 362	70 967	74 801	89 287
Czech Republic					
Unwrought (a)	2 865	1 619	1 253	1 670	5 659
Scrap	2 750	2 267	2 325	2 247	2 976
Denmark					
Scrap	7 351	7 178	9 263	5 543	2 336
Estonia					
Scrap	1 426	1 429	1 408	1 612	1 146
Finland					
Unwrought	176 366	175 402	186 916	212 125	235 735
Unwrought alloys	360	206	105	97	436
Scrap	6 668	8 159	7 324	5 195	2 281
France					
Ores & concentrates	44 107	18 305	17 775	37 167	38 779
Unwrought	111 730	127 252	143 307	109 839	115 352
Unwrought alloys	29 963	30 971	31 535	31 625	35 879
Scrap	41 599	42 470	33 611	38 294	56 440
Germany					
Ores & concentrates	58 100	62 741	43 050	4 741	695
Unwrought	66 002	71 859	95 493	104 982	91 123
Unwrought alloys	40 377	38 250	40 259	38 710	37 762
Scrap	45 218	47 388	40 684	47 414	52 545
Greece					
Ores & concentrates	32 670	57 166	65 084	0	0
Unwrought (a)	885	82 848	671	1 076	709
Scrap	173	120	172	683	709
Hungary					
Unwrought	948	1 032	997	921	3 798
Scrap	3 153	2 837	2 202	2 794	3 571
Irish Republic					
Ores & concentrates	331 533	381 072	161 452	439 247	564 018
Scrap	632	296	235	298	450
Italy					
Ores & concentrates	30 670	37 107	21 429	61 273	93 317
Unwrought	5 731	6 624	2 250	2 761	2 331
Unwrought alloys	6 328	5 002	6 520	6 914	3 523
Scrap	10 845	9 793	12 762	17 313	15 157
Netherlands					
Unwrought	223 418	252 993	187 416	277 262	282 610
Unwrought alloys	98	90	4 234	7 571	19 867
Scrap	18 842	21 496	16 093	24 856	29 836
Norway					
Unwrought	116 999	113 170	133 006	125 896	127 410
Unwrought alloys	12 067	13 990	6 704	6 245	6 710
Poland					
Ores & concentrates	21 200	29 223	61 378	64 486	44 257
Unwrought	75 489	86 067	78 497	65 661	72 820
Unwrought alloys	2 488	2 391	1 844	1 330	850
Scrap	897	2 497	1 463	136	269
Portugal					
Scrap	729	682	1 001	1 198	1 855
Romania					
Ores & concentrates	46 410	60 681	59 456	99 978	31 665
Unwrought	46 355	44 984	34 261	49 234	42 968
Slovakia					
Unwrought	286	199	104	587	...
Scrap	791	732	1 337	743	...

Zinc

Exports continued

Country	2000	2001	2002	2003	2004
Spain					
Ores & concentrates	232 781	296 040	29 661	33 913	37 986
Unwrought	84 575	93 738	79 286	245 702	294 548
Unwrought alloys	38 900	36 413	42 647	75 497	54 670
Scrap	5 451	5 861	4 577	3 561	5 125
Sweden					
Ores & concentrates	341 193	261 909	283 701	305 058	379 155
Unwrought (a)	609	494	629	496	280
Scrap	20 396	13 546	23 833	42 715	21 598
Switzerland					
Scrap	3 832	2 405	2 358	2 415	2 582
Turkey					
Ores & concentrates	128 187	85 661	100 445	97 605	110 692
Unwrought (a)	49	2 367	2 579	315	302
Scrap	...	...	...	4 293	2 318
United Kingdom					
Unwrought	12 231	15 455	15 686	3 106	1 387
Unwrought alloys	19 940	21 971	22 366	21 770	26 663
Scrap	45 202	19 157	15 248	15 436	7 742

Note(s):-

(1) In this table the term 'unwrought' zinc corresponds to item 7901 of the Harmonised System and comprises blocks, pigs, slabs, etc.

(a) Including alloys

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

Imports of zinc

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Unwrought	45 015	54 380	51 331	58 968	47 866
Unwrought alloys	16 126	22 617	23 414	24 621	31 444
Scrap	891	1 233	1 774	1 643	2 035
Belgium-Luxembourg					
Ores & concentrates	879 412	824 825	864 008	1 189 103	1 410 560
Unwrought	233 203	233 322	236 971	244 081	261 216
Unwrought alloys	2 049	910	4 767	2 649	13 872
Scrap	55 556	50 156	60 893	42 424	42 534
Bulgaria					
Ores & concentrates	145 588	124 895	120 409	149 957	167 098
Unwrought (a)	...	2 299	3 049	4 146	4 285
Croatia					
Unwrought (a)	2 340	2 816	3 006	5 324	3 516
Czech Republic					
Unwrought (a)	27 724	27 142	26 929	28 748	34 205
Denmark					
Unwrought	12 244	10 537	11 031	10 761	10 813
Unwrought alloys	2 428	5 070	3 030	1 647	1 548
Scrap	363	203	80	52	27
Estonia					
Unwrought (a)	528	498	...	10 578	17 468
Scrap	5 449	6 568	5 245	4 473	191
Finland					
Ores & concentrates	448 698	422 274	433 196	436 345	479 603
Scrap	2 424	1 882	2 030	2 511	395
France					
Ores & concentrates	637 021	574 312	558 771	482 493	458 760
Unwrought	129 061	126 795	98 355	115 491	103 037
Unwrought alloys	49 384	39 967	32 740	34 874	56 492
Scrap	12 758	13 265	11 144	8 203	6 046
Germany					
Ores & concentrates	282 566	316 009	319 996	340 244	480 355
Unwrought	251 227	261 517	231 495	253 892	248 654
Unwrought alloys	86 245	79 743	77 600	100 172	83 556
Scrap	18 021	21 487	34 083	26 647	23 997

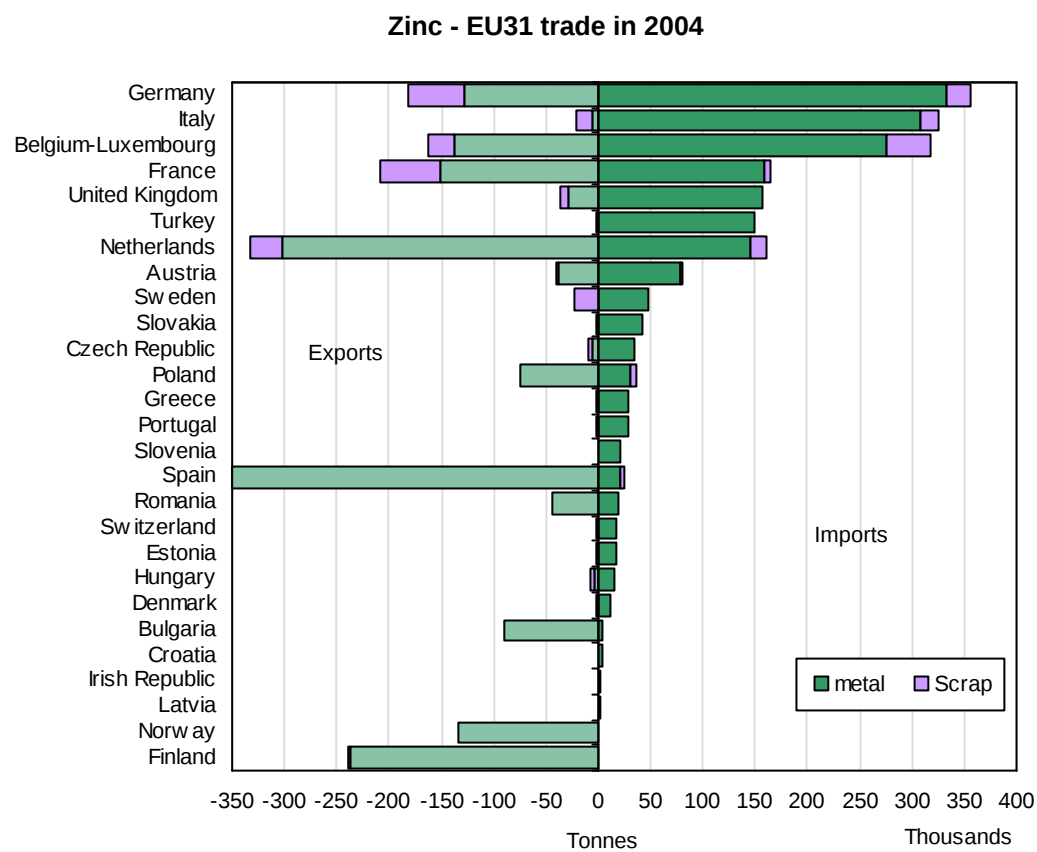
Imports continued

Country	2000	2001	2002	2003	2004
Greece					
Unwrought (a)	24 617	31 737	26 052	24 982	29 255
Hungary					
Unwrought (a)	23 997	23 615	23 295	16 900	15 779
Irish Republic					
Unwrought (a)	3 232	3 668	5 699	4 241	2 956
Italy					
Ores & concentrates	316 968	311 767	283 804	191 369	249 978
Unwrought	212 920	175 658	201 905	226 245	273 146
Unwrought alloys	38 457	42 197	31 361	28 659	35 835
Scrap	23 204	21 985	15 509	14 095	15 991
Latvia					
Unwrought (a)	378	747	753	895	1 172
Netherlands					
Ores & concentrates	427 101	299 374	375 646	430 349	408 032
Unwrought	171 866	152 500	126 816	160 793	143 218
Unwrought alloys	603	1 536	7 633	853	2 318
Scrap	8 849	11 413	10 368	14 213	15 230
Norway					
Ores & concentrates	209 118	233 797	220 879	221 754	231 563
Unwrought (a)	1 577	190	1 240	109	296
Scrap	429	421	675	261	295
Poland					
Ores & concentrates	95 443	118 106	112 193	113 990	114 800
Unwrought (a)	10 493	10 113	14 789	22 182	31 603
Scrap	373	261	251	656	4 636
Portugal					
Unwrought	12 146	12 701	13 649	18 113	13 450
Unwrought alloys	7 413	6 907	10 678	10 616	14 675
Romania					
Ores & concentrates	148 679	87 597	55 758	113 683	109 019
Unwrought (a)	6 075	11 747	15 482	16 030	19 555
Slovakia					
Unwrought (a)	24 062	...	31 953	33 557	42 324
Slovenia					
Unwrought (a)	23 136	20 516	18 031	19 925	21 146
Spain					
Ores & concentrates	562 965	687 733	901 359	1 096 292	917 968
Unwrought	2 507	4 529	4 939	7 448	3 862
Unwrought alloys	9 059	9 499	10 398	12 477	16 601
Scrap	3 314	2 850	2 506	4 103	4 062
Sweden					
Unwrought	22 536	27 156	25 562	22 320	29 682
Unwrought alloys	11 313	11 170	12 145	13 496	18 009
Switzerland					
Unwrought	16 257	20 567	21 073	11 730	14 577
Unwrought alloys	3 758	3 735	3 796	3 798	3 194
Turkey					
Ores & concentrates	333	416	910	1 027	367
Unwrought (a)	95 229	84 091	110 773	126 315	148 897
United Kingdom					
Ores & concentrates	177 332	215 342	229 042	16 611	260
Unwrought	119 052	110 157	108 357	171 219	141 867
Unwrought alloys	7 133	6 363	5 738	13 796	15 719
Scrap	4 983	3 219	261	172	190

Note(s):-

(1) In this table the term 'unwrought' zinc corresponds to item 7901 of the Harmonised System and comprises blocks, pigs, slabs, etc.

(a) Including alloys



Zirconium minerals

- The mineral zircon (zirconium silicate) is the principal zirconium commodity. Due to its very high melting temperature and chemical stability, it is used as a refractory in furnace and ladle linings, foundry sands and ceramic manufacture. Zirconium metal manufacture is a very small part of total output.
- Zircon is recovered from heavy mineral sands, typically as a co-product with titanium minerals, and the relative rarity of large deposits restricts production to only a few countries. The largest producers in 2004 were Australia (37%) and South Africa (32%).
- Zircon is traded in three forms — foundry, ceramic and refractory. In 2004, increased demand for zircon resulted in increased prices. The average value of ore and concentrates imported to the US increased to \$477/tonne in 2004 from \$396/tonne in 2003. Ceramic grade Australian zircon prices increased to between \$490–\$600/tonne at the end of 2004.

Exports of zirconium

tonnes

Country	2000	2001	2002	2003	2004
Belgium-Luxembourg					
Concentrates	13 216	14 979	18 253	10 047	11 105
Metal	365	193	233	163	170
Estonia					
Metal	65	...	----	0	0
France					
Concentrates	754	657	1 126	653	1 129
Germany					
Concentrates	5 428	4 161	2 539	2 111	2 450
Metal	241	265	343	300	275
Italy					
Concentrates	22 582	15 906	20 510	22 050	25 633
Metal	721	1 604	775	424	441
Netherlands					
Concentrates	1 978	1 430	5 361	7 011	8 548
Portugal					
Metal	472	0	1	0	0
Spain					
Concentrates	6 951	7 449	7 852	13 669	10 844
Metal	15	5	122	602	989
United Kingdom					
Concentrates	567	1 776	5 033	418	526
Metal	317	380	263	244	186

Note(s):-

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

Imports of zirconium

tonnes

Country	2000	2001	2002	2003	2004
Austria					
Concentrates	1 684	1 127	1 526	1 206	1 486
Belgium-Luxembourg					
Concentrates	7 954	5 657	13 267	5 178	3 991
Metal	477	670	483	533	534
Czech Republic					
Concentrates	3 459	3 480	2 911	2 105	1 605
Metal	617	486	580	348	32
France					
Concentrates	57 420	59 386	43 841	58 457	48 004
Metal	135	2 323	251	288	276
Germany					
Concentrates (a)	*70 000	82 728	76 921	85 178	80 328
Metal	412	409	456	632	516
Italy					
Concentrates	151 500	137 649	136 504	130 207	149 787
Metal	1 159	936	85	823	122
Netherlands					
Concentrates	30 993	27 300	21 401	11 607	13 613
Metal	64	53	42	52	105
Poland					
Concentrates	1 790	2 002	1 207	1 056	1 085
Metal	7	29	13	2	23

Zirconium

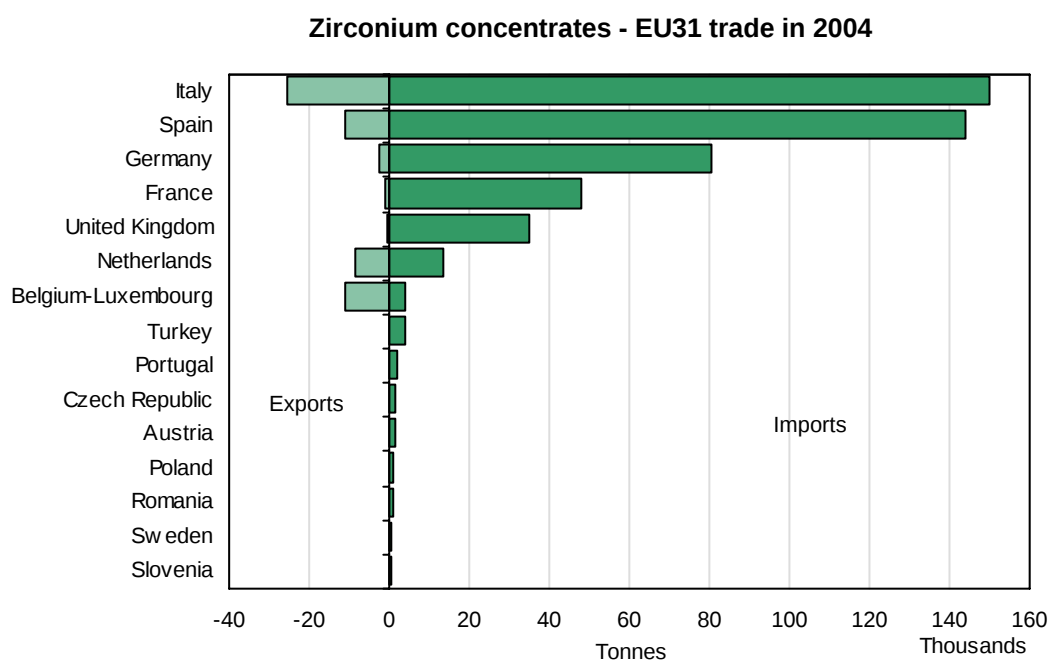
Imports continued

Country	2000	2001	2002	2003	2004
Portugal					
Concentrates	3 610	3 990	2 924	2 802	2 045
Romania					
Concentrates	468	685	678	827	809
Metal	18	48	12	22	30
Slovenia					
Concentrates	415	440	440	529	416
Spain					
Concentrates	115 108	133 013	145 970	142 949	143 860
Metal	232	163	41	60	94
Sweden					
Concentrates	602	435	424	480	564
Metal	91	66	138	172	82
Switzerland					
Metal	45	66	115	85	86
Turkey					
Concentrates	3 184	2 263	3 914	3 954	3 881
Metal	1	5	23	5	9
United Kingdom					
Concentrates	34 053	46 548	30 656	39 285	34 774
Metal	733	693	394	346	443

Note(s):-

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

(a) Including niobium and tantalum concentrates



Borates

- Borates is a general term for a range of boron-containing minerals of which borax (tincal), ulexite, colemanite and datolite are the most commercially significant. These minerals are processed via boron trioxide to boric acid. The chief use of borate minerals is in glass manufacture (in particular fibreglass) and ceramics.
- Economic concentrations of borates form in unusual geological environments and so production is restricted to only a few countries. Of these, Turkey (33% of world production) was the largest world and EU31 producer in 2004.
- Borates are traded in a variety of forms. The price of Turkish lump colemanite (FOB 40–42% B₂O₃) was \$270–\$290/tonne. Processed chemical (borax) was £300–£900/tonne with the higher prices referring to anhydrous borax.

Production of borates

tonnes

Country	2000	2001	2002	2003	2004
Turkey	1 402 000	1 399 000	1 328 000	1 324 000	1 727 000

Primary magnesium metal

- Magnesium is a light metal chiefly used as an alloying agent with aluminium to reduce weight but the use of magnesium castings is increasing, especially in the automotive industry. Its other chief use is in desulphurising steel.
- Magnesium is produced mainly from dolomite rock, lake and sea brines and magnesite (magnesium carbonate rock). The largest producer in 2004 was China. Until recently Norway and France produced recycled magnesium, however, the EU31 is now entirely import dependent for magnesium metal.
- Magnesium in 2004 (China free market, min. 99.8% Mg, FOB China main ports) started the year at around \$1700/tonne. Prices increased until April, reaching \$2300/tonne, before dropping back to around \$1700/tonne at the year-end.

Production of primary magnesium metal

tonnes

Country	2000	2001	2002	2003	2004
France	16 500	4 800	2 000	----	----
Norway	41 400	40 700	3 100	----	----

Nepheline syenite

- Nepheline syenite is an igneous rock composed chiefly of feldspar and nepheline (one of a family of minerals called feldspathoids). The chief uses are similar to those for feldspar, i.e. in the manufacture of glass, in ceramics and as a filler.
- Economic concentrations form in rare geological environments and only three countries produce nepheline syenite. Russia was the largest producer in 2004, followed by Canada and Norway.
- Norwegian nepheline syenite (bulk FOL, UK port, glass grade, 0.5mm) traded at £97/tonne throughout 2004.

Production of nepheline syenite

tonnes

Country	2000	2001	2002	2003	2004
Norway	330 000	330 362	330 461	332 000	333 000

Perlite

- Perlite is a silicate mineral that results from the alteration of natural glass with the chemical composition of granite. Upon heating the mineral swells and dewateres — resulting in a sudden increase in volume accompanied by a decrease in density. It has remarkable thermal insulation properties, porosity, chemical stability, nonflammability, high heat resistance and high sound absorption. It is chiefly used in building materials.
- More than 20 countries produce perlite. Greece is the largest perlite producer in the world, representing approximately 33% of world production in 2004. China and the USA are also significant perlite producers.
- Perlite can have a wide range of properties and shipments are individually assessed according to need. Thus, the price range is large. During 2004 perlite (aggregate, expanded, ex-works UK) traded between £320–£380/tonne.

Production of perlite

tonnes

Country	2000	2001	2002	2003	2004
Bulgaria	16 700	12 300	10 500	16 800	8 500
Greece	817 825	840 660	838 997	1 079 036	1 053 388
Hungary	151 069	89 900	72 196	95 100	65 000
Italy	*60 000	*60 000	*60 000	*60 000	*60 000
Slovakia	17 022	14 910	18 635	15 000	16 000
Turkey	149 426	154 515	151 902	136 683	133 829

Selenium metal

- Selenium is a light, weakly toxic, metalloid. Selenium has a wide range of uses; the largest is in glass-making where it acts as a decolourizer, and it is also used in ceramics, pigments, electronics, animal feed supplement and in base-metal alloys. Its former major use in photocopiers has declined as it has been replaced by other materials.
- Selenium is most commonly produced as a by-product of copper refining. Thus, production tends to occur in the countries that produce significant amounts of refined copper. The largest producer in 2004 was Japan. Within the EU31, Belgium, Germany and Sweden are thought to be the largest producers but precise statistics are unavailable.
- The average US price for selenium was \$24.89/lb in 2004. At the beginning of 2004 selenium was trading around \$10/lb. Prices steadily increased throughout the year to a year-end high of around \$40.00/lb.

Production of selenium metal

tonnes

Country	2000	2001	2002	2003	2004
Belgium	*200	*200	*200	*200	*200
Finland	37	42	37	52	65
Germany	*100	*100	*100	*100	*100
Poland	65	65	68	78	83
Sweden	104	88	118	107	*100

Strontium minerals

- Strontium is a soft metallic element. The most common strontium mineral is celestite (strontium sulphate). This is frequently converted into strontium carbonate before marketing.
- The dominant use of strontium is (in oxide form) in the faceplate glass of cathode ray tubes where it blocks X-ray emissions. Strontium compounds are also used in pigments, pyrotechnics and fluorescent tubes. Strontium metal has only very minor uses.
- Only seven countries reported production of strontium minerals in 2004. China is believed to be the world's largest producer with approximately one third of world production, however, precise statistics are unavailable. Spain and Turkey are the only EU31 producers. In 2004 celestite traded at \$50–\$100/tonne depending on source and grade.

Production of strontium minerals

tonnes

Country	2000	2001	2002	2003	2004
Spain	158 590	164 030	171 293	152 383	158 000
Turkey	24 150	63 635	*70 000	*70 000	*70 000

Note(s):-

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

Uranium

- Uranium is a dense metallic element. It is chiefly used as the fuel source for nuclear power stations and in weapons.
- Uranium ore is milled and processed into 'yellowcake' (a uranium oxide), which is the chief form in international trade. Yellowcake is converted to uranium hexafluoride, which is then enriched to enable it to be used as a fuel.
- Canada was the world's largest mine producer during 2004, producing 32% of the world total. Australia is also a significant producer, contributing 21% to world production. In the EU31, a small amount of uranium was mined in the Czech Republic. In addition there was minor production from Romania and Germany. During 2004, the uranium spot price climbed from \$14.50–\$20.70/lb U₃O₈. The price for long-term contracts reached \$25/lb U₃O₈.

Mine production of uranium

tonnes (metal content)

Country	2000	2001	2002	2003	2004
Czech Republic	498	490	477	458	435
France	319	194	12	-----	-----
Germany	28	27	221	104	77
Portugal	13	4	2	-----	-----
Romania	*50	85	90	90	90
Spain	251	0	0	-----	-----
EU31 Total	1 159	800	802	652	602
EU31 Total (U ₃ O ₈ equivalent)	1 368	944	946	769	710

Note(s):-

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

Wollastonite

- Wollastonite (calcium metasilicate) is a commercially important mineral because of its bladed (acicular) crystals. It is used as filler in plastics, ceramics, paint and friction products and as an asbestos substitute.
- Production is restricted to a handful of countries, of which China is the largest (54% of world production). Finland was the only EU31 producer, contributing 2% to world production.
- Wollastonite is traded on the basis of the aspect ratio of its crystals and by mesh size. Prices were stable throughout 2004 at \$205–\$345/short ton, depending on grade.

Production of wollastonite

tonnes

Country	2000	2001	2002	2003	2004
Finland	17 000	18 399	17 400	17 300	16 763

Note(s):-

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