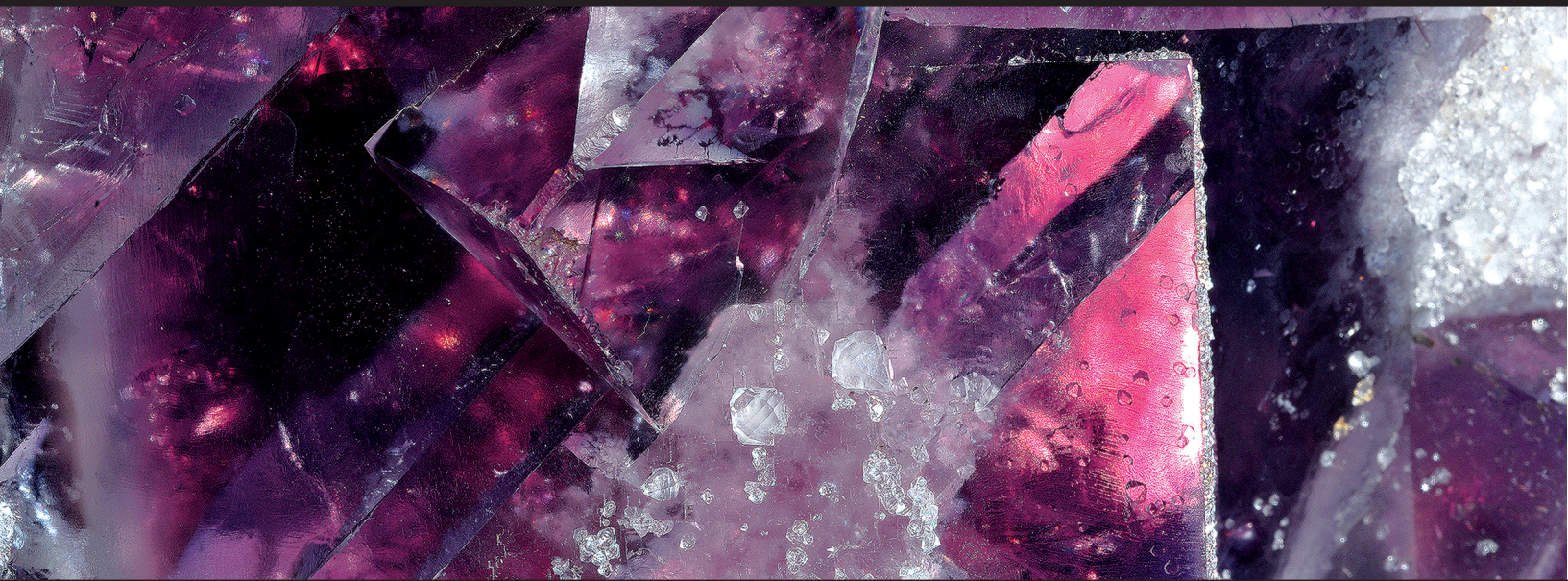


European Mineral Statistics



2004–08



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL



Communities
and Local Government

BRITISH GEOLOGICAL SURVEY

European Mineral Statistics 2004–08

A product of the World Mineral Statistics database

By: T J Brown, N E Idoine, T Bide, A J Mills, S F Hobbs

Technical support: A C MacKenzie



BRITISH GEOLOGICAL SURVEY

Keyworth, Nottingham NG12 5GG
☎ 0115-936 3100

Murchison House, West Mains Road, Edinburgh EH9 3LA
☎ 0131-667 1000

London Information Office, Natural History Museum (Earth Galleries), Exhibition Road, London SW7 2DE.
☎ 020-7589 4090

The full range of Survey publications is available from the BGS Sales Desks at Nottingham, Edinburgh and London; see contact details above or shop online at www.geologyshop.com.

The London Information Office also maintains a reference collection of BGS publications, including maps, for consultation.

The Survey publishes an annual catalogue of its maps and other publications; this catalogue is available from any of the BGS Sales Desks.

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

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

*All communications regarding the content of this publication should be addressed to the Head of Science, Minerals, British Geological Survey, Keyworth, Nottingham NG12 5GG
☎ 0115 936 3495 Fax 0115 936 3520
E-mail minerals@bgs.ac.uk*

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

Bibliographical reference

BRITISH GEOLOGICAL SURVEY. 2010. *European mineral statistics 2004–08*. (Keyworth, Nottingham: British Geological Survey.)

Cover photograph: Fluorite from Cumbria, United Kingdom; a specimen from the BGS collections. Photo: Paul Witney.
BGS © NERC

ISBN 978-0-85272-658-7 (Download)

ISBN 978-0-85272-657-0 (Paperback)

Commentary

1. Introduction

Europe's relatively restricted land mass has a remarkable variety of geological terranes. It includes ancient crystalline 'shields' and massifs, complex younger fold-belts penetrated by igneous intrusions, deep sedimentary basins containing coal, petroleum 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 sand and gravel, crushed rock aggregate 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 issue lies in the desire of governments, everywhere, to recover costs by asking for payment for official information –

¹ For this compilation 'Europe' is defined as the 27 EU members (as of 1 February 2008), the EU associates Norway and Switzerland and the EU candidate countries Croatia, Macedonia and Turkey; this group of 32 countries is for convenience referred to as 'EU32'.

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 so crucial to the maintenance of civilisation and so little understood by the population at large.

2. Construction minerals

The most important construction minerals 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>
Clay and shale	<i>bricks, pipes, tiles and cement manufacture</i>
Gypsum ²	<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 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 EU 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 approximately 2800 million tonnes of primary aggregate production in the EU32 countries. In recent years the European Aggregates Association (UEPG) (www.uepg.eu) has estimated that the average annual production of primary aggregates in only 21 European countries is higher than the figures shown here. However, at the time of writing, their estimates for 2007 and 2008 were not available.

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. Finland, 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 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 19 million tonnes per year or 22 per cent of total UK sand and gravel production in 2008. Almost one third 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. In Great Britain these materials account for approximately 25 per cent of total supply. This is the highest in the EU32 countries in percentage terms although Germany is usually larger in total tonnage.

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 extracted ore the ultimate refined marketable product 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, 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 the 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 EU32 production of selected industrial minerals as world percentages.

<i>Industrial mineral</i>	<i>% of world</i>	<i>EU32 countries with >2% of world output in 2008</i>
Feldspar	62.1	Turkey (26%), Italy, France, Spain, Poland, Czech Rep.
Kaolin	28.2	Germany (13%), UK, Czech Republic
Bentonite	25.1	Greece (9.8%), Turkey, Germany
Magnesite	22.6	Turkey (8.9%), Slovakia, Austria
Gypsum	21.6	Spain (10.7%)
Salt	20.0	Germany (5.4%), Netherlands, France, UK
Talc	17.4	Finland (6.9%), France, Austria
Potash	12.5	Germany (9.9%)
Mica	8.4	France (5.3%), Finland
Fluorspar	3.8	Spain (2.4%)

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, are still imported but smelting and refining of base metal concentrates has been increasingly undertaken at or near the sites of the overseas mines. Europe as a whole is now heavily

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.

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

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. Turkey for chromium (8.1 per cent of the world total in 2008), Norway for titanium (7.1 per cent) and Poland for silver (5.4 per cent), but the majority of European countries depend chiefly on imports from other continents. Between 2007 and 2008, the overall mine production for metals produced in the EU32 generally decreased slightly, although the situation was mixed. Mine production of tungsten increased by nearly 13 per cent and chromium increased by nearly 12 per cent. However, the mine production of zinc decreased by nearly five per cent, mined copper and iron ore by just over four per cent each. The overall European position of mine production of selected metals in 2008 is shown in Table 3.

Table 3 EU32 mine production of selected metals as world percentages.

<i>Metal</i>	<i>% world</i>	<i>EU32 countries with >1% of world output in 2008</i>
Chromium	10.7	Turkey (8.1%), Finland
Silver	8.5	Poland (5.4%), Sweden, Turkey
Zinc	7.7	Ireland (3.4%), Sweden, Poland
Titanium	7.1	Norway (7.1%)
Lead	6.6	Sweden (1.6%), Poland, Ireland, Macedonia
Copper	5.1	Poland (2.8%)
Tungsten	3.7	Austria (2.0%), Portugal
Nickel	3.0	Greece (1.2%)
Mercury	3.0	Finland (3.0%)
Aluminium (bauxite)	1.8	Greece (1.0%)
Iron	1.4	Sweden (1.1%)
Gold	1.2	–
Manganese	0.3	–

European smelting and refining of imported ores and concentrates provides the bulk of supply in the cases of iron, aluminium (bauxite), zinc, lead, and copper. Refining in Europe of semi-processed materials from other continents accounts for a large part of nickel and tin supply but vanadium and cobalt metal are 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 emphasised that the situation of individual countries may vary widely from one to another, as the statistics indicate.

During 2008, most metals prices, including the major non-ferrous metals (copper, aluminium, lead and zinc), experienced a similar trend with increases during the first part of the year reversed by sharp declines as the global recession took effect at the end of the year. Many metals prices show some degree of recovery in the latter part of 2009. In 2008, China consumed 32 per cent of the world's total production of primary aluminium, 29 per cent of refined copper, 33 per cent of refined lead, 22 per cent of refined nickel, 39 per cent of refined tin, and 34 per cent of slab zinc (World Bureau of Metal Statistics). It continues to be the largest consuming country of these metals, often by a significant margin. China also consumed 32 per cent of crude steel production, but, although its per capita consumption increased to 318.5 kilograms, it is still lower than the EU(27) at 368.9 kilograms per capita (World Steel Association).

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 the second largest exporter of petroleum from the EU32 countries, there is also a significant import of heavy crude which is a necessary requirement that cannot be supplied by the North Sea and other offshore fields.

Before 1975, European production of both petroleum and natural gas was negligible but Europe produced 10.0 per cent of the world total for natural gas in 2008 and 5.6 per cent of petroleum. These percentages both show reductions on the 2004 figures which were 11.9 per cent and 7.4 per cent, respectively.

In 2008, Norway produced 3.0 per cent of total world output of oil and the United Kingdom produced 1.7 per cent. These two countries are the twelfth and eighteenth largest world producers respectively. Production in Norway has decreased by 22.6 per cent between 2004 and 2008, and in the UK by 26.4 per cent.

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 EU32 countries was 1351 million tonnes. In 2008 production from the same territories was 669 million tonnes, of which half was provided by Germany (2.9 per cent of the world total) and Poland (2.2 per cent).

‘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.

In 2008, mine production of uranium in the EU32 countries amounted to 481 tonnes U₃O₈ equivalent, or 0.9 per cent of the world total, chiefly attributable to the Czech Republic. The EU32 countries occupy the top four positions for the amount of electricity generated from nuclear power in 2008 (International Atomic Energy Agency). These countries are France, Lithuania, Slovakia, and Belgium with the proportions ranging from 76.2 per cent to 53.8 per cent.

In January 2008, the UK government gave formal backing to the building of new nuclear power stations by private operators and in November 2009 announced the ten proposed locations for the plants. The first might be producing electricity by 2018. In 2008, the UK derived 13.5 per cent of its electricity from nuclear power.

The overall European position with regard to production of energy minerals in 2008 is shown in Table 4.

Table 4 EU32 production of energy minerals as world percentages.

<i>Mineral</i>	<i>% world</i>	<i>EU32 countries with > 1% of world output 2008</i>
Coal	10.1	Germany (2.9%), Poland, Turkey
Natural gas	10.0	Norway (3.1%), Netherlands, UK
Petroleum	5.6	Norway (3.0%), UK
Uranium	0.9	-

Contents

Country index

Austria 2	Lithuania 69
Belgium-Luxembourg 7	Macedonia 71
Bulgaria 13	Malta 73
Croatia 17	Netherlands 74
Cyprus 19	Norway 80
Czech Republic 21	Poland 84
Denmark 26	Portugal 89
Estonia 30	Romania 93
Finland 32	Slovakia 97
France 36	Slovenia 101
Germany 43	Spain 104
Greece 50	Sweden 110
Hungary 54	Switzerland 115
Ireland, Republic of 58	Turkey 119
Italy 61	United Kingdom 124
Latvia 67	

Commodity index

Aggregates 132	Magnesite 253
Alumina 138	Manganese 257
Aluminium 139	Mercury 261
Antimony 148	Mica 264
Arsenic 150	Molybdenum 266
Asbestos 152	Natural gas 277
Barytes 154	Nepheline syenite 337
Bauxite 137	Nickel 268
Bentonite 157	Niobium 312
Bismuth 162	Perlite 338
Borates 337	Petroleum 274
Bromine 164	Phosphates 280
Cadmium 166	Platinum 282
Cement 169	Potash 285
Chromium 176	Pyrites 303
Coal 181	Rare earths 290
Cobalt 187	Salt 293
Copper 191	Sand and gravel 132
Crushed rock 132	Selenium 338
Diamond 199	Silicon 229
Diatomite 202	Sillimanite 297
Feldspar 205	Silver 299
Ferro alloys 229	Strontium 339
Fluorspar 208	Sulphur 303
Fuller's earth 157	Talc 309
Gold 211	Tantalum 312
Graphite 215	Tin 314
Gypsum 218	Titanium 318
Iodine 223	Tungsten 323
Iron ore 224	Uranium 339
Iron and steel 227	Vanadium 326
Kaolin 242	Wollastonite 340
Lead 245	Zinc 328
Lithium 251	Zirconium 335
Magnesia 253	

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.

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'.

Exclusion of warranty

Use by recipients of information provided by the BGS, is at the recipients' own risk. BGS has taken care to ensure that information provided is as free from error as is reasonably practical. In view of the disparate sources of information at BGS's disposal, including such material donated to BGS, that BGS accepts in good faith as being accurate, the Natural Environment Research Council (NERC) gives no warranty, expressed or implied, as to the quality, accuracy, performance, and merchantability of the information supplied, or to the information's suitability for any use whether made known to BGS or otherwise. NERC/BGS accepts no liability whatever in respect of loss, damage, injury or other occurrence however caused.

Acknowledgements

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

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

Specialist commodity organisations which have kindly allowed information to be reproduced include the International Copper Study Group, the International Lead and Zinc Study Group, the International Nickel Study Group 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, *Country and Commodity Reports*; World Bureau of Metal Statistics, *World Metal Statistics* and *Metallstatistik*; publications of the Interstate Statistical Committee of the CIS, the United States Geological Survey, and the United Nations Statistics Division.

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 (now known as the World Steel Association); Eurofer; World Nuclear Association; Eurostat; European Aggregates Association; Inmet Mining; Aluminium de Grece; New Boliden; Eurozinc Mining Corporation; Rio Narcea; Lundin Mining; Vereinigung der Osterreichischen Zementindustrie, Austria; Federation de l'Industrie Cimentiere Belge, Belgium; Statistics Belgium; Czech Republic Statistical Office; 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; Unicem, 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; Geological Survey of Norway; Instituto Nacional de Estatistica, Portugal; Unesid, Spain; Sveriges Geologiska Undersokning, Sweden; Jernkontoret, Sweden; Statistiska Centralbyran, Sweden; Department for Business, Innovation and Skills, United Kingdom; Office for National Statistics, 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

c.i.f. Cost, Insurance and Freight. The seller's price includes the cost of the goods, the insurance of the goods to their destination port, and the cost of freight.

f.o.b. Free on Board. The seller is responsible for the cost of delivering goods to the ship. The buyer is responsible for transportation and insurance costs from that point.

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 EU32 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) These statistics 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

Bentonite and fuller's earth - production

- (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 attapulgitite, 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
- (5) From 2007 Harmonised System 2508.20, used for fuller's earth, is no longer available

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

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 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 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
- (2) Kilograms 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.
- (3) See explanatory notes regarding currency conversion

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
- (2) The term 'unwrought', as used here, includes alloys unless these are separately identified.

Magnesite and magnesia - 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

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

Natural Gas - exports and imports

- (1) This table includes both liquified natural gas (HS code: 271111) in tonnes and natural gas in gaseous state (HS code 271121) in tonnes of oil equivalent
- (2) To convert figures from million tonnes (of oil equivalent) to billion m³, multiply by 1.11

Platinum group metals - exports and imports

- (1) The term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys
- (2) Kilograms 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.
- (3) See explanatory notes regarding currency conversion

Rare earths - exports and imports

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

Salt - production

- (1) Refined salt is excluded
- (2) Salt is known to be produced in many countries for which statistics are not available.

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

Uranium – mine production

- (1) Excludes uranium production from decommissioning operations.

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	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel (a)	tonnes	29 395 685	29 065 350	27 281 864	29 230 545	32 221 208
Crushed rock (a)	tonnes	27 687 041	25 093 602	26 536 938	25 248 136	33 419 062
Cement						
Cement clinker	tonnes	...	90 053	188 588	221 684	275 483
Cement, finished	tonnes	4 040 000	4 676 768	5 293 370	5 518 303	5 709 315
Coal						
Brown coal and lignite (b)	tonnes	235 397	13 931	7 854	—	—
Copper, refined	tonnes	74 200	72 300	72 600	81 400	106 700
Gypsum						
Gypsum	tonnes	920 809	911 162	936 072	1 006 416	1 022 983
Anhydrite	tonnes	117 318	106 032	135 380	57 428	64 276
Iron ore (c)	tonnes	1 889 419	2 047 950	2 092 996	2 152 825	2 032 671
Pig iron	tonnes	4 846 740	5 444 000	5 547 000	5 908 000	5 795 000
Crude steel	tonnes	6 529 000	7 031 000	7 129 000	7 577 000	7 593 000
Ferro-alloys						
Ferro-molybdenum	tonnes	4 700	5 000	5 000	5 000	4 500
Ferro-nickel	tonnes	1 900	2 500	2 500	3 000	2 000
Ferro-vanadium	tonnes	5 800	6 250	6 250	6 500	6 300
Kaolin	tonnes	16 345	16 410	17 431	16 929	16 460
Lead, refined	tonnes	* 26 000	* 24 000	* 22 000	* 22 000	22 000
Magnesite	tonnes	715 459	693 754	769 188	811 556	837 476
Nickel, smelter/refinery	tonnes	1 300	1 000	900	900	900
Crude petroleum	tonnes	981 588	933 040	856 270	853 549	861 639
Natural gas	million m ³	2 011	1 654	1 765	1 835	1 544
Salt						
Rock salt	tonnes	1 228	1 497	1 336	1 172	503
Salt in brine	tonnes	745 670	771 455	764 103	735 724	866 674
Sulphur and pyrites						
Recovered (d)	tonnes (sulphur content)	55 322	54 377	50 097	50 501	48 024
Talc	tonnes	136 305	166 569	159 447	153 409	154 577
Tungsten	tonnes (metal content)	1 335	1 280	1 153	1 117	1 122

Note(s):-

(1) Austria is believed to produce arsenic and bentonite

(a) Sales

(b) Coal; all forms

(c) Including micaceous iron oxide

(d) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	2 829 930	2 745 393	3 086 027	3 394 988	3 130 358
Aluminium and bauxite						
Bauxite	tonnes	1 221	980	765	1 225	1 202
Unwrought	tonnes	13 341	6 616	7 630	8 294	4 120
Unwrought alloys	tonnes	122 693	125 796	119 058	111 571	109 757
Scrap	tonnes	71 362	67 434	80 200	91 960	90 825
Antimony						
Metal	tonnes	19	1 089	3	1	0
Barytes	tonnes	2 737	1 407	5 830	3 023	2 440
Bentonite and fuller's earth						
Bentonite	tonnes	8 242	10 173	8 112	5 589	5 225
Bismuth						
Metal	tonnes	8	8	0	12	1

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Cement						
Cement clinkers	tonnes	58 262	32 877	136 381	189 450	243 906
Portland cement	tonnes	185 069	151 330	201 687	314 112	344 338
Other cement	tonnes	40 830	53 951	38 926	59 361	82 570
Chromium						
Ores and concentrates	tonnes	392	276	136	491	833
Metal	tonnes	7 194	8 893	11 770	14 739	6 596
Cobalt						
Metal	tonnes	22	5	10	19	31
Copper						
Matte and cement	tonnes	4 686	2 901	651	2 323	719
Unwrought	tonnes	71 119	83 750	84 104	82 985	114 978
Unwrought alloys	tonnes	580	604	2 509	1 239	938
Scrap	tonnes	36 476	33 274	39 169	38 642	35 582
Diamond						
Unsorted	carats	£477 000	£188 000	£211 000	£85 000	£71 000
Gem, cut	carats	£1 665 000	£2 895 000	£3 157 000	£2 792 000	£5 778 000
Dust	carats	£432 000	£406 000	£45 000	£115 000	£165 000
Diatomite	tonnes	5 347	5 375	4 171	4 455	3 043
Feldspar	tonnes	18 864	18 998	17 977	15 058	15 194
Gold						
Metal	kilograms	11 500	8 500	11 100	14 900	18 700
Waste and scrap	kilograms	2 900	5 500	600	17 300	2 200
Graphite	tonnes	5 094	7 082	7 416	7 460	8 853
Gypsum						
Crude	tonnes	22 732	21 433	30 002	89 128	26 402
Calcined	tonnes	100 444	94 207	99 013	121 473	89 906
Iodine	kilograms	100	37	600	300	100
Iron, steel and ferro-alloys						
Pig iron	tonnes	6 585	6 614	5 695	6 958	7 539
Ferro-alloys	tonnes	5 999	9 476	10 218	9 100	7 541
Silicon metal	tonnes	598	628	1 884	5 166	5 412
Ingots, blooms, billets	tonnes	334 124	484 431	303 284	286 765	284 063
Scrap	tonnes	1 099 278	1 024 301	1 140 091	1 279 775	1 351 725
Kaolin	tonnes	2 277	3 019	3 649	2 292	2 445
Lead						
Unwrought	tonnes	14 504	10 746	13 129	13 629	13 844
Scrap	tonnes	252	1 514	1 027	1 018	600
Magnesite and magnesia						
Magnesite	tonnes	642	1 338	1 231	760	602
Magnesia	tonnes	73 037	59 283	45 311	57 964	28 779
Manganese						
Metal	tonnes	11 575	5 470	306	116	130
Mercury	kilograms	1 700	4 100	214	5 000	200
Mica	tonnes	3 917	4 915	4 102	4 234	4 274
Molybdenum						
Metal (a)	tonnes	* 2 100	* 4 700	* 3 000	* 3 500	* 3 000
Oxides	tonnes	125	...	...	...	...
Natural gas	tonnes	979 540	1 082 286	1 645 995	2 688 210	2 812 303
Nickel						
Unwrought (b)	tonnes	297	226	197	333	225
Scrap	tonnes	1 520	1 927	2 337	2 208	1 910
Phosphates	tonnes	802	1	942	—	...
Platinum metals						
Platinum and platinum metals	kilograms	£8 114 000	£12 253 000	£14 817 000	£30 801 000	£52 298 000
Waste and scrap	kilograms	£50 000	£397 000	£281 000	£621 000	£621 000
Potash						
Potassic fertilisers	tonnes	158	4 713	8 584	13 595	14 613
Rare earths						
Cerium compounds	tonnes	1 564	1 980	1 569	2 596	2 702
Other rare earth compounds	tonnes	6 415	6 449	5 911	9 039	8 508
Metals	tonnes	456	421	333	359	373
Salt	tonnes	183 850	199 133	202 465	235 775	388 681
Silver						
Metal	kilograms	77 400	62 600	120 400	115 100	95 000

Austria

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Sulphur and pyrites						
Pyrites	tonnes	2 418	2 641	2 881	2 645	2 672
Sulphur	tonnes	46	141	225	3 006	3 292
Sulphur, sublimed and precipitated	tonnes	8 435	9 245	4 881	492	3 906
Talc	tonnes	151 022	158 799	165 923	153 457	135 390
Tantalum and niobium						
Tantalum	tonnes	—	—	—	13	20
Tin						
Unwrought (b)	tonnes	153	116	110	167	177
Scrap	tonnes	278	62	125	103	141
Titanium						
Metal	tonnes	397	317	513	576	717
Oxides	tonnes	2 640	3 457	3 976	4 885	6 444
Tungsten						
Metal (a)	tonnes	* 1 300	* 2 100	* 2 000	* 1 600	* 1 600
Zinc						
Unwrought (b)	tonnes	37 304	13 469	19 981	14 682	13 794
Scrap	tonnes	2 000	3 559	4 329	2 132	8 176

Note(s)

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

(b) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	2 087 667	2 516 839	2 622 855	3 961 223	3 447 013
Aluminium and bauxite						
Bauxite	tonnes	36 791	36 123	25 291	16 717	21 727
Alumina	tonnes	23 636	41 269	45 777	49 728	55 639
Alumina hydrate	tonnes	6 372	10 125	12 821	16 056	20 205
Unwrought	tonnes	106 348	82 597	113 047	140 286	154 792
Unwrought alloys	tonnes	229 607	214 611	235 053	250 209	218 902
Scrap	tonnes	128 798	150 412	157 256	161 995	170 315
Antimony						
Metal	tonnes	53	74	51	104	63
Oxide	tonnes	316	263	271	277	245
Arsenic						
Metallic arsenic	tonnes	...	2	1	1	3
Barytes	tonnes	3 910	5 863	12 550	4 898	6 234
Bentonite and fuller's earth						
Bentonite	tonnes	53 871	58 344	60 667	58 727	68 703
Fuller's earth	tonnes	615	374	427	...	...
Bismuth						
Metal	tonnes	114	62	114	42	148
Bromine	kilograms	93 000	222 000	228 600	463 900	488 000
Cement						
Cement clinkers	tonnes	443 956	532 745	487 406	520 714	456 127
Portland cement	tonnes	773 897	860 087	686 652	626 723	753 529
Other	tonnes	51 811	43 083	31 100	39 568	40 766
Chromium						
Ores and concentrates	tonnes	26 761	21 398	37 326	39 071	42 008
Metal	tonnes	3 731	4 440	8 879	14 480	8 006
Coal						
Hard coal (a)	tonnes	3 552 594	4 108 821	3 912 731	4 509 917	4 118 906
Lignite	tonnes	38 833	2 139	2 294	53 331	46 392
Briquettes	tonnes	83 035	96 318	101 389	12 877	25 919
Cobalt						
Metal	tonnes	585	694	438	631	740
Oxides	tonnes	11	5	7	4	40

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Copper						
Unwrought, unrefined	tonnes	15 203	20 081	26 508	26 678	39 590
Unwrought, refined	tonnes	18 429	21 176	29 298	20 614	8 855
Unwrought alloys	tonnes	2 460	2 260	2 979	2 485	1 866
Scrap	tonnes	87 807	82 787	88 684	91 043	113 109
Diamond						
Unsorted	carats	£1 193 000	£1 218 000	£978 000	£957 000	£1 648 000
Gem, cut	carats	£4 660 000	£5 743 000	£5 892 000	£6 405 000	£8 881 000
Industrial	carats	£631 000	£706 000	£841 000	£884 000	£473 000
Dust	carats	24 000 000	23 000 000	28 000 000	26 000 000	33 000 000
Diatomite	tonnes	13 178	12 892	11 693	13 710	12 561
Feldspar	tonnes	418	1 549	2 220	3 816	1 928
Fluorspar	tonnes	3 078	2 561	2 722	2 517	3 405
Gold						
Metal	kilograms	17 300	22 100	9 300	30 900	72 300
Waste and scrap	kilograms	200	1 800	300	100	400
Graphite	tonnes	7 229	13 655	10 704	17 757	30 863
Gypsum						
Crude	tonnes	16 985	15 280	11 057	14 651	10 118
Calcined	tonnes	70 261	66 118	61 713	97 281	67 712
Iodine	kilograms	124 100	92 700	173 600	145 500	139 700
Iron ore (b)	tonnes	5 783 671	7 423 189	8 412 038	9 061 870	7 996 632
Iron, steel and ferro-alloys						
Pig iron	tonnes	66 196	51 982	40 133	69 614	43 663
Sponge and powder	tonnes	10 917	25 214	20 542	31 775	56 471
Ferro-chrome	tonnes	43 438	41 046	34 196	49 977	47 748
Ferro-silico-magnesium	tonnes	627	678	522	1 746	2 021
Ferro-manganese	tonnes	39 026	37 865	29 385	38 857	36 491
Ferro-silico-manganese	tonnes	6 817	26 572	22 456	30 340	22 322
Ferro-molybdenum	tonnes	1 011	617	1 632	1 370	1 552
Ferro-niobium	tonnes	934	899	955	956	1 125
Ferro-phosphorus	tonnes	1 433	1 749	1 520	1 692	2 011
Ferro-silicon	tonnes	47 223	32 445	25 609	26 180	27 850
Ferro-titanium and ferro-silico-titanium	tonnes	961	1 121	1 081	793	879
Ferro-tungsten and ferro-silico-tungsten	tonnes	589	535	677	796	1 277
Ferro-vanadium	tonnes	587	256	100	186	289
Other ferro-alloys	tonnes	1 279	1 554	1 611	7	61
Silicon metal	tonnes	9 127	11 698	12 937	16 581	15 601
Ingots, blooms, billets	tonnes	156 796	108 004	132 901	208 910	191 426
Scrap	tonnes	1 017 497	1 113 082	1 089 942	1 371 393	1 629 170
Kaolin	tonnes	249 353	234 906	222 007	218 813	226 682
Lead						
Unwrought	tonnes	39 533	23 062	29 184	27 015	27 475
Scrap	tonnes	2 192	1 068	890	661	263
Lithium						
Carbonate	tonnes	115	182	199	248	333
Magnesite and magnesia						
Magnesite	tonnes	4 814	17 019	1 653	933	2 319
Magnesia	tonnes	181 050	188 449	213 760	317 952	248 037
Manganese						
Ores and concentrates	tonnes	95	110	368	383	215
Metal	tonnes	6 497	8 707	12 059	17 543	14 275
Mercury	kilograms	3 900	1 600	2 000	4 400	200
Mica	tonnes	645	512	615	722	857
Molybdenum						
Metal	tonnes	865	599	1 342	1 243	1 502
Natural gas	tonnes	6 220 717	6 922 117	7 593 331	6 988 269	7 136 000
Nickel						
Mattes, sinters etc.	tonnes	369	460	684	443	476
Unwrought (c)	tonnes	6 772	6 903	7 599	7 874	10 511
Scrap	tonnes	632	447	670	605	1 164
Oxides	tonnes	293	312	195	78	82
Crude petroleum	tonnes	7 539 310	7 836 688	7 698 169	7 645 010	7 945 639
Phosphate rock	tonnes	210 010	67 853	94 630	106 018	(d)* 158 000
Platinum group metals						
Platinum and platinum metals	kilograms	9 400	7 200	8 400	1 100	700

Austria

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Potash						
Fertiliser salts	tonnes	23 040	23 685	23 423	...	...
Sulphate	tonnes	18 787	13 377	17 797	13 026	10 432
Chloride	tonnes	145 757	144 234	133 514	123 747	119 347
Other potassic fertilisers	tonnes	3 842	2 336	3 199	26 199	25 862
Rare earths						
Cerium compounds	tonnes	2 034	3 055	2 009	3 431	3 487
Other rare earth compounds	tonnes	3 973	2 685	2 618	3 762	3 589
Metals	tonnes	463	374	403	512	561
Salt	tonnes	350 903	210 736	429 515	143 538	105 335
Sillimanite minerals	tonnes	1 981	2 194	2 100	3 160	2 639
Silver						
Metal	kilograms	127 600	127 900	168 300	151 600	441 900
Sulphur and pyrites						
Pyrites	tonnes	3 126	3 251	3 537	3 809	3 754
Sulphur	tonnes	58 218	60 054	70 350	84 659	89 038
Sulphur, sublimed and precipitated	tonnes	6 339	9 589	10 850	5 556	17 842
Talc	tonnes	49 930	50 768	49 900	58 500	68 797
Tantalum and niobium						
Tantalum	tonnes	64	0	0	70	—
Tin						
Unwrought (c)	tonnes	765	1 926	2 177	2 486	2 679
Scrap	tonnes	170	79	23	10	28
Titanium						
Titanium minerals	tonnes	494	349	575	451	520
Metal	tonnes	943	1 691	1 873	3 851	2 455
Oxides	tonnes	18 612	25 640	27 485	26 856	30 861
Tungsten						
Metal	tonnes	400	825	670	548	435
Carbide	tonnes	136	42	22	...	...
Vanadium						
Vanadiferous residues	tonnes	* 27 000	* 29 000	* 29 000	* 37 000	* 36 000
Ores and concentrates	tonnes	467	1 565	792	543	460
Pentoxide (d)	tonnes	* 1 000	* 300	* 50	...	* —
Zinc						
Unwrought	tonnes	47 866	58 838	61 856	65 391	61 877
Unwrought alloys	tonnes	31 444	28 955	41 002	33 939	33 911
Scrap	tonnes	2 035	609	737	149	210
Zirconium						
Ores and concentrates	tonnes	1 486	1 200	1 285	2 054	2 163

Note(s):-

(a) Including anthracite

(b) Including burnt pyrites

(c) Including alloys

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

Belgium

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel (a) (b)	tonnes	8 787 817	8 330 239	8 636 966	* 8 600 000	* 8 600 000
Crushed rock (a) (c)	tonnes	36 980 382	38 826 735	39 937 651	* 43 000 000	* 4 000 000
White arsenic	tonnes	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Cement, finished	tonnes	6 216 000	6 587 000	6 965 000	6 930 000	7 135 000
Cobalt metal (d)	tonnes	2 947	3 298	2 840	2 825	3 020
Copper, refined	tonnes	383 000	382 900	378 600	394 000	395 800
Pig iron	tonnes	8 224 000	7 254 000	7 516 000	6 577 000	6 977 000
Selenium metal	tonnes	* 200	* 200	* 200	* 200	* 200
Crude steel	tonnes	11 697 000	10 422 000	11 631 000	10 692 000	10 673 000
Kaolin	tonnes	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Lead, refined	tonnes	86 000	103 000	101 000	117 000	104 000
Sulphur and pyrites						
Recovered (e) (f)	tonnes (sulphur content)	371 000	376 000	391 000	395 000	394 000
Tin, smelter	tonnes	8 900	7 700	8 000	8 400	9 200
Slab zinc	tonnes	272 500	222 000	251 000	240 000	239 000

Note(s):-

- (a) Deliveries
- (b) Includes construction sand and silica sand. Excludes gravel
- (c) Includes gravel
- (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	2004	2005	2006	2007	2008
Cement						
Cement clinker	tonnes	847 000	834 000	816 000	817 000	761 800
Cement, finished	tonnes	797 000	767 000	796 000	908 000	907 500
Crude steel	tonnes	2 684 000	2 194 000	2 802 000	2 858 000	2 582 000

Belgium–Luxembourg

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	13 208 283	14 573 270	15 452 434	16 081 634	15 843 526
Aluminium and bauxite						
Bauxite	tonnes	54 734	46 717	53 680	75 904	53 444
Alumina	tonnes	...	10 714	18 151	13 629	4 858
Unwrought	tonnes	266 682	267 811	210 559	164 800	160 684
Unwrought alloys	tonnes	42 010	38 889	29 871	268 119	175 510
Scrap	tonnes	137 374	149 914	186 613	208 272	190 301
Antimony						
Ores and concentrates	tonnes	...	77	360	301	228
Metal	tonnes	493	693	1 580	974	494
Oxide	tonnes	12 443	11 526	12 661	11 643	9 636
Arsenic						
Metallic arsenic	tonnes	10	101	2 542	117	77

Belgium–Luxembourg

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Asbestos	tonnes	3	...	164	17	—
Barytes	tonnes	3 646	4 016	19 004	506	1 381
Bentonite and fuller's earth						
Bentonite	tonnes	22 700	26 049	32 407	18 504	34 034
Fuller's earth	tonnes	501	501	303	...	...
Bismuth						
Metal	tonnes	0	* —	* —	355	162
Bromine	kilograms	21 275 800	19 124 000	20 738 100	17 430 000	20 963 000
Cadmium						
Metal	tonnes	746	639	298	181	442
Sulphide	tonnes	15	29	7	...	...
Cement						
Cement clinkers	tonnes	842 257	833 257	544 183	1 078 149	1 075 183
Portland cement	tonnes	1 598 742	1 715 979	1 811 884	2 087 094	2 069 807
Other cement	tonnes	616 066	612 642	609 236	606 807	821 103
Chromium						
Ores and concentrates	tonnes	2 433	10 777	14 485	11 405	48 086
Metal	tonnes	852	782	520	635	772
Coal						
Anthracite	tonnes	1 399 280	1 463 646	1 521 523	1 454 115	1 400 377
Other coal	tonnes	2 273 223	2 948 838	3 734 518	3 670 706	4 416 217
Briquettes	tonnes	1 454	11 682	7 923	8 214	11 331
Cobalt						
Ore	tonnes	1 064	543	197	1 204	1 112
Metal	tonnes	(a)* 3 900	(a)* 3 100	4 329	5 104	4 393
Oxides (a)	tonnes	* 7 300	* 5 500	* 5 800	* 6 000	* 7 000
Copper						
Ores and concentrates	tonnes	1 478	1 887	1 778	1 061	2 155
Matte and cement	tonnes	493	401	1 026	1 104	4 139
Unwrought, unrefined	tonnes	19 942	4 499	8 833	10 730	10 534
Unwrought, refined	tonnes	169 556	241 363	236 804	199 650	257 907
Unwrought alloys	tonnes	13 556	14 463	13 419	15 081	12 929
Scrap	tonnes	169 397	177 787	163 418	194 666	164 502
Diamond						
Unsorted	carats	...	£785 000	£889 000	...	£503 000
Gem, rough	carats	154 000 000	147 000 000	128 000 000	135 000 000	99 500 000
Gem, cut	carats	6 000 000	5 500 000	4 500 000	8 035 000	5 950 000
Industrial	carats	7 000 000	5 500 000	2 000 000	5 000 000	500 000
Dust	carats	42 500 000	40 000 000	35 500 000	27 000 000	23 000 000
Diatomite	tonnes	1 856	1 330	1 949	1 145	2 633
Fluorspar	tonnes	4 208	26 395	110 965	105 822	156 066
Gold						
Metal	kilograms	1 200	100	300	16 200	56 100
Waste and scrap	kilograms	...	458 400	438 000	128 400	134 500
Graphite	tonnes	581	834	460	438	3 815
Gypsum						
Crude	tonnes	91 110	46 691	62 303	54 953	89 627
Calcined	tonnes	175 496	2 709	4 707	4 271	4 369
Iodine	kilograms	3 646 100	3 460 200	3 272 600	2 633 100	3 560 100
Iron ore	tonnes	23 450	81 560	43 555	41 440	85 701
Iron, steel and ferro-alloys						
Pig iron	tonnes	225 486	201 577	230 490	275 411	283 034
Sponge and powder	tonnes	29 127	15 850	19 750	36 997	20 773
Ferro-chrome	tonnes	32 998	31 851	38 401	54 201	38 927
Ferro-silico-chrome	tonnes	7 214	9 107	17 169	15 141	12 463
Ferro-silico-magnesium	tonnes	39	11	52	6 744	6 172
Ferro-manganese	tonnes	9 621	11 674	11 122	16 126	24 024
Ferro-silico-manganese	tonnes	41 307	29 858	41 422	52 431	40 777
Ferro-molybdenum	tonnes	19 219	22 420	22 679	20 153	17 759
Ferro-silicon	tonnes	31 000	21 812	39 501	68 385	54 905
Other ferro-alloys	tonnes	6 523	6 689	6 498	1 988	5 401
Silicon metal	tonnes	6 078	9 095	6 765	5 869	6 673
Ingots, blooms, billets	tonnes	368 589	639 936	859 247	1 089 364	958 406
Scrap	tonnes	2 851 040	2 712 683	3 052 438	3 268 578	3 754 867
Kaolin	tonnes	664 743	777 451	628 479	612 062	1 030 344

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Lead						
Ores and concentrates	tonnes	109 580	96 610	113 576	96 059	114 105
Unwrought	tonnes	93 316	110 372	98 077	111 344	95 883
Scrap	tonnes	12 736	9 142	15 071	20 780	18 639
Lithium						
Oxides	tonnes	1 837	1 545	1 236	1 370	1 281
Carbonate	tonnes	10 053	4 999	5 107	4 915	3 567
Magnesite and magnesia						
Magnesite	tonnes	512	575	1 520	1 958	2 392
Magnesia	tonnes	53 755	52 665	75 011	64 293	81 186
Manganese						
Ores and concentrates	tonnes	11 300	10 648	5 138	15 819	8 578
Metal	tonnes	1 377	1 826	7 045	4 060	1 947
Mercury	kilograms	1 300	8 800	42 300	3 300	110 800
Mica	tonnes	1 635	3 226	3 225	3 226	2 127
Molybdenum						
Ores and concentrates	tonnes	16 219	17 683	24 320	22 340	11 314
Metal	tonnes	221	342	194	556	243
Oxides	tonnes	571	687	905	829	379
Natural gas	tonnes	19 331 793	17 889 507	39 448 874	20 807 227	59 248 950
Nickel						
Ores and concentrates	tonnes	...	853	877	1 423	2 750
Mattes, sinters etc.	tonnes	768	209	559	68	115
Unwrought	tonnes	16 290	13 376	14 324	15 642	13 298
Unwrought alloys	tonnes	2 843	2 510	1 994	2 401	2 152
Scrap	tonnes	1 694	1 008	3 656	4 954	2 872
Oxides	tonnes	772	702	685	476	1 196
Crude petroleum	tonnes	2 967 608	2 616 977	2 833 897	2 422 211	2 496 349
Phosphates	tonnes	101 115	108 238	82 232	115 628	84 619
Platinum metals						
Platinum	kilograms	1 000	700	2 600	4 100	7 800
Platinum metals	kilograms	4 400	2 100	3 000	6 400	6 400
Waste and scrap	kilograms	245 596	305 700	934 000	592 300	649 800
Potash						
Fertiliser salts	tonnes	487	158	43	...	...
Sulphate (a)	tonnes	* 685 000	* 628 000	* 424 000	* 433 000	* 311 000
Chloride	tonnes	141 056	116 930	102 641	137 689	84 791
Other potassic fertilisers	tonnes	8 109	9 819	10 560	6 043	7 034
Rare earths						
Rare earth compounds	tonnes	721	413	302	802	408
Metals	tonnes	237	187	444	253	299
Salt	tonnes	105 680	121 103	94 196	55 208	61 231
Sillimanite	tonnes	49 319	77 463	48 825	47 141	62 423
Silver						
Ores and concentrates	kilograms	29 800	7 200	8 000	47 600	33 100
Metal	kilograms	24 100	12 600	45 200	31 200	42 000
Sulphur and pyrites						
Sulphur	tonnes	36 824	47 927	38 494	18 393	73 317
Sulphur, sublimed and precipitated	tonnes	338	290	465	531	368
Talc	tonnes	128 120	168 900	144 081	165 105	139 619
Tantalum and niobium						
Tantalum	tonnes	...	...	0	3	26
Tin						
Concentrates	tonnes	186	286	118	68	161
Unwrought	tonnes	8 803	6 814	1 633	2 734	7 274
Unwrought alloys	tonnes	184	388	7 421	7 072	2 448
Scrap	tonnes	607	362	216	148	233
Titanium						
Titanium minerals	tonnes	139 393	131 597	100 498	129 722	100 210
Titanium slag	tonnes	...	4 219	20 830	3 209	5 085
Metal	tonnes	1 031	1 093	1 490	2 074	1 174
Oxides	tonnes	397 481	366 632	401 614	422 885	401 906
Tungsten						
Metal	tonnes	404	452	484	387	405
Carbide	tonnes	39	25	62	54	36
Vanadium						
Ores and concentrates	tonnes	1 456	2 600	791	297	327

Belgium–Luxembourg

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Zinc						
Ores and concentrates	tonnes	384 652	511 730	540 810	479 825	735 050
Unwrought	tonnes	136 768	10 058	13 275	22 114	8 379
Scrap	tonnes	26 546	37 754	57 851	42 673	15 900
Zirconium						
Concentrates	tonnes	11 105	22 965	27 054	23 645	16 056
Metal	tonnes	170	222	144	251	157

Note(s)

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

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	20 219 032	20 831 220	22 303 782	23 810 336	27 170 472
Aluminium and bauxite						
Bauxite	tonnes	82 208	87 376	59 874	85 963	88 894
Alumina	tonnes	12 942	10 879	28 030	28 985	14 918
Alumina hydrate	tonnes	33 798	37 831	45 723	46 815	36 100
Unwrought	tonnes	513 835	497 013	451 309	485 128	372 140
Unwrought alloys	tonnes	235 761	265 937	286 345	329 777	245 870
Scrap	tonnes	157 812	158 799	197 942	380 317	320 354
Antimony						
Metal	tonnes	12 225	10 722	11 543	11 915	8 851
Oxide	tonnes	1 708	1 735	2 524	2 342	920
Arsenic						
Metallic arsenic	tonnes	95	164	105	466	65
Asbestos						
Unmanufactured	tonnes	64	13	200	200	6
Barytes	tonnes	3 255	3 432	7 953	35 785	33 685
Bentonite and fuller's earth						
Bentonite	tonnes	35 509	45 282	48 871	42 816	74 621
Fuller's earth	tonnes	11 164	8 028	7 036	...	...
Bismuth						
Metal	tonnes	20	27	109	111	190
Bromine	kilograms	23 466 200	25 108 000	24 553 300	21 768 500	26 540 000
Cadmium						
Metal	tonnes	4 064	4 779	3 948	5 038	5 511
Oxide	tonnes	61	26	13	2	10
Sulphide	tonnes	—	29	13	...	...
Cement						
Cement clinkers	tonnes	553 911	442 986	545 575	798 670	664 109
Portland cement	tonnes	956 062	898 871	897 315	892 981	988 208
Other	tonnes	314 515	275 177	277 825	391 850	315 620
Chromium						
Ores and concentrates	tonnes	6 094	18 464	22 053	20 761	56 183
Metal	tonnes	821	1 245	1 264	1 188	1 114
Coal						
Anthracite	tonnes	4 134 160	3 293 344	2 608 840	2 864 554	3 999 349
Other	tonnes	9 728 235	8 997 265	10 534 424	9 679 689	10 252 899
Lignite	tonnes	232 809	229 192	279 982	278 700	372 271
Briquettes	tonnes	3 924	14 120	29 848	26 260	21 776
Cobalt						
Ores and concentrates	tonnes	455	263	107	153	222
Metal (a)	tonnes	* 7 000	* 4 700	* 4 300	* 6 600	* 3 600
Oxides	tonnes	1 103	(b)* 1 300	(b)* 600	(b)* 600	(b)* 600
Copper						
Ores and concentrates	tonnes	1 003	5 225	17 263	21 137	12 039
Matte and cement	tonnes	4 801	370	1 112	6 360	4 485
Unwrought, unrefined	tonnes	291 111	237 645	267 505	224 439	206 660
Unwrought, refined	tonnes	17 318	9 515	21 818	28 746	54 463
Unwrought alloys	tonnes	1 510	1 906	1 083	3 324	1 898
Scrap	tonnes	256 504	257 738	300 260	328 676	258 551

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Diamond						
Unsorted	carats	£41 932 000	£37 971 000	£38 530 000	£32 612 000	£27 166 000
Gem, rough	carats	121 500 000	134 500 000	67 500 000	63 500 000	55 000 000
Gem, cut	carats	7 500 000	6 500 000	6 000 000	29 500 000	91 500 000
Industrial	carats	£54 551 000	£46 159 000	£44 325 000	£35 072 000	£41 557 000
Dust	carats	£8 250 000	£8 989 000	£7 464 000	£9 606 000	£13 140 000
Diatomite	tonnes	9 052	8 192	7 450	8 633	8 506
Feldspar	tonnes	30 969	25 876	21 483	26 151	34 988
Fluorspar	tonnes	10 571	70 149	123 392	130 437	170 562
Gold						
Metal	kilograms	12 400	14 400	9 600	18 300	53 000
Waste and scrap	kilograms	(a)* 109 000	(a)* 34 000	147 099	362 364	(a)* 124 000
Graphite	tonnes	3 301	3 040	1 836	2 323	3 625
Gypsum						
Crude	tonnes	713 502	768 702	811 923	1 118 788	1 232 112
Calcined	tonnes	366 504	460 067	449 433	521 942	531 049
Iodine	kilograms	3 419 800	3 332 800	3 513 200	2 774 500	3 586 200
Iron ore (b)	tonnes	10 655 764	9 384 885	11 387 178	9 583 857	12 337 572
Iron, steel and ferro-alloys						
Pig iron	tonnes	396 174	330 709	560 116	552 212	548 129
Sponge and powder	tonnes	107 639	48 915	102 543	33 539	22 021
Ferro-chrome	tonnes	215 638	220 896	342 280	452 118	378 018
Ferro-silico-chrome	tonnes	7 435	9 587	19 190	17 149	15 483
Ferro-silico-magnesium	tonnes	993	1 656	2 040	12 168	10 433
Ferro-manganese	tonnes	49 305	60 564	54 402	65 987	89 088
Ferro-silico-manganese	tonnes	56 622	60 454	69 526	149 121	92 194
Ferro-molybdenum	tonnes	4 317	5 199	5 929	5 405	2 339
Ferro-nickel	tonnes	51 796	61 454	73 384	90 808	89 430
Ferro-niobium	tonnes	712	849	936	3 252	2 003
Ferro-phosphorus	tonnes	1 237	1 700	1 607	2 185	10 421
Ferro-silicon	tonnes	93 591	79 901	109 389	150 254	126 700
Ferro-titanium and ferro-silico-titanium	tonnes	1 677	2 141	3 016	3 553	5 595
Ferro-vanadium	tonnes	568	650	338	615	693
Other ferro-alloys	tonnes	7 366	7 499	6 887	—	—
Silicon metal	tonnes	15 136	18 563	20 117	17 307	20 098
Ingots, blooms, billets	tonnes	2 814 705	3 452 850	2 876 977	3 500 081	3 540 429
Scrap	tonnes	4 413 160	3 761 788	4 297 928	7 416 312	8 095 587
Kaolin	tonnes	1 023 999	962 536	868 255	862 714	1 476 705
Lead						
Ores and concentrates	tonnes	117 597	134 300	120 136	108 165	97 474
Unwrought	tonnes	27 042	18 807	15 081	36 620	30 543
Scrap	tonnes	26 904	26 699	41 070	55 153	25 873
Lithium						
Oxides	tonnes	2 250	2 014	1 201	1 784	1 851
Carbonate	tonnes	6 108	6 205	5 357	5 895	4 414
Magnesite and magnesia						
Magnesite	tonnes	505	767	3 872	4 326	4 064
Magnesia	tonnes	65 125	84 730	152 330	101 911	141 283
Manganese						
Ores and concentrates	tonnes	73 953	66 840	65 462	79 022	83 909
Metal	tonnes	2 466	4 150	10 114	6 403	4 425
Mercury	kilograms	54 682	18 658	44 810	8 369	133 278
Mica						
Unmanufactured	tonnes	1 588	913	470	1 204	2 155
Ground	tonnes	4 311	2 996	2 646	3 461	5 410
Waste	tonnes	...	...	...	4 364	2 107
Molybdenum						
Ores and concentrates	tonnes	45 922	54 452	47 122	43 932	37 964
Metal	tonnes	277	383	490	752	360
Oxides	tonnes	1 519	2 072	2 618	2 796	2 075
Natural gas	tonnes	33 170 346	31 896 566	32 123 464	29 397 014	29 615 926
Nickel						
Mattes, sinters etc.	tonnes	162	214	203	1 194	1 250
Unwrought	tonnes	42 387	41 364	51 130	37 554	29 492
Unwrought alloys	tonnes	979	822	483	427	734
Scrap	tonnes	1 644	1 221	271	9 946	566
Oxides	tonnes	366	324	349	241	618

Belgium–Luxembourg

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Crude petroleum	tonnes	34 210 727	34 417 017	33 843 960	34 847 067	35 556 838
Phosphate rock	tonnes	1 545 478	1 688 029	1 299 125	1 512 076	1 458 336
Platinum group metals						
Platinum	kilograms	20 865	88 976	6 421	13 300	28 600
Platinum metals	kilograms	2 080	2 873	4 061	2 000	100
Potash						
Fertiliser salts	tonnes	26 328	17 331	2 628	...	...
Sulphate	tonnes	212 176	260 839	2 839	5 073	7 317
Chloride	tonnes	1 276 732	1 211 640	576 972	587 275	559 104
Other potassic fertilisers	tonnes	22 357	17 698	7 693	612	825
Rare earths						
Cerium compounds	tonnes	615	411	280	490	259
Other rare earth compounds	tonnes	287	139	138	353	142
Ferro-cerium and other pyrophoric alloys	tonnes	7	5	5	2	3
Metals	tonnes	226	252	443	297	259
Salt	tonnes	1 236 192	1 315 385	2 275 674	1 230 983	1 220 421
Sillimanite minerals	tonnes	53 146	81 538	50 726	52 899	68 986
Silver						
Ores and concentrates	kilograms	1 090	625	536 600	195 900	254 200
Metal	kilograms	476 800	175 200	258 700	443 200	354 200
Sulphur and pyrites						
Sulphur, crude	tonnes	152 830	167 624	...	...	265 363
Sulphur, refined	tonnes	305 518	322 649	(c) 574 515	(c) 506 662	351 577
Sulphur, sublimed and precipitated	tonnes	28	127	156	311	1 852
Talc	tonnes	135 046	224 624	186 227	202 593	194 833
Tantalum and niobium						
Tantalum	tonnes	20	1	0	3	3
Tin						
Ores and concentrates	tonnes	329	377	154	17	318
Unwrought	tonnes	1 686	1 210	1 312	1 657	1 112
Unwrought alloys	tonnes	3 421	1 284	1 368	2 719	2 235
Scrap	tonnes	5 726	1 382	4 866	3 907	2 422
Titanium						
Ilmenite	tonnes	—	—	720	—	1 337
Other titanium minerals	tonnes	165 288	165 711	156 771	221 173	203 355
Metal	tonnes	1 868	2 289	1 857	4 139	3 904
Oxides	tonnes	339 444	291 670	314 131	145 929	133 378
Tungsten						
Metal	tonnes	372	340	454	513	426
Carbide	tonnes	42	42	64	1 182	1 028
Vanadium						
Ores and concentrates	tonnes	1 116	894	197	162	202
Pentoxide	tonnes	3	267	12	64	38
Metal	tonnes	32	60	67	...	...
Zinc						
Ores and concentrates	tonnes	1 410 560	1 182 083	1 109 923	1 100 875	* 1 100 000
Unwrought	tonnes	261 216	46 505	73 894	218 660	211 576
Unwrought alloys	tonnes	13 872	35 653	24 414	13 475	8 612
Scrap	tonnes	42 534	44 890	44 221	60 039	40 657
Zirconium						
Ores and concentrates	tonnes	3 991	14 504	18 763	17 593	17 337
Metal	tonnes	534	605	556	469	433

Note(s):-

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

(b) Including burnt pyrites

(c) Including crude

Bulgaria

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	9 719 350	12 835 622	15 289 051	17 607 212	17 033 156
Crushed rock	tonnes	5 447 430	8 121 646	8 889 017	12 199 339	14 947 808
Barytes	tonnes	75 400	76 600	74 500	50 900	40 100
Bentonite and fuller's earth						
Bentonite	tonnes	224 900	181 200	134 500	99 000	178 700
Bismuth, mine	tonnes (metal content)	* 40	* 40	* 45	* 45	* 45
Cadmium	tonnes	356	319	320	318	376
Cement						
Cement clinker	tonnes	...	402 684	400 315	* 400 000	* 400 000
Cement, finished	tonnes	* 2 920 000	3 559 420	4 003 664	* 4 290 000	4 894 903
Coal						
Anthracite and bituminous	tonnes	170 000	—	—	—	—
Lignite	tonnes	23 384 500	22 146 100	22 749 500	25 325 000	26 007 800
Brown coal	tonnes	2 724 200	2 469 200	2 556 900	2 833 500	2 643 200
Copper, mine	tonnes (metal content)	79 600	82 700	99 000	99 000	93 000
Copper, smelter	tonnes	215 800	225 000	217 000	217 600	257 100
Copper, refined	tonnes	55 300	60 100	65 600	70 000	126 700
Feldspar	tonnes	86 608	72 867	93 091	* 90 000	* 90 000
Gold, mine	kilograms	2 431	3 868	3 818	3 964	4 160
Gypsum	tonnes	175 900	187 700	215 800	234 300	21 200
Iron ore	tonnes	82 700	—	—	—	—
Pig iron	tonnes	1 158 000	1 150 000	1 147 000	1 069 000	441 000
Crude steel	tonnes	2 106 000	1 969 000	2 102 000	1 909 000	1 330 000
Ferro-alloys						
Ferro-silicon	tonnes	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Kaolin	tonnes	* 190 000	* 200 000	* 240 000	* 240 000	* 220 000
Lead, mine	tonnes (metal content)	* 19 400	* 18 500	* 16 000	* 17 600	* 15 800
Lead, refined	tonnes	66 000	81 000	76 000	87 000	90 900
Manganese ore	tonnes	27 800	38 500	20 500	27 900	39 100
Perlite	tonnes	8 500	15 300	4 500	13 900	7 400
Crude petroleum	tonnes	33 100	30 000	27 500	25 700	23 000
Natural gas	million m ³	333	573	519	295	218
Salt	tonnes	1 900 000	1 900 000	2 000 000	2 000 000	2 100 000
Silver, mine	kilograms (metal content)	* 45 000	* 55 000	* 65 000	* 55 000	* 55 000
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	301 000	312 000	340 000	359 000	352 000
Recovered (b)	tonnes (sulphur content)	25 000	30 000	35 000	35 000	30 000
Zinc, mine	tonnes (metal content)	* 12 700	* 12 000	* 10 400	* 11 500	* 10 300
Slab Zinc	tonnes	101 500	92 500	85 900	98 100	101 700

Note(s):-

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

(a) From metal sulphide processing

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	384 420	160 032	282 018	330 088	268 120
Aluminium and bauxite						
Unwrought alloys	tonnes	4 616	5 254	11 692	10 290	8 931
Scrap	tonnes	22 036	21 902	29 245	23 577	18 478
Barytes	tonnes	75 393	76 644	74 523	50 922	46 907
Bentonite and fuller's earth						
Bentonite	tonnes	95 435	76 614	89 531	74 412	103 106
Cadmium						
Metal	tonnes	378	316	369	434	374

Bulgaria

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Cement						
Cement clinkers	tonnes	392 414	338 505	293 031	353 996	120 588
Portland cement	tonnes	460 281	455 824	334 013	52 803	130 932
Other cement	tonnes	50	27	40	1 067	22 589
Coal						
Hard coal (a)	tonnes	9 513	3 920	5 372	17 358	36 095
Copper						
Ores and concentrates	tonnes	78 563	124 717	193 389	168 155	105 889
Matte and cement	tonnes	6 718	5 750	4 818	6 335	3 559
Unwrought	tonnes	219 415	219 009	210 520	185 012	252 018
Scrap	tonnes	9 480	8 244	13 163	11 590	10 547
Feldspar	tonnes	1 131	452	6 159	22 519	16 912
Gypsum						
Crude and calcined	tonnes	2 231	2 347	2 439	1 439	787
Iodine	kilograms	...	1 199	781	51 610	200
Iron, steel and ferro-alloys						
Pig iron	tonnes	114	51	44 549	62 032	23 553
Ferro-silico-manganese	tonnes	4 034	1 501	3 638	6 845	288
Ferro-silicon	tonnes	1 329	1 499	3 345	4 972	2 076
Other ferro-alloys	tonnes	283	72	180	2 072	550
Silicon metal	tonnes	11	15	11	2 374	46
Ingots, blooms, billets	tonnes	277 332	97 757	163 020	135 710	85 466
Scrap	tonnes	769 559	784 778	722 261	677 347	740 414
Kaolin	tonnes	114 399	124 899	149 559	160 372	139 069
Lead						
Ores and concentrates	tonnes	10 370	6 165	10 900	23 417	9 555
Unwrought	tonnes	54 686	69 825	65 400	66 384	80 972
Manganese						
Ores and concentrates	tonnes	42 122	53 559	25 595	19 335	17 369
Molybdenum						
Metal	tonnes	546	105	87	99	123
Phosphates	tonnes	458	265	...	—	91
Platinum metals						
Waste and scrap (b)	kilograms	* 24 000	* 31 400	* 73 200	* 94 700	* 1 400
Salt	tonnes	8 586	10 090	16 020	13 943	8 239
Sulphur and pyrites						
Sulphur	tonnes	20 103	25 019	31 737	33 039	28 993
Titanium						
Metal	tonnes	27	9	4	28	835
Zinc						
Ores and concentrates	tonnes	...	...	492	4 384	7 982
Unwrought (c)	tonnes	89 287	82 902	227 543	90 573	96 678
Scrap	tonnes	1 194	1 576	1 854	1 511	1 293

Note(s)

(a) Including anthracite

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

(c) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Aluminium and bauxite						
Alumina and alumina hydrate	tonnes	1 663	1 401	2 039	2 368	1 370
Unwrought	tonnes	23 579	25 562	46 154	39 850	42 738
Unwrought alloys	tonnes	11 936	15 185	20 490	19 617	18 557
Scrap	tonnes	435	1 449	2 179	3 554	4 028
Antimony						
Metal	tonnes	47	...	34	100	35
Arsenic						
Metallic arsenic	tonnes	18	5	10	30	12
Asbestos						
Unmanufactured	tonnes	196	...	...	20	...

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Bentonite and fuller's earth						
Bentonite	tonnes	708	1 178	1 455	2 979	3 386
Fuller's earth	tonnes	381	422	537	...	...
Cement						
Cement clinkers	tonnes	23 048	180 254	586 194	123 806	248 737
Portland cement	tonnes	51 493	23 787	9 127	5 690	13 645
Other	tonnes	920	1 128	1 665	1 829	1 110
Chromium						
Ores and concentrates	tonnes	812	997	1 440	969	793
Coal						
Anthracite	tonnes	1 464 605	2 016 911	2 170 631	2 229 619	2 841 458
Other	tonnes	2 784 512	2 270 525	2 221 526	2 415 165	2 054 649
Briquettes	tonnes	2 486	38	39	112 775	66 678
Copper						
Ores and concentrates	tonnes	561 613	632 255	581 055	539 325	609 258
Matte and cement	tonnes	383	562	5 003	10 025	34 997
Unwrought	tonnes	8 599	18 613	19 735	28 226	30 422
Scrap	tonnes	2 935	5 094	7 784	12 899	23 856
Diatomite	tonnes	1 292	1 312	1 156	436	587
Feldspar	tonnes	30 805	34 723	40 416	35 851	31 346
Fluorspar	tonnes	1 882	1 210	2 321	1 326	651
Graphite	tonnes	420	319	433	250	158
Gypsum						
Crude	tonnes	49 426	18 684	10 088	8 240	12 223
Calcined	tonnes	35 558	49 163	56 869	58 880	70 280
Iodine	kilograms	6 755	5 080	3 990	6 500	2 900
Iron ore						
Iron ore	tonnes	1 570 605	1 050 925	1 305 110	919 785	208 559
Burnt pyrites	tonnes	357 898	437 710	450 004	464 580	188 923
Iron, steel and ferro-alloys						
Pig iron	tonnes	14 228	19 624	15 278	26 932	27 941
Sponge and powder	tonnes	446	384	542	31 306	1 282
Ferro-chrome	tonnes	1 026	836	1 088	916	656
Ferro-manganese	tonnes	5 116	5 540	6 133	7 981	4 206
Ferro-silico-manganese	tonnes	459	666	1 885	3 336	4 325
Ferro-silicon	tonnes	4 564	3 897	4 410	2 977	3 331
Other ferro-alloys	tonnes	1 392	1 140	1 789	2 390	1 906
Silicon metal	tonnes	663	585	9 733	873	763
Ingots, blooms, billets	tonnes	280 895	275 001	417 485	462 348	567 381
Scrap	tonnes	90 491	108 450	188 698	295 555	237 055
Kaolin	tonnes	75 425	76 231	91 831	29 717	28 748
Lead						
Ores and concentrates	tonnes	74 163	83 398	100 736	92 929	119 522
Unwrought	tonnes	5 558	10 723	11 305	15 854	15 529
Scrap	tonnes	441	1 227	1 346	3 338	5 830
Magnesite and magnesia	tonnes	6 354	8 500	6 551	4 670	6 296
Manganese						
Ores and concentrates	tonnes	46 768	13 631	17 367	27 602	—
Molybdenum						
Metal	tonnes	53	108	73	47	15
Nickel						
Unwrought (a)	tonnes	250	202	205	195	204
Crude petroleum	tonnes	(b)* 2 664 000	(b)* 3 752 000	(b)* 4 866 000	7 162 499	7 262 658
Phosphate rock	tonnes	515 889	543 637	449 874	462 247	534 734
Platinum group metals						
Platinum and platinum metals	kilograms	...	366	31	54	4 952
Potash						
Potassic fertilizers	tonnes	4 725	7 794	9 102	4 845	4 633
Salt	tonnes	138 631	165 727	181 801	71 848	103 007
Sulphur and pyrites						
Sulphur	tonnes	903	1 076	767	1 039	487
Talc	tonnes	487	599	626	688	1 048
Tin						
Unwrought (a)	tonnes	39	51	278	51	69
Titanium						
Titanium minerals	tonnes	407	1 287	300	712	42
Oxides	tonnes	3 332	3 959	4 750	5 398	5 955

Bulgaria

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Zinc						
Ores and concentrates	tonnes	167 098	149 735	198 504	208 313	146 655
Unwrought (a)	tonnes	4 285	1 450	9 994	3 330	5 095
Zirconium						
Ores and concentrates	tonnes	1 149	1 589	1 421	1 357	1 081

Note(s):-

(a) Including alloys

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

Croatia

Production

Commodity	Units	2004	2005	2006	2007	2008
Bentonite and fuller's earth						
Bentonite	tonnes	15 674	17 391	16 410	19 578	19 759
Gypsum	tonnes	193 263	196 133	170 351	170 721	* 170 000
Crude steel	tonnes	85 947	73 640	80 516	76 252	121 759
Crude petroleum	tonnes	1 037 787	980 486	950 859	911 207	867 027
Natural gas	million m ³	2 198	2 384	2 714	2 892	2 625
Salt	tonnes	32 723	36 970	29 589	32 536	3 956
Sulphur and pyrites (a)	tonnes (sulphur content)	9 000	9 000	7 000	9 000	7 000

Note(s):-

(a) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	2 534 177	1 908 732	2 390 517	3 334 229	2 950 159
Aluminium and bauxite						
Scrap	tonnes	12 024	15 927	19 832	20 886	17 769
Cement						
Cement clinkers	tonnes	44 297	196 594	244 043	310 378	235 377
Portland cement	tonnes	1 039 442	1 254 309	1 282 560	855 579	667 503
Other cement	tonnes	95 310	92 074	89 957	94 185	468 597
Copper						
Scrap	tonnes	9 613	10 814	12 105	12 378	10 884
Gypsum						
Crude and calcined	tonnes	5 796	4 890	6 349	4 808	4 738
Iron, steel and ferro-alloys						
Scrap	tonnes	279 852	318 840	398 070	427 540	357 487
Kaolin	tonnes	351	15	35	32	51
Lead						
Scrap	tonnes	853	794	1 057	3 590	1 872
Natural gas	tonnes	469 325	601 267	871 768	540 782	457 192
Platinum metals						
Waste and scrap	kilograms	49 784	76 039	27 719	18 314	27 018
Salt	tonnes	9 226	5 688	9 759	3 986	4 530
Silver						
Metal	kilograms	733	352	324	461	163
Sulphur and pyrites						
Sulphur	tonnes	8 505	8 028	6 606	8 614	7 604
Titanium						
Oxides	tonnes	60	155	419	489	417
Zinc						
Scrap	tonnes	325	417	511	683	700

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	2 404 091	4 603 358	3 867 559	4 583 241	4 618 579
Aluminium and bauxite						
Bauxite	tonnes	48 302	112 007	80 441	115 367	107 237
Alumina and alumina hydrate	tonnes	1 885	1 672	1 405	2 431	2 440
Unwrought	tonnes	47 437	56 509	53 021	54 067	57 828
Unwrought alloys	tonnes	9 672	14 915	18 893	22 039	20 786
Asbestos						
Unmanufactured	tonnes	3 251	2 429	...	...	...
Barytes	tonnes	1 878	715	893	98	1 525

Croatia

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Bentonite and fuller's earth						
Bentonite	tonnes	2 181	1 897	2 053	7 633	39 289
Fuller's earth	tonnes	323	136	260	...	...
Bismuth						
Metal	tonnes	3	10	5	10	8
Cement						
Cement clinkers	tonnes	61 672	25	...	27 488	50
Portland cement	tonnes	214 400	379 711	447 202	340 112	393 886
Other	tonnes	287	1 569	5 547	5 242	7 447
Chromium						
Ores and concentrates	tonnes	459	537	615	584	568
Metal	tonnes	279	54	51	280	394
Coal						
Hard coal (a)	tonnes	1 218 407	957 899	1 082 446	1 101 803	1 189 379
Lignite	tonnes	79 921	77 959	78 226	62 789	58 417
Briquettes	tonnes	2 981	4 734	6 084	2 604	2 796
Diatomite	tonnes	703	495	633	610	511
Feldspar	tonnes	13 713	17 011	15 986	16 212	15 983
Fluorspar	tonnes	204	143	124	149	289
Gold						
Metal	kilograms	1 156	1 083	992	1 608	693
Gypsum						
Crude	tonnes	14 974	41 665	25 095	48 775	38 120
Calcined	tonnes	37 499	33 316	37 052	37 034	34 224
Iron ore (b)	tonnes	10 758	12 605	12 604	14 444	17 177
Iron, steel and ferro-alloys						
Pig iron	tonnes	15 175	15 270	16 994	17 011	15 031
Ferro-alloys	tonnes	2 980	2 893	3 031	3 027	4 790
Ingots, blooms, billets	tonnes	3 562	12 421	27 291	20 953	20 077
Scrap	tonnes	7 156	18 407	17 563	29 553	19 400
Kaolin	tonnes	6 472	7 941	16 423	21 845	24 009
Lead						
Unwrought	tonnes	1 460	1 492	1 415	911	680
Magnesite and magnesia	tonnes	1 479	1 647	1 564	1 872	1 682
Manganese						
Metal	tonnes	93	93	89	586	64
Natural gas	tonnes	979 394	1 088 406	1 085 554	700 955	855 326
Crude petroleum	tonnes	4 197 554	3 855 070	3 778 918	4 285 565	3 476 266
Phosphate rock	tonnes	245 224	272 005	317 571	327 936	328 599
Platinum group metals						
Platinum and platinum metals	kilograms	17 184	12 320	107	171	152
Potash						
Chloride	tonnes	168 015	131 567	149 424	159 288	157 994
Other potassic fertilisers	tonnes	66	2 083	3 594	3 563	2 958
Salt	tonnes	165 277	226 931	193 911	104 066	176 408
Silver						
Metal	kilograms	3 340	3 837	5 043	3 684	3 293
Sulphur and pyrites						
Sulphur	tonnes	63 606	70 897	86 431	71 965	98 785
Sulphur, sublimed and precipitated	tonnes	4 817	1 923	3 492	2 425	4
Talc	tonnes	1 726	1 378	1 753	1 985	1 709
Titanium						
Oxides	tonnes	2 401	2 561	2 827	3 244	2 989
Zinc						
Unwrought (c)	tonnes	3 516	3 329	11 506	4 674	4 656

Note(s):-

- (a) Including anthracite
(b) Including burnt pyrites
(c) Including alloys

Cyprus

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Crushed rock	tonnes	11 600 000	12 064 112	12 198 513	13 129 470	14 174 480
Bentonite and fuller's earth						
Bentonite	tonnes	155 717	172 366	150 620	154 655	155 125
Cement						
Cement clinker	tonnes	68 865	37 891	97 846	—	—
Cement, finished	tonnes	1 688 917	1 804 645	1 786 488	1 872 531	1 913 620
Copper, mine	tonnes (metal content)	—	—	900	2 900	3 000
Copper, refined	tonnes	1 344	—	880	3 012	2 986
Gypsum	tonnes	255 000	215 500	270 000	330 000	412 000

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	10	55	5 118	148 994	124 576
Aluminium and bauxite						
Scrap	tonnes	3 699	4 578	4 880	4 745	4 409
Bentonite and fuller's earth						
Bentonite	tonnes	81 596	85 724	159 472	156 871	92 089
Cement						
Cement clinkers	tonnes	31 215	37 891	91 635	0	...
Portland cement	tonnes	146 669	219 460	155 271	51 022	...
Copper						
Unwrought	tonnes	1 322	...	879	3 006	2 986
Scrap	tonnes	2 221	2 548	2 684	2 122	2 381
Gypsum						
Crude and calcined	tonnes	215 297	73 741	152 621	203 109	279 902
Iron, steel and ferro-alloys						
Scrap	tonnes	46 316	55 240	65 998	63 662	72 106
Lead						
Scrap	tonnes	1 711	1 212	129	488	...
Phosphates	tonnes	...	...	...	...	2 960
Salt	tonnes	559	635	521	769	956
Zinc						
Scrap	tonnes	80	63	69	1 746	...

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	(a)* 8 400	5 921	11 605	15 497	28 990
Aluminium and bauxite						
Unwrought alloys	tonnes	10 858	9 898	12 481	13 868	13 408
Bentonite and fuller's earth						
Bentonite	tonnes	18 052	3 057	9 063	10 556	12 496
Cement						
Cement clinkers	tonnes	28 622	43 375	17 819	17 498	66 787
Portland cement	tonnes	2 092	2 339	1 241	1 017	29 311
Coal						
Hard coal (b)	tonnes	108	3	23 473	56 896	46 258
Briquettes	tonnes	1 028	935	869	844	988
Diamond						
Gem, cut	carats	£788 000	£690 000	£1 387 000	£1 311 000	£1 564 000
Industrial	carats	£1 161 000	£750 000	£1 072 000	£1 042 000	£1 311 000
Gypsum						
Crude and calcined	tonnes	74	3 501	9 849	12 932	15 045
Crude petroleum	tonnes	417 475	...	...	...	...

Cyprus

Imports

Commodity	Units	2004	2005	2006	2007	2008
Platinum group metals						
Platinum and platinum metals	kilograms	78	97	73	70	528
Salt	tonnes	8 650	13 795	13 647	12 208	13 445
Silver						
Metal	kilograms	5 257	5 675	2 866	3 746	2 863
Sulphur and pyrites						
Sulphur	tonnes	1 226	1 356	893	995	895
Talc	tonnes	242	386	307	343	521
Titanium						
Oxides	tonnes	1 172	1 286	1 227	1 243	1 603

Note(s):-

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

(b) Including anthracite

Czech Republic

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	15 703 358	15 672 765	16 931 536	16 036 363	17 943 635
Crushed rock	tonnes	28 846 776	30 221 600	32 731 255	35 302 421	36 282 774
Bentonite and fuller's earth						
Bentonite	tonnes	224 000	216 000	267 000	335 000	174 000
Cement						
Cement clinker	tonnes	...	...	...	3 127 530	3 137 828
Cement, finished	tonnes	3 828 677	3 978 056	4 677 150	4 898 530	4 804 845
Coal						
Bituminous	tonnes	14 648 000	12 778 000	13 017 000	12 462 000	12 197 000
Lignite	tonnes	450 000	467 000	459 000	437 000	416 000
Brown coal	tonnes	47 840 000	48 658 000	48 915 000	49 134 000	47 456 000
Diatomite	tonnes	3 800	4 100	4 827	3 600	4 100
Feldspar	tonnes	488 000	472 000	487 000	514 000	488 000
Graphite	tonnes	5 000	3 000	5 000	3 000	3 000
Gypsum	tonnes	68 000	24 000	19 000	66 000	35 000
Pig iron	tonnes	5 385 000	4 627 000	5 192 000	5 287 000	4 737 000
Crude steel	tonnes	7 033 000	6 189 000	6 862 000	7 059 000	6 387 000
Ferro-alloys						
Ferro-vanadium	tonnes	* 3 400	* 2 600	* 2 800	* 1 700	* 2 800
Kaolin (a)	tonnes	596 000	649 000	673 000	682 000	672 000
Lead, refined	tonnes	* 25 000	26 000	26 100	26 000	26 000
Crude petroleum	tonnes	299 000	306 000	259 000	240 000	236 000
Natural gas	million m ³	175	356	148	148	167
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	60 000	65 000	65 000	65 000	61 000
Uranium, mine	tonnes (metal content)	435	420	383	322	290

Note(s):-

(a) Beneficiated

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	344 850	468 540	772 913	716 787	699 987
Aluminium and bauxite						
Unwrought (a)	tonnes	48 698	48 885	45 876	54 457	53 682
Scrap	tonnes	43 223	39 297	53 986	61 067	59 196
Antimony						
Oxide	tonnes	116	145	108	139	133
Barytes	tonnes	616	557	275	285	224
Bentonite and fuller's earth						
Bentonite	tonnes	62 012	85 093	86 296	97 358	105 403
Cement						
Cement clinkers	tonnes	91 626	29 169	32 521	29 924	19 039
Portland cement	tonnes	576 531	526 784	394 105	458 701	436 600
Other cement	tonnes	3 216	34 046	67 930	151 422	196 133
Chromium						
Ores and concentrates	tonnes	236	523	645	800	507
Metal	tonnes	364	109	2 104	946	594
Coal						
Hard coal (b)	tonnes	5 706 798	5 260 739	6 690 917	6 732 974	5 993 824
Lignite	tonnes	1 072 275	1 324 025	1 300 406	1 076 140	1 561 097
Briquettes	tonnes	160 823	148 966	213 621	112 447	75 459
Copper						
Unwrought	tonnes	7 834	4 251	12 651	10 301	7 829
Scrap	tonnes	53 086	53 707	57 152	58 534	63 825
Diamond						
Gem, cut	carats	£161 000	£331 000	£451 000	£529 000	£3 947 000
Diatomite	tonnes	4 734	4 247	4 566	1 094	4 128

Czech Republic

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Feldspar	tonnes	143 941	160 469	154 672	168 259	171 596
Fluorspar	tonnes	10 073	8 677	9 954	8 415	4 488
Gold						
Metal	kilograms	12 247	1 100	4 100	3 900	4 000
Waste and scrap	kilograms	31	600	700	6 100	5 200
Graphite	tonnes	3 924	3 489	3 518	4 029	4 076
Gypsum						
Crude	tonnes	90 750	33 307	46 837	105 394	60 018
Calcined	tonnes	5 563	4 272	6 249	5 973	7 881
Iodine	kilograms	537	1 000	800	1 000	300
Iron, steel and ferro-alloys						
Pig iron	tonnes	55 687	15 526	17 599	31 182	30 457
Ferro-silicon	tonnes	7 342	5 396	6 516	8 254	8 780
Ferro-vanadium	tonnes	3 417	2 613	2 763	1 685	2 830
Other ferro-alloys	tonnes	5 772	14 358	15 078	8 704	13 897
Silicon metal	tonnes	4 488	512	1 040	1 118	1 375
Ingots, blooms, billets	tonnes	267 912	251 513	324 619	587 296	500 423
Scrap	tonnes	1 930 343	1 351 676	1 456 061	1 678 565	1 792 889
Kaolin	tonnes	483 636	268 850	261 019	173 251	233 819
Lead						
Unwrought	tonnes	7 230	8 665	10 359	16 707	18 713
Scrap	tonnes	3 059	4 948	6 648	6 855	8 136
Magnesite and magnesia	tonnes	3 790	6 273	4 099	3 988	4 540
Mercury	kilograms	22 172	8 200	1 700	3 600	6 300
Molybdenum						
Metal	tonnes	123	23	12	78	86
Natural gas	tonnes	62 751	58 767	—	—	—
Nickel						
Unwrought (a)	tonnes	967	57	690	171	758
Scrap	tonnes	525	843	1 036	1 245	601
Oxides	tonnes	296	658	602	617	643
Crude petroleum	tonnes	64 315	57 522	41 794	16 573	18 130
Phosphates	tonnes	33	545	726	732	1 091
Platinum metals						
Platinum and platinum metals	kilograms	(c)* 4 600	(c)* 3 300	(c)* 500	(c)* 800	3 400
Waste and scrap	kilograms	4 158	4 500	4 700	1 900	700
Potash						
Potassic fertilisers	tonnes	2 416	3 458	3 143	3 096	3 322
Rare earths						
Cerium compounds	tonnes	6	8	8	6	3
Other rare earth compounds	tonnes	2	4	5	6	5
Salt	tonnes	12 986	13 833	30 648	18 760	14 116
Silver						
Metal	kilograms	291 519	29 337	98 354	102 968	117 325
Sulphur and pyrites						
Sulphur	tonnes	9 787	9 294	11 718	5 579	16 670
Sulphur, sublimed and precipitated	tonnes	1 581	503	113	114	658
Tantalum and niobium						
Tantalum	tonnes	84	68	53	66	97
Tin						
Unwrought (a)	tonnes	191	381	74	253	86
Scrap	tonnes	130	65	249	958	85
Titanium						
Titanium minerals	tonnes	873	340	492	745	641
Metal	tonnes	191	358	424	126	84
Oxides	tonnes	37 673	40 707	43 010	43 166	42 860
Tungsten						
Metal	tonnes	133	185	142	102	86
Carbide	tonnes	...	...	579	605	592
Zinc						
Unwrought (a)	tonnes	5 659	7 865	10 669	18 786	17 258
Scrap	tonnes	2 976	2 498	3 086	2 981	2 705

Note(s)

(a) Including alloys

(b) Including anthracite

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

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	509 217	574 008	690 730	252 049	333 726
Aluminium and bauxite						
Bauxite	tonnes	20 922	24 315	24 829	26 865	17 698
Alumina	tonnes	26 898	28 458	24 078	30 523	28 245
Alumina hydrate	tonnes	17 215	10 898	9 782	7 834	6 916
Unwrought	tonnes	75 289	69 977	74 392	82 910	68 362
Unwrought alloys	tonnes	90 688	96 702	104 238	119 773	124 643
Scrap	tonnes	28 542	34 226	48 937	63 508	58 424
Antimony						
Metal	tonnes	14	72	82	64	131
Oxide	tonnes	557	588	503	604	521
Arsenic						
Metallic arsenic	tonnes	8	9	11	10	26
Asbestos						
Unmanufactured	tonnes	2 891	0	...	1	1
Barytes	tonnes	8 782	8 552	7 195	6 358	7 388
Bentonite and fuller's earth						
Bentonite	tonnes	19 852	14 776	18 452	23 559	24 239
Fuller's earth	tonnes	564	1 290	1 039	...	...
Bismuth						
Metal	tonnes	64	50	77	70	78
Bromine	kilograms	8 121	1 174	5 066	7 700	12 000
Cadmium						
Metal	tonnes	...	2	1	1	24
Oxide	tonnes	...	251	...	338	463
Sulphide	tonnes	19	21	14	...	...
Cement						
Cement clinkers	tonnes	167 711	95 108	117 477	109 392	134 179
Portland cement	tonnes	1 105 823	1 027 011	1 001 321	918 739	932 685
Other	tonnes	24 799	38 434	38 439	30 602	23 816
Chromium						
Ores and concentrates	tonnes	11 365	12 440	11 380	13 936	12 990
Metal	tonnes	60	149	123	281	282
Coal						
Anthracite	tonnes	52 247	43 713	61 255	45 114	39 211
Other	tonnes	1 642 568	1 192 214	1 896 977	2 507 091	2 181 691
Lignite	tonnes	1 083	1 371	24 412	33 472	33 579
Briquettes	tonnes	3 410	853	23 837	1 393	18 654
Cobalt						
Metal	tonnes	81	75	84	108	199
Oxides	tonnes	33	18	24	26	21
Copper						
Unwrought	tonnes	5 644	4 551	8 321	18 911	15 336
Scrap	tonnes	5 601	6 114	8 104	8 966	8 677
Diamond						
Gem, cut	carats	2 322	2 755	18 182	5 837	116 669
Industrial	carats	17 460	27 453	30 377	43 006	30 181
Dust	carats	£776 000	£956 000	£867 000	£884 000	£1 369 000
Diatomite	tonnes	1 969	2 263	2 288	3 318	4 768
Feldspar	tonnes	8 785	13 315	16 032	14 213	11 414
Fluorspar	tonnes	28 408	24 009	24 637	24 915	3 440
Gold						
Metal	kilograms	1 957	769	1 570	8 813	3 047
Waste and scrap	kilograms	1 911	13 000	15 000	46 200	19 100
Graphite	tonnes	3 663	4 787	3 485	5 301	6 233
Gypsum						
Crude	tonnes	29 328	19 253	38 983	70 972	76 119
Calcined	tonnes	43 894	37 637	43 282	45 167	75 278
Iodine	kilograms	31 420	28 400	31 600	32 300	25 200
Iron ore	tonnes	(a) 7 636 968	6 576 885	7 984 718	(a) 6 578 116	(a) 6 799 756

Czech Republic

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Iron, steel and ferro-alloys						
Pig iron	tonnes	88 014	88 549	150 032	108 715	111 872
Sponge and powder	tonnes	5 661	6 130	10 136	20 580	24 791
Ferro-chrome	tonnes	16 248	16 772	20 492	34 123	26 043
Ferro-silico-magnesium	tonnes	...	941	1 236	6 297	5 778
Ferro-manganese	tonnes	27 051	30 921	32 355	35 500	33 704
Ferro-silico-manganese	tonnes	59 361	53 258	57 857	52 153	48 962
Ferro-molybdenum	tonnes	1 710	1 744	1 889	2 025	2 049
Ferro-silicon	tonnes	34 812	34 114	36 361	41 482	37 230
Ferro-vanadium	tonnes	395	564	429	440	578
Other ferro-alloys	tonnes	9 817	10 018	9 080	1 697	1 644
Silicon metal	tonnes	8 401	2 589	4 986	6 584	5 826
Ingots, blooms, billets	tonnes	352 672	484 450	409 753	445 181	525 598
Scrap	tonnes	593 330	392 135	560 676	521 779	502 256
Kaolin	tonnes	14 034	16 895	22 962	23 461	20 662
Lead						
Unwrought	tonnes	73 472	69 135	67 850	66 060	59 318
Scrap	tonnes	1 348	4 147	4 411	6 519	4 672
Lithium						
Carbonate	tonnes	76	71	118	146	64
Magnesite and magnesia						
Magnesite	tonnes	5 973	6 860	5 320	6 527	4 193
Magnesia	tonnes	42 226	43 277	51 674	52 330	54 246
Manganese						
Ores and concentrates	tonnes	11 663	13 820	14 335	16 079	15 715
Metal	tonnes	593	619	674	757	2 542
Mercury	kilograms	7 300	1 100	4 000	3 200	3 700
Mica	tonnes	879	819	1 629	2 262	1 958
Molybdenum						
Ores and concentrates	tonnes	124	189	139	213	284
Metal	tonnes	66	89	175	130	560
Natural gas	tonnes	6 345 673	6 733 431	5 489 325	5 478 515	6 264 909
Nickel						
Unwrought (b)	tonnes	2 574	2 520	3 531	4 429	3 728
Oxides	tonnes	712	785	844	919	838
Crude petroleum	tonnes	6 530 733	7 674 771	7 752 356	7 179 766	8 141 759
Phosphate rock	tonnes	24 282	22 633	28 141	33 954	20 928
Platinum group metals						
Platinum and platinum metals	kilograms	51 832	1 289	4 599	576	400
Waste and scrap	kilograms	506	55	86	913	4 300
Potash						
Chloride	tonnes	108 061	97 723	43 238	32 745	28 052
Other potassic fertilisers	tonnes	3 633	3 783	3 475	4 215	5 025
Rare earths						
Rare earth compounds	tonnes	92	198	227	228	155
Ferro-cerium and other pyrophoric alloys	tonnes	1	3	6	4	5
Salt	tonnes	909 966	891 667	1 151 331	567 960	610 149
Sillimanite minerals	tonnes	3 779	3 733	6 765	5 601	6 686
Silver						
Metal	kilograms	2 573 092	103 373	602 527	647 818	1 557 076
Sulphur and pyrites						
Pyrites	tonnes	83	134	223	281	1 576
Sulphur	tonnes	34 787	16 983	40 147	55 196	43 473
Sulphur, sublimed and precipitated	tonnes	70 159	89 595	70 555	57 410	65 242
Talc	tonnes	9 426	9 986	10 855	12 993	11 007
Tantalum and niobium						
Tantalum	tonnes	261	141	164	206	253
Tin						
Unwrought (b)	tonnes	550	634	665	616	802
Titanium						
Titanium minerals	tonnes	53 570	80 407	149 925	179 323	193 858
Metal	tonnes	800	1 143	1 155	1 086	1 122
Oxides	tonnes	6 773	8 008	8 734	10 529	8 765
Tungsten						
Metal	tonnes	116	173	197	837	206
Vanadium						
Pentoxide	tonnes	5 429	3 831	4 858	3 210	5 135

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Zinc						
Unwrought	tonnes	24 991	28 263	33 732	35 666	36 733
Unwrought alloys	tonnes	9 214	8 039	11 113	11 992	11 344
Scrap	tonnes	220	565	334	4 008	2 792
Zirconium						
Ores and concentrates	tonnes	1 605	655	1 498	1 482	751
Metal	tonnes	32	60	86	78	101

Note(s):-

(a) Including burnt pyrites

(b) Including alloys

Denmark

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	57 300 000	69 500 000	72 508 000	68 255 000	59 937 000
Crushed rock	tonnes	372 000	378 000	372 000	410 000	384 000
Bentonite and fuller's earth						
Bentonite	tonnes	18 352	18 515	19 211	20 093	22 458
Cement						
Cement clinker	tonnes	52 758	42 691	5 499	21 209	16 092
Cement, finished	tonnes	2 892 831	2 880 554	2 937 132	2 871 402	2 538 822
Diatomite						
Moler (a)	tonnes	188 000	209 000	196 000	201 000	210 000
Crude petroleum	tonnes	19 446 000	18 822 000	17 068 000	15 552 000	14 338 000
Natural gas	million m ³	8 946	9 909	9 861	8 760	9 564
Salt	tonnes	* 600 000	* 600 000	* 600 000	* 600 000	* 600 000
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	4 660	4 223	4 142	3 896	3 467

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	2004	2005	2006	2007	2008
Primary aggregates	tonnes	795 330	787 389	973 497	1 194 349	846 490
Aluminium and bauxite						
Alumina	tonnes	7 146	3 579	3 470	5 471	5 300
Unwrought alloys	tonnes	14 019	23 509	31 768	36 831	32 499
Scrap	tonnes	55 407	70 828	62 734	50 164	56 727
Bentonite and fuller's earth						
Bentonite	tonnes	17 279	17 066	19 214	19 495	15 734
Cement						
Cement clinkers	tonnes	85 967	54 542	11 981	9 673	7 287
Portland cement	tonnes	1 127 638	1 235 477	1 290 816	1 094 730	969 666
Other cement	tonnes	13 535	13 118	14 153	16 222	25 482
Chromium						
Metal	tonnes	661	703	855	549	1 262
Coal						
Hard coal (a)	tonnes	7 380	86 739	54 338	75 866	27 069
Copper						
Scrap	tonnes	38 573	27 227	31 076	31 569	33 421
Diatomite (b)	tonnes	* 75 800	* 69 300	* 71 500	* 63 600	* 67 800
Gold						
Metal	kilograms	803	1 064	1 253	366	397
Waste and scrap	kilograms	1	120	3 531	600	600
Gypsum						
Crude	tonnes	81 318	111 720	165 656	197 920	141 124
Calcined	tonnes	13 837	25 474	356 443	1 740	4 173
Iodine	kilograms	6 921	3 058	6 301	100	1
Iron, steel and ferro-alloys						
Ferro-silicon	tonnes	20 935	23 295	14 611	64	70
Other ferro-alloys	tonnes	187	139	238	701	585
Ingots, blooms, billets	tonnes	16 223	1 203	2 199	12 820	16 775
Scrap	tonnes	1 564 469	1 402 982	1 414 060	1 263 987	1 372 424
Kaolin	tonnes	461	637	443	351	486
Lead						
Unwrought	tonnes	1 930	1 312	1 071	721	78
Scrap	tonnes	1 805	3 067	2 954	1 685	1 159

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Magnesite and magnesia	tonnes	165	232	307	451	461
Mercury	kilograms	27 458	1 932	824	2 800	—
Natural gas	tonnes	3 151 483	3 466 835	3 818 822	3 786 580	4 023 305
Nickel						
Scrap	tonnes	777	676	585	482	642
Crude petroleum	tonnes	14 324 704	13 567 566	11 456 257	9 493 573	8 593 198
Platinum metals						
Platinum and platinum metals	kilograms	642	1 435	32	48	1
Potash						
Chloride	tonnes	3 162	1 052	29 533	127	45
Rare earths						
Metals	tonnes	0	0	0	4	2
Salt	tonnes	350 587	355 887	115 980	261 895	265 036
Silver						
Metal	kilograms	17 710	14 748	24 299	43 775	18 782
Sulphur and pyrites						
Sulphur	tonnes	2 608	332	176	153	4
Tin						
Scrap	tonnes	178	68	124	90	28
Titanium						
Metal	tonnes	166	184	146	162	152
Oxides	tonnes	1 304	1 136	1 134	1 121	460
Tungsten						
Metal	tonnes	26	5	86	112	121
Zinc						
Scrap	tonnes	2 336	3 538	3 628	2 388	2 028

Note(s)

(a) Including anthracite

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

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	2 949 549	2 804 325	3 151 321	3 077 714	3 346 209
Aluminium and bauxite						
Bauxite	tonnes	13 801	9 148	9 025	6 572	7 317
Alumina and alumina hydrate	tonnes	23 666	21 979	28 709	25 643	27 582
Unwrought (a)	tonnes	75 233	70 617	79 573	86 389	85 420
Scrap	tonnes	39 949	63 678	64 803	66 038	70 726
Barytes	tonnes	36 133	28 788	58 303	38 096	22 324
Bentonite and fuller's earth						
Bentonite	tonnes	37 253	47 386	49 695	43 555	34 012
Fuller's earth	tonnes	107	137	921	...	...
Cement						
Cement clinkers	tonnes	22 506	31 634	46 600	35 555	33 825
Portland cement	tonnes	187 982	230 842	274 151	243 348	289 307
Other	tonnes	33 913	36 753	54 194	52 662	38 687
Chromium						
Ores and concentrates	tonnes	594	837	774	945	974
Metal	tonnes	90	53	27	31	10
Coal						
Anthracite	tonnes	77 502	52 143	85 883	47 233	45 282
Other coal	tonnes	7 487 269	5 881 938	9 234 248	8 034 596	7 412 557
Briquettes	tonnes	9 851	15 865	511	194	1 000
Copper						
Unwrought	tonnes	2 065	1 702	4 081	2 901	2 818
Scrap	tonnes	16 446	13 827	14 646	9 187	11 235
Diamond						
Unsorted	carats	£294 000	£597 000	£686 000	£928 000	£1 168 000
Gem, cut	carats	£9 319 000	£6 506 000	£7 252 000	£8 473 000	£7 424 000
Industrial	carats	£105 000	£81 000	£184 000	£388 000	£104 000
Dust	carats	485 358	696 038	769 511	1 056 203	791 502
Diatomite	tonnes	5 001	6 561	4 974	4 244	5 849

Denmark

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Feldspar	tonnes	3 878	3 868	2 590	3 145	2 678
Fluorspar	tonnes	16 005	15 124	12 635	8 218	17 003
Gold						
Metal	kilograms	1 948	2 095	1 643	2 350	2 000
Graphite	tonnes	478	288	268	212	185
Gypsum						
Crude	tonnes	283 604	317 736	330 476	388 662	379 094
Calcined	tonnes	38 650	45 691	52 788	53 647	52 087
Iodine	kilograms	9 023	13 109	16 345	110 285	66 805
Iron ore						
Iron ore	tonnes	4 356	8 450	4 318	72 806	111 302
Burnt pyrites	tonnes	80 853	86 399	81 341	13 157	—
Iron, steel and ferro-alloys						
Pig iron	tonnes	14 844	12 720	18 128	18 349	14 064
Sponge and powder	tonnes	103 479	29 188	80 148	61 079	3 602
Ferro-silico-magnesium	tonnes	—	—	1 322	1 795	1 465
Ferro-silicon	tonnes	3 564	2 548	4 069	1 887	1 702
Other ferro-alloys	tonnes	975	1 345	1 771	595	1 080
Silicon metal	tonnes	1 061	659	1 586	741	263
Ingots, blooms, billets	tonnes	598 552	551 407	588 053	780 837	672 439
Scrap	tonnes	250 551	313 558	238 142	213 776	392 453
Kaolin	tonnes	13 056	14 117	19 572	35 288	47 525
Lead						
Unwrought	tonnes	2 072	2 135	2 322	1 033	192
Scrap	tonnes	2 366	2 288	2 209	2 228	1 984
Lithium						
Carbonate	tonnes	93	81	164	155	311
Magnesite and magnesia						
Magnesite	tonnes	1 984	2 002	444	512	456
Magnesia	tonnes	2 575	4 560	4 478	3 327	4 149
Manganese						
Ores and concentrates	tonnes	159	111	699	608	1
Metal	tonnes	164	157	161	317	233
Mercury	kilograms	403	2 901	129	300	400
Mica	tonnes	369	413	1 596	366	276
Molybdenum						
Oxides	tonnes	190	247	196	432	361
Natural gas	tonnes	33 801	242 936	—	—	—
Nickel						
Unwrought (a)	tonnes	112	97	92	53	47
Scrap	tonnes	447	317	403	529	100
Crude petroleum	tonnes	3 725 978	2 666 384	2 576 191	2 136 643	2 240 240
Phosphate rock	tonnes	30 425	1 311	274	1 051	881
Platinum group metals						
Platinum and platinum metals	kilograms	1 443	2 076	2 962	...	...
Potash						
Sulphate	tonnes	18 006	2 683	4 778	6 077	1 878
Chloride	tonnes	119 153	38 706	106 772	34 292	47 885
Other potassic fertilisers	tonnes	13 099	29 605	13 150	13 742	24 438
Rare earths						
Cerium compounds	tonnes	2	...	1	1	11
Other rare earth compounds	tonnes	21	16	41	30	10
Salt	tonnes	440 020	436 794	520 735	230 787	213 931
Sillimanite minerals	tonnes	2 274	2 909	3 023	3 377	2 482
Silver						
Metal	kilograms	18 909	18 173	26 104	62 049	51 992
Sulphur and pyrites						
Sulphur	tonnes	7 883	7 066	2 335	204	2 082
Talc	tonnes	14 085	14 103	13 299	10 830	12 055
Titanium						
Metal	tonnes	778	770	788	623	774
Oxides	tonnes	22 269	23 156	24 678	19 514	17 055
Tungsten						
Metal	tonnes	103	307	523	113	110

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Zinc						
Unwrought	tonnes	10 813	9 855	11 494	9 931	12 591
Unwrought alloys	tonnes	1 548	1 457	1 320	1 345	910

Note(s):-

(a) Including alloys

Estonia

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	2 341 620	3 459 760	4 209 080	6 531 740	2 918 700
Crushed rock	tonnes	5 426 600	6 828 600	8 298 400	8 855 800	7 891 000
Cement						
Cement clinker	tonnes	622 900	635 500	704 700	1 042 800	1 040 000
Cement, finished	tonnes	614 600	726 000	848 900	937 400	806 000
Lead, refined	tonnes	3 000	7 000	9 000	10 000	10 000
Crude petroleum (a)	tonnes	1 314 000	1 690 000	1 624 000	1 901 600	1 845 200

Note(s):-

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

(a) From oil shale

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	487 863	522 792	563 697	573 530	701 067
Aluminium and bauxite						
Unwrought (a)	tonnes	5 522	2 414	3 013	8 083	27 839
Scrap	tonnes	8 062	10 686	8 263	10 379	19 895
Cement						
Cement clinkers	tonnes	113 105	97 442	87 638	325 263	426 384
Portland cement	tonnes	209 168	225 729	228 971	274 997	383 449
Other cement	tonnes	3	13	29	452	1 387
Copper						
Scrap	tonnes	6 479	6 660	11 801	7 784	8 185
Iron, steel and ferro-alloys						
Pig iron	tonnes	...	(b)* 200	...	(b)* 1 360	1
Ferro-alloys	tonnes	1 238	665	672	159	153
Ingots, blooms, billets	tonnes	762	...	425	5 985	1 392
Scrap	tonnes	358 185	440 622	592 372	572 216	650 099
Lead						
Unwrought	tonnes	3 846	7 774	6 054	10 091	10 473
Scrap	tonnes	1 414	153	184	323	176
Manganese						
Metal	tonnes	94	663	222	464	226
Mercury	kilograms	...	3 400	—	—	...
Nickel						
Scrap	tonnes	296	34	713	1 260	840
Platinum metals						
Waste and scrap	kilograms	3 983	...	...	...	...
Rare earths						
Rare earth compounds	tonnes	1 064	2 319	6 819	3 183	2 916
Metals	tonnes	14	3	1	1	1
Salt	tonnes	68	149	572	429	121
Tantalum and niobium						
Tantalum	tonnes	39	65	51	43	67
Tin						
Scrap	tonnes	7	125	17	71	88
Titanium						
Metal	tonnes	188	31	49	11	13
Oxides	tonnes	68	144	163	1 491	579
Zinc						
Scrap	tonnes	1 146	539	1 121	725	2 860

Note(s)

(a) Including alloys

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

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	446 019	933 376	932 688	929 218	988 981
Aluminium and bauxite						
Unwrought (a)	tonnes	5 859	1 686	7 021	3 035	26 545
Scrap	tonnes	431	453	1 338	808	485
Bentonite and fuller's earth						
Bentonite	tonnes	1 356	2 014	2 223	1 995	1 506
Fuller's earth	tonnes	260	132	145	...	...
Cement						
Cement clinkers	tonnes	...	21 219	44 059	31 127	25 438
Portland cement	tonnes	16 827	3 311	1 833	2 536	4 613
Coal						
Hard coal (b)	tonnes	44 399	53 647	95 079	175 599	123 194
Gold						
Metal	kilograms	74	234	365	900	1 200
Gypsum						
Crude and calcined	tonnes	37 826	20 957	40 876	46 336	38 062
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	2 132	2 125	1 815	1 240	1 114
Scrap	tonnes	85 689	111 930	64 110	53 155	37 774
Kaolin	tonnes	964	1 058	1 090	3 214	3 902
Manganese						
Metal	tonnes	401	552	909	836	478
Natural gas	tonnes	153 430	155 659	154 926	726 823	717 831
Nickel						
Mattes, sinters etc.	tonnes	556	26	0	1	0
Unwrought (a)	tonnes	183	548	1 378	350	34
Scrap	tonnes	875	125	562	803	129
Potash						
Chloride	tonnes	30 923	14 509	11 173	7 048	8 665
Rare earths						
Rare earth compounds	tonnes	3 208	4 317	6 819	4 721	4 469
Metals	tonnes	5	8	10	...	...
Salt	tonnes	78 849	58 269	78 483	72 445	72 149
Silver						
Metal	kilograms	10 138	133 123	10 100	3 100	5 800
Talc	tonnes	316	300	295	418	331
Titanium						
Metal	tonnes	113	294	74	393	97
Oxides	tonnes	1 169	1 367	2 193	2 548	2 106
Zinc						
Unwrought (a)	tonnes	19 503	9 129	7 253	4 362	7 676

Note(s):-

(a) Including alloys

(b) Including anthracite

Finland

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	55 000 000	53 000 000	54 000 000	59 000 000	* 59 000 000
Crushed rock	tonnes	43 000 000	45 000 000	46 000 000	54 000 000	* 54 000 000
Cement, finished (a)	tonnes	1 295 000	1 347 000	1 684 507	1 771 000	1 638 000
Chromium ores and concentrates	tonnes	580 000	572 000	549 000	556 000	614 000
Cobalt metal	tonnes	7 893	8 171	8 582	9 173	9 645
Copper, mine	tonnes (metal content)	15 500	15 000	13 000	13 600	13 300
Copper, smelter	tonnes	151 647	157 933	164 306	118 911	142 154
Copper, refined	tonnes	132 384	132 126	137 961	109 870	131 249
Feldspar	tonnes	44 495	42 783	43 187	48 980	45 250
Gold, mine	kilograms (metal content)	* 1 300	* 1 300	5 292	4 621	4 148
Pig iron	tonnes	3 036 566	3 056 165	3 157 894	2 915 130	2 942 946
Crude steel	tonnes	4 832 427	4 738 446	5 053 714	4 430 726	4 416 792
Ferro-alloys						
Ferro-chrome	tonnes	264 492	234 881	243 350	241 760	233 550
Mercury	kilograms	23 500	34 200	22 820	45 195	33 120
Mica	tonnes	9 250	9 500	8 097	11 449	10 706
Nickel, mine	tonnes (metal content)	3 400	3 400	3 000	3 600	4 000
Nickel, smelter/refinery	tonnes	49 580	39 159	47 469	55 000	51 963
Phosphate rock	tonnes	838 000	822 987	857 922	830 989	780 000
Selenium metal	tonnes	65	66	70	52	65
Silver, mine	kilograms (metal content)	49 400	47 462	50 843	44 895	69 906
Sulphur and pyrites						
Pyrites	tonnes (sulphur content)	283 700	184 400	199 700	194 400	237 300
Recovered (b)	tonnes (sulphur content)	325 523	304 751	325 793	* 326 000	* 320 000
Recovered (c)	tonnes (sulphur content)	65 000	70 000	70 000	125 000	150 000
Talc	tonnes	528 943	508 169	547 146	535 882	527 686
Wollastonite	tonnes	16 763	15 950	16 200	16 364	15 600
Zinc, mine	tonnes (metal content)	37 200	40 500	35 700	38 900	27 800
Slab zinc	tonnes	284 525	281 904	282 238	305 543	297 722

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	2004	2005	2006	2007	2008
Primary aggregates	tonnes	422 709	580 815	735 655	837 957	850 685
Aluminium and bauxite						
Unwrought alloys	tonnes	17 254	14 107	11 411	12 924	14 239
Scrap	tonnes	22 946	21 053	25 921	38 364	37 345
Bentonite and fuller's earth						
Bentonite	tonnes	188	155	232	115	42
Cement						
Portland cement	tonnes	11 449	3 367	647	982	2 618
Chromium						
Ores and concentrates	tonnes	708	841	1 570	2 492	3 041
Cobalt						
Metal (a)	tonnes	* 5 200	* 5 800	* 5 700	* 5 700	* 5 700
Oxides (a)	tonnes	* 2 100	* 1 700	* 2 200	* 2 400	* 2 600
Copper						
Unwrought, unrefined	tonnes	25 618	29 685	34 962	10 490	27 525
Unwrought, refined	tonnes	27 650	40 170	55 239	32 956	67 908
Unwrought alloys	tonnes	903	746	1 533	587	423
Scrap	tonnes	23 543	30 577	31 182	32 872	32 585

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Feldspar	tonnes	42 612	37 386	41 437	37 392	36 482
Gold						
Waste and scrap	kilograms	368	778	886	200	466
Graphite	tonnes	0	0	2	46 162	0
Iron ore						
Burnt pyrites	tonnes	52	59 433	67 503	146 844	396 064
Iron, steel and ferro-alloys						
Pig iron	tonnes	0	8 040	3 045	0	14 070
Ferro-chrome	tonnes	35 780	39 341	37 663	100 022	37 709
Ingots, blooms, billets	tonnes	624 170	436 083	284 313	185 229	281 325
Scrap	tonnes	315 977	286 494	220 124	253 732	308 047
Kaolin	tonnes	8 111	7 378	8 373	10 597	8 587
Lead						
Scrap	tonnes	884	3 589	2 421	605	588
Mercury	kilograms	23 462	32 090	24 859	45 600	35 000
Mica	tonnes	7 511	5 745	6 603	8 956	7 138
Natural gas	tonnes	276	328	—	1 218	1 420
Nickel						
Ores and concentrates	tonnes	...	...	—	—	14 069
Unwrought	tonnes	36 458	30 628	37 747	43 427	40 108
Scrap	tonnes	26	28	47	441	27
Oxides (a)	tonnes	* 500	* 300	* 600	* 600	* 500
Phosphates	tonnes	16 375	996	1 141	6 942	3 248
Platinum metals						
Platinum and platinum metals	kilograms	6	5	23	19	30
Waste and scrap	kilograms	7	75 669	713	463	218
Potash						
Sulphate	tonnes	(a)* 34 900	33 484	(a)* 7 900	49 485	17 181
Chloride	tonnes	1 008	38 915	65 003	50 342	50 822
Rare earths						
Rare earth compounds	tonnes	1	2	1	1	103
Metals	tonnes	...	...	...	104	...
Salt	tonnes	458	384	531	424	336
Silver						
Ores and concentrates	kilograms	507 350	416 650	262 669	700	38
Metal	kilograms	9 804	6 764	6 041	3 400	3 400
Sulphur and pyrites						
Pyrites (a)	tonnes	* 279 000	* 100 000	* 73 000	* 90 000	* 386 000
Sulphur	tonnes	...	3 135	3 674	3 513	2 521
Talc (a)	tonnes	* 275 000	* 278 000	* 246 000	* 284 000	* 320 000
Tin						
Unwrought (b)	tonnes	53	66	95	56	77
Scrap	tonnes	86	58	89	201	193
Titanium						
Metal	tonnes	22	44	35	30	11
Oxides (a)	tonnes	* 94 000	* 104 000	* 103 000	* 103 000	* 106 000
Tungsten						
Metal	tonnes	91	77	80	113	360
Zinc						
Unwrought (b)	tonnes	236 171	235 403	233 231	260 434	257 411
Scrap	tonnes	2 281	2 116	1 650	1 274	964

Note(s)

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

(b) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	75 016	43 488	254 665	326 347	280 600
Aluminium and bauxite						
Bauxite	tonnes	4 782	3 661	6 366	4 909	10 461
Alumina	tonnes	2 220	2 659	2 327	3 296	2 350
Alumina hydrate	tonnes	37 361	28 300	31 024	37 163	22 243
Unwrought	tonnes	3 295	4 057	1 145	1 213	1 332
Unwrought alloys	tonnes	37 999	40 510	39 755	49 299	41 635
Scrap	tonnes	18 901	15 537	14 906	19 051	21 978
Antimony						
Oxide	tonnes	248	199	256	281	160
Barytes	tonnes	3 559	3 931	4 498	5 018	4 735
Bentonite and fuller's earth						
Bentonite	tonnes	27 321	26 395	32 520	37 741	31 445
Fuller's earth	tonnes	322	201	109	...	...
Bromine	kilograms	71 251	71 000	36 158	100	146 800
Cement						
Cement clinkers	tonnes	28 129	17 594	95 730	314 436	236 439
Portland cement	tonnes	423 958	383 260	380 296	341 748	281 924
Other	tonnes	9 344	13 211	12 176	16 006	15 911
Chromium						
Ores and concentrates	tonnes	6 092	6 962	8 388	9 324	8 866
Metal	tonnes	164	258	575	282	327
Coal						
Hard coal (a)	tonnes	8 283 891	4 724 392	6 683 990	6 669 717	5 671 385
Cobalt						
Ores and concentrates	tonnes	80 202	54 794	31 186	26 449	26 500
Metal	tonnes	(b)* 700	13 611	26 928	27 590	36 405
Oxides	tonnes	126	336	186	346	167
Copper						
Ores and concentrates	tonnes	528 930	504 658	544 149	448 119	536 584
Unwrought alloys	tonnes	2 778	3 229	3 996	4 178	3 542
Scrap	tonnes	1 735	2 423	1 259	2 644	4 146
Diamond						
Unsorted	carats	55 000	120 000	105 000	...	...
Gem, cut	carats	£2 840 000	£3 082 000	£3 264 000	£3 004 000	£3 698 000
Dust	carats	320 000	450 000	620 000	682 850	625 200
Diatomite	tonnes	5 881	2 700	2 339	3 510	3 344
Feldspar	tonnes	257	380	796	1 023	699
Fluorspar	tonnes	17 069	16 597	15 011	15 064	12 366
Gold						
Metal	kilograms	1 332	949	931	100	200
Waste and scrap	kilograms	67 582	22 981	4	1	—
Graphite	tonnes	168	84	63	62	54
Gypsum						
Crude	tonnes	278 645	341 680	310 245	423 355	408 509
Calcined	tonnes	7 010	7 517	9 958	8 588	6 598
Iodine	kilograms	27 020	6 209	2 066	3 400	3 400
Iron ore	tonnes	(c) 3 921 570	4 215 633	3 481 019	3 156 096	3 121 303
Iron, steel and ferro-alloys						
Pig iron	tonnes	30 453	27 160	45 364	53 901	42 681
Sponge and powder	tonnes	16 906	969	779 146	880 575	942 664
Ferro-chrome	tonnes	6 562	7 404	17 926	9 650	11 182
Ferro-manganese	tonnes	15 805	14 728	14 828	18 138	15 709
Ferro-silico-manganese	tonnes	40 800	38 375	38 440	34 994	34 139
Ferro-molybdenum	tonnes	2 709	2 293	1 948	1 892	1 730
Ferro-nickel	tonnes	60 213	47 531	53 741	54 106	50 294
Ferro-niobium	tonnes	470	478	493	570	757
Ferro-phosphorus	tonnes	570	489	550	560	380
Ferro-silicon	tonnes	32 507	25 723	36 659	31 814	29 740
Ferro-titanium and ferro-silico-titanium	tonnes	2 063	1 912	1 558	1 707	1 857
Other ferro-alloys	tonnes	4 128	4 849	4 252	4 300	4 193
Silicon metal	tonnes	2 097	1 306	1 402	1 318	1 638
Ingots, blooms, billets	tonnes	253 730	51 678	5 138	7 649	11 114
Scrap	tonnes	865 142	756 267	1 013 675	687 887	596 792
Kaolin	tonnes	1 301 806	1 144 335	1 261 699	1 155 041	1 147 687
Lead						
Unwrought	tonnes	2 582	2 854	1 571	2 283	3 195

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Lithium						
Carbonate	tonnes	53	77	85	73	84
Magnesite and magnesia						
Magnesia	tonnes	11 567	16 476	9 540	15 989	8 692
Manganese						
Ores and concentrates	tonnes	20 381	28 335	10 433	27 251	24 926
Metal	tonnes	547	753	2 182	2 379	2 649
Mercury	kilograms	554	28	38	200	209
Mica	tonnes	2 861	2 998	2 874	4 098	4 383
Molybdenum						
Ores and concentrates	tonnes	5 603	28 469	9 270	5 789	3 498
Natural gas	tonnes	3 364 823	3 068 411	3 312 381	3 172 117	3 269 068
Nickel						
Ores and concentrates	tonnes	169 170	104 983	190 233	256 932	290 914
Mattes, sinters etc.	tonnes	42 944	50 194	45 851	50 856	33 247
Unwrought (d)	tonnes	24 307	23 801	27 939	15 457	18 201
Scrap	tonnes	1 332	860	757	299	481
Crude petroleum	tonnes	12 249 366	10 603 534	12 176 669	12 221 330	11 908 304
Phosphate rock	tonnes	60 199	56 117	86 734	113 286	118 749
Platinum group metals						
Platinum and platinum metals	kilograms	231	495	309	198	365
Potash						
Chloride (e)	tonnes	192 600	163 600	161 400	148 400	120 158
Rare earths						
Cerium compounds	tonnes	73	83	117	92	101
Other rare earth compounds	tonnes	10	13	21	5	7
Salt	tonnes	408 367	438 346	401 961	409 761	397 033
Sillimanite minerals	tonnes	302	445	207	109	2 638
Silver						
Metal	kilograms	75 350	70 623	64 504	55 400	44 800
Sulphur and pyrites						
Sulphur	tonnes	8 238	310	11 925	415	9 073
Talc	tonnes	1 827	866	757	663	503
Tin						
Unwrought (d)	tonnes	126	178	173	166	184
Titanium						
Titanium minerals	tonnes	...	5 080	34 403	20 578	26 200
Oxides	tonnes	13 163	14 380	14 788	15 838	14 256
Tungsten						
Metal	tonnes	119	121	21	130	296
Zinc						
Ores and concentrates	tonnes	479 603	499 024	520 081	555 569	582 049
Unwrought (d)	tonnes	994	1 314	1 443	4 513	4 242

Note(s):-

- (a) Including anthracite
- (b) BGS estimates, based on known exports from certain countries
- (c) Including burnt pyrites
- (d) Including alloys
- (e) K₂O content

France

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	168 080 000	168 640 000	174 360 000	180 450 000	171 610 000
Crushed rock	tonnes	223 170 000	222 780 000	233 090 000	242 950 000	236 770 000
Bauxite	tonnes	170 000	175 000	160 000	* 160 000	* 160 000
Alumina	tonnes (Al ₂ O ₃ content)	* 600 000	* 600 000	* 636 000	* 500 000	* 500 000
Primary aluminium	tonnes	447 000	440 000	442 879	430 159	431 600
Barytes	tonnes	81 000	* 81 000	* 40 000	—	—
Cadmium	tonnes	* 120	* 100	* 90	* 50	* 50
Cement						
Cement clinker	tonnes	17 157 000	17 332 000	17 731 000	18 046 000	16 885 000
Cement, finished	tonnes	20 962 000	21 277 000	22 268 000	22 268 000	21 443 000
Coal						
Anthracite and bituminous	tonnes	200 000	—	—	—	—
Diatomite	tonnes	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000
Feldspar	tonnes	628 000	651 000	* 650 000	* 650 000	* 650 000
Fluorspar	tonnes	70 000	53 000	* 40 000	—	—
Gypsum (a)	tonnes	* 5 700 000	4 902 498	* 4 800 000	* 4 800 000	2 339 380
Pig iron	tonnes	13 087 705	12 595 584	12 873 900	12 425 703	11 371 879
Crude steel	tonnes	20 770 252	19 480 777	19 852 125	19 249 862	17 879 161
Ferro-alloys						
Ferro-manganese and spiegeleisen	tonnes	110 072	109 111	139 533	98 066	* 100 000
Ferro-silico-manganese	tonnes	64 100	52 300	63 300	* 65 000	* 65 000
Ferro-silicon	tonnes	* 87 000	* 67 000	* 67 000	* 71 000	* 70 000
Silicon metal	tonnes	* 85 000	* 100 000	* 100 000	* 120 000	* 120 000
Kaolin	tonnes	316 000	319 464	* 300 000	307 253	* 300 000
Lead, refined	tonnes	89 000	* 90 000	* 88 000	* 88 000	82 100
Mica (b)	tonnes	19 000	* 20 000	* 20 000	* 20 000	* 20 000
Nickel, smelter/refinery	tonnes	12 103	12 684	13 700	14 800	13 500
Crude petroleum	tonnes	1 288 000	1 179 000	1 100 000	1 013 000	975 000
Natural gas	million m ³	1 325	1 089	1 167	1 023	925
Salt						
Rock salt	tonnes	406 000	494 000	...	...	...
Brine salt	tonnes	1 433 000	1 468 000	...	...	...
Salt in brine	tonnes	4 408 000	4 750 780	(c) 9 371 000	(c) 6 139 840	(c)* 6 000 000
Sea salt	tonnes	1 365 000	1 026 000	...	...	...
Sillimanite minerals						
Andalusite	tonnes	68 000	* 65 000	* 65 000	* 65 000	* 65 000
Silver, mine	kilograms (metal content)	682	—	—	—	—
Sulphur and pyrites						
Recovered (d)	tonnes (sulphur content)	698 400	622 345	616 234	605 820	* 590 000
Recovered (e)	tonnes (sulphur content)	150 000	127 000	75 000	62 000	64 000
Talc	tonnes	402 000	416 000	* 420 000	* 420 000	* 420 000
Slab zinc	tonnes	260 000	209 000	120 000	129 000	118 000

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 domestic material

- (a) Including anhydrite
- (b) Including mica recovered from mica schists and/or kaolin beneficiation
- (c) Salt; all forms
- (d) From petroleum refining and/or natural gas
- (e) Other

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	9 389 763	8 492 936	8 928 358	8 383 027	8 565 175
Aluminium and bauxite						
Bauxite	tonnes	2 985	5 195	46 042	26 661	12 295
Alumina	tonnes	232 762	255 392	224 866	276 207	319 388
Alumina hydrate	tonnes	144 331	139 694	168 250	146 531	130 881
Unwrought	tonnes	70 010	77 097	65 943	45 503	46 364
Unwrought alloys	tonnes	78 047	95 700	148 253	136 803	139 176
Scrap	tonnes	299 226	314 243	345 107	380 708	344 436
Antimony						
Metal	tonnes	79	186	53	19	44
Oxide	tonnes	4 540	5 177	4 964	6 109	6 261
Arsenic						
Metallic arsenic	tonnes	...	8	15	3	5
Asbestos	tonnes	31	—	8	—	...
Barytes (a)	tonnes	* 75 900	* 57 700	* 36 300	* 37 100	* 10 000
Bentonite and fuller's earth						
Bentonite	tonnes	7 696	9 243	9 788	13 454	12 231
Bismuth						
Metal	tonnes	28	39	24	52	74
Cadmium						
Metal	tonnes	604	533	798	815	890
Cement						
Cement clinkers	tonnes	460 364	310 228	325 352	325 897	260 529
Portland cement	tonnes	785 100	792 192	683 110	590 684	578 230
Other cement	tonnes	112 828	102 222	113 145	13 999	10 056
Chromium						
Ores and concentrates	tonnes	2 928	2 340	2 013	2 391	4 694
Metal	tonnes	7 182	8 074	6 457	7 225	7 844
Coal						
Anthracite	tonnes	1 077	14 913	10 442	13 161	57 436
Other coal	tonnes	93 265	68 197	128 523	200 682	128 614
Cobalt						
Metal	tonnes	675	699	709	1 006	859
Oxides	tonnes	221	57	68	91	28
Copper						
Unwrought	tonnes	60 745	48 050	47 839	67 765	55 405
Unwrought alloys	tonnes	11 940	9 851	9 680	13 140	13 049
Scrap	tonnes	243 074	262 874	290 528	284 890	266 930
Diamond						
Unsorted	carats	858	14 853	40 105	22 863	9 386
Gem	carats	75 969	98 712	164 433	227 372	293 420
Dust	carats	528 370	1 273 515	1 069 100	430 000	838 620
Diatomite	tonnes	26 043	25 379	24 866	29 607	23 239
Feldspar	tonnes	219 741	255 836	224 062	261 112	244 785
Fluorspar	tonnes	12 002	6 821	28	3 770	58
Gold						
Metal	kilograms	31 890	20 053	24 302	20 229	22 247
Waste and scrap	kilograms	70 500	29 600	29 600	29 300	50 700
Graphite	tonnes	122	225	85	163	269
Gypsum						
Crude	tonnes	324 894	250 845	321 789	414 428	381 841
Calcined	tonnes	311 437	350 955	349 703	356 716	338 682
Iodine	kilograms	30 500	40 900	51 300	91 100	100 500
Iron ore	tonnes	38 452	107 042	76 097	69 376	57 720

France

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Iron, steel and ferro-alloys						
Pig iron	tonnes	679	350	113 729	89 768	88 462
Sponge and powder	tonnes	5 221	6 465	13 059	17 948	14 698
Ferro-chrome	tonnes	1 074	857	875	1 217	2 098
Ferro-silico-magnesium	tonnes	5 521	6 829	2 165	16 377	28 255
Ferro-manganese	tonnes	14 360	7 181	7 483	8 049	2 457
Ferro-silico-manganese	tonnes	63 483	76 021	53 278	41 110	42 260
Ferro-molybdenum	tonnes	538	547	673	481	374
Ferro-niobium	tonnes	521	240	596	948	984
Ferro-silicon	tonnes	65 881	69 551	63 432	50 334	73 824
Ferro-titanium and ferro-silico-titanium	tonnes	1 305	1 542	1 992	2 292	1 493
Other ferro-alloys	tonnes	29 320	27 432	22 699	357	150
Ingots, blooms, billets	tonnes	3 833 258	3 914 427	3 071 836	2 650 976	2 830 986
Scrap	tonnes	5 578 148	4 955 474	6 019 890	6 210 854	6 028 712
Kaolin	tonnes	484 554	421 927	968 538	412 284	319 301
Lead						
Unwrought	tonnes	6 182	6 920	25 933	14 936	17 630
Scrap	tonnes	27 003	24 683	21 854	29 544	15 888
Lithium						
Carbonate	tonnes	1 166	462	12	2	3
Magnesite and magnesia						
Magnesite	tonnes	241	230	241	373	310
Magnesia	tonnes	37 930	45 661	47 832	48 852	57 342
Manganese						
Ores and concentrates (b)	tonnes	272 815	139 723	303 881	333 747	321 638
Metal	tonnes	745	324	415	327	488
Mercury	kilograms	93 800	15 400	27 300	9 100	1 700
Mica	tonnes	14 323	13 469	12 845	13 959	13 924
Molybdenum						
Ores and concentrates	tonnes	41	365	512	485	55
Metal	tonnes	436	35	38	79	118
Natural gas	tonnes	2 728 650	9 107 475	11 501 866	10 247 611	22 087 224
Nickel						
Mattes, sinters etc.	tonnes	1 320	241	417	517	178
Unwrought	tonnes	9 203	10 148	11 761	12 308	10 754
Unwrought alloys	tonnes	1 455	1 762	999	1 475	2 475
Scrap	tonnes	6 618	6 373	7 826	7 578	7 558
Oxides	tonnes	1 140	63	433	26	105
Crude petroleum	tonnes	39	20 374	2 675	190	65
Phosphates	tonnes	6 362	4 463	10 147	15 919	96 127
Platinum metals						
Platinum	kilograms	3 032	3 324	5 283	4 758	2 033
Platinum metals	kilograms	4 611	4 075	3 565	2 800	2 120
Waste and scrap	kilograms	44 182	184 400	383 300	190 100	282 400
Potash						
Sulphate	tonnes	8 248	54 235	32 887	33 446	34 777
Chloride	tonnes	19 459	6 376	3 185	8 166	11 416
Other potassic fertilisers	tonnes	1 271	841	221	278	327
Rare earths						
Rare earth compounds	tonnes	8 588	2 007	2 185	2 545	1 854
Ferro-cerium and other pyrophoric alloys	tonnes	125	32	85	133	—
Metals	tonnes	65	7	24	11	11
Salt	tonnes	506 431	407 255	254 487	363 438	231 953
Sillimanite	tonnes	51 653	55 052	59 002	66 776	66 242
Silver						
Ores and concentrates	kilograms	7 100	...	...	26 500	51 100
Metal	kilograms	404 600	252 300	228 673	208 832	215 148
Sulphur and pyrites						
Sulphur	tonnes	497 302	361 594	294 003	59 934	246 005
Sulphur, sublimed and precipitated	tonnes	562	642	619	680	2 843
Talc	tonnes	262 147	279 659	273 706	276 014	269 771
Tantalum and niobium						
Tantalum	tonnes	20	101	9	21	18
Tin						
Unwrought	tonnes	430	324	368	552	441
Unwrought alloys	tonnes	527	1 020	1 010	884	236
Scrap	tonnes	457	478	893	590	654

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Titanium						
Titanium minerals	tonnes	64	62	116	2 242	93
Metal	tonnes	4 086	5 891	5 722	5 112	5 391
Oxides	tonnes	172 796	157 543	167 807	171 337	148 573
Tungsten						
Metal	tonnes	571	574	617	1 148	676
Carbide	tonnes	251	265	343	431	354
Vanadium						
Pentoxide	tonnes	138	13	10	15	16
Metal	tonnes	26	25	63	...	...
Zinc						
Ores and concentrates	tonnes	38 779	39 463	47 516	51 781	78 398
Unwrought	tonnes	115 352	80 472	31 960	29 305	31 601
Unwrought alloys	tonnes	35 879	33 940	12 205	7 238	5 073
Scrap	tonnes	56 440	63 571	71 224	56 200	43 770
Zirconium						
Concentrates	tonnes	1 129	1 058	2 316	1 832	1 440

Note(s)

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

(b) Including manganiferous iron ore

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	9 431 953	10 264 292	12 064 403	11 381 954	11 214 300
Aluminium and bauxite						
Bauxite	tonnes	1 507 504	1 799 671	1 664 642	2 001 899	1 788 358
Alumina	tonnes	644 513	655 246	667 146	710 029	722 371
Alumina hydrate	tonnes	41 187	41 682	45 085	46 584	51 289
Unwrought	tonnes	144 053	150 798	198 042	147 693	113 771
Unwrought alloys	tonnes	369 795	366 369	394 929	449 505	396 382
Scrap	tonnes	143 833	135 611	208 142	191 897	197 876
Antimony						
Metal	tonnes	8 486	7 766	8 919	8 568	9 078
Oxide	tonnes	2 096	2 243	2 092	3 315	1 923
Arsenic						
Metallic arsenic	tonnes	9	21	20	19	8
Asbestos						
Unmanufactured	tonnes	8	5	52	169	120
Barytes	tonnes	28 748	31 965	24 471	40 760	34 166
Bentonite and fuller's earth						
Bentonite	tonnes	220 260	163 999	220 996	243 350	198 787
Fuller's earth	tonnes	17 907	18 445	23 522	...	...
Bismuth						
Metal	tonnes	830	1 029	547	382	219
Bromine	kilograms	12 595 900	13 989 000	13 971 600	12 146 400	12 428 800
Cadmium						
Metal	tonnes	1 465	2 114	527	771	645
Oxide	tonnes	743	584	...	885	1 114
Sulphide	tonnes	5 802	6	—	...	...
Cement						
Cement clinkers	tonnes	865 213	946 642	1 010 056	1 739 962	1 338 362
Portland cement	tonnes	1 114 684	1 271 478	1 556 864	1 793 027	1 940 065
Other	tonnes	927 157	984 597	1 120 524	1 223 442	1 185 083
Chromium						
Ores and concentrates	tonnes	19 770	18 980	23 031	20 156	26 952
Metal	tonnes	1 323	669	1 040	717	1 335
Coal						
Anthracite	tonnes	2 076 592	3 266 840	3 018 025	3 532 378	2 817 048
Other coal	tonnes	17 619 595	16 234 759	16 372 754	15 425 960	18 470 782
Lignite	tonnes	40 405	34 396	36 436	51 589	68 426
Briquettes	tonnes	75 872	116 845	147 381	174 170	154 140

France

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Cobalt						
Metal	tonnes	1 681	2 038	2 117	3 137	2 251
Oxides	tonnes	522	474	562	658	574
Copper						
Unwrought, unrefined	tonnes	168	248	275	328	125
Unwrought, refined	tonnes	590 304	516 881	506 721	431 897	435 330
Unwrought alloys	tonnes	7 564	10 132	11 029	14 389	8 987
Scrap	tonnes	78 853	75 464	97 462	90 195	81 036
Diamond						
Unsorted	carats	101 610	263 542	45 393	32 997	18 648
Gem, rough	carats	67	3 526	729	656	344
Gem, cut	carats	539 724	355 505	331 348	439 204	450 568
Industrial	carats	56 456	33 869	44 334	81 570	73 641
Dust	carats	11 327 446	10 013 030	10 037 456	8 984 745	13 938 146
Diatomite	tonnes	12 368	11 181	12 712	14 371	14 308
Feldspar	tonnes	44 615	85 460	54 106	20 974	59 857
Fluorspar	tonnes	10 457	21 526	34 972	48 758	21 256
Gold						
Metal	kilograms	24 446	28 834	23 605	23 567	20 071
Waste and scrap	kilograms	...	5 200	1 500	1 100	3 300
Graphite	tonnes	15 083	20 449	19 430	19 250	20 618
Gypsum						
Crude	tonnes	311 411	361 820	588 367	580 341	492 072
Calcined	tonnes	85 845	60 358	68 652	111 325	116 678
Iodine	kilograms	1 317 700	1 685 200	1 929 100	1 687 900	1 875 400
Iron ore						
Iron ore	tonnes	20 777 700	19 506 894	19 463 057	20 065 037	18 220 893
Burnt pyrites	tonnes	65	160	3 451	2 107	4 948
Iron, steel and ferro-alloys						
Pig iron	tonnes	237 824	249 585	183 755	195 466	202 077
Sponge and powder	tonnes	151 090	184 661	219 813	147 662	89 809
Ferro-chrome	tonnes	224 722	192 129	159 940	106 513	111 584
Ferro-silico-chrome	tonnes	59	122	677	8	69
Ferro-silico-magnesium	tonnes	15 928	25 046	18 536	26 899	26 786
Ferro-manganese	tonnes	96 276	55 239	57 240	63 487	69 464
Ferro-silico-manganese	tonnes	61 446	58 403	49 287	45 827	54 004
Ferro-molybdenum	tonnes	5 474	5 235	5 223	5 650	5 637
Ferro-nickel	tonnes	10 966	9 229	4 487	6 373	5 887
Ferro-niobium	tonnes	2 297	2 722	2 597	2 785	3 266
Ferro-phosphorus	tonnes	2 942	2 536	2 360	2 528	2 698
Ferro-silicon	tonnes	62 260	71 269	64 727	52 945	61 740
Ferro-titanium and ferro-silico-titanium	tonnes	4 768	6 448	9 037	10 009	8 293
Ferro-tungsten and ferro-silico-tungsten	tonnes	346	523	839	597	666
Ferro-vanadium	tonnes	1 031	1 351	1 396	1 432	1 575
Silicon metal	tonnes	19 299	25 257	21 813	19 659	23 885
Ingots, blooms, billets	tonnes	1 803 335	1 621 219	1 557 219	1 998 943	1 747 005
Scrap	tonnes	3 449 108	2 819 160	3 319 269	3 197 843	3 241 199
Kaolin	tonnes	349 353	338 848	320 425	311 060	263 449
Lead						
Unwrought	tonnes	91 979	109 426	121 930	118 384	103 535
Scrap	tonnes	34 513	33 818	32 705	34 169	22 490
Lithium						
Oxides	tonnes	407	482	369	314	256
Carbonate	tonnes	1 484	1 392	1 186	1 289	1 251
Magnesite and magnesia						
Magnesite	tonnes	1 701	3 427	2 509	2 355	2 378
Magnesia	tonnes	148 780	161 488	161 029	163 908	164 235
Manganese						
Ores and concentrates (a)	tonnes	626 061	615 884	611 043	678 369	876 961
Metal	tonnes	8 851	11 039	11 131	15 198	19 115
Mercury	kilograms	299 200	202 600	138 100	190 000	105 300
Mica						
Ground (b)	tonnes	1 358	1 534	2 674	2 532	3 175
Waste	tonnes	546	1 423	—	—	...

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Molybdenum						
Ores and concentrates	tonnes	1 492	1 783	1 896	1 511	1 933
Metal	tonnes	762	993	1 075	830	1 094
Oxides	tonnes	664	678	579	670	1 191
Natural gas	tonnes	37 043 057	48 574 413	62 023 544	75 216 254	79 101 617
Nickel						
Mattes, sinters etc.	tonnes	12 329	15 399	19 818	19 864	18 952
Unwrought	tonnes	26 842	22 656	26 631	25 752	23 368
Unwrought alloys	tonnes	5 350	6 104	5 500	7 702	9 386
Scrap	tonnes	2 068	1 554	2 393	1 341	2 166
Oxides	tonnes	166	228	297	542	560
Crude petroleum	tonnes	86 416 072	84 951 337	83 411 036	81 011 061	81 854 226
Phosphate rock	tonnes	593 253	427 194	387 794	442 826	374 792
Platinum group metals						
Platinum	kilograms	6 416	5 390	4 455	6 263	8 471
Platinum metals	kilograms	4 268	3 500	3 711	3 631	4 404
Waste and scrap	kilograms	40 700	55 600	370 600	114 300	241 200
Potash						
Fertiliser salts	tonnes	1 988	1 400	712	...	...
Sulphate	tonnes	77 441	70 702	33 195	50 088	53 124
Chloride	tonnes	1 866 144	1 492 127	777 056	900 560	837 119
Other potassic fertilisers	tonnes	31 958	29 488	11 432	16 601	18 484
Rare earths						
Cerium compounds	tonnes	11 710	7 105	9 723	8 831	9 116
Other rare earth compounds	tonnes	1 037	585	1 329	1 232	768
Ferro-cerium and other pyrophoric alloys	tonnes	1	5	3	2	3
Metals	tonnes	251	322	479	417	447
Salt	tonnes	850 703	1 110 898	1 024 789	592 976	578 882
Sillimanite minerals	tonnes	3 360	3 080	4 813	6 026	6 255
Silver						
Ores and concentrates	kilograms	19 800	1 955	16 300	39 800	21 300
Metal	kilograms	675 245	731 182	734 679	643 280	544 821
Sulphur and pyrites						
Pyrites	tonnes	5 643	4 521	2 533	160	173
Sulphur, crude	tonnes	43 846	39 973	...	...	34 083
Sulphur, refined	tonnes	27 041	42 353	(c) 72 785	(c) 56 072	16 009
Sulphur, sublimed and precipitated	tonnes	12 555	5 809	2 439	797	5 861
Talc	tonnes	77 240	76 021	59 853	77 772	76 147
Tantalum and niobium						
Tantalum	tonnes	67	23	55	83	84
Tin						
Ores and concentrates	tonnes	3	194	22	73	81
Unwrought	tonnes	9 167	7 307	8 159	7 689	6 506
Unwrought alloys	tonnes	638	1 080	931	409	554
Scrap	tonnes	24	217	182	432	588
Titanium						
Ilmenite	tonnes	48 930	60 205	83 499	60 739	58 423
Other titanium minerals	tonnes	81 141	86 552	78 849	71 292	12 531
Titanium slag	tonnes	61 456	111 137	107 092	91 602	80 726
Metal	tonnes	8 259	9 403	9 431	10 521	10 036
Oxides	tonnes	140 068	119 699	135 309	126 786	128 226
Tungsten						
Metal	tonnes	568	784	925	823	898
Carbide	tonnes	692	592	898	866	859
Vanadium						
Ores and concentrates	tonnes	...	21	—	...	—
Pentoxide	tonnes	441	556	533	656	674
Metal	tonnes	72	88	71	...	...
Zinc						
Ores and concentrates	tonnes	458 760	423 664	250 791	259 750	238 502
Unwrought	tonnes	103 037	143 476	170 263	166 110	164 172
Unwrought alloys	tonnes	56 492	45 566	47 309	44 124	45 480
Scrap	tonnes	6 046	6 996	7 833	7 247	3 694

France

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Zirconium						
Ores and concentrates	tonnes	48 004	53 701	48 973	47 719	55 030
Metal	tonnes	276	207	378	570	456

Note(s):-

- (a) Including manganiferous iron ore
- (b) Including unmanufactured
- (c) Including crude

Germany

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	267 300 000	252 000 000	266 000 000	263 300 000	260 000 000
Crushed rock	tonnes	125 600 000	122 244 000	138 700 000	134 000 000	132 500 000
Alumina	tonnes (Al ₂ O ₃ content)	* 835 000	* 830 000	* 850 000	* 900 000	* 900 000
Primary aluminium	tonnes	667 800	647 900	515 539	551 000	605 880
Barytes	tonnes	93 624	88 591	85 524	88 265	78 941
Bentonite and fuller's earth						
Bentonite	tonnes	404 549	352 374	363 998	384 709	414 333
Cadmium	tonnes	* 500	* 490	* 490	* 475	* 420
Cement						
Cement clinker	tonnes	26 281 000	24 315 000	24 921 000	26 992 000	25 366 000
Cement, finished	tonnes	31 900 000	30 600 000	33 630 000	33 382 000	33 581 000
Coal						
Anthracite and bituminous	tonnes	25 871 882	24 909 867	20 882 119	21 531 956	17 171 232
Brown coal	tonnes	181 926 060	177 907 945	176 324 117	180 411 991	175 313 020
Copper, smelter	tonnes	278 600	257 200	273 800	275 300	295 000
Copper, refined	tonnes	652 600	638 800	662 338	665 517	689 763
Feldspar	tonnes	182 842	168 640	167 332	171 303	161 416
Fluorspar	tonnes	33 203	35 364	53 009	54 359	48 519
Graphite	tonnes	3 155	2 638	—	—	—
Gypsum (a)	tonnes	1 579 000	1 644 000	1 771 000	1 898 000	2 112 000
Iron ore (b) (c)	tonnes	412 238	362 106	416 000	421 711	455 100
Pig iron	tonnes	30 628 000	29 294 000	30 940 000	31 700 000	29 105 000
Crude steel	tonnes	46 374 000	44 524 000	47 223 000	48 550 000	45 832 000
Ferro-alloys						
Ferro-chrome	tonnes	24 857	22 672	26 710	22 030	26 960
Other ferro-alloys	tonnes	* 26 000	* 25 000	* 20 500	* 20 000	* 20 000
Silicon metal	tonnes	28 773	29 349	29 865	29 379	29 092
Kaolin (d)	tonnes	3 751 874	3 767 662	3 815 173	3 842 514	3 622 159
Lead, refined	tonnes	413 500	417 700	379 000	405 070	415 100
Crude petroleum	tonnes	3 515 537	3 815 173	3 514 284	3 414 590	3 053 998
Natural gas	million m ³	20 381	19 143	19 798	18 075	16 547
Potash						
Potassic salts	tonnes (K ₂ O content)	3 626 510	3 663 829	3 624 977	3 636 504	3 280 467
Salt						
Rock salt	tonnes	7 268 000	8 258 000	9 280 000	4 826 000	5 545 000
Brine salt	tonnes	974 000	1 006 000	1 001 000	1 010 000	989 000
Salt in brine	tonnes	7 212 000	7 449 000	7 189 000	7 558 000	7 307 000
Selenium metal	tonnes	* 14	* 12	* 12	* 12	* 12
Sulphur and pyrites						
Recovered (e)	tonnes (sulphur content)	1 526 700	1 627 900	1 706 200	1 650 100	1 578 000
Recovered (f)	tonnes (sulphur content)	40 000	42 900	42 500	35 900	39 000
Uranium, mine	tonnes (metal content)	77	80	65	41	* 40
Slab zinc	tonnes	382 020	334 900	342 566	294 735	292 284

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 petroleum refining and/or natural gas
- (f) Other

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	21 817 271	21 698 651	25 912 337	29 024 954	29 470 321
Aluminium and bauxite						
Bauxite	tonnes	30 647	28 087	30 772	36 361	33 636
Alumina	tonnes	294 034	204 075	313 586	282 245	305 514
Alumina hydrate	tonnes	528 700	527 900	717 433	672 561	634 635
Unwrought	tonnes	58 365	60 757	72 132	61 090	75 386
Unwrought alloys	tonnes	354 998	330 843	360 157	361 917	359 628
Scrap	tonnes	544 522	583 987	675 261	770 042	702 739
Antimony						
Metal	tonnes	12	15	30	141	33
Oxide	tonnes	786	724	892	1 130	932
Arsenic						
Metallic arsenic	tonnes	14	20	20	32	41
Barytes	tonnes	32 383	32 375	33 947	43 104	38 111
Bentonite and fuller's earth						
Bentonite	tonnes	50 477	71 977	77 368	81 272	67 109
Fuller's earth	tonnes	860	1 540	1 378	...	...
Bismuth						
Metal	tonnes	275	371	534	901	276
Bromine	kilograms	5 600	3 000	4 600	3 400	14 400
Cadmium						
Sulphide	tonnes	6	14	4	...	...
Cement						
Cement clinkers	tonnes	868 384	773 394	687 056	1 051 733	1 120 078
Portland cement	tonnes	3 496 157	3 587 966	4 251 126	4 874 062	5 115 858
Other cement	tonnes	1 580 315	1 876 289	1 852 990	2 086 591	2 077 175
Chromium						
Ores and concentrates	tonnes	12 691	14 188	24 185	20 629	23 563
Metal	tonnes	1 256	1 478	2 877	3 114	5 379
Coal						
Anthracite	tonnes	...	...	...	7 444	16 575
Other coal	tonnes	183 694	251 623	305 046	309 501	518 629
Lignite	tonnes	430	73	27 801	140 400	425 680
Briquettes	tonnes	87 022	74 952	83 990	72 008	370 211
Cobalt						
Ore	tonnes	367	171	...	457	145
Metal	tonnes	1 441	1 395	1 602	2 067	1 588
Oxides	tonnes	233	185	140	158	158
Copper						
Ores and concentrates	tonnes	49 617	46 139	54 167	61 535	48 234
Matte and cement	tonnes	944	536	101	24	2
Unwrought, unrefined	tonnes	53	232	3 244	105	182
Unwrought, refined	tonnes	137 238	149 083	146 137	117 596	124 980
Unwrought alloys	tonnes	21 038	20 232	22 941	22 436	16 485
Scrap	tonnes	373 809	439 134	465 264	480 700	478 643
Diamond						
Unsorted	carats	£663 000	£756 000	£21 000	£112 000	£127 000
Gem	carats	190 272	169 535	175 658	157 055	153 893
Industrial	carats	7 997	5 255	7 510	8 952	11 966
Dust	carats	54 314 035	42 628 300	27 074 465	3 366 830	3 410 935
Diatomite	tonnes	20 312	7 000	11 500	7 949	7 189
Feldspar	tonnes	118 838	113 329	121 046	125 258	121 777
Fluorspar	tonnes	17 594	24 061	35 207	56 023	50 338
Gold						
Metal	kilograms	36 500	47 600	65 200	71 250	5 400
Waste and scrap	kilograms	29 600	30 600	7 500	14 800	4 800
Graphite	tonnes	14 783	14 241	20 777	23 993	18 950
Gypsum						
Crude	tonnes	197 613	259 631	391 494	423 152	447 140
Calcined	tonnes	1 033 057	991 946	1 471 660	1 703 212	1 775 467
Iodine	kilograms	640 400	465 800	340 600	183 200	97 400
Iron ore						
Burnt pyrites	tonnes	3 241	7 257	6 623	7 491	12 700
Iron ore	tonnes	8 756	7 023	18 294	17 770	34 495

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Iron, steel and ferro-alloys						
Pig iron	tonnes	112 911	82 834	180 939	145 453	153 917
Sponge and powder	tonnes	148 734	175 291	197 636	147 303	95 846
Ferro-chrome	tonnes	22 758	26 472	36 289	39 892	36 856
Ferro-silico-magnesium	tonnes	13 887	14 254	12 142	24 051	22 191
Ferro-manganese	tonnes	13 776	12 660	24 659	14 733	11 802
Ferro-silico-manganese	tonnes	9 286	2 928	9 748	8 684	10 354
Ferro-molybdenum	tonnes	2 597	3 867	3 499	3 636	3 858
Ferro-nickel	tonnes	625	31	115	2 116	1 036
Ferro-niobium	tonnes	1 076	1 448	1 130	1 149	1 057
Ferro-phosphorus	tonnes	786	936	977	839	477
Ferro-silicon	tonnes	61 239	53 979	53 963	51 343	63 858
Ferro-titanium and ferro-silico-titanium	tonnes	3 069	5 263	4 795	6 011	4 237
Ferro-tungsten and ferro-silico-tungsten	tonnes	178	176	423	480	460
Ferro-vanadium	tonnes	600	528	268	558	413
Other ferro-alloys	tonnes	12 691	10 652	10 720	...	...
Silicon metal	tonnes	18 064	—	—	—	—
Ingots, blooms, billets	tonnes	2 104 580	1 950 158	2 171 036	2 496 951	2 047 223
Scrap	tonnes	6 956 839	6 692 022	7 605 306	7 770 479	8 268 662
Kaolin	tonnes	369 141	301 870	463 804	507 867	498 165
Lead						
Ores and concentrates	tonnes	3 423	102	475	467	—
Unwrought	tonnes	120 361	122 120	126 790	136 609	177 129
Scrap	tonnes	12 412	11 064	8 390	17 799	13 133
Lithium						
Oxides	tonnes	611	...	...	...	...
Carbonate	tonnes	2 660	2 991	2 907	2 705	2 290
Magnesite and magnesia						
Magnesite	tonnes	218	61	132	463	22
Magnesia	tonnes	66 422	81 021	93 286	87 264	72 684
Manganese						
Ores and concentrates	tonnes	2 860	3 249	3 046	5 761	3 321
Metal	tonnes	12 261	17 824	19 757	15 414	12 921
Mercury	kilograms	55 500	36 200	40 000	42 300	111 100
Mica	tonnes	3 655	3 656	4 039	4 957	4 713
Molybdenum						
Ores and concentrates	tonnes	2 309	2 770	3 812	2 723	3 575
Metal	tonnes	2 014	2 241	2 958	346	2 857
Nickel						
Ores and concentrates	tonnes	10 717	7 822	8 901	2 520	316
Mattes, sinters etc.	tonnes	644	5 604	9 285	18 473	20 202
Unwrought	tonnes	5 549	8 988	5 287	4 256	5 200
Unwrought alloys	tonnes	8 732	9 376	9 970	9 664	8 988
Scrap	tonnes	8 096	9 342	6 224	7 383	5 646
Crude petroleum	tonnes	1 253 391	1 257 658	344 965	196 926	40 011
Phosphates	tonnes	43	5 048	700	168	314
Platinum metals						
Platinum	kilograms	31 900	43 300	40 600	28 100	27 700
Palladium	kilograms	15 900	20 800	24 400	27 800	28 600
Other platinum metals	kilograms	4 600	11 100	16 000	22 300	24 700
Waste and scrap	kilograms	815 821	1 648 800	2 797 600	3 399 700	3 238 800
Potash						
Potassic fertilisers (a) (b)	tonnes	3 077 154	3 235 651	3 624 977	3 636 504	3 280 467
Rare earths						
Rare earth compounds	tonnes	108	123	145	217	188
Metals	tonnes	4	1	1	8	3
Salt	tonnes	3 201 549	3 372 522	3 943 083	2 787 088	2 782 861
Sillimanite	tonnes	14 382	12 191	13 257	16 143	18 231
Silver						
Metal	kilograms	2 814 700	2 631 200	2 995 900	2 884 200	3 012 400
Sulphur and pyrites						
Pyrites	tonnes	339	240	486	741	485
Sulphur	tonnes	894 683	898 820	796 341	828 544	654 808
Talc	tonnes	3 862	3 906	4 790	5 394	6 382

Germany

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Tantalum and niobium						
Niobium and tantalum ores	tonnes	93	...	...	...	...
Tantalum	tonnes	337	190	294	199	299
Tin						
Concentrates	tonnes	...	163	331	—	—
Unwrought	tonnes	978	1 343	1 015	1 246	1 612
Unwrought alloys	tonnes	408	329	392	1 371	1 530
Scrap	tonnes	994	701	965	1 222	1 649
Titanium						
Titanium minerals	tonnes	319	607	490	776	3 322
Metal	tonnes	8 048	8 911	8 893	8 713	8 278
Oxides	tonnes	356 007	359 946	400 832	409 495	367 545
Tungsten						
Metal	tonnes	2 816	4 020	4 320	3 020	4 687
Vanadium						
Ores and concentrates	tonnes	1 060	4 680	2 372	...	...
Pentoxide	tonnes	296	1 216	1 444	1 250	1 173
Metal	tonnes	522	1 469	573	...	...
Zinc						
Ores and concentrates	tonnes	695	7 257	2 336	612	1 835
Unwrought	tonnes	91 123	81 664	65 824	77 443	70 724
Unwrought alloys	tonnes	37 762	30 115	29 999	30 439	28 835
Scrap	tonnes	52 545	55 913	54 939	59 297	51 801
Zirconium						
Concentrates	tonnes	2 567	5 211	1 643	2 057	2 799
Metal	tonnes	275	286	434	514	625

Note(s)

(a) K₂O content

(b) Including sulphate, chloride and other potassic fertilisers

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	11 127 947	11 563 984	11 147 034	11 913 688	13 369 162
Aluminium and bauxite						
Bauxite	tonnes	2 119 259	2 435 244	2 143 631	3 141 693	2 995 241
Alumina	tonnes	1 107 265	999 798	912 564	790 515	1 017 746
Alumina hydrate	tonnes	204 721	231 124	219 035	266 042	241 736
Unwrought	tonnes	628 038	648 764	754 311	786 506	693 075
Unwrought alloys	tonnes	1 170 875	1 121 715	1 318 713	1 444 289	1 370 179
Scrap	tonnes	462 580	438 066	539 367	613 084	543 839
Antimony						
Metal	tonnes	178	148	421	612	700
Oxide	tonnes	7 072	6 560	8 305	8 527	8 672
Asbestos						
Unmanufactured	tonnes	69	98	61	54	54
Barytes	tonnes	226 706	231 471	272 526	320 702	278 335
Bentonite and fuller's earth						
Bentonite	tonnes	218 349	253 226	323 999	351 991	361 782
Fuller's earth	tonnes	11 202	9 571	9 371	...	...
Bismuth						
Metal	tonnes	1 693	1 508	1 337	1 130	1 262
Bromine	kilograms	1 626 600	1 304 000	801 100	607 500	646 400
Cadmium						
Metal	tonnes	39	16	7	22	53
Oxide	tonnes	139	231	...	423	507
Sulphide	tonnes	6	18	9	...	...
Cement						
Cement clinkers	tonnes	370 454	289 600	235 023	92 757	14 184
Portland cement	tonnes	1 002 404	934 865	794 716	833 311	770 566
Other	tonnes	343 597	380 858	345 286	311 152	293 583

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Chromium						
Ores and concentrates	tonnes	128 886	141 483	126 874	154 367	175 277
Metal	tonnes	5 599	5 428	7 552	8 454	7 022
Coal						
Anthracite	tonnes	1 413 902	991 877	2 499 908	4 353 426	4 137 690
Other coal	tonnes	31 047 441	29 452 512	35 218 836	37 993 445	37 215 220
Lignite	tonnes	10 570	9 890	10 070	15 411	39 248
Briquettes	tonnes	95 446	110 971	128 877	96 163	70 400
Cobalt						
Metal	tonnes	2 602	2 990	3 532	3 150	2 921
Oxides	tonnes	448	542	759	898	1 057
Copper						
Ores and concentrates	tonnes	1 141 843	1 149 088	1 148 316	1 300 491	1 088 291
Matte and cement	tonnes	15 085	25 931	30 463	14 880	10 102
Unwrought, unrefined	tonnes	11 635	36 671	41 589	31 830	24 706
Unwrought, refined	tonnes	584 852	624 688	881 427	844 747	833 354
Unwrought alloys	tonnes	24 066	26 657	36 770	48 261	40 073
Scrap	tonnes	426 995	432 147	552 413	595 751	563 560
Diamond						
Gem	carats	513 371	443 747	487 354	515 262	699 619
Industrial	carats	763 745	1 572 864	1 554 184	1 090 991	502 045
Dust	carats	96 561 025	63 878 900	53 291 240	45 596 025	45 888 930
Diatomite	tonnes	48 644	40 224	40 197	42 882	49 237
Feldspar	tonnes	70 064	101 931	126 834	143 596	143 758
Fluorspar	tonnes	302 071	264 896	293 737	346 581	357 914
Gold						
Metal	kilograms	51 356	52 827	56 743	68 549	118 516
Waste and scrap	kilograms	1 375 800	1 923 600	1 821 100	1 304 700	1 390 000
Graphite	tonnes	53 602	55 843	45 884	54 627	62 180
Gypsum						
Crude	tonnes	102 596	66 590	79 798	80 449	54 216
Calcined	tonnes	116 628	73 647	85 665	93 275	76 992
Iodine	kilograms	1 422 800	1 302 300	1 205 800	1 102 600	1 150 600
Iron ore						
Iron ore	tonnes	43 317 039	39 061 160	44 850 286	46 194 376	44 339 072
Burnt pyrites	tonnes	37 194	20 496	36 299	570	—
Iron, steel and ferro-alloys						
Pig iron	tonnes	342 152	320 481	422 525	655 022	713 470
Sponge and powder	tonnes	180 615	156 048	193 503	249 673	90 069
Ferro-chrome	tonnes	440 993	454 703	458 070	484 276	544 619
Ferro-silico-chrome	tonnes	11 367	1 429	12 867	14 426	12 886
Ferro-silico-magnesium	tonnes	1 722	6 831	23 761	25 758	23 645
Ferro-manganese	tonnes	175 176	170 967	195 387	217 428	209 083
Ferro-silico-manganese	tonnes	172 164	172 967	181 726	210 703	156 484
Ferro-molybdenum	tonnes	13 214	15 594	17 473	18 423	17 434
Ferro-nickel	tonnes	90 614	157 091	150 789	169 677	177 851
Ferro-niobium	tonnes	3 864	4 361	6 063	6 176	6 269
Ferro-phosphorus	tonnes	4 131	4 985	5 575	6 519	4 801
Ferro-silicon	tonnes	237 700	238 120	214 736	274 783	215 374
Ferro-titanium and ferro-silico-titanium	tonnes	6 845	10 302	13 492	15 339	13 824
Ferro-tungsten and ferro-silico-tungsten	tonnes	400	600	990	1 512	2 182
Ferro-vanadium	tonnes	4 006	4 843	5 171	5 711	5 333
Other ferro-alloys	tonnes	16 901	13 323	13 698	—	—
Silicon metal	tonnes	130 408	156 690	184 499	190 933	225 185
Ingots, blooms, billets	tonnes	1 945 817	2 331 264	2 578 298	3 095 162	2 970 042
Scrap	tonnes	5 411 710	5 026 286	5 592 745	5 920 061	5 675 167
Kaolin	tonnes	774 307	803 001	809 329	717 102	647 278
Lead						
Ores and concentrates	tonnes	202 309	171 533	161 113	211 132	212 602
Unwrought	tonnes	112 975	108 533	134 805	138 978	118 779
Scrap	tonnes	11 757	15 419	18 141	30 313	28 231
Lithium						
Oxides	tonnes	3 699	4 209	4 260	5 163	5 420
Carbonate	tonnes	7 189	8 101	7 948	8 131	7 098
Magnesite and magnesia						
Magnesite	tonnes	4 684	6 353	13 794	17 029	8 420
Magnesia	tonnes	348 766	515 089	519 576	568 508	562 618

Germany

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Manganese						
Ores and concentrates (a)	tonnes	8 034	7 645	11 327	15 997	14 916
Metal	tonnes	22 435	29 449	45 937	42 368	47 581
Mercury	kilograms	80 600	36 200	70 600	84 100	19 700
Mica						
Unmanufactured	tonnes	237	89	12	16	386
Ground	tonnes	28 784	30 820	33 101	36 345	33 175
Waste	tonnes	1 212	1 101	980	782	966
Molybdenum						
Ores and concentrates	tonnes	12 221	11 537	14 059	10 721	9 645
Metal	tonnes	3 043	2 569	3 894	4 238	4 132
Oxides	tonnes	703	725	2 049	1 776	1 905
Natural gas	tonnes	77 411 493	78 310 541	83 475 456	75 980 087	78 201 702
Nickel						
Mattes, sinters etc.	tonnes	7 264	6 902	6 459	1 911	797
Unwrought	tonnes	72 788	87 939	70 947	74 083	68 767
Unwrought alloys	tonnes	1 646	2 182	2 908	2 531	6 102
Scrap	tonnes	11 347	11 672	15 116	19 799	18 316
Oxides	tonnes	517	502	445	593	617
Crude petroleum	tonnes	112 096 299	113 067 864	113 960 654	105 162 534	105 835 665
Phosphate rock	tonnes	148 082	104 335	117 711	115 109	145 905
Platinum group metals						
Platinum	kilograms	39 600	58 400	46 900	51 500	47 100
Palladium	kilograms	20 700	56 000	42 000	54 700	55 100
Other platinum metals	kilograms	6 400	9 100	8 700	9 700	6 400
Waste and scrap	kilograms	3 713 700	6 574 600	9 332 700	11 442 800	10 983 600
Potash						
Sulphate	tonnes	4 426	5 964	5 414	17 108	11 801
Chloride	tonnes	97 924	75 483	62 917	101 081	124 643
Other potassic fertilisers	tonnes	570	4 065	809	1 344	2 503
Rare earths						
Cerium compounds	tonnes	1 082	1 082	975	901	673
Other rare earth compounds	tonnes	7 776	6 961	7 024	9 748	10 192
Ferro-cerium and other pyrophoric alloys	tonnes	214	6	3	7	6
Metals	tonnes	285	402	369	410	430
Salt	tonnes	2 467 276	2 558 898	2 591 036	2 476 738	2 319 273
Sillimanite minerals	tonnes	60 782	58 047	80 183	109 961	79 668
Silver						
Ores and concentrates	kilograms	...	...	1 323 500	859 400	6 024 500
Metal	kilograms	1 434 200	1 861 800	2 227 600	2 565 300	2 668 900
Sulphur and pyrites						
Pyrites	tonnes	53 264	62 686	76 343	92 569	109 955
Sulphur	tonnes	56 272	46 127	31 267	51 785	53 602
Sulphur, sublimed and precipitated	tonnes	12 782	4 389	1 363	2 007	2 964
Talc	tonnes	352 177	376 618	345 863	347 230	338 606
Tantalum and niobium						
Tantalum	tonnes	281	164	148	125	188
Tin						
Unwrought	tonnes	21 258	20 438	21 584	23 917	22 160
Unwrought alloys	tonnes	453	554	936	409	179
Scrap	tonnes	408	506	917	1 689	2 243
Titanium						
Ilmenite	tonnes	315 214	333 603	414 037	425 175	446 154
Other titanium minerals	tonnes	225 849	224 675	253 392	200 512	279 407
Titanium slag	tonnes	—	—	17 403	112 474	76 107
Metal	tonnes	14 756	15 978	18 426	19 385	19 449
Oxides	tonnes	237 464	240 554	269 812	299 599	281 009
Tungsten						
Ores and concentrates	tonnes	389	493	512	604	967
Metal	tonnes	4 976	5 515	4 450	4 791	5 184
Carbide	tonnes	1 520	1 802	1 366	2 678	2 526
Vanadium						
Ores and concentrates	tonnes	22	104	53	79	60
Pentoxide	tonnes	648	741	1 222	1 071	879
Metal	tonnes	159	193	173	...	...

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Zinc						
Ores and concentrates	tonnes	480 355	401 829	314 268	357 692	383 789
Unwrought	tonnes	248 654	245 794	313 034	316 603	305 075
Unwrought alloys	tonnes	83 556	76 981	83 795	87 785	89 738
Scrap	tonnes	23 997	22 480	30 028	19 586	17 395
Zirconium						
Ores and concentrates	tonnes	(b) 80 328	(b) 79 729	—	—	—
Metal	tonnes	516	503	571	880	791

Note(s):-

- (a) Including manganese iron ore
(b) Including niobium and tantalum concentrates

Greece

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel and crushed rock	tonnes	* 90 000 000	* 90 000 000	* 90 000 000	* 90 000 000	* 85 000 000
Bauxite	tonnes	2 396 065	2 441 443	2 162 900	2 093 433	2 174 000
Alumina	tonnes (Al ₂ O ₃ content)	514 000	511 100	509 800	515 600	504 400
Primary aluminium	tonnes	166 634	165 300	164 500	167 937	162 339
Asbestos	tonnes	* 4 000	—	—	—	—
Bentonite and fuller's earth						
Bentonite	tonnes	1 030 556	1 124 795	* 1 200 000	(a) 1 389 800	(a) 1 525 000
Cement						
Cement clinker	tonnes	12 185 001	12 442 361	10 852 453	12 035 077	* 12 000 000
Cement, finished	tonnes	14 800 861	15 191 761	15 723 088	14 356 483	14 036 951
Coal						
Lignite	tonnes	71 237 228	70 600 000	64 800 000	66 100 000	64 521 000
Feldspar	tonnes	88 274	100 586	* 100 000	95 000	62 000
Gypsum	tonnes	856 606	865 216	* 850 000	836 967	830 000
Crude steel	tonnes	1 967 000	2 266 000	2 416 000	2 554 000	2 477 000
Ferro-alloys						
Ferro-nickel	tonnes	90 600	* 96 000	* 89 000	93 300	83 200
Kaolin	tonnes	53 438	49 912	* 40 000	30 000	4 360
Lead, mine	tonnes (metal content)	—	3 000	10 400	13 400	14 000
Lead, refined	tonnes	* 3 000	* —	* 6 000	* 11 000	* 11 000
Magnesite	tonnes	552 300	471 000	463 277	351 414	361 165
Nickel, mine	tonnes (metal content)	19 000	20 400	21 700	21 200	18 600
Nickel, smelter/refinery	tonnes	18 116	19 235	17 700	18 668	16 640
Crude petroleum	tonnes	143 000	135 000	93 000	80 000	66 000
Natural gas	million m ³	23	16	* 16	21	14
Perlite	tonnes	1 053 388	1 075 129	* 1 100 000	1 100 000	1 000 000
Salt	tonnes	187 522	198 024	* 200 000	212 000	220 000
Silver, mine	kilograms (metal content)	—	2 300	25 500	38 300	35 500
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	160 000	162 000	162 000	165 000	120 000
Talc	tonnes	200	250	* 250	200	* 200
Zinc, mine	tonnes (metal content)	—	4 000	16 000	20 700	24 200

Note(s):-

(1) Greece is believed to produce gold

(a) Including attapulgite and sepiolite

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	108 042	43 306	48 990	49 781	50 453
Aluminium and bauxite						
Bauxite	tonnes	925 282	1 136 505	912 093	1 086 405	787 160
Alumina	tonnes	404 852	439 374	457 726	715 003	412 385
Alumina hydrate	tonnes	3 760	2 944	8 239	21 716	29 552
Unwrought	tonnes	61 846	60 964	64 487	27 195	26 083
Unwrought alloys	tonnes	8 597	15 017	18 804	67 732	64 998
Scrap	tonnes	13 777	15 205	19 105	13 566	13 261
Antimony						
Metal	tonnes	3	141	160	143	81
Asbestos	tonnes	4 256	—	...	—	...
Bentonite and fuller's earth						
Bentonite	tonnes	15 612	1 283	12 620	168	8 885
Fuller's earth	tonnes	8	90	122	...	...

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Cement						
Cement clinkers	tonnes	257 136	304 750	356 077	848 925	722 151
Portland cement	tonnes	2 679 607	3 502 085	2 816 832	2 685 623	2 842 584
Other cement	tonnes	170 640	242 957	181 529	207 665	205 640
Chromium						
Ores and concentrates	tonnes	21	249	726	—	98
Coal						
Hard coal (a)	tonnes	16 229	11 673	15 852	25 717	8 426
Briquettes	tonnes	67 702	51 752	23 465	12	25
Copper						
Unwrought, refined	tonnes	1 894	1 242	2 541	1 944	356
Unwrought alloys	tonnes	1 273	365	1 142	995	1 198
Scrap	tonnes	8 517	15 126	16 889	14 669	12 314
Feldspar	tonnes	8 515	4 755	5 258	6 052	5 806
Gold						
Metal	kilograms	15	3	311	900	400
Gypsum						
Crude	tonnes	106 082	88 187	116 442	47 694	21 258
Calcined	tonnes	549	926	752	1 842	937
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	5 528	1 044	511	340	3 671
Ingots, blooms, billets	tonnes	64 105	48	13 899	121 989	162 819
Scrap	tonnes	59 502	37 164	126 188	34 584	36 018
Kaolin	tonnes	131	129	472	276	384
Lead						
Unwrought	tonnes	3 003	4 017	3 292	9 913	5 792
Scrap	tonnes	240	848	1 256	769	1 390
Magnesite and magnesia						
Magnesia	tonnes	130 910	140 083	125 783	132 083	126 496
Mica	tonnes	2 769	5 653	9 613	3	59
Nickel						
Ores and concentrates	tonnes	190	...	52 169	150	231
Potash						
Potassic fertilisers	tonnes	4 083	2 894	3 977	1 217	1 648
Salt	tonnes	44 664	50 390	62 896	37 232	48 908
Silver						
Metal	kilograms	3 299	152	3 325	8 300	7 400
Sulphur and pyrites						
Pyrites	tonnes	6 920	4 306	16 495	73 606	63 893
Sulphur	tonnes	3 385	138	43 773	52 668	16 345
Talc	tonnes	2 566	3 479	4 065	5 016	3 926
Titanium						
Oxides	tonnes	1 835	2 373	1 861	2 233	598
Zinc						
Ores and concentrates	tonnes	0	3 276	12 615	14 890	43 003
Unwrought (b)	tonnes	709	334	1 802	29 861	448
Scrap	tonnes	709	517	421	644	413

Note(s)

(a) Including anthracite

(b) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	199 144	22 026	45 081	341 376	425 485
Aluminium and bauxite						
Bauxite	tonnes	247 358	206 870	268 899	376 304	226 374
Alumina and alumina hydrate	tonnes	905	1 049	71 073	283 255	38 828
Unwrought	tonnes	116 074	121 266	125 541	125 327	129 407
Unwrought alloys	tonnes	51 522	68 958	62 828	73 561	63 670
Scrap	tonnes	16 631	18 083	20 030	50 470	28 960
Antimony						
Ores and concentrates	tonnes	119	95	131	83	27
Metal	tonnes	46	24	0	21	63
Arsenic						
Metallic arsenic	tonnes	21	35	16	9	9
Barytes	tonnes	858	996	1 065	1 255	1 348
Bentonite and fuller's earth						
Bentonite	tonnes	8 902	22 164	14 573	19 780	21 261
Fuller's earth	tonnes	633	844	811	...	...
Bismuth						
Metal	tonnes	23	6	6	11	3
Cement						
Cement clinkers	tonnes	1 237	1 494	50 907	45 388	23 558
Portland cement	tonnes	1 754	425	3 237	3 603	74 239
Other	tonnes	3 497	4 548	3 228	3 010	2 618
Chromium						
Ores and concentrates	tonnes	122	477	732	257	298
Coal						
Anthracite	tonnes	37 633	35 475	39 250	59 007	41 475
Other coal	tonnes	753 949	724 600	461 181	382 933	288 441
Lignite	tonnes	2	0	50	3 029	35 457
Briquettes	tonnes	1 929	1 803	1 382	1 144	111
Cobalt						
Metal	tonnes	89	31	30	42	123
Copper						
Unwrought	tonnes	120 088	90 557	106 404	105 722	79 928
Unwrought alloys	tonnes	550	488	4 439	6 855	9 393
Scrap	tonnes	1 864	930	2 141	10 148	18 628
Diamond						
Unsorted	carats	4 725 000	9 570 000	20 035 000	7 000 000	116 000 000
Gem, rough	carats	45 000	85 000	55 000	205 000	425 000
Gem, cut	carats	5 990 000	10 375 000	10 075 000	9 470 000	2 815 000
Industrial	carats	7 685 000	6 770 000	9 720 000	11 355 000	22 810 000
Dust	carats	8 390 000	19 475 000	10 550 000	17 573 974	13 598 082
Diatomite	tonnes	610	645	757	958	790
Feldspar	tonnes	499	3 032	439	478	2 830
Fluorspar	tonnes	20 720	10 681	2 855	2 232	2 281
Gold						
Metal	kilograms	37 484	56 572	60 999	48 500	114 500
Graphite	tonnes	127	91	83	111	142
Gypsum						
Crude and calcined	tonnes	14 440	6 071	14 321	4 747	3 093
Iodine	kilograms	1 673	2 247	2 153	500	600
Iron ore	tonnes	(a) 4 714	(a) 55 530	(a) 9 755	(a) 23 775	1 567
Iron, steel and ferro-alloys						
Pig iron	tonnes	15 494	6 415	9 172	10 461	9 185
Sponge and powder	tonnes	3 507	3 374	492	6 741	7 709
Ferro-chrome	tonnes	565	674	871	1 016	1 146
Ferro-manganese	tonnes	2 604	1 293	640	2 654	1 753
Ferro-silico-manganese	tonnes	23 808	31 657	31 524	38 321	24 943
Ferro-silicon	tonnes	7 899	6 339	4 694	18 783	8 170
Other ferro-alloys	tonnes	1 026	474	444	546	504
Silicon metal	tonnes	1 055	1 126	1 408	1 383	2 312
Ingots, blooms, billets	tonnes	229 854	90 412	120 241	250 572	171 231
Scrap	tonnes	1 178 451	1 545 912	1 517 545	1 637 437	1 485 316
Kaolin	tonnes	56 380	54 293	68 083	40 298	62 415
Lead						
Unwrought	tonnes	28 460	5 112	5 401	11 792	6 875
Scrap	tonnes	1 284	85	138	2 071	2 800

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Magnesite and magnesia						
Magnesite	tonnes	20 579	14 250	15 645	12 611	44 397
Magnesia	tonnes	11 985	17 232	22 763	20 682	7 328
Manganese						
Ores and concentrates	tonnes	1	22 001	46 164	—	51 425
Metal	tonnes	1 510	905	730	291	271
Mercury	kilograms	187	954	933	100	2 500
Mica	tonnes	94	131	111	123	218
Molybdenum						
Metal	tonnes	13	2	47	34	60
Natural gas	tonnes	2 455 612	2 634 247	3 029 778	3 789 666	4 186 746
Nickel						
Ores and concentrates	tonnes	6	29 153	6 657	36	—
Unwrought (b)	tonnes	61	58	40	46	101
Crude petroleum	tonnes	18 390 500	18 926 138	18 370 720	16 938 841	6 422 841
Phosphate rock	tonnes	364 398	378 931	197 629	237 577	251 845
Platinum group metals						
Platinum and platinum metals	kilograms	179	181	248	7 400	300
Potash						
Sulphate	tonnes	92 816	28 334	44 049	37 785	36 642
Chloride	tonnes	29 191	46 667	36 887	22 518	28 144
Other potassic fertilisers	tonnes	6 411	4 387	9 682	6 189	8 660
Rare earths						
Cerium compounds	tonnes	9	3	4	2	1
Ferro-cerium and other pyrophoric alloys	tonnes	15	1	0	25	0
Salt	tonnes	173 729	162 669	277 940	177 719	134 557
Sillimanite minerals	tonnes	107	25	62	734	2 662
Silver						
Metal	kilograms	95 318	1 059 816	46 241	1 039 000	276 100
Sulphur and pyrites						
Pyrites	tonnes	5	...	31 906	94 621	40 754
Sulphur	tonnes	83 733	68 765	3 933	35 625	42 733
Talc	tonnes	10 061	9 937	10 000	8 550	12 372
Tin						
Unwrought (b)	tonnes	671	615	244	323	265
Titanium						
Titanium minerals	tonnes	563	528	440	826	399
Oxides	tonnes	27 241	25 592	25 372	27 284	23 260
Zinc						
Unwrought (b)	tonnes	29 255	20 110	19 320	58 708	28 996
Ores and concentrates	tonnes	611	629	466	547	429

Note(s):-

- (a) Including burnt pyrites
(b) Including alloys

Hungary

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	46 354 829	69 027 609	46 458 296	34 815 891	36 647 400
Crushed rock	tonnes	13 037 471	15 078 440	17 944 036	13 046 962	11 385 700
Bauxite	tonnes	646 726	535 337	507 259	515 061	511 337
Alumina	tonnes (Al ₂ O ₃ content)	* 304 000	* 270 000	* 270 000	* 300 000	* 330 000
Primary aluminium	tonnes	34 400	31 000	300	—	—
Bentonite and fuller's earth						
Bentonite	tonnes	9 300	4 900	6 635	54 231	7 464
Cement						
Cement clinker	tonnes	...	...	2 533 076	2 500 698	* 2 500 000
Cement, finished	tonnes	3 349 000	3 371 000	3 724 153	3 551 746	3 544 000
Coal						
Bituminous	tonnes	280 000	—	—	...	...
Lignite	tonnes	8 470 258	8 153 968	8 467 220	8 351 563	8 041 168
Brown coal	tonnes	2 500 000	1 426 000	1 431 700	1 450 400	1 386 140
Diatomite	tonnes	1 640	2 190	495	1 424	—
Gypsum (a)	tonnes	55 000	19 000	30 000	26 000	15 940
Pig iron	tonnes	1 350 000	1 329 000	1 340 000	1 393 655	1 288 758
Crude steel	tonnes	1 944 017	2 004 250	2 084 000	2 227 000	2 096 000
Kaolin	tonnes	3 300	1 300	1 350	2 136	—
Manganese ore	tonnes	49 000	50 000	50 000	51 000	49 579
Crude petroleum	tonnes	1 076 844	947 542	886 000	838 672	774 590
Natural gas	million m ³	3 112	3 041	3 254	2 653	2 703
Perlite	tonnes	65 000	69 900	71 019	67 542	132 000
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	35 000	65 000	50 000	65 000	55 000

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	2004	2005	2006	2007	2008
Primary aggregates	tonnes	729 270	736 586	961 775	1 889 989	1 382 695
Aluminium and bauxite						
Alumina	tonnes	170 664	142 470	170 030	178 984	168 347
Alumina hydrate	tonnes	80 314	75 811	90 705	98 187	102 652
Unwrought (a)	tonnes	25 475	22 635	28 884	27 580	10 981
Scrap	tonnes	38 684	41 192	34 986	29 228	22 098
Bentonite and fuller's earth						
Bentonite	tonnes	897	442	860	849	1 191
Cement						
Cement clinkers	tonnes	78 590	27 328	—	—	—
Portland cement	tonnes	244 276	274 262	257 050	177 191	329 647
Other cement	tonnes	855	123	32	4 448	25 169
Coal						
Lignite	tonnes	81 047	366 132	—	—	89 444
Copper						
Scrap	tonnes	31 741	34 861	27 051	23 394	20 958
Diatomite	tonnes	452	12	44	44	37
Gold						
Metal	kilograms	828	628	470	871	657
Gypsum						
Crude and calcined	tonnes	1 305	2 648	6 408	8 626	19 259

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	701	234	—	829	47
Ingots, blooms, billets	tonnes	24 042	24 923	14 731	36 548	90 282
Scrap	tonnes	887 069	761 464	658 499	567 923	691 805
Kaolin	tonnes	7 180	6 252	3 781	3 762	3 110
Lead						
Scrap	tonnes	2 377	2 987	3 286	2 369	4 052
Natural gas	tonnes	—	11 560	—	127 853	—
Platinum metals						
Waste and scrap	kilograms	...	...	...	89 200	...
Potash						
Potassic fertilisers	tonnes	2 512	1 253	2 336	3 474	7 891
Rare earths						
Other rare earth compounds	tonnes	...	0	...	...	14
Salt	tonnes	576	49 578	45 215	1 459	1 388
Sillimanite						
Mullite	tonnes	6 108	6 920	6 870	(b)* 7 500	(b)* 7 100
Silver						
Metal	kilograms	2 519	1 033	395	527	139
Sulphur and pyrites						
Sulphur	tonnes	22 607	36 471	34 850	43 178	43 649
Talc	tonnes	1 533	—	—	162	131
Tin						
Unwrought (a)	tonnes	343	28	70	51	140
Scrap	tonnes	169	67	123	141	246
Titanium						
Oxides	tonnes	278	126	324	991	1 402
Tungsten						
Metal	tonnes	64	24	49	52	39
Zinc						
Unwrought	tonnes	3 798	415	1 189	—	(a) 523
Scrap	tonnes	3 571	3 938	4 557	3 716	1 902

Note(s)

(a) Including alloys

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

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	254 800	446 504	211 927	455 416	806 281
Aluminium and bauxite						
Bauxite	tonnes	189 528	279 660	243 873	319 681	297 832
Alumina and alumina hydrate	tonnes	8 751	15 638	2 558	3 350	9 505
Unwrought	tonnes	337 995	109 382	109 506	132 695	122 319
Unwrought alloys	tonnes	32 021	54 362	72 573	149 299	107 123
Scrap	tonnes	13 111	17 164	49 076	37 204	56 347
Antimony						
Oxide	tonnes	186	180	139	192	144
Barytes	tonnes	3 454	...	...	1 444	492
Bentonite and fuller's earth						
Bentonite	tonnes	4 963	2 794	4 850	2 933	3 095
Fuller's earth	tonnes	251	281	...	...	...
Bromine	kilograms	(a) 5 623	12 000	9 300	(a) 29 143	9 900
Chromium						
Ores and concentrates	tonnes	367	388	306	492	479
Metal	tonnes	69	182	289	28	86
Cement						
Cement clinkers	tonnes	583	9 051	65 437	40 099	...
Portland cement	tonnes	451 613	565 366	455 108	560 863	643 776
Other	tonnes	579 735	508 067	375 337	144 824	55 798

Hungary

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Coal						
Hard coal (b)	tonnes	1 347 232	1 298 122	1 765 117	1 950 139	1 907 548
Lignite	tonnes	403 297	710 417	686 862	572 742	767 480
Briquettes	tonnes	12 295	14 310	15 416	13 590	16 093
Copper						
Unwrought	tonnes	11 365	3 269	2 175	2 492	3 016
Scrap	tonnes	512	399	571	1 405	5 933
Diamond						
Gem, cut	carats	£1 669 000	£849 000	£246 000	£52 000	£220 000
Diatomite	tonnes	1 390	1 158	1 476	2 111	1 110
Feldspar	tonnes	19 205	20 184	16 091	13 567	10 418
Fluorspar	tonnes	4 366	(c)* 2 900	2 801	7 460	4 512
Gold						
Metal	kilograms	1 514	1 380	235	229	...
Graphite	tonnes	234	191	192	178	147
Gypsum						
Crude and calcined	tonnes	64 726	60 336	65 546	66 039	55 933
Iodine	kilograms	3 257	6 700	1 800	4 400	7 900
Iron ore	tonnes	1 063 931	996 277	987 543	966 633	...
Iron, steel and ferro-alloys						
Pig iron	tonnes	14 429	8 808	14 821	13 285	12 951
Ferro-manganese	tonnes	9 152	2 898	15 611	4 311	4 318
Ferro-silico-manganese	tonnes	1 842	1 368	3 303	4 168	4 661
Ferro-silicon	tonnes	5 295	5 013	4 821	5 907	5 232
Other ferro-alloys	tonnes	2 534	4 049	1 677	1 535	13 393
Silicon metal	tonnes	5 196	2 260	4 847	2 982	2 184
Ingots, blooms, billets	tonnes	82 336	102 861	38 956	29 820	273 585
Scrap	tonnes	62 753	45 860	65 136	87 369	146 494
Kaolin	tonnes	23 417	33 075	25 282	25 168	29 089
Lead						
Unwrought	tonnes	4 545	5 028	4 063	5 802	2 711
Magnesite and magnesia	tonnes	7 003	6 251	5 435	9 760	14 754
Manganese						
Ores and concentrates	tonnes	194	...	20	254	293
Metal	tonnes	111	889	1 180	331	1 185
Mercury	kilograms	4 426	4 607	3 529	3 300	4 100
Molybdenum						
Metal	tonnes	129	129	145	112	102
Natural gas	tonnes	7 993 113	8 238 371	8 013 603	7 366 053	8 574 143
Nickel						
Unwrought (d)	tonnes	155	115	141	116	69
Crude petroleum	tonnes	5 001 714	6 320 762	(c)* 7 667 000	6 064 641	(c)* 6 959 000
Platinum group metals						
Platinum and platinum metals	kilograms	184	985	91	126	100
Potash						
Chloride	tonnes	140 551	137 278	133 764	168 692	181 373
Other potassic fertilisers	tonnes	2 913	3 735	3 180	5 863	4 552
Rare earths						
Rare earth compounds	tonnes	158	131	146	242	116
Salt	tonnes	486 695	592 522	662 455	514 119	510 287
Sillimanite minerals	tonnes	2 396	4 519	3 001	3 428	4 004
Silver						
Metal	kilograms	33 036	15 711	206 137	14 581	8 354
Sulphur and pyrites						
Sulphur (c)	tonnes	* 1 697	* 1 228	* 3 442	* 1 228	* 1 395
Sulphur, sublimed and precipitated	tonnes	296	362	326	174	586
Talc	tonnes	9 178	...	8 175	9 224	8 875
Tin						
Unwrought (d)	tonnes	155	192	384	328	320
Titanium						
Titanium minerals	tonnes	1 474	2 260	1 623	...	2 659
Metal	tonnes	387	157	240	138	31
Oxides	tonnes	8 677	7 523	7 845	8 291	8 590
Zinc						
Unwrought (d)	tonnes	15 779	14 529	19 093	16 843	17 011

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Zirconium						
Ores and concentrates	tonnes	...	3 266	...	2 427	2 439

Note(s):-

- (a) May include some fluorine
- (b) Including anthracite
- (c) BGS estimates, based on known exports from certain countries
- (d) Including alloys

Ireland, Republic of

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	* 40 000 000	* 40 000 000	* 64 000 000	* 40 000 000	* 25 000 000
Crushed rock	tonnes	* 60 000 000	* 94 000 000	* 96 000 000	* 90 000 000	* 60 000 000
Alumina	tonnes (Al ₂ O ₃ content)	* 1 500 000	* 1 800 000	1 800 000	1 800 000	1 800 000
Cement						
Cement, finished	tonnes	* ...	* 4 900 000	* 4 700 000	* 4 700 000	* 4 400 000
Gypsum	tonnes	* 650 000	* 700 000	* 700 000	* 700 000	* 600 000
Lead, mine	tonnes (metal content)	63 800	72 200	61 800	56 800	50 200
Lead, refined	tonnes	19 600	22 500	21 700	22 500	20 000
Natural gas (a)	million m ³	848	570	500	519	506
Silver, mine	kilograms (metal content)	5 200	10 500	12 900	9 650	8 462
Zinc, mine	tonnes (metal content)	438 300	445 400	425 800	400 900	398 200

Note(s):-

(a) Sales

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	135 579	62 729	230 125	85 146	255 295
Aluminium and bauxite						
Bauxite	tonnes	5	472	9 210	11 167	1 438
Alumina	tonnes	1 388 723	1 459 036	1 534 845	1 652 967	1 709 302
Alumina hydrate	tonnes	44 645	85 062	115 676	10 011	88 039
Unwrought alloys	tonnes	3 776	3 542	4 637	5 425	3 711
Scrap	tonnes	15 367	16 475	18 784	22 397	21 041
Cement						
Cement clinkers	tonnes	—	0	—	16 033	—
Portland cement	tonnes	1 133 469	942 655	972 585	1 120 808	1 144 186
Other cement	tonnes	850	10	1 489	1 596	1 512
Coal						
Anthracite	tonnes	1 037	501	3 791	30 451	...
Other coal	tonnes	8 749	9 800	6 382	4 395	6 158
Briquettes	tonnes	18 049	13 103	4 823	4 083	6 508
Cobalt						
Metal	tonnes	32	42	43	45	47
Oxides	tonnes	11	—	38	152	0
Copper						
Ores and concentrates	tonnes	...	3	922	1 024	49
Scrap	tonnes	16 118	13 152	15 784	9 836	21 421
Gold						
Metal	kilograms	£1 076 000	£942 000	£1 400 000	£1 678 000	£1 180 000
Waste and scrap	kilograms	£1 672 000	£1 429 000	£1 313 000	£902 000	£577 000
Gypsum						
Crude	tonnes	919	1 022	1 054	1 058	1 094
Calcined	tonnes	40 636	42 212	40 027	37 914	32 821
Iodine	kilograms	—	1 462	—	1 944	1 536
Iron, steel and ferro-alloys						
Scrap	tonnes	347 479	352 028	398 587	478 562	485 387
Lead						
Ores and concentrates	tonnes	84 115	92 813	129 748	108 645	91 728
Magnesite and magnesia						
Magnesite	tonnes	6	—	5 991	5 487	5 006
Magnesia	tonnes	69 105	82 417	46 656	3 981	9 912
Natural gas	tonnes	—	—	642 980	5 447	—
Nickel						
Scrap	tonnes	797	641	1 015	556	236
Crude petroleum	tonnes	63	7	11	55 635	—
Platinum metals						
Waste and scrap	kilograms	13 100	7 900	6 523	7 179	16 854

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Rare earths						
Rare earth compounds	tonnes	85	14	73	8	9
Salt	tonnes	233	1 521	2 492	3 867	8 783
Silver						
Ores and concentrates	kilograms	1 137	19	...	2 560	—
Tin						
Concentrates	tonnes	190	151	110	75	83
Unwrought (a)	tonnes	103	67	71	1 094	34
Scrap	tonnes	140	58	54	77	86
Tungsten						
Metal	tonnes	72	963	183	180	10
Zinc						
Ores and concentrates	tonnes	564 018	522 312	483 949	412 703	404 303
Scrap	tonnes	450	684	569	3 044	649

Note(s)

(a) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	1 269 673	1 444 893	1 687 279	1 729 337	1 368 008
Aluminium and bauxite						
Bauxite	tonnes	3 740 006	3 606 983	3 368 967	4 144 231	3 009 615
Alumina and alumina hydrate	tonnes	6 626	4 252	7 470	9 268	9 579
Unwrought (a)	tonnes	6 603	4 092	2 756	1 261	309
Arsenic						
Metallic arsenic	tonnes	...	158	125	137	95
Asbestos						
Unmanufactured	tonnes	475	2 794	2 700	23	3
Barytes	tonnes	411	894	293	586	229
Bentonite and fuller's earth						
Bentonite	tonnes	2 042	2 658	953	2 914	2 634
Bismuth						
Metal	tonnes	2	6	8	12	38
Chromium						
Metal	tonnes	25	40	44	101	120
Coal						
Anthracite	tonnes	100 792	60 325	68 190	33 175	47 392
Other coal	tonnes	2 930 298	2 641 074	1 908 618	1 830 979	2 169 185
Cement						
Cement clinkers	tonnes	226 116	245 955	395 053	592 721	36 153
Portland cement	tonnes	281 044	335 055	559 645	664 977	780 528
Other	tonnes	9 132	8 958	9 079	16 409	14 649
Briquettes	tonnes	48 348	35 959	48 158	14 278	19 049
Cobalt						
Ores and concentrates	tonnes	30	28	35	571	36
Metal	tonnes	273	390	464	298	622
Oxides	tonnes	5	13	43	7	4
Diamond						
Unsorted	carats	33 525 000	39 900 000	67 655 000	42 460 000	17 535 000
Gem, rough	carats	1 815 000	3 815 000	4 140 000	4 365 000	3 240 000
Gem, cut	carats	21 175 000	36 975 000	44 635 000	46 100 000	28 020 000
Industrial	carats	26 740 000	30 680 000	70 840 000	35 720 000	10 560 000
Dust	carats	...	30 924 437	200 868 966	233 626 080	83 596 315
Diatomite	tonnes	594	641	943	859	1 458
Gold						
Metal	kilograms	£7 480 000	£7 227 000	£7 213 000	£6 260 000	£5 271 000
Waste and scrap	kilograms	4 880	2 567	904	47	987
Graphite	tonnes	288	177	23	73	12
Gypsum						
Crude	tonnes	536	1 056	2 064	7 487	1 412
Calcined	tonnes	6 015	20 024	22 500	22 676	24 877
Iodine	kilograms	18 215	11 921	9 705	10 318	21 515

Ireland, Republic of

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Iron ore	tonnes	10 306	(b) 580	1 161	(b) 4 594	(b) 13 478
Iron, steel and ferro-alloys						
Pig iron	tonnes	3 812	3 215	2 710	939	2 359
Ingots, blooms, billets	tonnes	1 487	1 637	7 928	8 319	5 459
Scrap	tonnes	1 277	1 137	3 650	4 179	4 206
Kaolin	tonnes	22 213	22 764	19 647	19 322	18 766
Lead						
Unwrought	tonnes	26 896	30 999	28 386	35 675	23 480
Scrap	tonnes	18 290	28 530	31 794	25 828	17 702
Magnesite and magnesia						
Magnesite	tonnes	25 886	12 653	1 967	5 971	4 385
Magnesia	tonnes	49 664	49 466	35 800	48 088	42 999
Manganese						
Ores and concentrates (c)	tonnes	268	285	368	286	75
Metal	tonnes	5	5	15	118	7
Mercury	kilograms	61	72	11 804	1 019	979
Mica	tonnes	551	889	650	508	291
Natural gas	tonnes	1 237 980	2 383 218	1 946 640	3 838 104	4 364 595
Nickel						
Unwrought (a)	tonnes	1 493	1 775	1 256	97	1 118
Crude petroleum	tonnes	2 128 991	3 226 383	3 082 372	3 595 537	2 878 397
Phosphate rock	tonnes	1 159	219	154	6 028	3 425
Platinum group metals						
Platinum and platinum metals	kilograms	2 620	4 934	3 999	10 425	2 105
Potash						
Chloride	tonnes	30 456	113 476	125 803	122 191	97 056
Other potassic fertilisers	tonnes	4 924	5 747	4 566	1 785	4 347
Rare earths						
Rare earth compounds	tonnes	74	32	7	23	21
Salt	tonnes	83 789	83 746	96 164	89 236	105 636
Silver						
Ores and concentrates	kilograms	30	...	18 974	1 270	385
Metal	kilograms	2 709	2 611	5 147	1 045	8 191
Sulphur and pyrites						
Sulphur, sublimed and precipitated	tonnes	1 371	2 327	2 486	887	305
Talc	tonnes	2 508	2 632	1 278	375	473
Tantalum and niobium						
Tantalum	tonnes	2	8	2	3	2
Tin						
Unwrought (a)	tonnes	462	307	211	249	389
Titanium						
Metal	tonnes	151	290	350	362	1 154
Oxides	tonnes	5 685	5 059	4 703	4 822	3 961
Tungsten						
Metal	tonnes	177	292	173	277	215
Carbide	tonnes	...	...	53	184	158
Zinc						
Unwrought (a)	tonnes	3 622	3 629	7 010	7 687	5 453
Zirconium						
Ores and concentrates	tonnes	152	248	258	425	3 976

Note(s):-

(a) Including alloys

(b) Including burnt pyrites

(c) Including manganese ore

Italy

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel (a)	tonnes	200 836 237	183 908 475	185 382 004	195 348 311	157 434 471
Crushed rock (a)	tonnes	111 274 000	91 524 456	90 705 870	93 631 311	78 715 720
Alumina	tonnes (Al ₂ O ₃ content)	1 064 000	1 070 000	1 090 000	1 327 000	* 1 100 000
Primary aluminium	tonnes	195 400	192 900	194 200	179 500	186 400
Barytes	tonnes	12 258	7 312	* 7 000	* 7 000	* 7 000
Bentonite and fuller's earth						
Bentonite	tonnes	437 659	445 573	469 654	599 735	281 119
Fuller's earth	tonnes	300	...	...	...	...
Cement						
Cement, finished	tonnes	45 342 868	46 400 000	47 400 000	46 700 000	4 300 000
Copper, refined	tonnes	33 600	32 200	36 400	28 600	24 200
Feldspar	tonnes	3 251 264	3 995 233	4 600 903	4 726 908	* 5 000 000
Fluorspar	tonnes	24 339	70 326	* 15 000	—	—
Gypsum	tonnes	1 615 287	* 1 600 000	1 600 000	* 1 600 000	* 1 600 000
Pig iron	tonnes	10 566 000	11 392 000	11 500 000	11 100 000	10 300 000
Crude steel	tonnes	28 603 000	29 349 000	31 624 000	31 506 000	30 589 000
Ferro-alloys						
Ferro-manganese	tonnes	38 000	32 000	* 30 000	* 30 000	* 30 000
Ferro-silico-manganese	tonnes	108 000	99 000	96 600	87 000	87 000
Kaolin	tonnes	246 608	183 804	* 180 000	* 180 000	* 180 000
Lead, mine	tonnes (metal content)	800	* 800	* 800	* 800	* 800
Lead, refined	tonnes	201 600	211 000	190 500	211 800	199 900
Manganese ore	tonnes	714	632	...	...	...
Crude petroleum	tonnes	5 445 000	6 100 000	5 800 000	5 800 000	5 200 000
Natural gas	million m ³	12 961	11 977	11 000	9 700	9 300
Perlite	tonnes	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Salt						
Rock salt and brine salt	tonnes	3 174 313	3 475 734	2 823 960	2 214 133	2 334 315
Silver, mine	kilograms (metal content)	100	100	—	—	—
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	113 000	92 000	87 000	84 000	82 000
Recovered (c)	tonnes (sulphur content)	575 000	650 000	680 000	650 000	645 000
Talc	tonnes	111 887	140 581	130 714	112 080	* 110 000
Slab Zinc	tonnes	118 400	121 200	109 200	102 100	107 100

Note(s):-

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

(a) Sales

(b) From metal sulphide processing

(c) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	1 556 414	1 734 620	1 720 142	1 482 346	1 522 229
Aluminium and bauxite						
Bauxite	tonnes	40 512	121 029	12 082	49 989	26 718
Alumina	tonnes	606 416	651 704	748 594	696 603	571 090
Alumina hydrate	tonnes	24 895	26 652	26 668	34 521	35 538
Unwrought	tonnes	4 203	8 742	20 315	18 971	18 249
Unwrought alloys	tonnes	43 578	57 573	73 137	104 361	96 798
Scrap	tonnes	26 630	35 904	50 024	42 052	56 214
Antimony						
Ores and concentrates	tonnes	100	274	250	355	386
Oxide	tonnes	207	94	254	237	569
Arsenic						
Metallic arsenic	tonnes	—	16	2	—	—
Asbestos	tonnes	...	20	5	29	—

Italy

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Barytes	tonnes	1 951	505	1 000	2 239	1 238
Bentonite and fuller's earth						
Bentonite	tonnes	257 596	245 515	272 438	296 809	293 417
Bromine	kilograms	505	1 000	228 287	55 156	1 000
Cadmium						
Metal	tonnes	54	18	1	796	1 633
Cement						
Cement clinkers	tonnes	8 965	19 427	61 437	143 235	38 106
Portland cement	tonnes	1 903 368	2 379 941	2 091 427	2 143 940	2 094 130
Other cement	tonnes	130 920	130 120	660 595	536 324	491 150
Chromium						
Ores and concentrates	tonnes	3 803	4 673	5 446	3 980	2 567
Metal	tonnes	4 184	1 070	111	1 666	166
Coal						
Hard coal (a)	tonnes	92 227	66 115	38 239	41 075	31 201
Cobalt						
Metal	tonnes	236	97	224	168	220
Oxides	tonnes	123	63	77	223	235
Copper						
Matte and cement	tonnes	366	107	1 511	2 244	911
Unwrought	tonnes	22 988	6 387	13 567	22 424	13 381
Unwrought alloys	tonnes	16 772	14 128	14 620	20 830	15 268
Scrap	tonnes	97 964	110 711	102 463	120 231	148 923
Diamond						
Gem, cut	carats	99 218	119 462	105 514	131 174	1 830 000
Dust	carats	49 921 702	49 139 151	18 028 081	65 975 744	10 865 000
Diatomite	tonnes	1 745	1 138	1 110	3 884	9 991
Feldspar	tonnes	204 096	302 715	238 555	226 963	324 977
Fluorspar	tonnes	20 607	28 699	16 710	19 281	31 271
Gold						
Metal	kilograms	44 180	60 480	55 847	56 360	51 260
Waste and scrap	kilograms	27	—	16	160	1 376
Graphite	tonnes	625	274	442	401	308
Gypsum						
Crude	tonnes	8 040	12 641	141	17 748	24 525
Calcined	tonnes	42 223	41 404	69 272	27 123	24 496
Iodine	kilograms	3 080	14 499	7 067	2 613	2 119
Iron ore						
Burnt pyrites	tonnes	11 086	9 410	4 407	1 544	101
Iron ore	tonnes	242	365	18 929	7 026	1 598
Iron, steel and ferro-alloys						
Pig iron	tonnes	41 068	15 740	22 114	50 789	36 137
Sponge and powder	tonnes	62	163	194	1 097	615
Ferro-chrome	tonnes	8 411	3 753	8 276	5 411	4 593
Ferro-silico-magnesium	tonnes	3 163	30	93	2 061	1 681
Ferro-manganese	tonnes	8 857	10 380	8 670	14 562	12 890
Ferro-silico-manganese	tonnes	3 167	3 511	4 086	7 048	6 882
Ferro-molybdenum	tonnes	162	90	174	68	277
Ferro-nickel	tonnes	...	3 967	173	239	123
Ferro-silicon	tonnes	3 594	5 035	4 457	7 113	7 094
Other ferro-alloys	tonnes	...	996	1 986	84	95
Silicon metal	tonnes	1 667	3 931	3 304	4 576	6 007
Ingots, blooms, billets	tonnes	402 967	698 402	958 626	983 369	964 245
Scrap	tonnes	211 385	185 688	190 139	240 735	387 528
Kaolin	tonnes	29 995	40 800	17 287	16 265	13 627
Lead						
Unwrought	tonnes	28 295	18 244	8 143	8 008	34 904
Scrap	tonnes	1 262	2 477	3 806	7 661	6 897
Lithium						
Carbonate	tonnes	206	269	347	225	193
Magnesite and magnesia						
Magnesite	tonnes	2 868	3 489	3 003	3 878	2 337
Magnesia	tonnes	9 779	12 130	12 174	9 036	8 172
Manganese						
Metal	tonnes	113	241	298	309	494
Mercury	kilograms	6 952	18 244	14 820	125 946	84 247
Mica	tonnes	623	738	1 159	1 429	3 211

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Molybdenum						
Ores and concentrates	tonnes	295	246	29	311	159
Metal	tonnes	171	132	639	221	873
Oxides	tonnes	21	47	107	185	604
Natural gas	tonnes	686 700	649 706	331 234	585 818	1 749 247
Nickel						
Unwrought (b)	tonnes	1 637	1 720	799	1 272	972
Scrap	tonnes	644	1 923	448	724	658
Crude petroleum	tonnes	824 206	986 121	937 813	1 442 498	1 195 500
Phosphates	tonnes	4 417	4 883	6 789	7 800	7 661
Platinum metals						
Platinum	kilograms	6 277	6 555	9 542	11 783	13 350
Platinum metals	kilograms	3 892	6 039	6 951	5 828	8 295
Waste and scrap	kilograms	105 220	206	1 065	94 988	257
Potash						
Potassic fertilisers	tonnes	1 169	1 270	2 194	5 572	6 345
Rare earths						
Rare earth compounds	tonnes	20	13	43	38	153
Metals	tonnes	81	168	56	177	112
Salt	tonnes	289 415	317 124	361 602	212 223	322 221
Silver						
Metal	kilograms	616 861	564 308	516 281	547 042	519 148
Sulphur and pyrites						
Pyrites	tonnes	7 384	4 763	8 646	8 024	10 071
Sulphur	tonnes	165 618	225 403	290 353	263 362	219 095
Sulphur, sublimed and precipitated	tonnes	930	2 159	36 881	39 061	4 693
Talc	tonnes	118 131	120 920	122 148	131 071	114 017
Tin						
Unwrought (b)	tonnes	406	503	437	567	392
Scrap	tonnes	180	17	269	204	249
Titanium						
Titanium slag	tonnes	...	1 499	...	...	...
Metal	tonnes	4 439	4 130	4 101	4 884	5 478
Oxides	tonnes	28 476	25 433	22 473	26 242	25 982
Tungsten						
Metal	tonnes	357	233	197	455	973
Vanadium						
Ores and concentrates	tonnes	1 267	1 092	1 291	527	217
Zinc						
Ores and concentrates	tonnes	93 317	96 439	114 339	105 437	99 121
Unwrought	tonnes	2 331	9 230	37 659	21 048	7 967
Unwrought alloys	tonnes	3 523	2 854	7 792	6 689	2 857
Scrap	tonnes	15 157	13 652	12 934	13 574	8 603
Zirconium						
Concentrates	tonnes	25 633	21 760	23 472	25 596	41 296
Metal	tonnes	441	455	260	630	233

Note(s)

(a) Including anthracite

(b) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	4 102 477	4 331 596	4 655 740	4 967 745	4 139 144
Aluminium and bauxite						
Bauxite	tonnes	2 407 108	2 602 224	2 618 296	2 374 609	2 417 499
Alumina	tonnes	142 931	147 537	137 469	148 384	144 473
Alumina hydrate	tonnes	151 086	155 718	156 231	166 453	143 217
Unwrought	tonnes	434 802	426 721	481 919	534 385	445 882
Unwrought alloys	tonnes	468 500	463 411	504 142	545 052	436 207
Scrap	tonnes	346 736	326 901	366 623	432 780	377 441
Antimony						
Ores and concentrates	tonnes	879	1 005	829	851	1 171
Metal	tonnes	743	164	279	399	300
Oxide	tonnes	5 528	5 543	6 061	5 950	6 168
Arsenic						
Metallic arsenic	tonnes	84	54	52	64	43
Barytes	tonnes	86 874	84 178	84 398	89 745	102 684
Bentonite and fuller's earth						
Bentonite	tonnes	153 410	138 973	121 697	155 568	136 417
Fuller's earth	tonnes	5 760	7 893	8 208	...	...
Bismuth						
Metal	tonnes	175	203	251	316	269
Bromine	kilograms	355 734	281 000	522 069	374 426	598 800
Cadmium						
Metal	tonnes	87	72	30	40	49
Oxide	tonnes	96	55	...	1	3
Cement						
Cement clinkers	tonnes	2 720 499	2 828 906	2 872 114	2 827 333	2 095 716
Portland cement	tonnes	2 130 079	2 014 905	1 564 049	1 162 254	962 746
Other	tonnes	146 033	152 325	184 862	287 190	295 988
Chromium						
Ores and concentrates	tonnes	30 872	39 999	41 992	46 433	36 552
Metal	tonnes	677	958	830	891	742
Coal						
Anthracite	tonnes	338 706	369 840	282 831	406 331	490 757
Other coal	tonnes	25 382 339	24 714 768	24 860 362	25 111 043	25 745 375
Briquettes	tonnes	9 374	9 136	10 207	6 914	5 392
Cobalt						
Ores and concentrates	tonnes	122	5	11	17	12
Metal	tonnes	440	468	587	626	703
Oxides	tonnes	1 004	1 128	1 161	1 682	561
Copper						
Unwrought, unrefined	tonnes	216	955	323	796	370
Unwrought, refined	tonnes	700 101	652 089	774 140	746 482	617 420
Unwrought alloys	tonnes	16 723	8 053	15 174	24 996	18 531
Scrap	tonnes	128 501	124 737	214 289	177 546	167 212
Diamond						
Unsorted	carats	280 000	350 000	150 000	915 000	1 905 000
Gem, rough	carats	95 000	115 000	75 000	80 000	10 000
Gem, cut	carats	11 635 000	11 760 000	4 855 000	14 560 000	12 135 000
Industrial	carats	1 670 000	1 110 000	650 000	880 000	1 145 000
Dust	carats	135 820 000	141 970 000	152 680 000	161 010 000	252 290 000
Diatomite	tonnes	14 744	9 141	5 179	4 487	3 939
Feldspar	tonnes	2 693 951	2 623 428	2 603 981	2 573 637	2 511 704
Fluorspar	tonnes	212 975	249 756	237 597	236 797	238 008
Gold						
Metal	kilograms	274 841	250 938	204 012	206 914	166 506
Waste and scrap	kilograms	3 612	904	810	17 885	851
Graphite	tonnes	10 699	11 102	11 548	11 362	11 832
Gypsum						
Crude	tonnes	5 024	6 134	5 285	6 814	21 411
Calcined	tonnes	22 515	22 076	20 028	21 088	19 621
Iodine	kilograms	1 127 906	854 831	1 033 737	1 231 082	1 343 977
Iron ore	tonnes	(a) 16 714 771	17 551 785	(a) 17 776 812	17 013 076	16 313 184

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Iron, steel and ferro-alloys						
Pig iron	tonnes	1 304 367	1 729 086	1 791 165	2 235 376	2 238 037
Sponge and powder	tonnes	206 956	424 810	468 825	465 834	396 660
Ferro-chrome	tonnes	400 159	428 716	464 364	419 392	389 002
Ferro-silico-magnesium	tonnes	7 826	5 409	6 809	16 751	15 716
Ferro-manganese	tonnes	79 827	84 920	95 010	108 976	96 771
Ferro-silico- manganese	tonnes	182 945	174 391	216 632	229 755	186 135
Ferro-molybdenum	tonnes	7 289	7 294	7 469	7 433	8 318
Ferro-nickel	tonnes	82 107	141 603	129 870	91 651	104 198
Ferro-niobium	tonnes	1 403	2 457	2 194	2 783	2 733
Ferro-phosphorus	tonnes	830	987	547	721	488
Ferro-silicon	tonnes	119 820	141 789	147 121	154 797	122 236
Ferro-titanium and ferro-silico-titanium	tonnes	3 379	3 978	3 922	4 230	3 861
Ferro-tungsten and ferro-silico-tungsten	tonnes	229	208	307	385	578
Ferro-vanadium	tonnes	1 890	1 945	1 839	2 521	2 445
Other ferro-alloys	tonnes	8 411	11 799	9 727	1	243
Silicon metal	tonnes	46 108	49 129	51 696	57 854	57 493
Ingots, blooms, billets	tonnes	3 874 346	4 310 404	5 792 203	5 991 974	5 311 325
Scrap	tonnes	5 606 124	5 367 259	5 668 405	5 242 020	5 705 462
Kaolin	tonnes	939 832	956 948	978 378	881 968	810 560
Lead						
Ores and concentrates	tonnes	99 015	107 685	65 610	111 999	85 760
Unwrought	tonnes	114 546	72 181	112 069	114 471	99 015
Scrap	tonnes	3 877	3 333	4 097	7 107	2 972
Lithium						
Oxides	tonnes	148	223	159	160	246
Carbonate	tonnes	1 505	2 263	1 646	1 303	1 519
Magnesite and magnesia						
Magnesite	tonnes	9 429	23 536	10 862	10 240	18 347
Magnesia	tonnes	163 273	161 432	174 000	131 140	150 098
Manganese						
Ores and concentrates (b)	tonnes	206 249	76 278	72 465	113 300	114 289
Metal	tonnes	4 970	8 494	35 391	7 100	5 839
Mercury	kilograms	135 119	32 471	49 335	9 491	21 754
Mica						
Unmanufactured	tonnes	65	118	158	189	106
Ground	tonnes	3 473	3 405	3 657	4 803	3 980
Molybdenum						
Ores and concentrates	tonnes	4 719	5 109	5 552	5 901	6 220
Metal	tonnes	105	203	189	215	254
Oxides	tonnes	247	117	229	183	125
Nickel						
Mattes, sinters etc.	tonnes	353	32	1 550	1	1
Unwrought	tonnes	41 944	37 708	48 178	41 802	42 339
Unwrought alloys	tonnes	2 664	1 455	3 918	1 613	2 164
Scrap	tonnes	3 075	5 119	1 606	1 372	892
Oxides	tonnes	101	56	40	74	72
Crude petroleum	tonnes	87 208 954	89 007 151	86 807 240	89 130 022	82 998 642
Phosphate rock	tonnes	359 090	279 693	242 633	249 847	248 005
Platinum group metals						
Platinum	kilograms	12 087	15 586	17 279	20 491	16 570
Palladium	kilograms	18 604	16 178	15 943	18 880	20 593
Other platinum metals	kilograms	2 826	3 005	3 077	1 811	2 426
Waste and scrap	kilograms	278	2 085	431	447	7 646
Potash						
Sulphate	tonnes	96 904	96 415	91 061	90 992	78 513
Chloride	tonnes	392 833	334 324	302 115	396 162	346 465
Other potassic fertilisers	tonnes	29 902	13 203	17 583	15 929	9 882
Rare earths						
Cerium compounds	tonnes	504	651	540	694	710
Other rare earth compounds	tonnes	428	336	313	452	431
Ferro-cerium and other pyrophoric alloys	tonnes	1	17	1	2	2
Metals	tonnes	108	38	58	149	144
Salt	tonnes	833 790	773 507	863 836	611 435	572 965
Sillimanite minerals	tonnes	15 132	27 476	26 304	24 807	30 616

Italy

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Silver						
Ores and concentrates	kilograms	1 428	2 378	67 952	1 002	—
Metal	kilograms	1 776 385	1 635 765	1 583 508	1 445 303	1 167 457
Sulphur and pyrites						
Pyrites	tonnes	8 929	15 548	17 741	14 879	20 984
Sulphur, crude	tonnes	8 646	3 150	...	...	32 195
Sulphur, refined	tonnes	10 279	10 497	(c) 11 691	(c) 16 271	16 423
Sulphur, sublimed and precipitated	tonnes	281	328	375	414	2 711
Talc	tonnes	126 745	125 913	129 218	140 461	147 549
Tin						
Ores and concentrates	tonnes	241	24	572	65	—
Unwrought	tonnes	5 610	5 899	5 526	4 113	4 124
Unwrought alloys	tonnes	95	135	392	504	777
Titanium						
Titanium minerals	tonnes	88 361	85 607	185 121	136 274	102 909
Metal	tonnes	6 580	5 186	6 248	8 609	7 155
Oxides	tonnes	158 592	154 950	161 253	166 223	141 959
Tungsten						
Metal	tonnes	321	257	236	280	255
Carbide	tonnes	299	337	365	361	350
Vanadium						
Ores and concentrates	tonnes	...	...	75	...	255
Pentoxide	tonnes	134	156	209	150	173
Zinc						
Ores and concentrates	tonnes	249 978	219 491	175 253	195 798	161 838
Unwrought	tonnes	273 146	261 192	229 040	314 714	179 691
Unwrought alloys	tonnes	35 835	34 929	42 768	51 514	81 350
Scrap	tonnes	15 991	14 172	18 541	21 599	15 369
Zirconium						
Ores and concentrates	tonnes	149 787	147 435	143 672	114 838	129 999
Metal	tonnes	122	120	128	315	130

Note(s):-

- (a) Including burnt pyrites
(b) Including manganiferous iron ore
(c) Including crude

Latvia

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	4 946 204	6 059 487	5 957 744	9 998 863	8 206 910
Crushed rock	tonnes	414 305	586 607	582 081	552 145	507 591
Cement						
Cement clinker	tonnes	250 000	...	...	...	...
Cement, finished	tonnes	283 647	280 000	* 280 000	* 300 000	* 300 000
Gypsum (a)	tonnes	225 742	* 220 000	* 230 000	* 230 000	* 230 000
Crude steel	tonnes	550 000	550 000	* 690 000	* 696 000	* 635 000

Note(s):-

(a) Including anhydrite

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	10 278	13 178	11 618	32 783	54 321
Aluminium and bauxite						
Unwrought alloys	tonnes	39 368	34 697	18 180	19 281	17 012
Scrap	tonnes	748	910	1 767	2 416	4 203
Cement						
Cement clinkers	tonnes	—	184	326	35 307	—
Portland cement	tonnes	26 144	10 762	5 528	43 951	240 311
Other cement	tonnes	—	1	141	10 178	20
Copper						
Unwrought	tonnes	384	503	2 734	3 272	4 117
Scrap	tonnes	7 153	9 207	7 116	7 309	6 900
Gypsum						
Crude and calcined	tonnes	24 782	48 896	109 404	74 627	63 732
Iron, steel and ferro-alloys						
Ingots, blooms, billets	tonnes	306	667	2 626	4 371	4 010
Scrap	tonnes	64 936	217 361	313 455	245 958	388 456
Nickel						
Scrap	tonnes	170	538	116	49	199
Crude petroleum	tonnes	19 892	6 085	12 099	—	...
Platinum metals						
Waste and scrap	kilograms	716	1 002	468	219	181
Potash						
Chloride	tonnes	479	2 321	117	250	970
Salt	tonnes	5 169	10 205	14 485	14 282	13 741
Tin						
Scrap	tonnes	—	20	307	—	—
Zinc						
Scrap	tonnes	504	629	750	757	443

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	629 613	1 320 287	1 412 127	1 663 783	2 033 701
Aluminium and bauxite						
Unwrought (a)	tonnes	6 100	1 810	577	154	21
Scrap	tonnes	27 340	16 970	6 505	6 837	7 677
Asbestos						
Unmanufactured	tonnes	34	4	28	1	1
Bentonite and fuller's earth						
Bentonite	tonnes	1 917	1 629	1 544	1 850	2 628
Cement						
Cement clinkers	tonnes	...	38 589	43 774	29 438	30 233
Portland cement	tonnes	204 353	234 862	322 187	431 482	353 174
Coal						
Hard coal (b)	tonnes	94 896	115 720	159 787	153 806	169 211
Copper						
Unwrought	tonnes	401	606	1 199	1 396	3 609
Diatomite	tonnes	592	389	467	545	681
Fluorspar	tonnes	240	216	204	220	240
Gypsum						
Crude and calcined	tonnes	2 931	3 563	9 960	13 670	5 818
Iron ore	tonnes	...	...	3 919	46 109	44 607
Iron, steel and ferro-alloys						
Pig iron	tonnes	75 448	54 639	57 696	65 437	56 964
Ferro-manganese	tonnes	3 576	3 119	3 281	3 021	10 334
Ferro-silico-manganese	tonnes	5 793	5 024	5 628	14 947	23 477
Ferro-silicon	tonnes	6 620	3 876	2 550	3 086	18 466
Other ferro-alloys	tonnes	251	203	418	373	323
Silicon metal	tonnes	2 220	1 711	1 409	656	467
Ingots, blooms, billets	tonnes	195 467	206 550	145 037	158 649	146 505
Scrap	tonnes	171 941	161 538	266 616	294 904	412 240
Kaolin	tonnes	5 096	5 016	5 422	11 071	11 173
Magnesite and magnesia						
Magnesia	tonnes	5 297	3 343	4 092	4 678	5 355
Natural gas	tonnes	960 563	1 153 086	1 201 960	1 158 965	1 138 776
Platinum group metals						
Waste and scrap	kilograms	...	...	...	1 900	2 900
Potash						
Chloride	tonnes	25 408	19 361	9 489	8 875	10 845
Other potassic fertilisers	tonnes	960	1 982	132	312	111
Salt	tonnes	122 251	139 662	149 696	123 316	144 424
Silver						
Metal	kilograms	—	189 912	16	1 400	1 100
Talc	tonnes	154	105	217	396	417
Titanium						
Oxides	tonnes	1 232	726	833	781	3 112
Zinc						
Unwrought (a)	tonnes	1 172	654	953	664	1 256

Note(s):-

(a) Including alloys

(b) Including anthracite

Lithuania

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	5 835 729	7 034 402	7 633 311	9 181 552	9 469 411
Crushed rock	tonnes	3 683 266	4 757 023	5 259 535	6 424 791	6 913 160
Cement						
Cement, finished	tonnes	753 069	832 076	1 065 367	1 105 365	1 075 581
Crude petroleum	tonnes	301 874	216 634	180 894	154 449	127 658
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	67 094	74 276	61 135	42 618	73 870

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	2004	2005	2006	2007	2008
Primary aggregates	tonnes	460 569	957 488	871 522	1 053 802	943 673
Aluminium and bauxite						
Unwrought alloys	tonnes	3 943	3 922	3 410	3 453	3 994
Scrap	tonnes	11 953	7 210	5 640	5 701	5 280
Bentonite and fuller's earth						
Bentonite	tonnes	218	26	2 491	5 457	1 929
Cement						
Portland cement	tonnes	247 918	299 782	246 350	154 649	204 951
Other cement	tonnes	2	10	16	893	1 531
Chromium						
Ores and concentrates	tonnes	...	948	2 213	1 156	240
Copper						
Scrap	tonnes	7 611	5 821	5 020	4 814	4 675
Iodine	kilograms	7 502	33	4 800	20	3
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	...	13 293	17 952	15 437	11 188
Scrap	tonnes	677 727	599 084	681 692	661 349	659 646
Lead						
Scrap	tonnes	6 613	7 848	6 118	11 776	9 730
Molybdenum						
Ores and concentrates	tonnes	...	310	...	173	186
Nickel						
Scrap	tonnes	770	411	674	232	131
Crude petroleum	tonnes	197 709	148 031	115 075	155 416	128 838
Phosphates	tonnes	...	150	1 406	2 011	140
Platinum metals						
Waste and scrap	kilograms	5 958	...	16	404	62 710
Potash						
Potassic fertilisers	tonnes	8 037	10 463	8 939	5 752	2 846
Rare earths						
Cerium compounds	tonnes	0	1	3	4	3
Salt	tonnes	5 457	5 895	7 150	6 761	6 063
Silver						
Metal	kilograms	560	245	300	...	600
Sulphur and pyrites						
Sulphur	tonnes	13 960	3 851	1	7	1 517
Tantalum and niobium						
Tantalum	tonnes	13	5	5	48	31
Titanium						
Oxides	tonnes	65	141	208	268	1 230
Vanadium						
Ores and concentrates	tonnes	...	...	...	346	358

Lithuania

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Zinc Scrap	tonnes	691	685	976	517	232

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	1 069 921	1 289 117	1 214 058	1 333 772	1 301 091
Aluminium and bauxite						
Alumina and alumina hydrate	tonnes	10 388	13 079	11 176	13 304	10 282
Scrap	tonnes	1 131	1 841	1 964	3 380	1 887
Bentonite and fuller's earth						
Bentonite	tonnes	2 472	2 675	2 838	3 105	3 068
Cement						
Cement clinkers	tonnes	22 496	766	416	104 219	79 102
Portland cement	tonnes	183 712	265 103	209 400	170 955	111 578
Coal						
Hard coal (a)	tonnes	260 684	290 058	391 032	356 342	382 695
Diatomite	tonnes	917	520	504	1 178	763
Feldspar	tonnes	7 461	4 166	1 933	1 693	1 516
Gold						
Waste and scrap	kilograms	(b)* 16 000	114 600	12 470	2	—
Gypsum						
Crude	tonnes	39 653	58 859	71 649	78 185	90 320
Calcined	tonnes	16 245	20 990	36 588	47 112	43 127
Iodine	kilograms	1 828	6 929	5 023	470	383
Iron, steel and ferro-alloys						
Ferro-chrome	tonnes	...	5 210	6 140	9 705	9 634
Ferro-silico-manganese	tonnes	...	3 153	6 864	5 983	...
Other ferro-alloys	tonnes	562	3 047	1 413	437	457
Ingots, blooms, billets	tonnes	2 351	4 279	5 260	6 011	9 661
Scrap	tonnes	82 325	74 816	103 878	64 661	64 462
Kaolin	tonnes	701	802	1 399	568	607
Magnesite and magnesia						
Magnesia	tonnes	5 448	5 398	5 513	6 501	5 196
Mica	tonnes	137	124	122	53	92
Natural gas	tonnes	1 991 505	2 071 091	2 129 513	2 414 798	2 246 642
Crude petroleum	tonnes	8 375 777	9 746 806	7 994 367	4 869 858	9 325 904
Phosphate rock	tonnes	1 082 901	1 178 816	1 193 093	1 202 196	1 209 385
Platinum group metals						
Waste and scrap	kilograms	1 100	5 403	26 700	65 900	40 800
Potash						
Sulphate	tonnes	12 553	12 086	10 439	15 637	10 971
Chloride	tonnes	172 622	123 782	143 499	138 895	107 749
Rare earths						
Rare earth compounds	tonnes	80	34	52	3	8
Salt	tonnes	204 839	198 994	197 262	171 915	166 505
Silver						
Metal	kilograms	5 885	3 943	4 500	5 200	6 900
Sulphur and pyrites						
Sulphur	tonnes	255 917	306 635	320 658	317 678	293 365
Sulphur, sublimed and precipitated	tonnes	1	560	607	0	404
Talc	tonnes	87	402	463	511	388
Tantalum and niobium						
Tantalum	tonnes	12	10	11	47	38
Titanium						
Oxides	tonnes	713	926	975	1 328	980
Zinc						
Unwrought (c)	tonnes	393	547	1 554	627	563

Note(s):-

(a) Including anthracite

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

(c) Including alloys

Macedonia

Production

Commodity	Units	2004	2005	2006	2007	2008
Bentonite and fuller's earth						
Bentonite	tonnes	16 373	14 958	20 353	22 509	13 689
Coal						
Lignite	tonnes	7 129 535	6 879 726	6 650 182	6 569 220	7 669 103
Copper, mine	tonnes (metal content)	—	4 799	7 054	7 029	8 051
Feldspar	tonnes	22 921	27 076	38 124	32 814	28 920
Gypsum	tonnes	165 416	190 232	267 760	255 500	242 400
Crude steel	tonnes	319 873	321 170	326 484	370 317	344 866
Ferro-alloys						
Ferro-nickel	tonnes	5 313	8 141	10 942	15 321	15 026
Ferro-silicon	tonnes	66 769	71 249	59 023	78 892	97 605
Lead, mine	tonnes (metal content)	—	—	9 349	29 221	40 441
Lead, refined	tonnes	3 591	—	—	—	—
Nickel, mine	tonnes (metal content)	4 900	7 800	10 900	15 000	15 000
Nickel, smelter/refinery	tonnes	5 300	8 100	10 900	15 000	15 000
Silver, mine	kilograms (metal content)	—	—	* 10 000	* 30 000	* 40 000
Talc	tonnes	4 350	1 955	1 025	1 775	977
Zinc, mine	tonnes (metal content)	—	—	9 349	32 195	40 286

Exports

Commodity	Units	2004	2005	2006	2007	2008
Aluminium and bauxite						
Scrap	tonnes	1 107	2 105	2 788	1 795	2 043
Bentonite and fuller's earth						
Bentonite	tonnes	3 973	4 346	4 747	4 181	5 201
Cadmium						
Metal	tonnes	500	...	...	...	...
Cement						
Cement clinkers	tonnes	16 762	129 570	151 663	90 869	173 089
Portland cement	tonnes	189 166	207 457	220 588	308 468	281 782
Chromium						
Ores and concentrates	tonnes	247	46	...	1 835	160
Copper						
Ores and concentrates	tonnes	648	21 441	31 547	32 224	...
Scrap	tonnes	1 413	1 926	3 190	2 277	2 302
Feldspar	tonnes	18 661	22 369	36 539	28 766	23 762
Gypsum						
Crude and calcined	tonnes	15 408	9 779	9 488	10 167	12 496
Iron, steel and ferro-alloys						
Ferro-silico-manganese	tonnes	138	1 673	6 682	48 258	...
Ferro-nickel	tonnes	16 260	34 419	45 058	71 189	...
Ferro-silicon	tonnes	67 929	74 450	62 794	30 139	...
Scrap	tonnes	61 690	85 745	98 763	124 200	104 326
Lead						
Ores and concentrates	tonnes	0	233	16 371	47 209	...
Unwrought	tonnes	1 135	54	...	70	184
Scrap	tonnes	1 468	935	2 511	2 622	2 209
Manganese						
Ores and concentrates	tonnes	...	...	5 117	...	6 314
Phosphates	tonnes	3 104	3 388	1 944	2 050	1 685
Potash						
Potassic fertilisers	tonnes	822	1 102	3	—	2
Salt	tonnes	1 329	2 677	4 508	5 091	3 255
Silver						
Metal	kilograms	64	500	...	71	26
Talc	tonnes	664	789	735	1 124	509

Macedonia

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Zinc						
Ores and concentrates	tonnes	...	3 306	23 106	58 973	...
Unwrought (a)	tonnes	745	124	30	5	28
Scrap	tonnes	222	720	719	874	576

Note(s)

(a) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Aluminium and bauxite						
Unwrought (a)	tonnes	1 753	1 610	2 941	3 930	3 446
Cement						
Portland cement	tonnes	81 250	59 679	44 542	69 220	136 030
Chromium						
Ores and concentrates	tonnes	...	3	709	1 432	306
Coal						
Hard coal	tonnes	53 495	98 024	179 193	199 946	214 078
Briquettes	tonnes	190 519	188 634	103 508	63 805	56 640
Fluorspar	tonnes	172	92	218	380	300
Graphite	tonnes	—	107	648	1 969	1 522
Gypsum						
Crude and calcined	tonnes	819	1 165	1 106	1 080	976
Iron, steel and ferro-alloys						
Pig iron	tonnes	1 484	1 970	3 781	2 467	2 609
Ferro-alloys	tonnes	4 907	2 786	2 860	3 737	3 402
Ingots, blooms, billets	tonnes	137 447	226 286	359 029	501 134	482 294
Scrap	tonnes	129 487	264 067	277 360	310 410	255 543
Kaolin	tonnes	6 966	19 414	9 797	16 849	12 259
Lead						
Unwrought	tonnes	1 150	1 146	857	331	19
Magnesite and magnesia	tonnes	1 288	1 384	5 047	18 863	13 956
Manganese						
Ores and concentrates	tonnes	...	28 977	44 040	143 556	170 455
Natural gas	tonnes	47 782	52 416	56 876	63 225	86 823
Nickel						
Ores and concentrates	tonnes	65 162	236 025	466 623	863 999	789 929
Crude petroleum	tonnes	781 438	950 742	1 081 738	1 063 614	1 057 671
Phosphate rock	tonnes	6 567	...	...	...	...
Potash						
Potassic fertilizers	tonnes	5 736	362	995	490	607
Salt	tonnes	34 790	39 178	40 184	35 657	37 575
Silver						
Metal	kilograms	3 725	3 813	3 901	3 612	3 807
Titanium						
Oxides	tonnes	430	466	471	383	426
Zinc						
Unwrought (a)	tonnes	5 025	3 750	15 658	6 721	4 954

Note(s):-

(a) Including alloys

Malta

Exports

Commodity	Units	2004	2005	2006	2007	2008
Aluminium and bauxite						
Scrap	tonnes	1 008	1 142	1 221	1 136	1 441
Asbestos	tonnes	...	65	16	...	...
Copper						
Scrap	tonnes	1 461	1 242	1 036	1 790	1 890
Iron, steel and ferro-alloys						
Scrap	tonnes	12 424	5 252	19 012	28 083	25 379
Tin						
Scrap	tonnes	6	9	373	340	250

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	8 880	4 529	11 666	29 929	27 924
Cement						
Portland cement	tonnes	288 610	316 012	389 690	356 365	374 392
Gold						
Metal	kilograms	5 194	7 258	7 900	9 034	6 820
Gypsum						
Crude and calcined	tonnes	5 309	5 981	7 549	6 309	5 505
Salt	tonnes	3 863	5 453	1 629	3 590	3 794
Silver						
Metal	kilograms	1 031	188	1 800	600	5 300
Talc	tonnes	315	302	271	179	295
Titanium						
Oxides	tonnes	565	471	512	531	463

Netherlands

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	66 200 000	63 579 000	72 147 000	69 437 000	67 622 000
Primary aluminium	tonnes	330 000	333 820	285 317	296 900	320 000
Cadmium	tonnes	493	494	524	495	* 480
Cement						
Cement clinker	tonnes	825 000	...	...	...	...
Cement, finished	tonnes	2 380 000	2 496 000	2 790 000	2 700 000	* 2 700 000
Pig iron	tonnes	6 011 000	6 031 000	5 417 000	6 412 000	6 130 000
Crude steel	tonnes	6 848 000	6 919 000	6 372 000	7 368 000	6 853 000
Lead, refined	tonnes	* 17 000	* 17 000	* 16 000	* 16 000	* 16 000
Magnesite (a)	tonnes	245 495	285 336	293 006	* 245 000	* 245 000
Crude petroleum	tonnes	2 890 979	2 268 746	2 022 475	2 576 222	2 162 000
Natural gas	million m ³	81 499	74 460	73 300	72 431	80 388
Salt	tonnes	5 896 000	6 155 000	6 056 000	6 177 000	6 200 000
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	137 000	141 000	141 000	116 000	106 000
Recovered (c)	tonnes (sulphur content)	410 000	440 000	495 000	505 000	515 000
Slab zinc	tonnes	224 000	227 500	227 500	234 000	250 000

Note(s):-

(a) Chloride produced from solution mining

(b) From metal sulphide processing

(c) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	8 300 000	6 900 000	9 100 000	9 300 000	10 400 000
Aluminium and bauxite						
Bauxite	tonnes	96 740	93 993	107 660	41 170	129 186
Alumina	tonnes	267 947	264 116	301 767	542 794	257 169
Alumina hydrate	tonnes	42 398	48 643	45 480	151 641	85 713
Unwrought	tonnes	314 462	304 993	370 471	490 373	332 871
Unwrought alloys	tonnes	320 583	304 675	341 439	341 670	361 012
Scrap	tonnes	234 761	265 755	334 426	317 877	264 142
Antimony						
Metal	tonnes	212	570	886	308	185
Oxide	tonnes	652	664	780	496	346
Arsenic						
Metallic arsenic	tonnes	115	50	33	59	67
Barytes	tonnes	77 269	52 444	37 392	68 798	58 740
Bentonite and fuller's earth						
Bentonite	tonnes	203 897	186 286	132 076	129 692	120 946
Fuller's earth	tonnes	9 085	2 931	2 141	...	...
Bismuth						
Metal	tonnes	136	97	48	238	196
Bromine (a)	kilograms	964 481	1 388 695	1 285 156	1 364 466	1 820 693
Cadmium						
Metal	tonnes	621	553	1 064	544	816
Cement						
Cement clinkers	tonnes	1 562	2 513	3 119	10 725	0
Portland cement	tonnes	326 234	295 457	410 232	278 904	298 133
Other cement	tonnes	30 013	18 513	134 225	12 931	6 217
Chromium						
Ores and concentrates	tonnes	58 623	72 062	74 909	78 433	117 639
Metal	tonnes	2 655	3 543	4 430	2 125	4 282
Coal						
Anthracite	tonnes	161 320	165 918	196 407	158 572	109 516
Other coal	tonnes	8 624 870	8 445 919	11 940 024	14 089 233	6 399 941
Briquettes	tonnes	71 710	58 241	73 524	10 188	15

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Cobalt						
Metal	tonnes	1 954	1 326	587	1 579	1 090
Oxides	tonnes	953	1 323	112	127	959
Copper						
Unwrought	tonnes	32 548	39 638	31 204	49 300	65 343
Scrap	tonnes	140 909	207 551	306 132	229 090	241 332
Diamond						
Unsorted	carats	£1 883 000	£928 000	£849 000	£1 000 000	£442 000
Gem, cut	carats	£5 843 000	£8 690 779	£8 997 000	£6 214 000	£7 567 000
Industrial	carats	£188 000	£842 000	£2 250 000	£1 891 000	£2 156 000
Dust	carats	£724 000	£44 000	£61 000	£82 000	£45 000
Diatomite	tonnes	1 569	804	1 395	348	301
Feldspar	tonnes	81	17	552	456	555
Fluorspar	tonnes	3 019	37 113	1 587	27 213	12 665
Gold						
Metal	kilograms	24 557	11 603	19 634	22 468	37 439
Waste and scrap	kilograms	62 212	72 427	98 813	4 433	45 456
Graphite	tonnes	5 987	3 240	2 991	4 308	1 378
Gypsum						
Crude	tonnes	37 920	53 351	32 425	49 394	37 991
Calcined	tonnes	11 088	61 508	70 005	17 744	15 228
Iodine	kilograms	58 633	59 228	76 080	517 872	773 705
Iron ore	tonnes	1 384 740	1 977 965	2 491 191	2 710 120	85 710
Iron, steel and ferro-alloys						
Pig iron	tonnes	31 821	40 552	28 806	134 324	170 468
Sponge and powder	tonnes	15 794	46 464	22 899	543	382
Ferro-chrome	tonnes	70 272	81 105	92 920	94 048	103 036
Ferro-silico-chrome	tonnes	18	508	299	25	15
Ferro-silico-magnesium	tonnes	751	4 195	...	...	...
Ferro-manganese	tonnes	53 367	49 203	28 423	42 958	65 203
Ferro-silico-manganese	tonnes	16 109	13 994	14 118	21 432	17 571
Ferro-molybdenum	tonnes	2 712	4 304	5 652	5 579	3 150
Ferro-nickel	tonnes	9 855	23 252	42 421	42 331	5 086
Ferro-niobium	tonnes	47	126	217	1 439	1 736
Ferro-phosphorus	tonnes	12 515	12 173	7 910	...	...
Ferro-silicon	tonnes	27 328	95 845	97 120	106 764	71 762
Ferro-titanium and ferro-silico-titanium	tonnes	660	6 235	4 281	3 706	3 046
Ferro-tungsten and ferro-silico-tungsten	tonnes	193	624	477	2 010	1 168
Ferro-vanadium	tonnes	2 901	22 495	5 855	7 263	2 274
Other ferro-alloys	tonnes	5 925	9 700	5 683	7 719	22 603
Silicon metal	tonnes	10 319	40 393	56 525	15 237	15 547
Ingots, blooms, billets	tonnes	309 454	152 593	378 061	1 111 462	806 999
Scrap	tonnes	3 859 394	4 140 362	4 786 987	4 500 919	4 523 660
Kaolin	tonnes	307 337	441 248	431 027	416 108	72 264
Lead						
Ores and concentrates	tonnes	2 730	17 161	27 068	2 897	55 980
Unwrought	tonnes	34 426	24 382	11 133	14 824	7 725
Scrap	tonnes	12 395	11 950	16 067	21 822	12 278
Lithium						
Oxides	tonnes	187	115	154	331	511
Carbonate	tonnes	199	224	405	318	299
Magnesite and magnesia						
Magnesite	tonnes	8 704	1 452	4 750	582	494
Magnesia	tonnes	431 175	492 077	465 555	128 060	344 675
Manganese						
Ores and concentrates	tonnes	12 975	14 903	33 386	8 223	19 103
Metal	tonnes	12 548	13 585	16 739	19 767	19 144
Mercury	kilograms	183 998	188 220	176 670	196 039	192 605
Mica	tonnes	6 084	2 912	2 735	6 842	1 341
Molybdenum						
Ores and concentrates	tonnes	30 424	47 395	27 264	26 613	16 284
Metal	tonnes	120	59	190	409	282
Oxides	tonnes	2 010	2 708	2 110	3 059	4 253

Netherlands

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Nickel						
Mattes, sinters etc. (b)	tonnes	* 11 700	* 11 800	* 11 700	* 6 500	* 2 400
Unwrought (c)	tonnes	24 467	21 895	77 742	80	117
Scrap	tonnes	2 745	2 009	1 740	4 456	4 614
Oxides	tonnes	28 549	6 017	1 757	...	...
Crude petroleum	tonnes	136 202	145 541	309 456	207 858	328 795
Phosphates	tonnes	94 150	91 592	98 687	106 235	120 214
Platinum metals						
Platinum	kilograms	£18 570 000	£9 061 000	£8 718 000	£8 190 000	£18 207 000
Platinum metals	kilograms	£1 377 000	£8 211 000	£3 971 000	£3 766 000	£10 385 000
Waste and scrap	kilograms	201 129	876	16 569	25 850	352 175
Potash						
Sulphate	tonnes	578	382	842	7 918	1 424
Chloride	tonnes	197 731	163 072	152 423	170 921	147 436
Other potassic fertilisers	tonnes	391	759	1 557	1 162	1 341
Rare earths						
Rare earth compounds	tonnes	87	171	157	77	131
Ferro-cerium and other pyrophoric alloys	tonnes	...	...	...	...	19
Metals	tonnes	124	13	16	64	202
Salt	tonnes	3 212 606	3 749 442	4 126 810	4 055 898	3 878 601
Sillimanite	tonnes	10 097	11 444	7 679	9 689	10 848
Silver						
Ores and concentrates	kilograms	42 000	...	26 860	...	18 000
Metal	kilograms	99 221	93 668	151 077	144 024	208 300
Sulphur and pyrites						
Pyrites	tonnes	76 812	82 502	82 883	102 300	132 802
Sulphur	tonnes	304 026	248 680	436 669	460 352	850 183
Talc	tonnes	225 528	183 270	190 668	199 896	186 688
Tantalum and niobium						
Tantalum	tonnes	24	3	76	2	2
Tin						
Unwrought	tonnes	3 921	5 330	6 971	8 061	2 566
Unwrought alloys	tonnes	1 430	1 790	1 051	293	948
Scrap	tonnes	685	297	761	545	157
Titanium						
Titanium minerals	tonnes	4 050	1 390	1 660	449	1 341
Metal	tonnes	1 846	2 181	1 902	2 182	1 551
Oxides	tonnes	92 050	84 310	95 512	64 544	15 544
Tungsten						
Ores and concentrates	tonnes	16	—	276	181	29
Metal	tonnes	777	502	434	391	582
Vanadium						
Pentoxide	tonnes	1 167	381	411	157	45
Metal	tonnes	...	11	...	...	...
Zinc						
Ores and concentrates	tonnes	31 254	5 836	3 730	13 939	0
Unwrought	tonnes	265 840	273 832	615 269	243 354	244 789
Unwrought alloys	tonnes	19 867	9 364	38 116	31 276	23 932
Scrap	tonnes	32 684	41 593	39 073	67 010	19 815
Zirconium						
Concentrates	tonnes	8 548	8 178	7 391	14 539	8 223

Note(s)

(a) May include some fluorine

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

(c) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	37 100 000	40 800 000	43 000 000	33 400 000	38 100 000
Aluminium and bauxite						
Bauxite	tonnes	231 213	169 012	118 203	108 088	182 711
Alumina	tonnes	671 167	654 487	440 195	706 255	689 724
Alumina hydrate	tonnes	181 328	223 823	205 902	190 351	178 940
Unwrought	tonnes	349 481	370 979	650 035	713 441	248 386
Unwrought alloys	tonnes	249 182	287 504	321 582	358 930	479 786
Scrap	tonnes	174 969	189 722	197 160	204 117	210 203
Antimony						
Metal	tonnes	817	705	651	699	234
Oxide	tonnes	2 932	3 717	35 127	3 783	51 439
Arsenic						
Metallic arsenic	tonnes	110	85	20	19	8
Barytes	tonnes	155 325	116 512	88 489	148 808	122 039
Bentonite and fuller's earth						
Bentonite	tonnes	358 305	199 692	281 144	305 364	314 298
Fuller's earth	tonnes	76 177	70 482	80 511	...	...
Bismuth						
Metal	tonnes	166	85	168	127	120
Bromine (a)	kilograms	148 000	5 019 289	3 037	4 403	7 661
Cadmium						
Metal	tonnes	284	233	113	437	186
Cement						
Cement clinkers	tonnes	581 267	388 146	494 944	228 817	380 281
Portland cement	tonnes	1 812 884	1 632 872	1 925 756	2 072 034	1 705 144
Other	tonnes	774 050	846 622	1 452 353	722 635	993 318
Chromium						
Ores and concentrates	tonnes	88 660	80 622	99 305	125 778	145 698
Metal	tonnes	612	1 838	3 632	2 222	3 897
Coal						
Anthracite	tonnes	293 892	186 936	218 516	62 577	79 784
Other coal	tonnes	22 241 661	21 958 859	21 368 119	24 622 621	17 843 689
Lignite	tonnes	18 294	30 769	22 548	29 517	5 265
Briquettes	tonnes	15 510	58 737	83 734	68 765	53 432
Cobalt						
Metal	tonnes	1 340	1 532	1 511	1 270	1 124
Oxides	tonnes	369	351	269	489	244
Copper						
Unwrought, unrefined	tonnes	10 185	10 485	18 333	18 130	...
Unwrought, refined	tonnes	125 310	135 004	147 428	151 515	35 077
Unwrought alloys	tonnes	2 172	1 904	2 214	3 379	2 440
Scrap	tonnes	98 396	92 927	110 753	117 259	116 503
Diamond						
Unsorted	carats	£3 423 000	£344 000	£225 000	£299 000	£803 000
Gem, rough	carats	£137 000	£79 000	£369 000	£320 000	£1 071 000
Gem, cut	carats	£15 736 000	£16 550 000	£22 397 000	£13 943 000	£17 750 000
Industrial	carats	£1 033 000	£2 027 000	£1 850 000	£859 000	£1 088 000
Dust	carats	2 961 380	2 919 740	3 998 115	1 089 105	791 805
Diatomite	tonnes	10 806	7 967	6 799	7 214	6 275
Feldspar	tonnes	9 606	7 721	7 505	8 529	12 633
Fluorspar	tonnes	108 312	45 073	7 836	48 089	13 860
Gold						
Metal	kilograms	16 218	22 754	22 122	21 706	41 012
Waste and scrap	kilograms	1	1	92 890	19 174	2 422
Graphite	tonnes	18 139	15 205	5 362	13 463	42 612
Gypsum						
Crude	tonnes	176 349	155 519	227 950	402 915	285 990
Calcined	tonnes	492 478	686 085	483 249	430 550	415 623
Iodine	kilograms	357 223	21 015	158 145	1 870	800 817
Iron ore	tonnes	(b) 12 649 345	12 285 177	10 833 565	12 693 210	10 831 769

Netherlands

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Iron, steel and ferro-alloys						
Pig iron	tonnes	71 664	107 828	122 097	158 199	292 867
Sponge and powder	tonnes	59 030	131 170	251 304	244 874	253 882
Ferro-chrome	tonnes	176 862	170 806	204 637	325 741	275 995
Ferro-silico-chrome	tonnes	616	621	1 125	674	1
Ferro-manganese	tonnes	112 073	115 972	102 493	105 789	96 135
Ferro-silico-manganese	tonnes	33 492	30 114	47 986	81 034	70 108
Ferro-molybdenum	tonnes	5 282	5 100	7 554	11 826	8 566
Ferro-nickel	tonnes	38 872	39 305	17 866	16 878	17 602
Ferro-niobium	tonnes	16	51	159	465	2 074
Ferro-silicon	tonnes	153 434	145 459	122 016	160 792	114 290
Ferro-titanium and ferro-silico-titanium	tonnes	4 272	11 496	11 005	10 730	6 781
Ferro-tungsten and ferro-silico-tungsten	tonnes	625	1 148	965	1 186	1 572
Ferro-vanadium	tonnes	3 608	5 100	4 409	4 132	2 042
Other ferro-alloys	tonnes	5 680	7 412	25 282	12 829	30 407
Silicon metal	tonnes	36 792	52 931	69 104	68 719	57 446
Ingots, blooms, billets	tonnes	302 637	322 908	390 652	269 481	283 834
Scrap	tonnes	2 250 964	2 030 115	2 321 144	1 669 159	1 842 597
Kaolin	tonnes	646 638	564 518	627 768	612 720	352 122
Lead						
Ores and concentrates	tonnes	4 281	9 268	13 186	22 303	5 307
Unwrought	tonnes	83 391	36 051	24 272	22 419	9 373
Scrap	tonnes	7 818	9 700	17 508	22 006	11 325
Lithium						
Oxides	tonnes	270	178	359	428	537
Carbonate	tonnes	1 081	1 171	1 356	1 459	729
Magnesite and magnesia						
Magnesite	tonnes	20 619	3 057	3 007	1 390	3 609
Magnesia	tonnes	644 428	558 764	454 271	437 684	314 860
Manganese						
Ores and concentrates	tonnes	14 558	35 936	22 495	11 749	10 664
Metal	tonnes	14 347	61 240	22 162	31 236	35 573
Mercury	kilograms	616 057	670 022	889 199	674 888	293 481
Mica						
Unmanufactured	tonnes	54	143	176	400	751
Ground	tonnes	9 951	7 381	7 251	9 933	2 618
Molybdenum						
Ores and concentrates	tonnes	39 710	31 781	34 891	30 403	36 305
Metal	tonnes	141	287	801	1 060	572
Oxides	tonnes	2 032	1 509	1 441	1 341	859
Natural gas	tonnes	9 210 387	14 229 445	29 784 906	...	...
Nickel						
Unwrought alloys	tonnes	321	343	139	204	1 227
Scrap	tonnes	6 582	6 738	9 870	14 008	12 647
Oxides (c)	tonnes	* 7	* 22	* 142	* 23	* 30
Crude petroleum	tonnes	61 377 494	62 152 486	61 548 064	57 027 374	58 484 561
Phosphate rock	tonnes	724 960	776 661	815 692	847 776	1 108 711
Platinum group metals						
Platinum	kilograms	£14 670 000	£12 517 000	£21 774 000	£22 793 000	£89 137 000
Platinum metals	kilograms	£7 964 000	£3 682 000	£7 066 000	£7 725 000	£8 219 000
Potash						
Sulphate	tonnes	23 765	26 208	24 658	21 211	17 393
Chloride	tonnes	387 637	445 767	265 838	314 011	307 612
Other potassic fertilisers	tonnes	4 321	2 486	5 283	6 691	3 899
Rare earths						
Cerium compounds	tonnes	103	141	290	473	278
Other rare earth compounds	tonnes	2 254	1 879	2 781	3 868	2 766
Ferro-cerium and other pyrophoric alloys	tonnes	7	3	3	3	4
Metals						
Salt	tonnes	10	14	135	100	261
Sillimanite minerals	tonnes	535 581	630 738	1 150 949	193 457	167 508
Sillimanite minerals	tonnes	12 975	20 001	24 195	17 488	24 457
Silver						
Metal	kilograms	139 218	139 625	263 049	229 637	265 925
Sulphur and pyrites						
Pyrites	tonnes	456	8 896	109	80	145 627
Sulphur	tonnes	40 439	37 083	23 928	38 189	55 173
Sulphur, sublimed and precipitated	tonnes	104 982	37 484	—	...	0

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Talc	tonnes	226 602	206 485	243 071	225 720	207 922
Tantalum and niobium						
Tantalum	tonnes	35	12	6	8	10
Tin						
Unwrought	tonnes	6 801	8 730	13 696	7 858	11 003
Unwrought alloys	tonnes	1 832	1 983	1 283	1 972	2 540
Scrap	tonnes	155	201	466	607	503
Titanium						
Titanium minerals	tonnes	154 460	127 941	79 377	103 580	87 769
Metal	tonnes	2 835	1 857	2 234	4 295	1 073
Oxides	tonnes	47 957	92 334	8 387	41 221	37 101
Tungsten						
Ores and concentrates	tonnes	222	110	1 532	875	457
Metal	tonnes	210	204	330	284	329
Carbide	tonnes	56	99	49	36	94
Vanadium						
Pentoxide	tonnes	1 718	714	362	316	227
Zinc						
Ores and concentrates	tonnes	408 032	484 472	532 861	359 520	430 617
Unwrought	tonnes	188 510	144 592	200 472	182 072	155 003
Unwrought alloys	tonnes	2 318	2 387	40 482	38 602	24 062
Scrap	tonnes	20 288	15 257	14 619	13 633	6 270
Zirconium						
Ores and concentrates	tonnes	13 613	10 975	15 948	20 462	24 694
Metal	tonnes	105	88	123	199	240

Note(s):-

- (a) May include some fluorine
- (b) Including burnt pyrites
- (c) BGS estimates, based on known exports from certain countries

Norway

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	15 000 000	15 000 000	13 418 000	14 855 000	14 817 000
Crushed rock	tonnes	37 000 000	38 000 000	45 947 000	51 533 000	52 338 000
Primary aluminium	tonnes	1 318 000	1 391 000	1 383 000	1 362 000	1 368 000
Cadmium	tonnes	141	153	125	269	178
Cement						
Cement, finished	tonnes	1 420 000	1 613 000	1 695 000	1 700 000	* 1 700 000
Coal						
Bituminous (a)	tonnes	3 018 500	1 667 000	2 359 000	3 223 000	3 429 000
Cobalt metal	tonnes	4 670	5 021	4 927	3 939	3 719
Copper, smelter	tonnes	35 643	38 681	39 700	34 200	37 000
Copper, refined	tonnes	35 643	38 681	39 700	34 200	37 000
Feldspar	tonnes	67 000	* 67 000	65 000	65 000	62 000
Graphite	tonnes	6 000	9 000	9 000	3 000	4 100
Iron ore	tonnes	586 100	713 000	620 000	630 000	746 000
Pig iron	tonnes	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Crude steel	tonnes	725 000	705 000	684 000	708 000	560 000
Ferro-alloys						
Ferro-manganese	tonnes	* 130 000	* 130 000	* 130 000	* 130 000	* 130 000
Ferro-silico-manganese	tonnes	* 260 000	* 290 000	* 310 000	* 280 000	* 260 000
Ferro-silicon	tonnes	389 599	329 316	123 819	170 024	185 344
Other ferro-alloys	tonnes	* 60 000	* 60 000	* 60 000	* 62 000	* 60 000
Silicon metal	tonnes	193 566	178 572	* 150 000	* 140 000	* 155 000
Nickel, mine	tonnes (metal content)	382	342	320	378	377
Nickel, smelter/Refinery	tonnes	71 410	85 374	82 257	87 600	88 700
Crude petroleum	tonnes	150 974 000	139 802 000	136 695 000	125 763 000	116 864 000
Natural gas	million m ³	78 351	84 702	87 600	89 700	99 200
Nepheline syenite	tonnes	329 000	320 000	312 000	312 000	346 000
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	* 105 000	* 110 000	* 110 000	* 95 000	* 95 000
Recovered (c)	tonnes (sulphur content)	18 000	19 000	20 000	18 000	28 000
Talc	tonnes	32 000	34 000	* 34 000	* 34 000	* 30 000
Titanium						
Ilmenite	tonnes	866 700	806 800	850 000	882 000	915 000
Slab zinc	tonnes	140 901	151 285	160 670	157 027	145 469

Note(s):-

(1) Norway is believed to produce gold

(a) Spitzbergen: not including production from mines controlled by Russia

(b) From metal sulphide processing

(c) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	12 561 778	13 334 212	14 357 509	16 183 927	16 683 638
Aluminium and bauxite						
Unwrought	tonnes	150 479	147 295	126 841	113 285	105 729
Unwrought alloys	tonnes	1 333 251	1 365 929	1 412 569	1 496 556	1 484 854
Scrap	tonnes	39 742	38 218	42 804	41 296	41 476
Barytes	tonnes	15 888	1 482	14 199	13 425	5 608
Cadmium						
Metal	tonnes	304	132	90	205	259
Cement						
Cement clinkers (a)	tonnes	* 100	* 50 000	* 65 000	* 117 000	* 118 000
Portland cement (a)	tonnes	* 413 000	* 569 000	* 369 000	* 236 000	* 152 000
Chromium						
Metal	tonnes	413	116	203	96	128

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Cobalt						
Metal	tonnes	4 744	4 997	4 990	4 030	3 731
Copper						
Unwrought	tonnes	35 632	37 430	38 232	34 007	36 734
Unwrought alloys	tonnes	988	1 707	1 141	1 161	756
Scrap	tonnes	21 256	22 667	24 205	24 066	22 561
Diatomite	tonnes	81	1 362	281	566	770
Feldspar	tonnes	60 972	58 821	66 838	66 484	58 211
Gold						
Metal	kilograms	2 293	2 415	2 337	2 601	3 847
Waste and scrap	kilograms	127	137	182	426	600
Gypsum						
Crude and calcined	tonnes	30 879	49 511	40 811	51 212	69 976
Iodine	kilograms	—	—	17	7 200	—
Iron ore						
Burnt pyrites	tonnes	117 389	14 730	2 658	...	...
Iron ore	tonnes	648 583	721 975	720 582	739 731	615 296
Iron, steel and ferro-alloys						
Pig iron (a)	tonnes	* 123 600	* 66 800	* 149 400	* 119 800	* 110 100
Ferro-chrome (a)	tonnes	* 600	* 200	* 200	* 100	* 75
Ferro-manganese (a)	tonnes	* 336 800	* 274 200	* 287 500	* 329 400	* 354 000
Ferro-silico-manganese	tonnes	264 163	289 497	306 932	280 028	257 804
Ferro-silicon	tonnes	256 018	179 503	90 556	155 198	209 669
Other ferro-alloys	tonnes	59 696	55 564	58 033	...	57 954
Silicon metal	tonnes	176 458	168 790	152 514	144 607	155 385
Ingots, blooms, billets	tonnes	148 514	151 882	180 500	176 755	62 625
Scrap	tonnes	270 903	267 051	337 088	290 644	269 370
Lead						
Scrap	tonnes	601	1 013	892	974	695
Manganese						
Ores and concentrates	tonnes	105	1 410	7 880	56 939	10 266
Metal	tonnes	274	131	203	2 373	1 363
Mica	tonnes	2 076	2 003	2 157	2 168	2 640
Natural gas	tonnes	57 013 142	61 351 894	63 323 422	63 999 250	71 394 708
Nickel						
Ores and concentrates	tonnes	9 575	7 581	7 860	5 379	8 093
Unwrought	tonnes	71 982	84 012	81 440	88 628	88 940
Scrap	tonnes	909	897	641	1 185	394
Crude petroleum	tonnes	129 935 579	119 119 538	105 110 521	99 245 180	90 343 623
Platinum metals						
Platinum and platinum metals	kilograms	13 360	11 871	11 885	14 611	15 393
Waste and scrap	kilograms	384	342	29 817	66 193	5 119
Potash						
Chloride	tonnes	10 107	7 611	2 243	1 285	—
Rare earths						
Rare earth compounds	tonnes	1	...	...	1	21
Metals	tonnes	...	11	59	0	1
Salt	tonnes	4 948	6 679	9 040	4 178	4 833
Silver						
Metal	kilograms	69 207	66 139	52 952	45 461	59 381
Sulphur and pyrites						
Sulphur	tonnes	2 671	1	20	3 325	—
Talc	tonnes	30 279	28 448	31 834	33 032	27 371
Tin						
Scrap	tonnes	211	323	236	189	119
Titanium						
Titanium minerals (a)	tonnes	* 416 000	* 382 000	* 477 000	* 435 000	* 435 000
Metal	tonnes	182	159	176	117	339
Oxides (a)	tonnes	* 193 000	* 177 000	* 221 000	* 199 000	* 217 000
Zinc						
Unwrought	tonnes	127 410	134 690	138 491	130 570	130 397
Unwrought alloys	tonnes	6 710	5 600	12 275	13 899	9 227

Note(s)

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

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	85 471	67 562	66 708	72 906	80 161
Aluminium and bauxite						
Bauxite	tonnes	9 035	16 601	11 384	3 446	10 232
Alumina	tonnes	2 620 149	2 723 588	2 730 064	2 535 547	2 753 105
Alumina hydrate	tonnes	42 775	45 957	43 721	48 560	50 401
Unwrought	tonnes	325 514	328 722	352 293	435 126	381 638
Unwrought alloys	tonnes	29 974	42 056	34 783	73 058	58 995
Scrap	tonnes	70 430	20 806	26 326	32 024	37 386
Antimony						
Metal	tonnes	0	71	11	70	44
Oxide	tonnes	775	305	507	337	371
Barytes	tonnes	129 547	109 802	125 134	127 181	121 259
Bentonite and fuller's earth						
Bentonite	tonnes	13 667	10 000	15 246	14 399	14 783
Fuller's earth	tonnes	170	260	209	...	...
Cement						
Cement clinkers	tonnes	2 307	6 615	8 782	14 895	36 704
Portland cement	tonnes	236 622	373 788	443 104	441 619	361 216
Other	tonnes	10 738	12 319	14 147	19 062	22 317
Chromium						
Ores and concentrates (a)	tonnes	* 400	* 500	* 500	* 20	* 600
Metal	tonnes	88	92	73	253	128
Coal						
Anthracite (b)	tonnes	71 785	92 673	55 914	76 744	81 955
Other coal (b)	tonnes	693 106	575 921	472 129	* 527 000	* 538 000
Briquettes	tonnes	904	282	349	706	24 406
Cobalt						
Metal	tonnes	9 629	5 775	6 362	3 871	3 131
Copper						
Unwrought	tonnes	2 594	3 190	3 133	3 650	3 133
Scrap	tonnes	11 270	12 420	12 759	13 486	11 189
Diatomite	tonnes	2 500	2 044	1 228	1 645	1 891
Feldspar	tonnes	15 490	17 103	17 199	12 930	17 367
Gold						
Metal	kilograms	1 253	2 099	1 739	1 448	1 146
Waste and scrap	kilograms	987	1 049	1 304	1 455	3 940
Graphite	tonnes	548	423	296	980	561
Gypsum						
Crude	tonnes	109 069	119 962	117 892	128 045	121 440
Calcined	tonnes	259 001	274 006	287 568	328 003	298 394
Iodine	kilograms	1 294 934	1 748 110	1 919 848	1 785 526	1 668 339
Iron ore	tonnes	495 047	(c) 526 738	216 372	179 727	151 503
Iron, steel and ferro-alloys						
Pig iron	tonnes	8 823	10 841	12 813	11 335	11 198
Sponge and powder	tonnes	38 519	13 729	320	2 355	1 589
Ferro-chrome	tonnes	860	1 251	1 440	1 303	929
Ferro-manganese	tonnes	9 703	6 154	5 328	10 639	7 448
Ferro-silico-manganese	tonnes	933	1 071	2 729	1 034	1 960
Ferro-silicon	tonnes	11 684	25 663	26 931	43 350	13 502
Other ferro-alloys	tonnes	1 885	1 877	3 392	3 681	2 471
Silicon metal	tonnes	17 653	26 714	37 439	39 961	40 878
Ingots, blooms, billets	tonnes	150 611	142 986	161 778	195 928	167 309
Scrap	tonnes	416 062	345 634	313 184	267 085	96 427
Kaolin	tonnes	237 725	250 879	241 976	208 709	253 361
Lead						
Unwrought	tonnes	2 970	4 882	4 749	7 055	6 473
Magnesite and magnesia						
Magnesite	tonnes	2 587	2 125	4 265	126	69
Magnesia	tonnes	1 643	500	1 784	4 298	5 989
Manganese						
Ores and concentrates	tonnes	1 132 985	1 172 711	849 729	1 083 361	1 232 799
Metal	tonnes	3 610	2 976	3 531	2 953	2 595
Mica	tonnes	1 559	1 001	1 141	1 267	2 427
Natural gas	tonnes	—	—	—	118 063	442
Nickel						
Mattes, sinters etc.	tonnes	136 200	176 657	158 274	165 628	178 502
Unwrought (d)	tonnes	222	80	60	215	201

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Crude petroleum	tonnes	440 346	983 848	440 374	1 446 918	752 400
Phosphate rock	tonnes	646 319	710 528	672 546	673 331	682 369
Platinum group metals						
Platinum and platinum metals	kilograms	973	1 076	922	1 057	1 072
Waste and scrap	kilograms	59	998	1 102	846	1 093
Potash						
Sulphate	tonnes	267 653	247 379	266 149	241 918	190 757
Chloride	tonnes	309 061	306 369	307 422	349 459	353 452
Rare earths						
Metals	tonnes	702	544	686	738	341
Salt	tonnes	741 959	910 846	1 026 541	988 001	1 075 905
Sillimanite minerals	tonnes	3 605	2 400	2 288	3 404	2 702
Silver						
Ores and concentrates	kilograms	3 118 000	...	7 923 075	—	...
Metal	kilograms	86 037	90 331	64 511	62 077	67 398
Sulphur and pyrites						
Pyrites	tonnes	225 513	26 940	...	...	77
Sulphur	tonnes	4 559	16 413	11 983	5 224	4 690
Sulphur, sublimed and precipitated	tonnes	138	240	5 571	10 790	12 932
Talc	tonnes	14 522	16 488	10 991	13 374	8 020
Tin						
Unwrought (d)	tonnes	126	78	126	74	80
Titanium						
Titanium minerals	tonnes	...	33 000	73 690	17 600	73 307
Metal	tonnes	505	636	661	637	937
Oxides	tonnes	10 026	11 924	16 013	12 121	12 241
Vanadium						
Metal	tonnes	32	10	63	...	...
Zinc						
Ores and concentrates	tonnes	231 563	255 158	248 486	284 791	243 213
Unwrought (d)	tonnes	296	247	2 828	2 167	3 286

Note(s):-

- (a) BGS estimates, based on known exports from certain countries
- (b) Excludes coal imported from Spitzbergen
- (c) Including burnt pyrites
- (d) Including alloys

Poland

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel (a)	tonnes	79 232 000	95 277 000	110 580 000	* 124 000 000	* 129 000 000
Crushed rock	tonnes	29 271 189	33 098 360	38 835 618	46 854 829	49 442 388
Primary aluminium	tonnes	58 931	54 508	57 620	58 736	47 543
Barytes	tonnes	3 183	2 357	2 034	2 000	2 200
Bentonite and fuller's earth	tonnes	66 143	86 331	97 900	105 943	121 031
Cadmium	tonnes	356	408	373	421	603
Cement						
Cement clinker	tonnes	9 620 601	9 468 410	11 219 940	13 167 950	12 443 103
Cement, finished	tonnes	12 566 000	12 646 223	14 688 353	16 963 752	17 206 735
Coal						
Bituminous	tonnes	100 087 100	97 903 730	95 222 512	88 313 369	84 345 443
Lignite	tonnes	61 197 500	61 636 445	60 844 278	57 537 727	59 668 166
Copper, mine	tonnes (metal content)	530 768	511 799	497 200	451 900	429 400
Copper, smelter	tonnes	547 228	555 681	555 907	518 303	492 942
Copper, refined	tonnes	550 066	560 256	556 625	532 975	526 808
Diatomite	tonnes	800	500	600	* 600	* 600
Feldspar	tonnes	373 459	426 914	457 600	501 800	* 545 000
Gold, mine (b)	kilograms (metal content)	527	713	1 700	883	902
Gypsum						
Gypsum	tonnes	970 786	1 048 000	1 172 000	1 298 000	(c) 1 499 901
Anhydrite	tonnes	196 000	195 000	181 000	194 000	...
Pig iron	tonnes	6 292 341	4 476 831	5 332 632	5 804 418	4 933 781
Crude steel	tonnes	10 578 482	8 335 898	9 991 638	10 630 716	10 380 738
Ferro-alloys						
Ferro-manganese	tonnes	46 898	7 782	4 089	2 093	8 475
Ferro-silico-manganese	tonnes	29 600	10 242	3 310	15 590	25 061
Ferro-silicon	tonnes	83 552	65 118	13 034	58 538	56 031
Other ferro-alloys	tonnes	1 419	3 663	4 488	6 255	2 948
Kaolin (d)	tonnes	130 596	159 207	148 579	153 670	165 615
Lead, mine	tonnes (metal content)	86 000	78 980	77 450	74 200	61 110
Lead, refined	tonnes	73 900	81 000	73 000	104 200	108 300
Magnesite	tonnes	57 900	55 300	63 000	65 000	* 60 000
Crude petroleum	tonnes	886 188	847 844	795 742	720 603	754 907
Natural gas	million m ³	5 630	5 742	5 651	5 653	5 382
Salt						
Rock salt	tonnes	1 099 072	1 123 219	1 129 875	591 240	618 111
Brine salt	tonnes	2 940 169	2 889 941	2 899 076	2 930 726	2 783 198
Other salt	tonnes	195 873	118 703	808 247	785 694	706 618
Selenium metal	tonnes	83	82	87	85	82
Silver, mine	kilograms (metal content)	1 372 700	1 262 400	1 265 100	1 199 000	1 161 000
Sulphur and pyrites						
Frasch	tonnes (sulphur content)	821 489	801 799	800 200	833 583	762 119
Recovered (e)	tonnes (sulphur content)	289 100	289 000	308 000	* 304 000	* 305 000
Recovered (f)	tonnes (sulphur content)	182 000	186 600	203 100	* 211 900	* 215 000
Zinc, mine	tonnes (metal content)	140 381	135 600	126 600	129 600	132 300
Slab zinc	tonnes	155 500	137 300	133 900	141 900	142 500

Note(s):-

(1) Poland is believed to produce strontium minerals

(a) Includes an estimate for small producers

(b) Metal production

(c) Including anhydrite

(d) Washed

(e) From metal sulphide processing

(f) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	790 734	1 237 482	1 671 890	1 378 634	1 237 976
Aluminium and bauxite						
Bauxite	tonnes	2 378	1 300	1 693	596	536
Unwrought (a)	tonnes	70 740	81 962	80 266	78 187	82 242
Scrap	tonnes	71 525	82 875	107 939	113 649	123 468
Bentonite and fuller's earth						
Bentonite	tonnes	1 365	12 061	15 851	19 107	20 384
Fuller's earth	tonnes	431	404	580	...	...
Bromine	kilograms	...	3 000	5 500	9 400	5 000
Cadmium						
Metal	tonnes	665	610	364	368	558
Cement						
Cement clinkers	tonnes	226 981	256 621	856 035	181 690	163 902
Portland cement	tonnes	341 112	460 479	402 741	313 361	314 733
Other cement	tonnes	7 059	49 970	67 457	65 822	78 349
Chromium						
Metal	tonnes	82	1	13	1 556	1 465
Coal						
Anthracite	tonnes	8 599	23 331	31 200	30 256	16 173
Other coal	tonnes	19 684 005	20 816 121	16 586 467	11 761 743	7 775 799
Lignite	tonnes	26 929	8 211	317	—	1 009
Cobalt						
Metal	tonnes	26	19	8	11	11
Copper						
Matte and cement	tonnes	1 606	3 673	6 774	2 187	2 989
Unwrought	tonnes	275 089	290 462	287 666	239 508	296 738
Unwrought alloys	tonnes	5 007	6 183	6 205	6 397	5 469
Scrap	tonnes	42 763	47 463	55 285	64 377	63 779
Diatomite	tonnes	536	455	527	774	277
Feldspar	tonnes	1 441	1 509	2 749	1 849	2 049
Gold						
Metal	kilograms	...	100	1 100	300	105 000
Waste and scrap	kilograms	4 074	1 100	1 600	700	4 800
Gypsum						
Crude and calcined	tonnes	29 467	33 277	40 832	56 003	58 644
Iodine	kilograms	100	100	200	1 300	5 100
Iron ore	tonnes	9 499	50	—	27	10 198
Iron, steel and ferro-alloys						
Pig iron	tonnes	57 696	4 917	19 286	7 481	5 189
Ferro-manganese and ferro-silico-manganese	tonnes	66 666	22 713	11 954	20 412	37 978
Ferro-silicon	tonnes	85 538	64 974	16 023	46 923	52 976
Other ferro-alloys	tonnes	195	915	1 630	2 364	2 752
Ingots, blooms, billets	tonnes	1 585 494	1 249 618	964 361	1 575 099	1 580 450
Scrap	tonnes	1 973 116	1 426 831	1 197 827	1 199 620	1 368 952
Kaolin	tonnes	9 941	6 194	7 177	10 401	8 936
Lead						
Ores and concentrates	tonnes	94 126	92 226	73 902	70 970	69 852
Unwrought	tonnes	39 287	44 008	68 635	34 455	40 017
Scrap	tonnes	963	1 652	2 168	3 120	1 110
Magnesite and magnesia	tonnes	796	1 208	654	2 632	1 921
Manganese						
Ores and concentrates	tonnes	1	43 186	1 309	151	18
Metal	tonnes	33	67	52	460	35
Mercury	kilograms	2	3 000	33 900	61 600	17 700
Molybdenum						
Metal	tonnes	...	61	122	113	54
Natural gas	tonnes	12 367	26 501	—	—	...
Nickel						
Unwrought	tonnes	(a) 110	(a) 480	312	(a) 466	(a) 334
Scrap	tonnes	...	642	290	268	647
Oxides	tonnes	468	529	577	558	759
Crude petroleum	tonnes	138 253	216 256	243 699	287 684	34 871
Phosphates	tonnes	507	1	1	1	203
Platinum metals						
Platinum and platinum metals	kilograms	470	903	350	156	7 275
Waste and scrap	kilograms	33 019	60	4 312	139	7 399

Poland

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Potash						
Potassic fertilisers	tonnes	1 638	932	3 130	2 202	9 222
Rare earths						
Cerium compounds	tonnes	0	0	0	15	8
Other rare earth compounds	tonnes	—	0	0	33	22
Metals	tonnes	...	...	...	—	5
Salt	tonnes	493 259	495 481	498 345	345 335	361 691
Silver						
Metal	kilograms	821 501	318 800	519 800	1 148 300	1 121 900
Sulphur and pyrites						
Sulphur	tonnes	560 340	575 796	478 736	555 603	446 202
Sulphur, sublimed and precipitated	tonnes	13 706	17 364	18 426	26 376	27 041
Tin						
Unwrought (a)	tonnes	64	116	182	1 520	355
Scrap	tonnes	704	158	37	34	20
Titanium						
Metal	tonnes	25	740	917	52	117
Oxides	tonnes	20 818	24 394	25 598	21 776	21 509
Tungsten						
Metal	tonnes	89	84	89	76	143
Zinc						
Ores and concentrates	tonnes	44 257	63 913	61 094	61 595	58 035
Unwrought	tonnes	72 820	74 938	62 332	73 096	83 571
Unwrought alloys	tonnes	850	857	2 513	1 829	3 606
Scrap	tonnes	269	797	233	422	430

Note(s)

(a) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	1 756 513	1 775 291	2 976 252	5 566 874	5 868 908
Aluminium and bauxite						
Bauxite	tonnes	82 233	59 758	61 638	71 598	59 907
Alumina	tonnes	124 274	102 845	114 800	120 768	126 143
Alumina hydrate	tonnes	26 927	29 538	27 358	27 634	25 334
Unwrought	tonnes	85 010	62 403	76 996	105 281	71 563
Unwrought alloys	tonnes	119 305	140 792	167 914	192 930	195 072
Scrap	tonnes	31 536	39 907	52 498	59 623	67 176
Antimony						
Metal	tonnes	80	28	158	142	52
Oxide	tonnes	1 042	1 231	1 338	1 315	1 086
Arsenic						
Metallic arsenic	tonnes	14	39	21	24	42
Asbestos						
Unmanufactured	tonnes	16	6	52	...	...
Barytes	tonnes	6 593	7 744	9 138	10 895	14 334
Bentonite and fuller's earth						
Bentonite	tonnes	126 127	115 208	153 266	162 424	171 633
Fuller's earth	tonnes	1 749	2 566	2 564	...	...
Bismuth						
Metal	tonnes	6	14	14	15	25
Bromine	kilograms	(a) 9 000	6 000	16 000	14 300	10 600
Cement						
Cement clinkers	tonnes	13 746	33 673	45 560	65 632	127 428
Portland cement	tonnes	540 342	444 855	285 135	520 330	680 447
Other	tonnes	2 323	5 537	5 700	22 982	29 529
Chromium						
Ores and concentrates	tonnes	13 053	9 391	16 161	38 543	36 646
Metal	tonnes	242	54	45	1 717	2 137

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Coal						
Anthracite	tonnes	168 095	263 929	295 026	449 362	553 152
Other coal	tonnes	2 231 606	3 112 462	4 866 783	5 442 327	9 531 959
Lignite	tonnes	...	...	4 406	8 946	18 057
Briquettes	tonnes	2 368	2 118	3 932	3 710	10 960
Cobalt						
Metal	tonnes	44	35	52	69	51
Oxides	tonnes	37	121	63	18	30
Copper						
Ores and concentrates	tonnes	30	43 504	112 708	61 319	62 443
Matte and cement	tonnes	1	312	5 310	10 062	—
Unwrought	tonnes	3 071	7 118	40 899	35 420	43 646
Scrap	tonnes	14 973	5 855	4 885	18 596	19 269
Diamond						
Industrial	carats	67 042	43 583	31 323	150 918	237 903
Dust	carats	3 799 175	4 042 100	...	3 149 550	27 584 081
Diatomite	tonnes	6 387	6 465	5 997	8 235	9 504
Feldspar	tonnes	201 509	215 185	219 719	237 963	243 798
Fluorspar	tonnes	7 501	6 290	7 834	8 682	8 691
Gold						
Metal	kilograms	2 420	100	400	6 100	3 800
Graphite	tonnes	3 089	3 028	3 658	5 701	4 474
Gypsum						
Crude	tonnes	163 227	150 622	175 567	283 724	154 273
Calcined	tonnes	100 886	91 356	150 619	216 536	182 150
Iodine	kilograms	18 687	10 200	18 700	18 800	24 100
Iron ore	tonnes	(b) 10 933 453	6 788 655	9 607 629	8 746 836	(b) 7 784 529
Iron, steel and ferro-alloys						
Pig iron	tonnes	150 163	239 240	220 163	228 445	236 682
Sponge and powder	tonnes	34 456	24 490	12 448	10 282	8 390
Ferro-chrome	tonnes	10 352	10 863	12 318	14 113	13 713
Ferro-manganese	tonnes	46 414	29 230	35 508	42 352	31 876
Ferro-silico-manganese	tonnes	64 985	51 197	63 332	79 942	47 964
Ferro-molybdenum	tonnes	1 138	1 178	1 168	1 527	1 554
Ferro-phosphorus	tonnes	...	1 056	1 195	1 492	1 386
Ferro-silicon	tonnes	29 551	22 769	24 986	24 846	20 424
Ferro-vanadium	tonnes	393	313	480	445	418
Other ferro-alloys	tonnes	7 454	10 815	14 326	9 741	8 793
Silicon metal	tonnes	9 967	9 243	11 935	13 946	11 652
Ingots, blooms, billets	tonnes	191 722	298 314	569 057	679 404	584 305
Scrap	tonnes	278 271	238 113	289 956	313 907	465 978
Kaolin	tonnes	89 139	90 931	94 257	122 245	126 426
Lead						
Unwrought	tonnes	50 189	53 095	56 504	44 235	35 465
Scrap	tonnes	602	794	1 633	1 256	2 467
Lithium						
Oxides	tonnes	132	136	266	245	61
Carbonate	tonnes	117	128	252	184	162
Magnesite and magnesia						
Magnesite	tonnes	1 406	244	288	1 536	216
Magnesia	tonnes	80 758	71 550	103 092	109 810	109 646
Manganese						
Ores and concentrates	tonnes	205 290	38 845	6 017	32 984	54 087
Metal	tonnes	652	499	1 155	1 167	716
Mercury	kilograms	4 489	15 700	9 200	15 700	13 300
Mica	tonnes	878	547	918	1 118	880
Molybdenum						
Metal	tonnes	142	102	208	616	843
Natural gas	tonnes	6 226 121	7 118 539	—	—	...
Nickel						
Unwrought (c)	tonnes	2 207	1 683	2 573	2 344	3 398
Scrap	tonnes	23	3	116	4 897	3 683
Crude petroleum	tonnes	17 316 135	17 639 489	19 479 284	20 778 118	20 949 949
Phosphate rock	tonnes	1 885 350	1 558 007	1 658 266	1 689 120	1 448 780
Platinum group metals						
Platinum and platinum metals	kilograms	235	3 413	15 500	16 400	16 900

Poland

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Potash						
Fertiliser salts	tonnes	2 264	621	1 066	...	...
Sulphate	tonnes	24 143	21 770	14 517	20 242	19 161
Chloride	tonnes	1 098 679	1 041 798	770 674	992 979	815 282
Other potassic fertilisers	tonnes	4 174	4 726	4 110	4 659	7 143
Rare earths						
Cerium compounds	tonnes	56	79	109	85	148
Other rare earth compounds	tonnes	5	39	74	63	58
Metals	tonnes	3	6	7	1	—
Salt	tonnes	294 590	376 829	582 080	313 297	356 929
Sillimanite minerals						
Kyanite, silliminite and andalusite	tonnes	14 928	9 975	21 196	23 321	16 975
Mullite	tonnes	1 355	2 207	2 012	4 956	3 728
Silver						
Metal	kilograms	34 563	40 100	28 800	77 000	95 200
Sulphur and pyrites						
Pyrites	tonnes	1 061	1 013	5 065	1 582	5 768
Sulphur	tonnes	78 292	78 274	83 432	74 805	104 300
Talc	tonnes	16 155	20 536	22 348	23 122	28 186
Tantalum and niobium						
Tantalum	tonnes	1	1	0	3	52
Tin						
Unwrought (c)	tonnes	1 367	1 437	1 583	1 838	1 857
Scrap	tonnes	697	705	1 653	1 931	1 038
Titanium						
Titanium minerals	tonnes	98 214	100 539	95 057	100 002	91 208
Metal	tonnes	271	328	2 550	2 122	451
Oxides	tonnes	29 710	33 417	36 943	45 984	41 019
Tungsten						
Metal	tonnes	46	108	111	108	103
Vanadium						
Metal	tonnes	32	32	41	...	...
Zinc						
Ores and concentrates	tonnes	114 800	78 746	129 551	127 720	150 283
Unwrought	tonnes	19 580	13 333	28 714	31 838	26 811
Unwrought alloys	tonnes	12 022	13 337	11 421	13 660	11 906
Scrap	tonnes	4 636	3 899	2 681	4 445	6 378
Zirconium						
Ores and concentrates	tonnes	1 085	870	863	542	833

Note(s):-

- (a) May include some fluorine
- (b) Including burnt pyrites
- (c) Including alloys

Portugal

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	9 405 437	8 284 238	9 764 029	10 664 828	* 11 000 000
Crushed rock	tonnes	73 264 403	73 343 159	65 428 239	60 822 000	* 60 000 000
White arsenic	tonnes	* 15	* 15	* 15	* 15	* 15
Cement						
Cement clinker (a)	tonnes	1 082 678	1 450 646	1 484 856	1 513 487	1 760 510
Cement, finished (a)	tonnes	8 839 048	8 426 830	8 326 687	9 178 735	8 365 242
Copper, mine	tonnes (metal content)	95 700	89 541	78 576	90 182	89 026
Feldspar	tonnes	221 312	238 843	257 570	371 952	* 370 000
Gypsum	tonnes	461 212	389 180	366 599	* 400 000	* 400 000
Crude steel	tonnes	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000
Kaolin	tonnes	152 077	164 072	167 792	* 170 000	* 170 000
Lead, mine	tonnes (metal content)	—	—	—	—	1 000
Lead, refined	tonnes	4 000	3 000	3 000	5 000	* 5 000
Lithium minerals						
Lepidolite	tonnes	28 696	26 185	28 497	34 755	35 000
Salt						
Rock salt	tonnes	661 704	597 945	586 190	590 588	* 590 000
Sea salt	tonnes	75 400	92 495	76 858	64 048	69 249
Silver, mine	kilograms (metal content)	24 400	23 786	20 078	26 514	28 825
Sulphur and pyrites						
Recovered	tonnes (sulphur content)	25 000	30 000	38 000	27 000	22 000
Talc	tonnes	6 231	5 362	5 517	12 367	* 12 500
Tin, mine	tonnes (metal content)	200	243	25	41	32
Tungsten, mine (b)	tonnes (metal content)	746	816	780	846	* 900
Zinc, mine	tonnes (metal content)	—	—	7 505	24 163	22 567

Note(s):-

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

(a) Sales

(b) Wolframite and scheelite

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	53 451	138 939	101 721	120 914	44 174
Aluminium and bauxite						
Unwrought alloys	tonnes	105 837	140 505	152 591	130 636	127 150
Scrap	tonnes	28 576	41 797	38 026	41 603	40 020
Antimony						
Metal	tonnes	26	1	646	267	60
Bentonite and fuller's earth						
Bentonite	tonnes	813	444	518	1 718	1 608
Cement						
Cement clinkers	tonnes	148 984	1 271 578	1 138 307	1 263 190	1 448 397
Portland cement	tonnes	286 819	1 110 739	1 204 981	1 481 219	1 102 589
Other cement	tonnes	13 267	17 301	11 364	58 931	11 139
Chromium						
Ores and concentrates	tonnes	...	1 111	591	295	70
Copper						
Ores and concentrates	tonnes	346 534	375 312	328 296	399 589	375 755
Unwrought	tonnes	1 165	9 356	918	227	600
Scrap	tonnes	35 927	33 583	29 736	24 566	22 184
Diamond						
Gem, cut	carats	£45 779 000	£17 981 000	£8 000	£105 000	£55 000
Diatomite	tonnes	7 755	11	286	943	554
Feldspar	tonnes	—	1 546	862	4 048	873
Gold						
Waste and scrap	kilograms	...	4 800	400	1 100	36 100

Portugal

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Gypsum						
Crude and calcined	tonnes	1 424	1 332	4 349	8 362	22 707
Iron, steel and ferro-alloys						
Ingots, blooms, billets	tonnes	184 547	159 868	79 697	138 692	164 425
Scrap	tonnes	259 297	330 536	479 017	378 043	172 133
Kaolin	tonnes	11 383	31 484	46 494	70 580	47 562
Lead						
Unwrought	tonnes	1 988	1 269	2 018	3 092	4 950
Scrap	tonnes	3 452	4 127	9 471	9 961	3 105
Natural gas	tonnes	—	—	—	—	890 688
Platinum metals						
Waste and scrap	kilograms	695	...	...	33 500	...
Potash						
Potassic fertilisers	tonnes	30	1 056	42	80	240
Salt	tonnes	4 444	6 130	11 872	25 341	13 412
Silver						
Ores and concentrates	kilograms	...	...	...	4 000	13 500
Metal	kilograms	1 356	1 673	411	218	7 876
Sulphur and pyrites						
Sulphur	tonnes	10 838	28 122	9 747	15 410	7 539
Sulphur, sublimed and precipitated	tonnes	121	80	500	1	136
Talc	tonnes	1 117	1 614	6 013	4 243	3 841
Tantalum and niobium						
Tantalum	tonnes	42	15	4	63	48
Tin						
Unwrought alloys	tonnes	0	—	146	172	—
Scrap	tonnes	—	7	124	25	147
Titanium						
Oxides	tonnes	431	512	840	1 064	1 189
Tungsten						
Ores and concentrates	tonnes	900	1 425	1 305	1 466	1 705
Metal	tonnes	217	12	14	16	17
Zinc						
Ores and concentrates	tonnes	...	...	13 035	40 950	75 414
Scrap	tonnes	1 855	2 050	2 023	3 345	2 910

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	790 615	698 717	488 917	731 709	194 088
Aluminium and bauxite						
Alumina and alumina hydrate	tonnes	9 257	6 250	7 760	9 325	9 750
Unwrought	tonnes	10 903	13 941	16 292	16 859	17 732
Unwrought alloys	tonnes	200 335	224 631	237 617	214 990	214 614
Scrap	tonnes	4 214	2 651	1 487	3 994	2 409
Antimony						
Oxide	tonnes	242	137	166	172	161
Asbestos						
Unmanufactured	tonnes	474	356	...	...	—
Barytes	tonnes	2 630	5 382	3 099	1 934	3 806
Bentonite and fuller's earth						
Bentonite	tonnes	17 907	16 881	17 640	18 480	20 304
Fuller's earth	tonnes	662	483	379	...	...
Cement						
Cement clinkers	tonnes	8 775	17 084	140 673	331 025	196 929
Portland cement	tonnes	1 066 969	669 272	356 040	45 012	22 862
Other	tonnes	65 793	10 479	14 286	11 966	8 842
Chromium						
Ores and concentrates	tonnes	1 547	2 599	2 845	3 339	5 369
Metal	tonnes	18	18	336	55	53
Coal						
Anthracite	tonnes	30 630	48 785	30 688	44 447	48 793
Other coal	tonnes	5 241 255	5 386 968	5 630 721	4 733 158	3 721 513

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Copper						
Unwrought	tonnes	7 740	4 572	5 752	5 309	5 534
Scrap	tonnes	1 874	3 329	5 946	8 503	10 229
Diamond						
Gem, rough	carats	45 000	77 027	...	2 359	...
Gem, cut	carats	£11 608 000	£7 015 000	£2 940 000	£3 435 000	£3 949 000
Industrial	carats	£669 000	£565 000	£381 000	£427 000	£296 000
Dust	carats	2 954 899	2 870 000	...	8 473 445	5 891 661
Diatomite	tonnes	2 263	3 946	3 432	1 731	1 372
Feldspar	tonnes	96 049	115 286	98 106	108 150	85 400
Fluorspar	tonnes	158	1 633	2 530	2 423	1 828
Gold						
Metal	kilograms	...	6 074	5 234	2 003	1 535
Graphite	tonnes	1 317	1 722	1 954	2 210	1 493
Gypsum						
Crude	tonnes	82 603	79 370	96 070	75 794	89 627
Calcined	tonnes	340 665	361 284	307 953	320 174	298 708
Iodine	kilograms	14 717	12 000	1 400	900	100
Iron, steel and ferro-alloys						
Pig iron	tonnes	16 089	19 713	15 149	17 468	13 824
Ferro-chrome	tonnes	1 487	884	1 160	1 050	1 093
Ferro-silico-magnesium	tonnes	518	1 028	1 005	6 070	6 228
Ferro-manganese	tonnes	889	885	816	1 281	908
Ferro-silico-manganese	tonnes	1 742	10 021	12 779	9 835	10 063
Ferro-silicon	tonnes	1 881	3 028	3 341	3 355	3 479
Other ferro-alloys	tonnes	1 930	5 389	7 270	187	393
Ingots, blooms, billets	tonnes	7 167	10 538	14 494	84 769	26 532
Scrap	tonnes	292 753	653 988	1 056 949	1 075 517	1 128 391
Kaolin	tonnes	124 508	143 943	137 656	154 891	114 041
Lead						
Unwrought	tonnes	18 885	21 198	17 523	14 704	12 014
Magnesite and magnesia						
Magnesite	tonnes	969	1 012	1 269	924	1 521
Magnesia	tonnes	4 808	5 998	6 544	7 119	5 863
Manganese						
Ores and concentrates	tonnes	275	28	63	51	765
Mercury	kilograms	291	0	0	—	7 500
Mica	tonnes	311	193	630	284	125
Natural gas	tonnes	2 812 628	3 588 097	3 356 949	3 758 075	4 188 706
Nickel						
Unwrought (a)	tonnes	310	602	739	450	524
Crude petroleum	tonnes	13 081 242	12 941 851	13 479 579	12 386 104	12 050 226
Phosphate rock	tonnes	149 365	137 423	91 912	114 826	90 667
Potash						
Sulphate	tonnes	7 526	3 631	3 227	4 223	1 869
Chloride	tonnes	79 232	65 682	58 237	51 600	38 200
Other potassic fertilisers	tonnes	1 752	2 780	2 141	1 629	1 708
Rare earths						
Rare earth compounds	tonnes	13	46	46	115	20
Ferro-cerium and other pyrophoric alloys	tonnes	23	—	4	4	0
Metals	tonnes	3	4	5	0	0
Salt	tonnes	121 621	70 266	110 581	169 480	94 501
Sillimanite minerals	tonnes	337	160	192	293	646
Silver						
Metal	kilograms	2 237	200	300	...	200
Sulphur and pyrites						
Sulphur	tonnes	3 532	5 878	4 485	3 233	2 852
Sulphur, sublimed and precipitated	tonnes	431	28	3	3	51
Talc	tonnes	20 203	23 583	30 955	36 089	26 774
Tantalum and niobium						
Tantalum	tonnes	68	115	103	69	83
Tin						
Unwrought	tonnes	434	971	763	577	487
Unwrought alloys	tonnes	71	100	274	419	130
Titanium						
Oxides	tonnes	20 120	17 458	18 565	19 545	18 800

Portugal

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Tungsten						
Metal	tonnes	153	179	106	122	251
Carbide	tonnes	109	105	97	119	169
Zinc						
Unwrought	tonnes	13 450	11 862	19 015	16 367	19 551
Unwrought alloys	tonnes	14 675	11 573	5 778	5 054	4 617
Zirconium						
Ores and concentrates	tonnes	2 045	5 918	6 426	7 205	8 162

Note(s):-

(a) Including alloys

Romania

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	14 567 501	17 030 886	21 817 372	26 276 857	31 377 110
Crushed rock	tonnes	2 585 894	2 328 165	3 373 384	5 905 842	4 635 010
Alumina	tonnes (Al ₂ O ₃ content)	560 243	689 329	622 083	22 830	344
Primary aluminium	tonnes	222 347	258 000	277 382	289 388	289 740
Bentonite and fuller's earth						
Bentonite	tonnes	18 161	18 190	21 165	16 911	16 638
Bismuth, mine	tonnes (metal content)	* 40	* 40	* 40	* 40	* 40
Cement						
Cement, finished	tonnes	6 238 584	7 032 100	8 198 090	9 844 706	10 461 456
Coal						
Anthracite and bituminous	tonnes	3 016 000	3 079 000	—	—	—
Lignite	tonnes	29 726 895	28 491 480	32 753 526	35 671 000	34 529 000
Brown coal	tonnes	220 157	62 609	* 58 000	97 000	205 000
Copper, mine	tonnes (metal content)	20 380	16 286	12 535	2 213	308
Copper, smelter	tonnes	61	—	—	—	—
Copper, refined	tonnes	24 526	20 739	21 583	18 289	14 120
Diatomite	tonnes	20 626	1 402	1 719	2 057	—
Feldspar	tonnes	60 924	74 927	33 100	41 477	22 995
Fluorspar	tonnes	* 15 000	—	—	—	—
Gold, mine	kilograms (metal content)	1 430	* 500	* 500	* 500	* 500
Graphite	tonnes	395	486	—	—	—
Gypsum	tonnes	490 372	532 867	615 072	1 004 150	832 248
Iron ore	tonnes	231 417	220 788	122 684	8 157	—
Pig iron	tonnes	4 243 956	4 097 998	3 945 975	3 923 244	2 957 715
Crude steel	tonnes	6 076 600	6 280 000	6 266 036	6 269 486	5 035 164
Ferro-alloys						
Ferro-chrome	tonnes	—	—	—	—	6 179
Ferro-manganese	tonnes	191	18 625	3 777	—	—
Ferro-silico-manganese	tonnes	194 754	100 957	66 476	26 868	9 979
Kaolin	tonnes	22 338	26 772	11 063	7 576	3 060
Lead, mine	tonnes (metal content)	18 297	11 610	6 269	784	—
Lead, refined	tonnes	37 600	37 900	34 133	39 369	39 596
Manganese ore	tonnes	79 130	72 000	60 107	49 350	43 590
Crude petroleum	tonnes	5 462 000	5 215 000	4 777 000	4 837 000	4 528 000
Natural gas	million m ³	13 246	12 637	12 422	11 981	11 520
Salt	tonnes	2 399 956	2 442 640	2 621 129	2 475 349	2 526 774
Silver, mine	kilograms (metal content)	* 18 000	* 18 000	* 18 000	* 18 000	* 18 000
Sulphur and pyrites						
Recovered	tonnes (sulphur content)	53 000	79 000	60 000	64 000	61 000
Talc	tonnes	9 725	6 760	2 967	1 513	1 843
Uranium, mine	tonnes (metal content)	90	* 90	* 90	* 77	* 77
Zinc, mine	tonnes (metal content)	23 599	13 784	8 052	849	14
Slab zinc	tonnes	52 746	56 795	43 705	58 342	61 978

Note(s):-

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

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	23 073	63 110	51 793	111 803	60 190
Aluminium and bauxite						
Bauxite	tonnes	8 878	8 967	129	47	526
Alumina	tonnes	209 950	261 862	137 753	5 191	0
Unwrought	tonnes	59 363	31 543	12 672	23 193	61 638
Unwrought alloys	tonnes	20 145	7 711	10 110	9 080	6 690
Scrap	tonnes	4 703	4 829	11 132	14 332	16 021
Bentonite and fuller's earth						
Bentonite	tonnes	8 810	7 154	521	68	10
Cement						
Cement clinkers	tonnes	669 204	465 660	608 616	243 116	111 719
Portland cement	tonnes	701 686	739 215	447 713	134 044	7 449
Coal						
Hard coal (a)	tonnes	1 390	661	7 997	67 304	5 331
Copper						
Ores and concentrates	tonnes	81 485	84 084	72 900	23 689	33 391
Matte and cement	tonnes	3 482	...	2 818	11 569	8 494
Unwrought	tonnes	815	614	735	125	153
Scrap	tonnes	15 979	22 665	41 911	35 856	39 733
Feldspar	tonnes	28 820	28 859	20 563	25 102	16 438
Gypsum						
Crude and calcined	tonnes	14 277	15 089	14 283	13 507	13 069
Iron ore						
Burnt pyrites	tonnes	...	...	1	24 068	15 567
Iron, steel and ferro-alloys						
Pig iron	tonnes	3 339	0	1	5	1
Sponge and powder	tonnes	9 187	12 522	12 851	17 832	18 697
Ferro-silico-manganese	tonnes	179 788	142 617	41 000	33 529	5 793
Other ferro-alloys	tonnes	3 891	8 657	3 561	872	1 493
Ingots, blooms, billets	tonnes	161 438	100 515	87 685	183 551	220 136
Scrap	tonnes	2 394 490	1 661 747	1 862 498	1 963 213	1 985 977
Lead						
Ores and concentrates	tonnes	25 092	25 012	18 104	10 501	17 396
Unwrought	tonnes	20 894	22 120	18 786	23 289	22 752
Scrap	tonnes	1 689	3 295	4 389	4 659	2 997
Magnesite and magnesia						
Magnesia	tonnes	281	231	277	351	440
Manganese						
Metal	tonnes	...	...	1	3 024	6 666
Salt	tonnes	497 826	598 154	503 629	506 641	486 040
Sulphur and pyrites						
Pyrites	tonnes	36	42	73	0	994
Sulphur	tonnes	20 682	54 917	43 255	45 579	59 030
Titanium						
Metal	tonnes	277	255	579	650	2 469
Zinc						
Ores and concentrates	tonnes	31 665	26 611	16 796	4 043	503
Unwrought (b)	tonnes	42 991	42 012	32 008	48 339	59 395
Scrap	tonnes	7 950	1 073	228	1 348	442

Note(s)

(a) Including anthracite

(b) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	370 184	197 911	332 190	352 576	351 123
Aluminium and bauxite						
Bauxite	tonnes	1 532 335	1 655 045	1 597 023	75 934	45 527
Alumina	tonnes	120 826	27 498	28 342	482 375	487 304
Alumina hydrate	tonnes	5 076	1 852	15 253	16 927	17 822
Unwrought (a)	tonnes	7 449	2 849	4 151	10 191	16 416
Scrap	tonnes	43	565	436	3 833	598
Antimony						
Metal	tonnes	62	55	43	68	30
Oxide	tonnes	88	73	97	190	153
Asbestos						
Unmanufactured	tonnes	13 036	9 077	3 272	0	1
Barytes	tonnes	9 943	5 747	7 604	14 040	25 475
Bentonite and fuller's earth						
Bentonite	tonnes	4 192	3 805	4 685	5 253	6 014
Fuller's earth	tonnes	460	321	358	...	...
Bromine (b)	kilograms	3 010	9 827	9 104	152 319	267 073
Cement						
Cement clinkers	tonnes	3	50	280	500 794	486 462
Portland cement	tonnes	228 506	167 686	102 759	142 476	538 259
Other	tonnes	1 755	1 653	3 085	12 072	32 765
Chromium						
Ores and concentrates	tonnes	2 562	2 828	1 675	1 856	77 546
Metal	tonnes	58	245	958	78	64
Coal						
Anthracite	tonnes	74 708	82 683	60 272	68 924	110 484
Other coal	tonnes	3 584 413	3 681 406	3 398 344	4 421 709	3 008 391
Lignite	tonnes	44 787	367 781	620 251	575 514	121 227
Briquettes	tonnes	251	282	95	237 051	148 890
Copper						
Unwrought	tonnes	7 255	9 723	12 794	25 093	22 116
Scrap	tonnes	3 359	1 528	2 946	1 710	4 197
Diatomite	tonnes	3 294	3 183	3 707	3 254	3 798
Feldspar	tonnes	38 470	39 448	31 433	48 999	49 160
Fluorspar	tonnes	4 117	6 285	3 915	4 738	2 526
Graphite	tonnes	315	548	488	542	304
Gypsum						
Crude	tonnes	12 588	28 044	53 211	66 231	90 194
Calcined	tonnes	25 217	40 983	65 441	77 900	100 471
Iodine	kilograms	833	1 054	1 107	2 700	1 400
Iron ore						
Iron ore	tonnes	6 609 026	6 601 393	6 054 765	6 259 705	5 003 811
Burnt pyrites	tonnes	—	...	62 505	2 824	17 770
Iron, steel and ferro-alloys						
Pig iron	tonnes	3 702	19 339	9 872	53 779	37 889
Ferro-chrome	tonnes	4 342	5 286	3 022	2 838	3 423
Ferro-manganese	tonnes	50 754	38 323	36 872	34 126	28 773
Ferro-silico-manganese	tonnes	7 088	18 752	18 432	37 558	17 919
Ferro-silicon	tonnes	27 466	17 170	17 152	21 156	13 190
Other ferro-alloys	tonnes	2 652	3 048	3 167	3 191	2 412
Silicon metal	tonnes	3 401	2 813	8 947	1 192	3 155
Ingots, blooms, billets	tonnes	559 793	448 454	633 196	922 499	757 551
Scrap	tonnes	2 027	545	9 867	15 771	17 886
Kaolin	tonnes	71 987	55 653	54 862	51 347	48 422
Lead						
Ores and concentrates	tonnes	26 920	31 085	13 288	17 064	27 055
Unwrought	tonnes	1 667	1 620	1 400	835	872
Magnesite and magnesia						
Magnesite	tonnes	66	155	516	187	139
Magnesia	tonnes	26 142	27 088	27 447	19 666	13 003
Manganese						
Ores and concentrates	tonnes	534 014	357 327	3 134	79	16 432
Metal	tonnes	303	427	1 000	3 030	646
Mercury	kilograms	24 287	20 288	49 623	80 000	2 300
Mica	tonnes	828	886	912	478	488
Natural gas	tonnes	3 725 638	4 140 078	4 048 749	8 877 219	7 757 273

Romania

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Nickel						
Unwrought (a)	tonnes	563	745	747	528	338
Crude petroleum	tonnes	7 314 284	8 688 818	8 678 466	8 533 821	8 419 364
Phosphate rock	tonnes	303 713	283 192	148 110	193 276	225 581
Potash						
Sulphate	tonnes	8 070	757	6 361	4 086	5 133
Chloride	tonnes	53 008	41 974	35 384	50 558	68 877
Other potassic fertilisers	tonnes	653	563	491	1 058	338
Rare earths						
Rare earth compounds	tonnes	21	22	8	9	6
Salt	tonnes	120 787	131 683	113 585	111 681	92 815
Silver						
Metal (c)	kilograms	* 10 900	* 17 700	* 18 600	* 7 700	* 9 400
Sulphur and pyrites						
Pyrites	tonnes	...	...	...	3	1 072
Sulphur	tonnes	2 075	964	1 413	1 959	2 390
Sulphur, sublimed and precipitated	tonnes	9	113	112	2	180
Talc	tonnes	1 609	1 962	2 101	2 006	1 971
Tin						
Unwrought (a)	tonnes	188	216	421	137	127
Titanium						
Titanium minerals	tonnes	2 334	2 111	1 809	2 093	2 171
Metal	tonnes	195	328	486	612	453
Oxides	tonnes	6 378	7 600	9 794	11 132	9 127
Tungsten						
Metal	tonnes	8	7	7	59	1 122
Zinc						
Ores and concentrates	tonnes	109 019	150 282	137 878	173 536	161 527
Unwrought (a)	tonnes	19 555	14 640	23 732	13 135	7 394
Zirconium						
Ores and concentrates	tonnes	809	552	766	303	437
Metal	tonnes	30	22	32	16	136

Note(s):-

(a) Including alloys

(b) May include some fluorine

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

Slovakia

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	4 892 089	6 807 116	7 522 034	6 470 725	7 517 655
Crushed rock	tonnes	9 717 300	13 834 800	14 088 600	13 338 000	16 151 350
Primary aluminium	tonnes	156 893	159 203	158 289	160 461	162 995
Barytes	tonnes	25 000	26 589	57 000	58 000	20 000
Bentonite and fuller's earth						
Bentonite	tonnes	98 000	97 000	136 000	149 000	145 000
Cement						
Cement, finished	tonnes	3 158 308	3 498 685	3 592 509	3 718 410	4 157 356
Coal						
Lignite	tonnes	289 000	35 000	6 000	20 000	87 000
Brown coal	tonnes	2 523 000	2 268 000	2 016 000	1 839 000	2 075 000
Copper, smelter	tonnes	...	...	—	20 485	27 337
Gold, mine	kilograms (metal content)	107	109	84	92	198
Gypsum (a)	tonnes	125 000	107 500	126 200	151 000	152 000
Iron ore	tonnes	305 072	258 500	311 000	349 000	392 000
Pig iron	tonnes	3 765 000	3 681 000	4 145 000	4 012 000	3 529 000
Crude steel	tonnes	4 454 000	4 485 000	5 093 000	5 082 000	4 489 000
Ferro-alloys						
Ferro-chrome	tonnes	1 784	867	19	—	—
Ferro-silico-manganese	tonnes	64 862	47 843	59 128	71 587	...
Ferro-silicon	tonnes	34 684	16 512	16 155	8 583	20 679
Other ferro-alloys	tonnes	68 096	48 161	65 498	74 065	...
Kaolin	tonnes	46 000	31 000	58 000	46 000	44 000
Magnesite	tonnes	965 900	920 100	941 100	957 000	1 347 000
Crude petroleum	tonnes	42 410	35 000	30 520	23 000	21 000
Natural gas	million m ³	179	211	135	195	111
Perlite	tonnes	23 840	8 630	10 560	20 000	25 000
Salt	tonnes	121 600	105 100	122 500	117 000	109 510
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	5 000	5 000	5 000	5 000	5 000
Recovered (c)	tonnes (sulphur content)	65 000	65 000	65 000	78 000	75 000
Talc	tonnes	3 000	200	—	—	...

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	2004	2005	2006	2007	2008
Primary aggregates (a)	tonnes	* 552 000	* 796 000	* 644 000	* 744 000	* 1 388 000
Aluminium and bauxite						
Unwrought	tonnes	6 827	15 302	66 893	61 319	44 845
Unwrought alloys	tonnes	183 346	159 134	93 141	118 286	129 771
Scrap	tonnes	7 594	8 042	9 876	10 421	10 109
Barytes	tonnes	7 919	7 876	13 843	9 174	685
Bentonite and fuller's earth						
Bentonite	tonnes	85 341	76 014	105 273	89 517	79 936
Fuller's earth	tonnes	* 1 000	1 757	...	...	...
Cement						
Cement clinkers	tonnes	4 768	26 549	27 092	30 800	53 871
Portland cement	tonnes	1 470 728	1 433 926	1 372 554	1 346 692	1 622 292
Other cement	tonnes	24 408	44 670	35 596	85 987	144 311
Chromium						
Metal	tonnes	2 362	1 876	1 735	1 116	1 299

Slovakia

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Coal						
Hard coal (b)	tonnes	44 068	33 608	33 665	26 600	30 131
Copper						
Unwrought	tonnes	15 680	19 130	27 178	34 232	35 141
Scrap	tonnes	12 764	14 752	18 821	23 502	21 144
Gold						
Metal	kilograms	274	268	569	300	800
Waste and scrap	kilograms	357	986	1 000	1 600	800
Iron ore	tonnes	135 398	8 581	141 448	4 353	53 434
Iron, steel and ferro-alloys						
Pig iron	tonnes	73 303	31 261	50 497	10 588	20 676
Ferro-manganese	tonnes	57 440	41 918	59 475	49 723	48 747
Ferro-silico-manganese	tonnes	66 902	51 623	73 050	62 898	55 873
Ferro-silicon	tonnes	40 135	29 130	25 240	16 437	21 352
Other ferro-alloys	tonnes	11 834	10 741	8 033	13 604	15 436
Ingots, blooms, billets	tonnes	286 072	289 090	654 743	508 620	241 811
Scrap	tonnes	544 714	390 620	524 597	404 401	525 777
Kaolin	tonnes	475	2 332	10 946	12 546	593
Lead						
Unwrought	tonnes	2 119	1 662	98	221	94
Magnesite and magnesia						
Magnesite (a)	tonnes	* 3 600	* 8 000	* 3 000	* 6 000	* 9 300
Magnesia	tonnes	404 448	385 312	394 826	444 539	409 295
Natural gas	tonnes	500	257 026	221 885	124 820	112 328
Nickel						
Unwrought	tonnes	...	...	128	72	259
Scrap	tonnes	...	...	134	116	1 061
Crude petroleum	tonnes	113 305	30 887	27 686	22 172	18 159
Phosphates	tonnes	48	438	2 603	—	...
Potash						
Potassic fertilisers	tonnes	204	26	...	1 407	434
Salt	tonnes	51 539	53 451	51 566	51 517	62 133
Silver						
Metal	kilograms	7 112	1 872	3 430	35 036	6 061
Sulphur and pyrites						
Sulphur, sublimed and precipitated	tonnes	65 648	60 776	63 019	75 817	71 373
Talc	tonnes	1 239	1 051	1 011	1 494	1 994
Tin						
Unwrought	tonnes	(c) 7	59	(c) 251	20	107
Titanium						
Metal	tonnes	5	13	28	5	76
Tungsten						
Metal	tonnes	...	16	66	2	9
Zinc						
Unwrought	tonnes	...	3 522	5 232	16 356	14 600
Unwrought alloys	tonnes	5 977	3 618	14 053	7 147	10 412

Note(s)

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

(b) Including anthracite

(c) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	286 443	828 096	665 844	633 400	755 496
Aluminium and bauxite						
Bauxite	tonnes	7 991	3 669	5 886	7 524	5 778
Alumina	tonnes	366 784	307 756	314 576	311 914	311 891
Unwrought (a)	tonnes	45 913	31 683	31 521	52 718	41 681
Scrap	tonnes	13 701	12 567	8 550	8 748	4 638
Antimony						
Oxide	tonnes	116	118	82	104	48

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Arsenic						
Metallic arsenic	tonnes	6	0	5	2	6
Barytes	tonnes	927	814	872	147	142
Bentonite and fuller's earth						
Bentonite	tonnes	6 040	6 863	6 916	7 145	8 987
Fuller's earth	tonnes	866	1 082	886	...	...
Bromine	kilograms	(b) 1 372	(b) 364	(b) 9 658	2 600	(b) 582
Cement						
Cement clinkers	tonnes	33 021	68 894	42 666	52 608	94 510
Portland cement	tonnes	85 834	88 403	98 625	123 589	172 555
Other cement	tonnes	19 636	49 619	56 418	58 035	93 031
Chromium						
Ores and concentrates	tonnes	24 479	12 475	11 252	16 819	11 969
Metal	tonnes	2	55	11	20	104
Coal						
Anthracite	tonnes	61 361	112 482	38 147	176 682	258 597
Other coal	tonnes	5 387 110	5 249 848	4 411 685	4 802 258	4 253 530
Lignite	tonnes	692 059	704 690	889 241	725 586	983 151
Briquettes	tonnes	12 464	33 067	12 150	5 813	6 733
Cobalt						
Metal	tonnes	38	5	13	37	1 020
Copper						
Matte and cement	tonnes	758	4 342	1 071	...	...
Unwrought	tonnes	1 269	1 718	2 084	1 557	4 120
Scrap	tonnes	20 776	19 977	17 973	17 476	17 350
Diatomite	tonnes	865	675	698	549	577
Feldspar	tonnes	39 689	36 989	30 726	27 548	24 788
Fluorspar	tonnes	1 574	1 615	1 543	908	1 143
Gold						
Metal	kilograms	417	42 001	13 901	92 400	74 800
Graphite	tonnes	1 667	1 031	1 382	2 246	2 981
Gypsum						
Crude	tonnes	79 729	76 298	85 408	88 083	111 188
Calcined	tonnes	27 823	39 836	26 794	29 894	47 044
Iron ore	tonnes	(d) 6 109 379	5 513 902	6 406 019	5 853 880	4 802 516
Iron, steel and ferro-alloys						
Pig iron	tonnes	29 498	39 400	59 145	59 778	70 034
Sponge and powder	tonnes	11 141	13 832	24 994	51 560	138 216
Ferro-chrome	tonnes	968	2 630	2 597	9 818	7 539
Ferro-manganese	tonnes	14 858	14 245	23 409	20 410	19 503
Ferro-silico-manganese	tonnes	431	1 480	3 016	977	2 776
Ferro-niobium	tonnes	345	393	849	906	897
Ferro-silicon	tonnes	14 245	21 742	19 395	26 142	23 747
Other ferro-alloys	tonnes	5 031	4 044	5 216	3 874	5 408
Silicon metal	tonnes	8 199	6 279	5 416	6 004	6 391
Ingots, blooms, billets	tonnes	15 927	10 753	17 086	20 708	18 953
Scrap	tonnes	241 718	197 550	243 822	257 815	217 558
Kaolin	tonnes	76 440	94 705	100 551	87 956	95 911
Magnesite and magnesia						
Magnesite	tonnes	48	1 440	3 947	3 520	3 401
Magnesia	tonnes	27 070	21 927	27 280	36 768	40 675
Manganese						
Ores and concentrates	tonnes	257 331	273 270	308 417	253 048	211 653
Metal	tonnes	246	146	445	313	350
Mercury	kilograms	2 738	3 457	3 100	3 400	5 200
Natural gas	tonnes	5 099 100	5 177 312	5 157 793	4 249 360	4 640 012
Nickel						
Unwrought (a)	tonnes	190	274	221	139	190
Crude petroleum	tonnes	5 858 911	5 421 866	5 878 819	6 141 203	5 778 688
Phosphates	tonnes	2 932	5 415	494	267	251
Platinum metals						
Platinum	kilograms	394	60	23 016	348 975	1 573 410
Potash						
Chloride	tonnes	33 460	28 400	31 791	29 514	28 757
Other potassic fertilisers	tonnes	2 722	576	1 752	2 375	1 832
Rare earths						
Rare earth compounds	tonnes	9	10	8	8	5

Slovakia

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Salt	tonnes	266 601	320 413	299 087	182 234	189 268
Sillimanite	tonnes	2 444	4 312	2 069	3 299	1 919
Silver						
Metal	kilograms	14 584	57 439	6 400	12 200	8 200
Sulphur and pyrites						
Sulphur	tonnes	3 582	3 669	3 454	4 339	4 553
Sulphur, sublimed and precipitated	tonnes	94	689	266	753	1 518
Talc	tonnes	192	1 552	4 174	1 344	2 448
Tin						
Unwrought (a)	tonnes	2 033	2 610	2 246	2 260	2 276
Titanium						
Titanium minerals	tonnes	6 407	17 627	12 648	17 242	...
Metal	tonnes	101	980	179	250	329
Oxides	tonnes	2 173	2 804	2 742	2 193	2 389
Zinc						
Unwrought (a)	tonnes	41 424	43 437	45 143	44 959	41 003

Note(s)

- (a) Including alloys
- (b) May include some fluorine
- (c) Including anthracite
- (d) Including burnt pyrites

Slovenia

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	12 373 000	12 432 000	17 873 000	21 548 000	4 500 000
Crushed rock	tonnes	13 719 888	12 223 182	14 213 319	14 279 253	15 000 000
Primary aluminium	tonnes	120 700	120 642	118 682	111 016	83 300
Cement						
Cement, finished	tonnes	1 186 000	1 114 000	1 269 000	* 1 500 000	* 1 500 000
Coal						
Lignite	tonnes	4 195 953	3 945 100	3 932 842	4 037 766	4 008 440
Brown coal	tonnes	611 349	594 456	587 912	483 417	488 830
Crude steel	tonnes	565 000	582 000	628 000	638 000	640 000
Ferro-alloys						
Ferro-silicon	tonnes	22 482	15 529	12 550	* 6 000	* —
Lead, refined	tonnes	15 000	15 000	15 000	15 000	15 000
Natural gas	million m ³	6	6	4	3	3
Salt	tonnes	2 852	803	1 624	3 029	535

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	166 176	221 830	324 830	437 208	402 033
Aluminium and bauxite						
Bauxite	tonnes	...	...	2 650	8 013	450
Alumina	tonnes	24 278	205 584	241 631	243 062	258 238
Unwrought alloys	tonnes	124 069	123 555	133 005	123 041	88 038
Scrap	tonnes	14 971	21 103	27 584	30 132	26 863
Cement						
Cement clinkers	tonnes	18 577	58 765	21 440	2	1
Portland cement	tonnes	101 842	56 776	73 187	55 803	77 656
Other cement	tonnes	16 154	63 732	115 104	156 183	227 400
Coal						
Lignite	tonnes	1 959	6 881	29 794	2 150	377
Cobalt						
Metal	tonnes	40	42	16	31	24
Copper						
Scrap	tonnes	12 564	13 054	15 922	17 810	15 606
Gold						
Metal	kilograms	254	101	100	1 300	3 000
Waste and scrap	kilograms	1 649	—	3 700	—	—
Gypsum						
Crude and calcined	tonnes	164	993	9 502	36 039	8 575
Iron, steel and ferro-alloys						
Pig iron	tonnes	574	752	3 511	14 942	24 639
Ferro-silicon	tonnes	25 894	24 290	26 859	15 277	20 826
Other ferro-alloys	tonnes	11 820	27 120	22 497	24 205	12 516
Silicon metal	tonnes	1 608	252	3 006	1 875	1 149
Ingots, blooms, billets	tonnes	15 327	12 647	12 273	31 849	21 006
Scrap	tonnes	186 726	225 627	222 403	245 869	199 016
Lead						
Unwrought	tonnes	4 701	5 818	6 524	8 860	6 960
Scrap	tonnes	568	572	843	1 415	391
Lithium						
Carbonate	tonnes	89	96	96	110	122
Manganese						
Metal	tonnes	143	2 584	228	236	58
Mercury	kilograms	7 309	1 517	28	—	...
Natural gas	tonnes	—	72 043	54 579	34 212	24 368
Nickel						
Unwrought (a)	tonnes	144	117	118	232	268
Phosphates	tonnes	...	189 207	140 281	109 350	164 848

Slovenia

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Platinum metals						
Platinum and platinum metals	kilograms	839	47	248	84	110
Rare earths						
Cerium compounds	tonnes	...	...	...	2	1
Salt	tonnes	5 253	8 034	20 702	18 280	20 590
Silver						
Metal	kilograms	2 699	6 382	3 100	5 200	8 800
Titanium						
Metal	tonnes	30	21	36	37	40
Oxides	tonnes	38 497	44 123	50 755	55 867	55 110
Zinc						
Unwrought	tonnes	167	180	(a) 1 553	(a) 1 557	(a) 1 937
Scrap	tonnes	788	803	846	873	975
Zirconium						
Concentrates	tonnes	...	1 009	1 186	509	202

Note(s)

(a) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	532 614	364 091	863 881	3 113 823	1 424 240
Aluminium and bauxite						
Bauxite	tonnes	44 560	47 935	51 064	63 229	40 006
Alumina hydrate	tonnes	14 131	23 581	24 102	28 628	27 121
Unwrought	tonnes	57 362	73 137	48 337	65 589	67 405
Unwrought alloys	tonnes	43 403	46 782	60 484	58 215	50 389
Scrap	tonnes	27 390	47 381	50 865	52 338	51 319
Antimony						
Metal	tonnes	84	137	98	110	71
Arsenic						
Metallic arsenic	tonnes	5	5	12	11	—
Asbestos	tonnes	10	25	...	...	...
Barytes	tonnes	896	845	1 044	585	596
Bentonite and fuller's earth						
Bentonite	tonnes	3 555	3 612	4 981	4 048	3 976
Bismuth						
Metal	tonnes	43	69	66	90	60
Cement						
Cement clinkers	tonnes	61 151	1 343	11 970	145 638	5 783
Portland cement	tonnes	219 774	215 473	249 749	328 312	326 096
Other cement	tonnes	4 411	2 906	6 917	17 037	4 618
Chromium						
Ores and concentrates	tonnes	406	446	1 414	986	999
Metal	tonnes	31	122	97	85	313
Coal						
Hard coal (a)	tonnes	38 849	51 173	47 221	83 100	74 508
Lignite	tonnes	584 117	543 465	614 851	567 139	833 308
Cobalt						
Metal	tonnes	162	209	209	96	93
Copper						
Unwrought	tonnes	2 948	2 764	3 150	2 809	2 649
Scrap	tonnes	3 743	5 762	9 000	10 431	9 687
Diamond						
Dust	carats	2 035 000	1 136 505	1 287 165	1 670 815	1 395 416
Diatomite	tonnes	730	846	738	686	644
Feldspar	tonnes	10 045	5 852	5 813	6 877	6 576
Fluorspar	tonnes	1 178	1 031	1 184	1 017	1 326
Gold						
Metal	kilograms	385	239	445	600	1 700
Waste and scrap	kilograms	363	214	1 600	100	—
Graphite	tonnes	155	112	161	108	141

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Gypsum						
Crude	tonnes	39 062	29 388	31 312	38 588	24 660
Calcined	tonnes	7 429	7 429	8 167	7 936	8 622
Iron, steel and ferro-alloys						
Pig iron	tonnes	27 783	32 217	70 254	102 973	68 153
Ferro-chrome	tonnes	21 299	23 308	26 992	23 645	25 665
Ferro-manganese	tonnes	4 165	4 410	4 467	6 061	5 663
Ferro-silico-manganese	tonnes	2 022	2 443	3 691	4 789	3 373
Ferro-molybdenum	tonnes	916	550	539	569	540
Ferro-nickel	tonnes	2 335	2 321	2 457	2 364	538
Ferro-silicon	tonnes	7 730	13 486	17 937	14 017	24 651
Other ferro-alloys	tonnes	5 787	8 111	10 027	4 914	5 402
Silicon metal	tonnes	10 171	6 393	9 945	7 654	6 536
Ingots, blooms, billets	tonnes	3 199	3 505	3 444	11 479	12 930
Scrap	tonnes	386 832	434 585	434 330	363 362	367 968
Kaolin	tonnes	28 782	25 928	24 389	28 363	25 682
Lead						
Unwrought	tonnes	12 854	10 262	8 897	12 761	14 103
Scrap	tonnes	1 223	1 382	2 946	5 191	1 556
Lithium						
Oxides	tonnes	127	116	115	144	186
Magnesite and magnesia						
Magnesite	tonnes	125	391	166	123	113
Magnesia	tonnes	9 435	9 500	8 312	7 994	8 159
Manganese						
Ores and concentrates	tonnes	8	6	4	187	10
Metal	tonnes	296	294	435	388	438
Molybdenum						
Ores and concentrates	tonnes	524	5 674	700	876	690
Natural gas	tonnes	798 848	851 258	811 065	807 877	750 581
Nickel						
Unwrought (b)	tonnes	959	929	874	967	2 686
Phosphates	tonnes	...	...	140 455	109 768	164 872
Platinum metals						
Platinum and platinum metals	kilograms	438	120	449	177	177
Potash						
Potassic fertilisers	tonnes	1 751	1 704	2 465	1 973	2 166
Rare earths						
Rare earth compounds	tonnes	6	4	27	4	3
Metals	tonnes	107	139	96	139	88
Salt	tonnes	178 531	207 314	232 017	148 352	190 017
Silver						
Metal	kilograms	306 403	42 380	19 700	27 800	45 000
Sulphur and pyrites						
Pyrites	tonnes	375	400	463	612	683
Sulphur	tonnes	49 649	58 287	58 159	53 434	56 381
Sulphur, sublimed and precipitated	tonnes	—	90	135	1	7
Talc	tonnes	5 628	5 357	5 297	5 301	12 860
Tin						
Unwrought (b)	tonnes	68	151	73	101	87
Titanium						
Titanium minerals	tonnes	11 610	21 054	22 825	14 903	34 930
Titanium slag	tonnes	...	...	64 246	53 245	65 180
Metal	tonnes	300	614	392	348	257
Oxides	tonnes	3 033	3 157	3 153	3 500	3 296
Vanadium						
Metal	tonnes	21	14	26	...	...
Zinc						
Unwrought (b)	tonnes	21 146	21 716	29 435	28 407	23 819
Zirconium						
Concentrates	tonnes	416	625	443	550	548

Note(s)

(a) Including anthracite

(b) Including alloys

Spain

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	113 947 729	125 299 480	130 000 000	120 000 000	90 000 000
Crushed rock	tonnes	273 555 490	340 000 000	355 000 000	280 000 000	268 000 000
Alumina	tonnes (Al ₂ O ₃ content)	* 1 400 000	* 1 400 000	* 1 400 000	* 1 450 000	* 1 450 000
Primary aluminium	tonnes	397 500	395 000	367 400	405 100	407 700
Barytes	tonnes	40 776	42 792	45 001	26 770	* 11 110
Bentonite and fuller's earth						
Bentonite	tonnes	156 760	163 290	154 746	147 253	152 927
Attapulgite	tonnes	20 796	20 565	20 933	24 615	27 348
Sepiolite	tonnes	655 346	807 820	806 345	717 728	737 659
Bromine	kilograms	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Cement						
Cement, finished	tonnes	46 595 560	50 300 000	54 032 770	54 504 607	* 42 000 000
Coal						
Anthracite	tonnes	3 692 220	3 888 838	3 775 504	3 439 879	3 148 603
Bituminous	tonnes	5 220 407	4 664 589	4 572 350	4 304 938	4 156 918
Sub-bituminous	tonnes	3 426 001	3 354 014	3 221 083	3 182 556	2 896 654
Lignite	tonnes	8 146 908	7 587 113	6 859 641	6 112 946	—
Copper, mine	tonnes (metal content)	1 308	7 358	8 700	6 281	7 071
Copper, smelter	tonnes	224 249	284 215	263 662	257 348	259 897
Copper, refined	tonnes	228 466	313 105	299 146	308 372	319 050
Diatomite (a)	tonnes	33 799	39 101	52 123	45 480	46 192
Feldspar	tonnes	552 507	650 061	696 912	682 884	* 632 120
Fluorspar	tonnes	145 694	144 126	144 845	156 970	148 207
Gold, mine	kilograms (metal content)	5 248	2 145	1 565	—	—
Gypsum	tonnes	12 533 972	14 453 053	14 596 559	15 000 000	* 15 000 000
Iron ore	tonnes	10 879	—	—	—	—
Pig iron	tonnes	4 036 000	4 160 000	3 432 000	3 976 000	3 995 000
Crude steel	tonnes	17 700 000	17 825 000	18 391 000	18 998 000	18 640 000
Ferro-alloys						
Ferro-manganese	tonnes	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Ferro-silico-manganese	tonnes	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Ferro-silicon	tonnes	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Silicon metal	tonnes	* 25 000	* 25 000	* 25 000	* 25 000	* 25 000
Kaolin (b)	tonnes	437 990	463 398	476 327	426 124	* 430 000
Lead, refined	tonnes	105 600	110 000	129 000	128 000	125 000
Lithium minerals						
Lepidolite	tonnes	3 226	6 751	8 339	10 326	9 342
Magnesite	tonnes	567 504	556 129	520 646	463 850	* 436 000
Mica (c)	tonnes	7 825	4 043	4 496	5 569	4 254
Nickel, mine	tonnes (metal content)	—	5 380	6 398	6 630	8 136
Crude petroleum	tonnes	262 707	166 014	143 432	143 123	127 285
Natural gas	million m ³	370	174	118	22	46
Potash						
Chloride	tonnes (K ₂ O content)	553 210	494 594	493 189	503 000	444 000
Salt						
Rock salt	tonnes	2 656 904	2 909 526	2 809 046	2 560 658	2 330 518
Sea salt	tonnes	1 227 625	1 368 960	1 506 343	1 330 442	1 207 951
Other salt	tonnes	108 733	121 461	115 826	102 524	100 946
Silver, mine	kilograms (metal content)	3 583	5 227	2 369	—	—
Strontium minerals	tonnes	206 001	336 630	280 195	142 512	138 590
Sulphur and pyrites						
Recovered (d)	tonnes (sulphur content)	488 000	541 000	547 000	543 000	551 000
Recovered (e)	tonnes (sulphur content)	145 000	* 150 000	* 150 000	* 150 000	* 150 000
Talc						
Talc	tonnes	107 829	90 589	83 502	78 042	59 299
Pyrophyllite	tonnes	700	700	—	—	—

Production continued

Commodity	Units	2004	2005	2006	2007	2008
Tungsten, mine	tonnes (metal content)	—	—	—	—	194
Wollastonite	tonnes	...	* 30 000	* 30 000	10 918	9 500
Slab zinc	tonnes	525 000	501 400	507 300	509 000	466 000

Note(s):-

(1) Spain is believed to produce arsenic

(a) Including Tripoli

(b) Washed

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

(d) From metal sulphide processing

(e) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	1 694 285	1 546 315	2 489 305	2 042 075	1 478 362
Aluminium and bauxite						
Bauxite	tonnes	4 159	3 821	3 647	6 057	5 623
Alumina	tonnes	491 808	561 125	511 992	539 739	671 009
Alumina hydrate	tonnes	241 910	264 829	258 854	199 679	236 855
Unwrought	tonnes	1 024	3 002	8 245	15 999	39 359
Unwrought alloys	tonnes	102 146	111 992	128 262	125 008	123 577
Scrap	tonnes	35 021	36 688	41 923	34 520	109 493
Antimony						
Metal	tonnes	409	13	21	17	143
Oxide	tonnes	706	859	2 031	246	1 023
Barytes	tonnes	33 930	27 389	27 743	31 693	33 676
Bentonite and fuller's earth						
Bentonite	tonnes	80 410	75 450	73 767	72 278	75 287
Sepiolite	tonnes	501 988	506 019	464 939	481 589	465 188
Fuller's earth	tonnes	11 362	9 828	7 896	...	...
Bismuth						
Metal	tonnes	2	9	118	32	19
Bromine	kilograms	291	1 000	192 339	418 531	2 000
Cement						
Cement clinkers	tonnes	9 491	13 259	28 809	37 343	907 694
Portland cement	tonnes	1 681 953	1 713 572	1 386 652	1 358 857	1 474 428
Other cement	tonnes	59 696	51 340	43 262	46 348	63 825
Chromium						
Ores and concentrates	tonnes	2 113	1 314	1 908	1 529	1 073
Metal	tonnes	905	709	990	779	1 165
Coal						
Anthracite	tonnes	48 710	49 563	74 826	101 968	186 293
Other coal	tonnes	14 624	8 208	135 401	872 269	1 636 071
Briquettes	tonnes	33	1	53	20	21 735
Cobalt						
Metal	tonnes	35	7	22	12	8
Oxides	tonnes	33	59	30	56	7
Copper						
Ores and concentrates	tonnes	4 327	14 434	5 835	905	463
Unwrought, unrefined	tonnes	50 901	62 269	45 906	37 210	41 676
Unwrought, refined	tonnes	32 366	44 365	38 205	48 288	85 899
Unwrought alloys	tonnes	11 724	9 810	10 590	12 679	12 139
Scrap	tonnes	77 850	99 600	84 570	88 429	83 820
Diamond						
Unsorted	carats	£792 000	£673 000	£531 000	£346 000	£503 000
Gem, cut	carats	£1 855 000	£5 275 000	£61 119 000	£8 478 000	£6 631 000
Industrial	carats	£212 000	£325 000	£331 000	£208 000	£498 000
Dust	carats	...	1 607 384	210 000	254 600	630 000
Diatomite	tonnes	5 278	6 694	6 118	6 399	5 306
Feldspar	tonnes	71 993	66 427	77 348	74 461	79 120
Fluorspar	tonnes	2 221	4 434	10 518	29 117	13 109

Spain

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Gold						
Metal	kilograms	6 490	3 520	3 679	23 667	6 966
Waste and scrap	kilograms	2 908	38	2 636	92	1 147
Graphite	tonnes	27 634	11 972	6 356	8 728	10 499
Gypsum						
Crude	tonnes	2 820 367	3 228 806	3 568 327	3 335 273	3 458 773
Calcined	tonnes	470 437	391 274	306 791	274 781	228 060
Iodine	kilograms	31 156	21 089	7 356	7 689	46 873
Iron ore (a)	tonnes	171 551	231 059	90 447	69 590	62 125
Iron, steel and ferro-alloys						
Pig iron	tonnes	3 258	12 709	4 202	12 491	9 747
Sponge and powder	tonnes	4 914	4 397	4 030	6 404	4 763
Ferro-chrome	tonnes	551	775	1 024	2 461	4 768
Ferro-manganese	tonnes	82 733	101 850	91 018	71 345	65 330
Ferro-silico-manganese	tonnes	40 130	42 916	32 806	33 636	34 307
Ferro-molybdenum	tonnes	60	331	317	70	45
Ferro-silicon	tonnes	19 332	11 843	7 759	18 323	9 562
Other ferro-alloys	tonnes	558	992	493	1 170	1 285
Silicon metal	tonnes	13 254	16 742	16 566	16 175	16 008
Ingots, blooms, billets	tonnes	130 079	118 414	114 897	91 085	310 671
Scrap	tonnes	205 298	140 200	137 273	162 371	214 913
Kaolin	tonnes	154 667	192 735	213 955	199 541	155 563
Lead						
Ores and concentrates	tonnes	6 057	2	29	130	1 015
Unwrought	tonnes	8 301	9 805	7 830	9 242	14 771
Scrap	tonnes	6 399	9 128	6 460	7 023	6 616
Lithium						
Carbonate	tonnes	3 157	1 123	554	192	128
Magnesite and magnesia						
Magnesite	tonnes	25 557	901	19 635	607	725
Magnesia	tonnes	185 811	189 005	179 046	185 364	175 307
Manganese						
Ores and concentrates	tonnes	989	776	1 336	1 299	518
Metal	tonnes	6 117	6 651	5 827	5 783	4 562
Mercury	kilograms	596 739	581 653	463 954	779 110	639 203
Mica	tonnes	3 075	2 591	4 457	3 562	2 626
Natural gas	tonnes	2 223 089	778 037	1 546	31 159	—
Nickel						
Ores and concentrates	tonnes	...	85 203	95 377	65 853	127 812
Unwrought (b)	tonnes	177	572	795	767	600
Scrap	tonnes	363	528	910	227	226
Crude petroleum (c)	tonnes	* 3 000	* 28 000	* 53 000	* 2 000	* 24 000
Phosphates	tonnes	7	42	7 259	7 840	4 754
Platinum metals						
Platinum and platinum metals	kilograms	1 054	152	363	434	3 104
Waste and scrap	kilograms	1 893	2 892	290	44	88 069
Potash						
Sulphate	tonnes	3 958	2 832	1 245	1 795	1 251
Chloride	tonnes	675 140	514 042	201 242	163 891	360 538
Other potassic fertilisers	tonnes	590	483	257	998	1 895
Rare earths						
Cerium compounds	tonnes	12	17	45	63	8
Other rare earth compounds	tonnes	80	20	18	2	17
Ferro-cerium and other pyrophoric alloys	tonnes	2	3	1	...	...
Salt	tonnes	744 750	750 180	743 390	463 791	646 288
Silver						
Ores and concentrates	kilograms	...	...	...	1 608	—
Metal	kilograms	43 448	11 665	7 915	13 637	379 675
Sulphur and pyrites						
Sulphur	tonnes	53 738	45 690	76 771	77 220	116 213
Talc	tonnes	60 832	56 493	47 142	39 689	51 180
Tin						
Unwrought (b)	tonnes	205	139	120	98	433
Scrap	tonnes	221	435	408	460	447

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Titanium						
Titanium minerals	tonnes	604	170	185	232	155
Metal	tonnes	483	903	2 005	1 431	947
Oxides	tonnes	85 867	83 905	85 307	91 583	58 342
Tungsten						
Ores and concentrates	tonnes	17	—	—	0	286
Metal	tonnes	141	77	59	177	223
Zinc						
Ores and concentrates	tonnes	37 986	67 420	31 416	98 359	121 688
Unwrought	tonnes	294 548	333 966	270 233	220 002	191 897
Unwrought alloys	tonnes	54 670	32 673	87 073	66 155	92 781
Scrap	tonnes	5 125	11 981	7 946	5 295	6 210
Zirconium						
Concentrates	tonnes	10 844	9 805	9 811	11 803	14 151
Metal	tonnes	989	820	110	200	525

Note(s)

(a) Including burnt pyrites

(b) Including alloys

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

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	1 190 670	1 305 835	762 652	1 396 928	1 035 555
Aluminium and bauxite						
Bauxite	tonnes	3 329 441	3 224 101	3 007 043	3 547 201	3 618 306
Alumina hydrate	tonnes	30 429	43 246	49 725	49 451	41 614
Unwrought	tonnes	91 382	110 257	95 436	122 303	82 512
Unwrought alloys	tonnes	235 123	223 627	303 607	328 314	281 270
Scrap	tonnes	86 553	99 459	103 839	123 074	110 745
Antimony						
Ores and concentrates	tonnes	105	108	175	164	154
Metal	tonnes	2 270	1 881	1 596	1 676	1 987
Oxide	tonnes	5 656	808	984	1 146	899
Arsenic						
Metallic arsenic	tonnes	92	112	143	116	192
Asbestos	tonnes	192	23	20	50	21
Barytes	tonnes	59 378	47 923	50 743	65 569	71 025
Bentonite and fuller's earth						
Bentonite	tonnes	60 709	83 784	82 645	104 057	103 602
Fuller's earth	tonnes	271	238	159	...	...
Bismuth						
Metal	tonnes	206	179	297	190	212
Bromine	kilograms	73 493	53 000	82 351	77 578	169 159
Cadmium						
Metal	tonnes	22	2	19	0	21
Oxide	tonnes	28	53	17	22	25
Cement						
Cement clinkers	tonnes	6 266 470	7 852 531	9 108 499	10 894 888	5 496 563
Portland cement	tonnes	2 549 086	2 845 856	2 771 668	2 929 208	1 729 088
Other cement	tonnes	21 527	20 031	40 164	74 401	58 007
Chromium						
Ores and concentrates	tonnes	3 947	10 262	5 906	6 437	6 721
Metal	tonnes	1 520	1 206	1 552	1 393	1 219
Coal						
Anthracite	tonnes	2 376 019	2 534 019	2 508 261	1 019 341	957 293
Other coal	tonnes	22 098 156	22 222 316	21 196 872	23 420 766	20 010 533
Cobalt						
Metal	tonnes	181	158	180	121	131
Oxides	tonnes	1 249	1 352	1 254	1 187	1 038

Spain

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Copper						
Ores and concentrates	tonnes	776 980	1 040 099	1 100 338	1 001 284	1 122 093
Unwrought, unrefined	tonnes	2 488	312	2 631	1 032	3 733
Unwrought, refined	tonnes	74 277	69 039	62 982	56 237	79 125
Unwrought alloys	tonnes	5 254	4 458	5 898	5 417	4 352
Scrap	tonnes	112 934	84 824	89 252	56 754	65 765
Diamond						
Unsorted	carats	£5 431 000	£6 908 000	£4 616 000	£3 667 000	£1 959 000
Gem, cut	carats	£41 732 000	£37 408 000	£47 084 000	£57 921 000	£40 012 000
Industrial	carats	£1 412 000	£1 421 000	£2 701 000	£1 396 000	£1 485 000
Dust	carats	89 035 000	10 685 000	8 750 000	18 980 000	...
Diatomite	tonnes	7 004	5 186	7 281	9 447	8 861
Feldspar	tonnes	955 039	1 231 861	1 422 514	1 407 350	1 410 760
Fluorspar	tonnes	15 006	10 859	28 908	29 560	32 016
Gold						
Metal	kilograms	29 702	20 594	15 072	6 641	489 893
Waste and scrap	kilograms	5 018	139	233	2 352	252
Graphite	tonnes	9 402	8 334	10 143	15 582	24 284
Gypsum						
Crude	tonnes	43 004	47 585	59 656	53 028	43 171
Calcined	tonnes	14 462	32 078	20 440	14 129	33 825
Iodine	kilograms	710 814	781 787	790 641	582 029	541 706
Iron ore	tonnes	6 119 146	6 248 781	5 511 247	5 719 062	6 329 188
Iron, steel and ferro-alloys						
Pig iron	tonnes	593 588	806 327	793 050	652 786	688 421
Sponge and powder	tonnes	670 063	516 423	641 804	611 893	621 627
Ferro-chrome	tonnes	221 156	200 543	253 172	1 123 216	203 518
Ferro-silico-magnesium	tonnes	6 183	5 256	2 891	7 289	9 890
Ferro-manganese	tonnes	19 817	16 489	14 406	24 599	17 126
Ferro-silico-manganese	tonnes	75 061	66 531	42 326	48 205	74 962
Ferro-molybdenum	tonnes	3 456	6 327	10 473	5 863	3 777
Ferro-nickel	tonnes	58 664	59 113	92 147	75 625	68 355
Ferro-niobium	tonnes	491	906	515	8 283	685
Ferro-phosphorus	tonnes	2 072	2 036	1 771	2 554	1 488
Ferro-silicon	tonnes	56 736	39 623	52 215	71 487	46 445
Ferro-titanium and ferro-silico-titanium	tonnes	1 212	1 880	796	1 276	1 006
Ferro-vanadium	tonnes	1 077	824	515	1 189	1 122
Other ferro-alloys	tonnes	3 095	6 546	4 586	82	4 378
Silicon metal	tonnes	5 660	4 160	2 837	3 640	8 856
Ingots, blooms, billets	tonnes	1 495 840	1 219 342	1 601 769	1 733 247	1 587 605
Scrap	tonnes	7 093 195	6 975 101	7 437 224	6 316 516	7 408 237
Kaolin	tonnes	1 209 303	1 366 226	1 506 142	1 571 143	1 470 440
Lead						
Ores and concentrates	tonnes	1 845	1 526	2 299	8 188	7 107
Unwrought	tonnes	154 828	174 618	147 423	157 485	116 492
Scrap	tonnes	27 866	30 499	30 625	42 629	35 506
Lithium						
Oxides	tonnes	329	480	573	600	501
Carbonate	tonnes	759	1 553	828	1 811	3 908
Magnesite and magnesia						
Magnesite	tonnes	2 901	2 348	3 937	4 092	2 839
Magnesia	tonnes	102 418	103 747	88 898	117 867	143 849
Manganese						
Ores and concentrates	tonnes	575 518	415 959	393 476	349 131	640 677
Metal	tonnes	9 786	10 537	9 165	9 563	10 033
Mercury	kilograms	301 097	572 872	628 737	906 297	337 117
Mica	tonnes	1 641	1 917	1 484	1 871	952
Molybdenum						
Ores and concentrates	tonnes	3 805	3 317	4 584	4 622	3 787
Metal	tonnes	30	31	163	113	189
Natural gas	tonnes	19 758 243	24 439 892	26 548 202	27 048 984	32 044 466
Nickel						
Unwrought	tonnes	27 854	27 452	28 171	21 202	22 668
Unwrought alloys	tonnes	380	1 188	1 174	1 426	1 547
Oxides	tonnes	210	176	127	94	151
Crude petroleum	tonnes	59 343 873	59 510 408	59 203 359	57 773 847	59 444 410
Phosphates	tonnes	1 800 329	1 768 425	1 556 734	1 653 874	1 611 494

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Platinum metals						
Platinum and platinum metals	kilograms	1 402	13 799	1 506	2 075	11 296
Waste and scrap	kilograms	298	122	526	4 111	8 947
Potash						
Sulphate	tonnes	48 174	47 561	10 412	5 547	40 911
Chloride	tonnes	269 278	243 017	224 320	199 403	194 656
Other potassic fertilisers	tonnes	22 019	4 667	86	25	3 548
Rare earths						
Rare earth compounds	tonnes	692	824	828	835	691
Ferro-cerium and other pyrophoric alloys	tonnes	1 267	8	29	40	15
Metals	tonnes	84	20	84	95	274
Salt	tonnes	36 494	111 449	37 632	33 691	97 348
Sillimanite	tonnes	15 262	27 308	22 102	27 792	34 909
Silver						
Ores and concentrates	kilograms	54 295	59 653	56 421	58 344	75 633
Metal	kilograms	158 529	106 596	134 673	126 668	1 547 747
Sulphur and pyrites						
Pyrites	tonnes	1 012	1 542	1 478	2 585	1 903
Sulphur, crude	tonnes	220 662	182 318	(a) 133 552	(a) 152 566	146 376
Sulphur, refined	tonnes	13 582	5 778	...	...	7 199
Sulphur, sublimed and precipitated	tonnes	533	243	296	265	372
Talc	tonnes	80 626	80 726	87 578	96 298	85 942
Tantalum and niobium						
Tantalum	tonnes	4	62	10	112	—
Tin						
Concentrates	tonnes	160	137	29	27	2
Unwrought	tonnes	7 860	7 109	7 716	7 093	7 313
Unwrought alloys	tonnes	292	170	220	167	261
Scrap	tonnes	2 111	1 919	1 576	185	376
Titanium						
Ilmenite	tonnes	172 431	121 204	159 090	121 898	119 467
Other titanium minerals	tonnes	2 316	1 746	1 807	22 037	9 133
Titanium slag	tonnes	...	57	8	2 164	10 004
Metal	tonnes	3 722	3 862	5 782	3 450	3 131
Oxides	tonnes	116 397	117 203	112 778	123 132	138 275
Tungsten						
Metal	tonnes	259	134	556	914	731
Carbide	tonnes	59	38	35	41	31
Vanadium						
Ores and concentrates	tonnes	26	9	20	50	80
Pentoxide	tonnes	118	62	71	45	43
Zinc						
Ores and concentrates	tonnes	917 968	1 090 022	1 188 067	1 257 304	1 114 634
Unwrought	tonnes	3 862	8 203	7 577	21 634	26 779
Unwrought alloys	tonnes	16 601	17 858	18 933	17 411	15 000
Scrap	tonnes	4 062	3 927	4 996	6 601	7 396
Zirconium						
Concentrates	tonnes	143 860	153 619	149 710	138 442	152 604
Metal	tonnes	94	56	55	65	136

Note(s)

(a) Including refined

Sweden

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	22 647 111	21 755 752	21 488 963	20 036 785	18 804 343
Crushed rock	tonnes	54 737 031	62 313 089	70 517 845	64 047 058	66 757 671
Primary aluminium	tonnes	100 591	102 107	101 668	99 842	81 913
Cement						
Cement clinker	tonnes	2 385 509	2 457 245	2 660 045	1 712 626	* 1 700 000
Cement, finished	tonnes	2 712 810	2 731 000	2 952 000	2 950 000	* 2 950 000
Copper, mine	tonnes (metal content)	82 415	87 068	86 746	62 905	57 688
Copper, smelter	tonnes	174 459	168 763	129 951	148 835	136 409
Copper, refined	tonnes	235 620	223 482	229 241	213 894	227 774
Feldspar	tonnes	38 000	30 000	24 000	25 000	22 000
Gold, mine	kilograms (metal content)	6 564	6 564	6 848	5 159	5 341
Iron ore	tonnes	22 272 000	23 255 000	23 302 000	24 714 000	23 888 000
Pig iron	tonnes	3 992 000	3 844 000	3 701 000	3 947 000	3 708 000
Crude steel	tonnes	5 978 000	5 725 600	5 466 100	5 672 900	5 196 000
Ferro-alloys						
Ferro-chrome	tonnes	127 300	127 500	136 400	124 400	118 700
Ferro-silicon	tonnes	18 500	9 800	4 600	4 300	—
Lead, mine	tonnes (metal content)	54 347	60 445	55 644	63 224	63 489
Lead, refined	tonnes	73 548	72 760	70 239	69 730	56 812
Selenium metal	tonnes	131	122	135	126	130
Silver, mine	kilograms (metal content)	319 563	309 933	292 255	323 171	293 068
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	185 800	180 000	180 000	177 000	179 000
Recovered (b)	tonnes (sulphur content)	62 238	59 839	68 391	66 569	84 456
Talc	tonnes	8 000	7 000	6 000	7 000	4 000
Zinc, mine	tonnes (metal content)	197 034	215 691	210 029	214 576	172 194

Note(s):-

(a) From metal sulphide processing

(b) From petroleum refining and/or natural gas

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	2 213 385	2 447 200	2 333 174	2 307 614	3 049 601
Aluminium and bauxite						
Alumina	tonnes	6 160	14 133	14 481	14 278	13 919
Unwrought	tonnes	22 096	9 390	910	735	6 307
Unwrought alloys	tonnes	105 752	88 311	112 575	89 591	89 190
Scrap	tonnes	79 433	69 166	67 879	107 946	106 581
Bentonite and fuller's earth						
Bentonite	tonnes	9 486	7 419	9 539	12 240	11 640
Cadmium						
Oxide	tonnes	139	140	...	322	448
Cement						
Portland cement	tonnes	867 450	1 295 834	1 208 231	845 235	723 793
Other cement	tonnes	2 492	2 555	12 144	15 237	14 082
Chromium						
Metal	tonnes	75	55	105	102	225
Cobalt						
Metal	tonnes	127	127	110	152	67
Copper						
Unwrought, refined	tonnes	81 878	99 824	86 726	65 926	70 047
Unwrought alloys	tonnes	5 040	5 247	6 443	8 837	5 610
Scrap	tonnes	44 366	43 816	45 456	54 673	57 245
Diatomite	tonnes	492	4 423	568	3 497	749
Feldspar	tonnes	23 752	16 515	15 880	14 383	10 670
Fluorspar	tonnes	8 702	8 206	7 450	7 764	11 538

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Gold						
Metal	kilograms	19 000	18 000	19 000	17 800	19 400
Waste and scrap	kilograms	20 000	1 000	32 000	65 700	29 400
Graphite	tonnes	260	195	230	273	252
Gypsum						
Crude and calcined	tonnes	7 343	7 832	9 954	12 694	11 525
Iodine	kilograms	—	4 000	40	48	122
Iron ore	tonnes	17 336 835	17 597 351	18 409 475	19 033 842	17 617 162
Iron, steel and ferro-alloys						
Pig iron	tonnes	116 550	99 496	145 733	152 911	62 588
Sponge and powder	tonnes	12 306	9 064	15 238	26 666	19 844
Ferro-chrome	tonnes	1 830	1 801	1 973	2 247	3 534
Ferro-silico-magnesium	tonnes	235	60	739	1 260	...
Ferro-manganese and ferro-silico-manganese	tonnes	1 605	3 456	2 584	3 859	3 620
Ferro-molybdenum	tonnes	87	158	157	304	301
Ferro-phosphorus	tonnes	281	294	706	1 128	1 370
Ferro-silicon	tonnes	441	731	1 968	2 892	2 616
Ferro-vanadium	tonnes	99	249	61	135	112
Other ferro-alloys	tonnes	2 280	1 171	1 289	216	895
Silicon metal	tonnes	6 387	6 049	2 321	1 474	2 458
Ingots, blooms, billets	tonnes	367 562	232 958	116 880	134 568	102 086
Scrap	tonnes	741 254	863 474	847 179	1 069 335	1 449 311
Kaolin	tonnes	15 544	18 473	15 735	18 229	30 495
Lead						
Ores and concentrates	tonnes	60 105	62 155	50 854	56 581	61 439
Unwrought	tonnes	68 215	70 042	76 777	65 733	53 715
Scrap	tonnes	554	307	703	734	816
Magnesite and magnesia						
Magnesia	tonnes	1 431	1 421	2 277	1 593	235
Manganese						
Metal	tonnes	196	143	176	131	95
Nickel						
Unwrought (a)	tonnes	133	112	516	390	288
Scrap	tonnes	1 138	4 369	5 743	5 344	1 513
Oxides	tonnes	317	291	349	457	511
Phosphates	tonnes	5	392	969	1 623	4 897
Platinum metals						
Platinum and platinum metals	kilograms	£1 037 000	£663 000	£1 514 000	£900 000	£851 000
Waste and scrap	kilograms	29 000	25 000	280 000	242 500	575 300
Potash						
Sulphate	tonnes	70 066	54 841	10 191	84 414	53 883
Salt	tonnes	10 354	8 783	9 357	12 601	10 444
Silver						
Ores and concentrates	kilograms	...	...	...	59 400	...
Metal	kilograms	473 000	421 000	368 000	364 500	521 200
Sulphur and pyrites						
Sulphur	tonnes	4 542	16 883	12 071	5 168	5 525
Sulphur, sublimed and precipitated	tonnes	139	239	5 719	10 959	13 128
Talc	tonnes	9 388	10 080	7 556	9 415	9 227
Tin						
Unwrought (a)	tonnes	261	217	250	201	213
Scrap	tonnes	161	45	43	161	96
Titanium						
Metal	tonnes	1 737	1 955	1 461	2 667	1 002
Oxides	tonnes	13 912	14 306	20 409	17 047	19 992
Tungsten						
Ores and concentrates	tonnes	0	62	—	3 192	75
Metal	tonnes	102	414	296	234	328
Carbide	tonnes	114	37	491	446	436
Zinc						
Ores and concentrates	tonnes	379 155	372 925	402 219	405 682	389 473
Unwrought (a)	tonnes	280	165	1 143	103	538
Scrap	tonnes	21 598	16 134	29 015	2 777	2 898

Note(s)

(a) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	729 992	810 385	1 135 048	1 068 840	864 988
Aluminium and bauxite						
Bauxite	tonnes	28 758	3 171	2 846	30 099	18 761
Alumina hydrate	tonnes	66 156	62 549	56 535	94 218	95 834
Unwrought	tonnes	29 493	17 916	7 959	46 431	47 534
Unwrought alloys	tonnes	120 732	117 202	135 270	159 628	144 343
Scrap	tonnes	24 082	24 309	32 198	36 838	40 125
Antimony						
Metal	tonnes	234	199	337	546	166
Oxide	tonnes	328	377	296	319	293
Arsenic						
Metallic arsenic	tonnes	13	6	...	12	6
Barytes	tonnes	2 854	4 610	4 876	6 504	6 371
Bentonite and fuller's earth						
Bentonite	tonnes	82 414	48 564	125 491	184 313	178 308
Bismuth						
Metal	tonnes	13	11	8	5	12
Bromine	kilograms	5 000	13 000	9 000	2 800	31 700
Cadmium						
Metal	tonnes	330	282	388	491	851
Oxide	tonnes	71	35	...	25	83
Cement						
Cement clinkers	tonnes	24 491	14 601	13 238	29 344	37 009
Portland cement	tonnes	218 928	242 326	249 670	55 784	61 891
Other cement	tonnes	27 286	34 597	41 176	52 359	50 333
Chromium						
Ores and concentrates	tonnes	457 000	240 000	315 000	350 000	337 933
Metal	tonnes	1 903	1 150	1 639	2 145	12 782
Coal						
Anthracite	tonnes	7 304	13 013	28 506	25 832	36 163
Other coal	tonnes	3 059 218	3 187 798	3 003 919	3 154 331	2 811 668
Briquettes	tonnes	4 371	8 443	27 164	287	9 029
Cobalt						
Metal	tonnes	711	660	743	676	698
Copper						
Ores and concentrates	tonnes	340 858	311 085	267 753	420 050	393 295
Unwrought, unrefined	tonnes	2	15 452	35 496	10 495	23 539
Unwrought, refined	tonnes	34 912	40 106	41 036	31 535	21 123
Unwrought alloys	tonnes	2 762	2 926	3 944	5 867	5 239
Scrap	tonnes	76 672	50 940	54 483	81 015	91 839
Diamond						
Unsorted	carats	£309 000	£220 000	£143 000	£141 000	£100 000
Gem, cut	carats	22 325	7 132	8 573	9 465	9 323
Industrial	carats	207 247	198 724	188 546	224 486	217 127
Dust	carats	15 000 000	5 000 000	10 000 000	11 500 000	4 000 000
Diatomite	tonnes	5 475	5 096	6 095	6 976	6 929
Feldspar	tonnes	7 019	9 387	4 029	6 021	3 861
Fluorspar	tonnes	14 640	15 790	16 176	12 089	14 214
Gold						
Metal	kilograms	£8 498 000	£8 625 000	£10 124 000	£18 292 000	£25 583 000
Waste and scrap	kilograms	£5 726	£180 000	£7 000	£112 000	£565 000
Graphite	tonnes	1 473	1 539	1 252	1 592	1 091
Gypsum						
Crude	tonnes	269 060	206 972	263 582	244 986	178 364
Calcined	tonnes	160 784	97 746	166 829	146 638	154 201
Iodine	kilograms	1 000	2 000	2 000	5 000	600
Iron ore	tonnes	(a) 110 157	(a) 104 570	82 211	(a) 69 937	71 441

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Iron, steel and ferro-alloys						
Pig iron	tonnes	29 369	38 223	43 492	59 661	80 450
Sponge and powder	tonnes	3 074	2 091	7 346	16 799	11 861
Ferro-chrome	tonnes	72 926	86 040	86 160	125 057	114 712
Ferro-silico-chrome	tonnes	2 521	2 030	1 370	3 104	3 873
Ferro-manganese	tonnes	32 782	43 005	49 295	75 409	68 246
Ferro-silico-manganese	tonnes	17 887	18 995	20 566	17 085	10 677
Ferro-molybdenum	tonnes	4 369	5 364	4 976	4 377	5 693
Ferro-nickel	tonnes	948	7 431	8 076	9 162	6 803
Ferro-niobium	tonnes	809	1 156	1 504	1 242	1 264
Ferro-phosphorus	tonnes	920	314	433	1 331	386
Ferro-silicon	tonnes	38 534	48 950	37 095	42 315	34 249
Ferro-titanium and ferro-silico-titanium	tonnes	1 627	3 212	1 681	691	1 370
Ferro-tungsten and ferro-silico-tungsten	tonnes	564	195	119	105	153
Ferro-vanadium	tonnes	1 375	1 316	1 202	1 005	956
Other ferro-alloys	tonnes	5 614	5 574	5 860	5 986	8 916
Silicon metal	tonnes	10 542	10 832	7 531	6 756	7 631
Ingots, blooms, billets	tonnes	491 102	294 616	108 821	137 032	264 782
Scrap	tonnes	271 041	254 358	279 956	242 167	193 207
Kaolin	tonnes	452 215	480 358	451 919	448 129	468 491
Lead						
Ores and concentrates	tonnes	26 142	5 085	10 476	—	275
Unwrought	tonnes	6 088	6 098	17 679	6 554	6 922
Scrap	tonnes	4 062	3 538	3 101	3 771	2 089
Lithium						
Oxides	tonnes	162	176	186	107	146
Carbonate	tonnes	208	259	215	236	278
Magnesite and magnesia						
Magnesite	tonnes	111	41	39	477	38
Magnesia	tonnes	29 455	21 293	24 610	17 556	14 701
Manganese						
Ores and concentrates	tonnes	62	119	72	130	388
Metal	tonnes	2 641	2 632	2 380	3 012	3 287
Mercury	kilograms	4 000	3 000	6 000	10 600	13 800
Mica	tonnes	514	592	515	584	755
Molybdenum						
Ores and concentrates	tonnes	5 826	5 690	6 863	7 003	4 645
Metal	tonnes	458	280	139	281	442
Oxides	tonnes	594	392	1 133	780	711
Natural gas	tonnes	862 740	618 697	372 627	749 162	647 510
Nickel						
Mattes, sinters etc.	tonnes	4 051	4 346	4 215	4 252	1 490
Unwrought	tonnes	27 687	26 931	28 101	25 303	25 474
Unwrought alloys	tonnes	1 076	1 324	1 414	356	1 317
Scrap	tonnes	10 523	8 946	9 158	9 118	12 215
Crude petroleum	tonnes	20 873 087	19 770 639	19 170 472	17 719 046	19 184 387
Phosphates	tonnes	1 878	1 626	4 283	2 369	925
Platinum metals						
Platinum and platinum metals	kilograms	£4 985 000	£6 513 000	£4 509 000	£6 109 000	£8 722 000
Waste and scrap	kilograms	273 000	577 000	618 000	731 700	13 800
Potash						
Sulphate	tonnes	2 819	4 911	10 191	1 004	2 872
Chloride	tonnes	68 457	43 106	44 941	27 470	15 689
Other potassic fertilisers	tonnes	4 409	1 119	4 109	4 886	4 735
Rare earths						
Rare earth compounds	tonnes	58	26	20	56	68
Metals	tonnes	56	41	37	74	46
Salt	tonnes	929 193	738 931	1 054 982	744 328	875 294
Sillimanite	tonnes	5 470	5 086	5 568	6 381	5 212
Silver						
Ores and concentrates	kilograms	15 000	...	...	21 000	...
Metal	kilograms	161 000	151 000	137 000	162 900	122 200
Sulphur and pyrites						
Pyrites	tonnes	699	319	557	750	691
Sulphur	tonnes	61 305	71 337	82 246	94 449	78 784
Sulphur, sublimed and precipitated	tonnes	2 693	16	23	4	112
Talc	tonnes	43 288	45 376	44 669	48 746	45 801

Sweden

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Tin						
Unwrought (b)	tonnes	724	761	838	720	555
Titanium						
Titanium minerals	tonnes	389	300	911	1 032	995
Metal	tonnes	1 856	1 382	2 294	2 623	2 391
Oxides	tonnes	44 812	50 099	62 841	65 872	61 890
Tungsten						
Metal	tonnes	559	502	563	546	588
Carbide	tonnes	747	925	738	876	904
Vanadium						
Pentoxide	tonnes	4	3	1	1	76
Metal	tonnes	46	20	40	...	...
Zinc						
Unwrought	tonnes	29 682	29 847	25 763	21 570	29 211
Unwrought alloys	tonnes	18 009	16 812	20 325	22 600	12 059
Zirconium						
Concentrates	tonnes	564	588	750	825	832
Metal	tonnes	82	91	134	219	185

Note(s)

(a) Including burnt pyrites

(b) Including alloys

Switzerland

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	26 000 000	46 500 000	50 000 000	* 50 000 000	* 50 000 000
Crushed rock	tonnes	3 000 000	5 300 000	5 700 000	* 5 700 000	* 5 700 000
Primary aluminium	tonnes	44 879	44 800	12 000	—	—
Cement						
Cement, finished (a)	tonnes	3 954 816	4 267 854	4 231 294	4 252 574	4 238 000
Gypsum	tonnes	300 000	300 000	300 000	300 000	* 300 000
Pig iron	tonnes	1 000 000	1 158 000	1 252 000	1 264 000	1 312 000
Crude steel	tonnes	1 000 000	1 158 000	1 252 000	1 264 000	1 312 000
Lead, refined	tonnes	9 300	9 600	* 9 000	* 9 000	* 8 000
Salt	tonnes	486 000	539 000	525 000	353 000	358 000

Note(s):-

(a) Includes production in Liechtenstein

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	296 911	283 508	273 603	486 288	202 846
Aluminium and bauxite						
Unwrought (a)	tonnes	8 180	14 499	21 257	22 645	9 938
Scrap	tonnes	108 536	122 729	140 657	139 599	125 769
Asbestos	tonnes	0	0	0	290	120
Cement						
Cement clinkers	tonnes	106 263	121 014	103 367	114 075	91 167
Portland cement	tonnes	33 524	46 939	23 437	13 704	35 925
Other cement	tonnes	2 046	2 692	988	4 014	9 009
Chromium						
Metal	tonnes	319	249	530	74	54
Cobalt						
Metal	tonnes	95	140	105	94	120
Copper						
Unwrought	tonnes	1 872	1 069	1 036	1 002	1 159
Scrap	tonnes	69 243	74 878	74 079	75 542	82 687
Diamond						
Gem, rough	carats	139 400	195 614	119 619	4 360	5 000
Gem, cut	carats	338 524	500 591	543 079	559 591	360 000
Industrial	carats	18 185	13 934	76 604	12 100	15 000
Dust	carats	120 790 000	126 190 000	128 180 000	40 985 000	44 105 000
Gold						
Metal	kilograms	1 125 319	1 340 948	965 959	1 095 682	1 312 906
Waste and scrap	kilograms	55 166	2 823	2 802	102 745	125 459
Graphite	tonnes	335	326	225	384	600
Gypsum						
Crude and calcined	tonnes	1 160	1 095	1 158	2 754	5 207
Iodine	kilograms	5 228	4 179	1 342	1 205	1 605
Iron, steel and ferro-alloys						
Sponge and powder	tonnes	1 679	2 222	2 233	2 537	2 126
Ferro-alloys	tonnes	1 261	867	616	653	642
Ingots, blooms, billets	tonnes	51 639	83 219	88 289	104 433	65 257
Scrap	tonnes	539 629	561 972	582 567	585 342	636 462
Kaolin	tonnes	408	246	433	786	128
Lead						
Unwrought	tonnes	5 407	4 657	7 966	7 383	7 387
Scrap	tonnes	1 320	2 932	3 124	4 860	3 236
Lithium						
Oxides	tonnes	80	78	69	75	88
Mercury	kilograms	316 631	171 790	87 136	140 336	11 592
Natural gas	tonnes	1	3 244	1	4	2

Switzerland

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Nickel						
Unwrought (a)	tonnes	49	73	154	113	94
Scrap	tonnes	1 106	1 403	1 669	1 750	1 603
Platinum metals						
Platinum	kilograms	57 268	42 102	62 243	57 569	69 404
Palladium	kilograms	61 960	75 105	46 578	52 880	86 503
Other platinum metals	kilograms	1 703	2 047	292	636	717
Waste and scrap	kilograms	118 241	235 630	200 470	393 326	616 867
Rare earths						
Cerium compounds	tonnes	1	1	2	2	1
Other rare earth compounds	tonnes	2	3	7	3	1
Salt	tonnes	41 044	30 461	62 318	55 916	37 772
Silver						
Metal	kilograms	1 085 657	1 044 080	930 397	1 201 402	1 616 115
Tantalum and niobium						
Tantalum	tonnes	14	27	17	14	7
Tin						
Unwrought (a)	tonnes	72	29	160	112	114
Scrap	tonnes	107	157	130	123	76
Titanium						
Metal	tonnes	562	560	692	868	987
Oxides	tonnes	740	1 020	1 024	1 133	1 276
Tungsten						
Metal	tonnes	268	316	270	392	400
Zinc						
Unwrought (a)	tonnes	499	897	1 001	679	1 078
Scrap	tonnes	2 582	2 480	2 856	2 408	2 445

Note(s)

(a) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	6 413 474	6 261 007	6 700 038	7 371 907	7 256 472
Aluminium and bauxite						
Bauxite	tonnes	8 066	9 929	5 901	5 850	12 439
Alumina hydrate	tonnes	16 945	16 823	18 333	17 875	17 235
Unwrought	tonnes	73 413	75 987	111 780	136 214	127 018
Unwrought alloys	tonnes	59 125	56 059	79 666	78 916	62 962
Scrap	tonnes	20 734	27 617	26 711	32 716	31 728
Antimony						
Ores and concentrates	tonnes	5 004	1 722	201	38	—
Metal	tonnes	93	58	56	57	18
Oxide	tonnes	1 174	1 026	1 141	1 461	1 328
Arsenic						
Metallic arsenic	tonnes	2	5	2	5	—
Barytes	tonnes	2 187	2 242	2 433	2 843	3 644
Bentonite and fuller's earth						
Bentonite	tonnes	20 027	20 861	24 407	21 334	21 876
Fuller's earth	tonnes	1 641	1 844	916	...	...
Bismuth						
Metal	tonnes	6	15	6	8	12
Cadmium						
Metal	tonnes	30	5	7	3	8
Cement						
Cement clinkers	tonnes	64 882	71 542	115 001	15 292	8 596
Portland cement	tonnes	313 292	352 409	380 862	348 262	361 305
Other cement	tonnes	58 671	48 309	49 317	37 522	30 908
Chromium						
Ores and concentrates	tonnes	671	624	1 080	1 339	1 510
Metal	tonnes	141	127	162	114	134

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Coal						
Anthracite	tonnes	7 396	6 640	7 978	9 539	18 721
Other coal	tonnes	169 472	93 584	143 425	214 684	132 824
Lignite	tonnes	455	34 897	86 762	84 654	80 814
Briquettes	tonnes	3 917	5 137	4 584	3 908	3 986
Cobalt						
Metal	tonnes	361	423	408	454	386
Copper						
Unwrought	tonnes	6 779	4 734	4 843	5 960	5 903
Unwrought alloys	tonnes	4 481	3 897	4 695	4 089	3 925
Scrap	tonnes	11 881	9 937	7 641	7 995	5 266
Diamond						
Gem, rough	carats	144 732	195 180	118 710	8 634	11 566
Gem, cut	carats	861 211	1 182 706	1 112 264	1 209 708	1 147 690
Industrial	carats	56 909	100 219	63 939	39 174	20 205
Dust	carats	126 815 000	142 135 000	127 740 000	59 930 000	54 445 000
Diatomite	tonnes	11 204	3 291	3 157	4 636	4 864
Feldspar	tonnes	8 347	7 977	6 219	8 056	7 653
Fluorspar	tonnes	991	714	704	533	571
Gold						
Metal	kilograms	1 048 597	1 655 691	1 498 693	1 667 100	2 101 027
Waste and scrap	kilograms	52 053	72 764	104 957	57 001	214 839
Graphite	tonnes	395	652	722	966	931
Gypsum						
Crude	tonnes	64 677	76 460	87 964	93 365	101 731
Calcined	tonnes	81 971	88 511	92 787	95 000	97 296
Iodine	kilograms	7 428	7 949	11 133	18 136	7 260
Iron ore (a)	tonnes	5 660	15 145	16 019	15 626	18 704
Iron, steel and ferro-alloys						
Pig iron	tonnes	22 954	24 628	24 497	28 095	28 630
Sponge and powder	tonnes	7 631	9 035	8 900	9 685	8 873
Ferro-chrome	tonnes	1 161	1 203	1 306	1 834	1 803
Ferro-manganese	tonnes	7 884	9 033	10 423	9 922	11 696
Ferro-silico-manganese	tonnes	6 481	4 341	3 717	5 992	5 011
Ferro-silicon	tonnes	5 194	4 630	7 122	5 287	5 264
Other ferro-alloys	tonnes	1 203	1 602	1 435	1 478	1 086
Silicon metal	tonnes	694	1 135	1 164	1 508	1 255
Ingots, blooms, billets	tonnes	20 896	38 694	47 524	50 301	29 911
Scrap	tonnes	544 911	390 607	499 914	475 542	505 597
Kaolin	tonnes	41 350	37 368	41 481	45 629	39 932
Lead						
Unwrought	tonnes	7 831	8 067	9 185	7 087	9 915
Lithium						
Oxides	tonnes	89	81	112	142	143
Magnesite and magnesia						
Magnesite	tonnes	294	168	394	1 024	69
Magnesia	tonnes	6 538	6 708	7 506	7 144	7 772
Manganese						
Ores and concentrates	tonnes	363	469	453	415	472
Metal	tonnes	484	486	444	778	472
Mercury	kilograms	9 704	5 846	5 333	6 687	3 557
Mica	tonnes	426	601	1 151	3 021	1 088
Natural gas	tonnes	2 469 629	2 539 454	2 560 801	2 402 267	2 596 153
Nickel						
Unwrought (b)	tonnes	1 333	1 401	1 706	1 787	2 054
Crude petroleum	tonnes	5 086 184	4 744 965	5 413 010	4 595 181	5 141 634
Phosphates	tonnes	2 854	3 516	1 612	4 645	358
Platinum metals						
Platinum	kilograms	47 742	51 377	76 842	43 113	67 022
Palladium	kilograms	96 530	46 565	126 416	46 744	60 666
Other platinum metals	kilograms	3 725	780	1 078	913	1 255
Waste and scrap	kilograms	161 433	156 229	172 679	267 258	494 962
Potash						
Sulphate	tonnes	2 170	3 325	4 215	5 259	4 685
Chloride	tonnes	19 185	18 971	18 811	19 279	15 158
Other potassic fertilisers	tonnes	3 039	3 411	2 555	2 504	2 861

Switzerland

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Rare earths						
Rare earth compounds	tonnes	29	34	38	34	34
Ferro-cerium and other pyrophoric alloys	tonnes	...	...	...	...	6
Salt	tonnes	9 299	48 114	19 300	8 913	8 988
Sillimanite	tonnes	315	413	463	1 035	1 128
Silver						
Ores and concentrates (c)	kilograms	* 141 000	* 309 400	* 792 000	* 39 800	* 9 600
Metal	kilograms	1 082 664	1 484 207	1 306 866	849 037	1 520 531
Sulphur and pyrites						
Pyrites	tonnes	117	76	69	51	135
Sulphur	tonnes	24 940	24 977	19 369	20 982	17 425
Sulphur, sublimed and precipitated	tonnes	120	61	50	5	35
Talc	tonnes	9 579	10 254	10 786	10 360	8 756
Tin						
Unwrought (b)	tonnes	726	909	1 042	1 241	1 093
Titanium						
Metal	tonnes	735	1 273	1 357	1 352	1 168
Oxides	tonnes	19 349	19 055	18 805	20 455	19 550
Tungsten						
Metal	tonnes	170	235	146	257	272
Zinc						
Unwrought	tonnes	14 577	13 045	12 189	14 473	13 715
Unwrought alloys	tonnes	3 194	2 601	2 214	2 700	2 471
Zirconium						
Metal	tonnes	86	117	29	29	19

Note(s)

(a) Including burnt pyrites

(b) Including alloys

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

Turkey

Production

Commodity	Units	2004	2005	2006	2007	2008
Bauxite	tonnes	365 836	356 480	771 227	863 404	* 900 000
Alumina	tonnes (Al ₂ O ₃ content)	169 991	112 558	150 117	163 435	* 150 000
Primary aluminium	tonnes	64 002	59 000	60 000	63 400	60 400
Antimony, mine	tonnes (metal content)	* 700	* 1 200	* 1 100	* 1 200	* 1 300
Barytes	tonnes	134 504	157 200	160 000	150 000	150 000
Bentonite and fuller's earth						
Bentonite	tonnes	643 153	582 735	* 600 000	748 170	683 253
Sepiolite	tonnes	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Borates	tonnes	1 727 000	2 087 000	2 373 345	1 997 163	2 139 224
Cement						
Cement clinker	tonnes	...	31 355 180	32 824 687	39 363 683	41 652 824
Cement, finished	tonnes	38 019 112	41 100 274	47 906 365	50 995 107	54 027 283
Chromium ores and concentrates	tonnes	506 421	858 729	1 059 901	1 678 932	1 885 712
Coal						
Anthracite	tonnes	2 842 952	2 785 505	3 070 793	3 230 787	3 343 409
Bituminous	tonnes	738 915	737 701	* ...	...	...
Lignite	tonnes	43 754 159	60 867 574	61 010 000	74 316 728	86 074 626
Copper, mine	tonnes (metal content)	49 800	54 100	46 400	81 400	83 300
Copper, smelter	tonnes	34 700	27 700	26 300	17 900	38 000
Copper, refined	tonnes	63 800	94 900	105 800	99 600	89 100
Feldspar	tonnes	4 600 000	4 750 000	5 500 000	6 000 000	* 6 000 000
Fluorspar	tonnes	880	—	—	—	—
Gold, mine	kilograms (metal content)	3 260	4 170	8 040	9 920	11 120
Graphite	tonnes	* 1 000	* 1 100	1 200	* 1 500	* 1 500
Gypsum	tonnes	250 099	* 500 000	* 800 000	* 770 000	...
Iron ore	tonnes	3 856 536	3 889 934	3 251 969	4 549 556	3 990 110
Pig iron	tonnes	5 835 889	5 398 500	5 952 000	6 235 537	6 697 372
Crude steel	tonnes	19 868 118	20 961 240	23 307 523	25 760 889	26 809 050
Ferro-alloys						
Ferro-chrome	tonnes	33 686	26 043	67 975	69 730	75 840
Ferro-silico-chrome	tonnes	5 560	6 695	7 310	6 624	6 094
Kaolin	tonnes	536 008	615 271	* 600 000	456 238	232 746
Lead, mine	tonnes (metal content)	18 792	11 341	14 000	14 000	18 000
Lead, refined	tonnes	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
Magnesite	tonnes	3 732 952	2 372 206	2 088 033	1 984 908	2 143 047
Manganese ore	tonnes	13 751	4 751	...	...	...
Nickel, mine	tonnes (metal content)	—	700	1 900	1 700	—
Perlite	tonnes	133 829	156 935	* 160 000	* 160 000	* 160 000
Crude petroleum	tonnes	2 275 529	2 280 764	2 175 353	2 131 288	2 222 594
Natural gas	million m ³	344	484	307	839	894
Salt						
Rock salt	tonnes	6 100	512	...	...	...
Sea salt	tonnes	582 440	529 235	* 500 000	* 500 000	* 500 000
Other salt	tonnes	1 569 178	1 196 486	* 1 200 000	1 385 822	1 367 981
Silver, mine	kilograms (metal content)	122 000	219 000	* 266 000	* 315 000	* 286 000
Strontium minerals	tonnes	* 77 000	* 18 000	* 6 300	* 4 200	* 1 600
Sulphur and pyrites						
Pyrites	tonnes (sulphur content)	20 000	55 000	59 000	61 000	79 000
Recovered (a) (b)	tonnes (sulphur content)	68 000	76 000	73 000	73 000	73 000
Zinc, mine	tonnes (metal content)	39 000	56 000	59 000	71 000	73 000

Note(s):-

(1) Turkey is believed to produce diatomite and wollastonite

(a) From petroleum refining and/or natural gas

(b) Other

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	758 169	1 631 232	586 393	73 162	1 183 150
Aluminium and bauxite						
Bauxite	tonnes	4 420	1 531	89 764	254 689	262 708
Alumina	tonnes	29 915	45 914	73 707	142 557	118 915
Unwrought alloys	tonnes	7 702	6 138	9 072	13 012	10 827
Unwrought	tonnes	373	21 034	38 690	47 574	50 056
Scrap	tonnes	9 955	12 558	14 275	13 415	16 218
Antimony						
Ores and concentrates	tonnes	700	920	679	819	1 000
Metal	tonnes	25	63	5	28	0
Asbestos	tonnes	0	—	3	990	685
Barytes	tonnes	142 767	134 482	159 128	115 039	123 485
Bentonite and fuller's earth						
Bentonite	tonnes	210 328	211 926	84 595	22 237	244 177
Fuller's earth	tonnes	179	342	251	...	...
Cadmium						
Metal	tonnes	95	25	27	—	8
Cement						
Cement clinkers	tonnes	2 359 071	2 990 365	1 559 980	1 539 287	2 558 779
Portland cement	tonnes	7 907 130	6 713 088	3 277 480	4 323 666	11 010 951
Other cement	tonnes	147 792	261 816	112 683	124 395	150 785
Chromium						
Ores and concentrates	tonnes	575 030	834 034	887 689	1 265 036	1 816 427
Metal	tonnes	33	238	6	7	122
Coal						
Anthracite	tonnes	11 077	10 324	1 259	—	1 043
Copper						
Ores and concentrates	tonnes	180 609	145 118	68 286	36 046	251 958
Unwrought	tonnes	12 863	13 524	13 876	11 813	41 780
Scrap	tonnes	4 529	15 083	12 630	8 920	9 670
Diamond						
Dust	carats	£3 000	£29 000	£15 000	£28 000	£146 000
Diatomite	tonnes	14 581	23 366	(a) 32 000	34 424	40 370
Feldspar (a)	tonnes	* 3 600 000	* 3 800 000	* 4 300 000	* 4 300 000	* 4 600 000
Gold						
Metal	kilograms	9 845	29 624	13 581	12 068	142 244
Graphite	tonnes	...	72	57	13	390
Gypsum						
Crude	tonnes	7 859	4 346	26 683	43 195	37 899
Calcined	tonnes	434 910	477 710	481 313	544 954	838 314
Iodine	kilograms	118	21 250	20 213	11 098	1 212
Iron, steel and ferro-alloys						
Pig iron	tonnes	50 165	9 358	1 150	—	10 372
Ferro-chrome	tonnes	16 286	39 038	60 952	63 209	39 324
Other ferro-alloys	tonnes	5 092	1 356	1 747	7 122	5 682
Ingots, blooms, billets	tonnes	3 769 934	2 174 257	1 630 209	1 660 642	2 501 135
Scrap	tonnes	82 460	64 281	44 474	29 237	77 654
Kaolin	tonnes	267 817	177 881	192 298	132 834	130 923
Lead						
Ores and concentrates (b)	tonnes	29 423	30 226	18 415	34 715	52 988
Unwrought	tonnes	6 190	2 875	4 271	930	832
Magnesite and magnesia						
Magnesite	tonnes	39 670	41 353	28 937	40 414	68 054
Magnesia	tonnes	230 675	198 654	205 989	181 870	175 441
Manganese						
Ores and concentrates	tonnes	12 817	955	2 466	13 007	81 280
Metal	tonnes	15	—	4	20	401
Mica	tonnes	15 975	565	430	—	840
Natural gas	tonnes	—	—	2 974	5 392	412 655
Nickel						
Ores and concentrates	tonnes	3 511	52 062	91 828	175 712	130 179
Unwrought (c)	tonnes	14	48	9	—	232
Scrap	tonnes	172	300	102	79	734
Crude petroleum	tonnes	* 29 000	* 75 000	* 545 000	* 3 584 000	* 4 115 000
Potash						
Potassic fertilisers	tonnes	70	313	148	488	3 544
Salt	tonnes	30 898	22 167	17 095	11 164	27 393

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Silver						
Metal	kilograms	2 731	27 323	8 932	10 700	20 897
Sulphur and pyrites						
Sulphur	tonnes	534	638	152	7 091	21 289
Sulphur, sublimed and precipitated	tonnes	75	127	170	15 376	17 259
Talc	tonnes	1 963	2 806	1 195	1 742	1 636
Tin						
Unwrought (c)	tonnes	10	17	18	179	118
Titanium						
Metal	tonnes	20	30	17	—	49
Oxides	tonnes	1 365	2 350	2 023	2 489	2 607
Tungsten						
Metal	tonnes	2	115	25	33	99
Vanadium						
Pentoxide	tonnes	900	940	—	24	200
Zinc						
Ores and concentrates	tonnes	110 692	138 288	144 662	123 956	253 573
Scrap	tonnes	2 318	53	176	281	468

Note(s)

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

(b) Complex lead-zinc ore

(c) Including alloys

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	4 519	7 978	4 661	3 843	4 590
Aluminium and bauxite						
Bauxite	tonnes	34 592	46 016	52 627	53 202	39 256
Alumina	tonnes	19 341	19 665	23 179	12 713	39 507
Unwrought	tonnes	182 113	236 076	245 876	296 098	327 525
Unwrought alloys	tonnes	144 836	146 853	168 498	193 702	270 871
Scrap	tonnes	11 648	16 723	7 061	5 634	16 868
Antimony						
Metal	tonnes	87	40	46	37	346
Oxide	tonnes	460	377	135	106	522
Arsenic						
Metallic arsenic	tonnes	48	98	77	63	71
Asbestos	tonnes	13 509	12 576	6 124	2 518	585
Barytes	tonnes	258	2 003	279	741	455
Bentonite and fuller's earth						
Bentonite	tonnes	832	4 127	2 127	3 202	9 803
Fuller's earth	tonnes	157	159	93	...	...
Bismuth						
Metal	tonnes	6	7	11	14	21
Bromine	kilograms	(a) 149 960	105 000	24 426	77	384
Cement						
Cement clinkers	tonnes	375 619	567 256	1 209 618	1 360 090	380 516
Portland cement	tonnes	9 096	66 260	71 237	39 270	12 279
Other cement	tonnes	4 268	4 693	3 979	4 202	5 036
Chromium						
Ores and concentrates	tonnes	56 836	89 844	84 467	107 524	119 806
Metal	tonnes	85	26	33	60	60
Coal						
Anthracite	tonnes	397 125	413 333	502 178	530 393	707 425
Other coal	tonnes	16 033 118	16 126 628	14 658 368	13 850 371	18 781 879
Cobalt						
Metal	tonnes	170	167	186	176	148
Oxides	tonnes	134	139	165	142	152

Turkey

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Copper						
Ores and concentrates	tonnes	10 370	44 633	18 111	32	3 884
Unwrought, unrefined	tonnes	29 555	53 214	54 790	34 389	38 116
Unwrought, refined	tonnes	217 290	223 978	150 412	128 077	287 705
Unwrought alloys	tonnes	4 685	3 212	2 160	1 975	3 060
Scrap	tonnes	34 975	10 104	6 602	3 013	1 263
Diamond						
Gem	carats	207 903	124 043	112 906	135 413	141 553
Industrial	carats	11 633	27 325	44 601	36 999	102 596
Dust	carats	15 900 000	26 765 000	13 675 000	9 835 000	18 430 000
Diatomite	tonnes	1 211	1 460	1 619	1 385	1 491
Feldspar	tonnes	40 733	40 739	44 159	46 323	28 594
Fluorspar	tonnes	31 908	30 446	21 750	23 139	34 073
Gold						
Metal	kilograms	262 519	403 415	157 792	155 471	179 606
Graphite	tonnes	10 212	11 956	6 300	6 095	13 230
Gypsum						
Crude and calcined	tonnes	170 958	196 747	278 129	180 159	167 572
Iodine	kilograms	31 797	5 634	3 219	8 594	9 498
Iron ore						
Iron ore	tonnes	4 573 864	4 621 446	7 197 305	6 925 163	5 004 509
Burnt pyrites	tonnes	22 047	63 666	11 596	...	17 092
Iron, steel and ferro-alloys						
Pig iron	tonnes	286 589	396 658	333 981	338 641	802 741
Sponge and powder	tonnes	18 084	68 952	34 440	19 801	96 393
Ferro-chrome	tonnes	5 321	5 443	4 610	11 138	11 321
Ferro-manganese	tonnes	44 406	43 743	60 213	56 619	73 319
Ferro-silico-manganese	tonnes	189 294	159 496	216 036	236 039	195 623
Ferro-molybdenum	tonnes	838	1 253	1 020	1 628	1 645
Ferro-niobium	tonnes	211	433	435	446	609
Ferro-phosphorus	tonnes	(b) ...	1 710	919	246	1 731
Ferro-silicon	tonnes	82 543	58 007	72 599	100 758	90 477
Ferro-titanium and ferro-silico-titanium	tonnes	441	447	649	616	634
Ferro-vanadium	tonnes	462	426	483	472	529
Other ferro-alloys	tonnes	7 629	5 983	7 357	9 642	12 345
Silicon metal	tonnes	4 649	4 794	5 233	2 530	6 207
Ingots, blooms, billets	tonnes	1 531 529	1 816 973	1 504 374	1 930 627	3 849 141
Scrap	tonnes	12 892 546	13 010 728	12 860 533	13 335 810	17 414 983
Kaolin	tonnes	218 838	265 530	190 924	163 015	402 812
Lead						
Unwrought	tonnes	71 606	71 680	56 792	46 966	79 460
Lithium						
Oxides	tonnes	179	183	248	245	257
Carbonate	tonnes	417	433	491	683	617
Magnesite and magnesia						
Magnesia	tonnes	38 084	52 432	29 148	43 360	61 519
Manganese						
Ores and concentrates	tonnes	156	259	383	428	2 531
Metal	tonnes	495	300	509	719	874
Mercury	kilograms	6 024	1 440	2 052	9	3 069
Mica	tonnes	215	266	413	293	385
Molybdenum						
Metal	tonnes	10	4	6	8	89
Oxides	tonnes	130	82	80	69	167
Nickel						
Unwrought (c)	tonnes	3 353	3 333	3 417	3 710	4 038
Oxides	tonnes	144	128	150	140	142
Crude petroleum	tonnes	23 917 019	23 389 647	23 786 875	23 445 764	21 833 471
Phosphates	tonnes	291 245	496 738	744 504	782 996	741 190
Platinum metals						
Platinum and platinum metals	kilograms	231	188	212	316	463
Potash						
Sulphate	tonnes	59 381	39 198	19 373	57 661	33 427
Chloride	tonnes	130 748	135 433	78 671	96 038	82 412

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Rare earths						
Rare earth compounds	tonnes	171	155	117	183	360
Ferro-cerium and other pyrophoric alloys	tonnes	253	...	...	...	12
Metals	tonnes	4	0	0	8	9
Salt	tonnes	307 039	320 147	285 694	35 382	257 146
Sillimanite	tonnes	5 110	5 504	2 939	6 987	9 535
Silver						
Metal	kilograms	269 009	409 844	108 588	996 239	154 639
Sulphur and pyrites						
Pyrites	tonnes	107	94	231	252	224
Sulphur	tonnes	90 502	139 197	162 187	168 952	128 685
Sulphur, sublimed and precipitated	tonnes	138	111	111	194	321
Talc	tonnes	16 810	15 454	17 143	18 549	17 706
Tin						
Unwrought (c)	tonnes	2 314	2 731	2 380	2 788	2 603
Titanium						
Titanium minerals	tonnes	10 435	6 755	6 831	* 9 000	7 762
Oxides	tonnes	85 832	92 136	108 721	111 858	106 206
Zinc						
Unwrought	tonnes	143 904	141 842	397 384	136 916	147 215
Unwrought alloys	tonnes	4 993	6 121	5 481	3 775	4 091
Scrap	tonnes	379	153	3 206	1 913	1 381
Zirconium						
Concentrates	tonnes	3 881	4 581	1 118	980	4 844

Note(s)

- (a) May include some fluorine
(b) Included with 'other ferro-alloys'
(c) Including alloys

United Kingdom

Production

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates						
Sand and gravel	tonnes	97 333 000	94 666 000	92 107 000	93 236 000	85 473 000
Crushed rock (a)	tonnes	147 067 000	141 636 000	145 578 000	148 534 000	127 996 000
Primary aluminium	tonnes	359 631	368 477	360 325	364 595	316 000
Barytes	tonnes	61 000	64 000	48 000	53 000	43 000
Bentonite and fuller's earth						
Fuller's earth (b)	tonnes	27 540	6 200	—	—	—
Cement						
Cement clinker	tonnes	10 402 000	10 074 000	10 069 000	10 227 000	8 700 000
Cement, finished	tonnes	11 405 000	11 216 000	11 469 000	11 887 000	10 071
Coal						
Bituminous (c)	tonnes	25 096 000	20 498 000	18 517 000	17 070 000	17 912 000
Feldspar (d)	tonnes	2 274	1 835	1 441	1 112	430
Fluorspar	tonnes	50 080	56 417	49 676	44 936	36 801
Gypsum	tonnes	1 686 000	* 1 700 000	* 1 700 000	* 1 700 000	* 1 700 000
Iron ore	tonnes	* 500	354	341	* 300	145
Pig iron	tonnes	10 179 600	10 188 800	10 695 700	10 959 800	10 136 800
Crude steel	tonnes	13 765 700	13 238 900	13 904 600	14 392 300	13 520 500
Kaolin (e) (f)	tonnes	1 944 955	1 910 874	1 762 328	1 671 426	1 355 365
Lead, mine	tonnes (metal content)	* 500	* 400	* 400	* 100	* 100
Lead, refined	tonnes	245 938	304 350	318 703	263 391	283 000
Nickel, smelter/refinery	tonnes	38 600	37 100	36 800	34 050	38 700
Crude petroleum	tonnes	88 715 159	78 162 720	70 896 869	70 959 333	65 293 585
Natural gas	million m ³	101 571	93 505	84 748	77 350	75 382
Potash						
Chloride	tonnes (K ₂ O content)	539 500	439 200	427 000	430 000	403 800
Salt						
Rock salt	tonnes	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000
Brine salt	tonnes	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000
Salt in brine (g)	tonnes	* 2 800 000	* 2 800 000	* 2 800 000	* 2 800 000	* 2 800 000
Sulphur and pyrites						
Recovered (h)	tonnes (sulphur content)	120 000	124 000	115 000	130 000	135 000
Talc	tonnes	3 881	6 000	4 325	2 850	2 410

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 the United Kingdom

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

Exports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	12 702 493	13 304 920	14 631 060	14 048 387	13 008 608
Aluminium and bauxite						
Bauxite	tonnes	6 576	4 325	28 636	4 276	6 121
Alumina	tonnes	5 766	4 336	9 979	9 016	9 517
Alumina hydrate (a)	tonnes	* 35 500	* 20 600	* 1 900	* 5 300	* 5 300
Unwrought	tonnes	29 949	48 684	17 530	30 631	20 690
Unwrought alloys	tonnes	306 372	329 691	331 598	269 523	265 018
Scrap	tonnes	319 217	474 587	385 211	906 831	872 988
Antimony						
Metal	tonnes	88	54	27	21	35
Oxide	tonnes	663	621	397	379	558

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Barytes	tonnes	12 873	16 334	4 250	9 242	9 976
Bentonite and fuller's earth						
Bentonite	tonnes	71 153	49 514	42 548	47 122	43 261
Fuller's earth	tonnes	124	778	1 102	...	...
Bismuth						
Metal	tonnes	2 633	2 426	2 703	2 588	905
Bromine	kilograms	1 126 043	234 977	1 137 544	1 469 781	1 015 304
Cadmium						
Metal	tonnes	27	79	7	76	54
Cement						
Cement clinkers	tonnes	82 936	134 992	91 357	28 432	15 071
Portland cement	tonnes	214 420	320 680	521 784	459 629	230 920
Other cement	tonnes	76 517	68 554	69 692	88 452	93 122
Chromium						
Ores and concentrates	tonnes	622	228	47	178	—
Metal	tonnes	4 776	4 547	5 123	6 777	6 501
Coal						
Anthracite	tonnes	172 486	169 252	137 353	123 549	165 473
Other coal	tonnes	439 930	380 426	354 281	419 193	742 582
Lignite	tonnes	2 335	2 321	2 748	1 965	2 334
Briquettes	tonnes	41 094	20 713	20 037	27 591	52 605
Cobalt						
Metal	tonnes	1 882	1 471	1 695	2 300	2 614
Oxides	tonnes	1 233	994	750	689	798
Copper						
Matte and cement	tonnes	79	41	515	16	28
Unwrought	tonnes	7 362	16 253	6 122	9 276	7 916
Unwrought alloys	tonnes	22 035	15 013	17 251	18 142	17 822
Scrap	tonnes	244 749	238 557	311 058	346 361	358 981
Diamond						
Unsorted	carats	6 394 541	16 818 545	3 544 216	5 307 857	3 388 395
Gem, rough	carats	78 613 304	76 400 064	88 991 279	84 573 134	66 479 817
Gem, cut	carats	1 592 715	5 330 874	2 341 635	477 463	795 612
Industrial	carats	22 821 714	21 647 850	13 652 233	4 754 029	6 121 081
Dust	carats	149 415 960	124 529 495	111 788 350	104 552 775	122 681 695
Diatomite	tonnes	2 123	708	687	1 238	903
Feldspar	tonnes	261	48	38	40	82
Fluorspar	tonnes	4 593	5 803	3 016	589	187
Gold						
Metal	kilograms	407 467	638 262	166 080	224 598	600 018
Waste and scrap	kilograms	471 657	541 399	313 712	282 298	272 339
Graphite	tonnes	4 348	2 685	2 979	3 065	3 156
Gypsum						
Crude	tonnes	3 903	2 299	2 679	1 248	1 493
Calcined	tonnes	49 945	54 356	63 533	57 988	48 340
Iodine	kilograms	107 007	197 086	314 659	368 785	174 965
Iron, steel and ferro-alloys						
Pig iron	tonnes	957	1 387	5 407	15 892	2 523
Sponge and powder	tonnes	4 003	3 605	2 346	4 969	43 775
Ferro-chrome and ferro-silico-chrome	tonnes	2 384	6 238	4 066	2 973	1 385
Ferro-silico-magnesium	tonnes	316	542	653	917	976
Ferro-manganese	tonnes	1 554	661	473	1 136	1 210
Ferro-silico-manganese	tonnes	8 247	5 003	60	7	49
Ferro-molybdenum	tonnes	14 213	11 501	12 004	11 823	11 283
Ferro-nickel	tonnes	125	55	329	52	81
Ferro-niobium	tonnes	47	79	74	49	58
Ferro-phosphorus	tonnes	1 336	189	36	33	45
Ferro-silicon	tonnes	2 699	2 652	2 733	2 314	3 299
Ferro-titanium and ferro-silico-titanium	tonnes	20 703	17 361	17 645	19 515	18 557
Ferro-vanadium	tonnes	17	156	151	96	79
Other ferro-alloys	tonnes	3 892	5 473	3 655	2 925	4 012
Silicon metal	tonnes	1 555	2 466	6 963	11 325	151 132
Ingots, blooms, billets	tonnes	1 712 102	2 246 377	2 692 654	3 514 850	3 348 794
Scrap	tonnes	6 772 111	6 105 955	7 407 174	6 013 907	6 616 708
Kaolin (b)	tonnes	1 728 161	1 698 747	1 566 025	1 490 416	1 188 261

United Kingdom

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Lead						
Unwrought	tonnes	34 859	52 593	89 271	68 152	57 466
Unwrought alloys	tonnes	31 148	38 806	48 589	39 246	79 520
Scrap	tonnes	32 934	27 248	1 859	31 942	47 660
Lithium						
Oxides	tonnes	285	125	94	92	116
Carbonate	tonnes	160	203	271	158	108
Magnesite and magnesia						
Magnesite	tonnes	49	87	26	51	158
Magnesia	tonnes	24 796	20 077	19 036	16 371	13 647
Manganese						
Metal (a)	tonnes	* 3 200	* 3 100	* 2 000	* 2 100	* 3 100
Mercury	kilograms	2 054	191 193	78 514	4 311	6 369
Mica	tonnes	9 377	4 050	4 593	3 820	4 749
Molybdenum						
Ores and concentrates	tonnes	180	179	166	78	64
Metal	tonnes	312	807	318	237	241
Natural gas	tonnes	52 315	1 373 020	60 124	30 814	7 641
Nickel						
Mattes, sinters etc.	tonnes	964	196	517	40	13
Unwrought	tonnes	38 249	38 524	31 610	24 147	26 235
Unwrought alloys	tonnes	4 710	6 141	6 486	4 375	4 378
Scrap	tonnes	10 465	14 119	15 555	16 872	18 229
Crude petroleum	tonnes	60 743 679	50 619 044	47 864 601	47 058 702	43 354 245
Phosphates	tonnes	34	1 548	335	504	759
Platinum metals						
Platinum	kilograms	44 598	41 500	42 843	54 256	51 720
Palladium	kilograms	61 198	51 807	48 688	59 369	2 021 831
Other platinum metals	kilograms	12 610	17 852	23 353	31 484	27 629
Waste and scrap	kilograms	2 681 379	2 881 226	3 507 381	3 793 637	4 278 682
Potash						
Chloride	tonnes	* 510 000	* 340 000	* 430 000	* 350 000	* 283 000
Other potassic fertilisers	tonnes	662	705	651	562	656
Rare earths						
Cerium compounds	tonnes	47	121	111	37	73
Other rare earth compounds	tonnes	1 157	1 189	954	1 089	622
Ferro-cerium and other pyrophoric alloys	tonnes	197	2	76	80	7
Metals	tonnes	10	26	29	143	237
Salt	tonnes	691 895	538 796	557 311	514 868	873 708
Sillimanite	tonnes	2 016	2 417	1 925	2 430	2 076
Silver						
Ores and concentrates	kilograms	7 583	13 387	...	1 627	192
Metal	kilograms	1 754 885	2 289 098	1 069 383	2 317 951	6 071 009
Sulphur and pyrites						
Sulphur	tonnes	700	431	756	23 476	41 054
Sulphur, sublimed and precipitated	tonnes	1 387	1 458	1 312	624	1 144
Talc	tonnes	3 317	5 244	4 626	2 389	3 129
Tantalum and niobium						
Tantalum	tonnes	77	131	83	77	55
Tin						
Concentrates	tonnes	0	2	4	373	254
Unwrought	tonnes	524	1 608	8 395	4 085	1 264
Unwrought alloys	tonnes	885	442	698	696	532
Scrap	tonnes	7 353	20 603	35 252	27 329	19 110
Titanium						
Metal	tonnes	11 913	17 212	14 028	12 934	11 155
Oxides	tonnes	234 591	215 741	182 246	212 068	222 503
Tungsten						
Metal	tonnes	1 267	1 732	2 100	2 444	1 625
Carbide	tonnes	92	83	251	303	51
Vanadium						
Pentoxide	tonnes	2	20	23	697	589
Metal	tonnes	1 075	433	70	—	2
Zinc						
Unwrought	tonnes	1 581	1 661	5 325	5 932	3 883
Unwrought alloys	tonnes	26 260	38 267	37 120	33 799	28 408
Scrap	tonnes	9 710	9 881	4 571	7 543	5 699

Exports continued

Commodity	Units	2004	2005	2006	2007	2008
Zirconium						
Concentrates	tonnes	505	699	902	1 096	716
Metal	tonnes	183	127	90	54	61

Note(s)

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

(b) Dry weight

Imports

Commodity	Units	2004	2005	2006	2007	2008
Primary aggregates	tonnes	1 543 380	2 160 513	2 905 198	2 806 448	2 631 986
Aluminium and bauxite						
Bauxite	tonnes	122 021	103 522	86 882	48 741	57 971
Alumina hydrate	tonnes	124 451	130 321	101 126	112 287	110 503
Unwrought	tonnes	116 545	114 189	169 259	201 262	160 797
Unwrought alloys	tonnes	118 398	87 063	122 748	93 145	93 210
Scrap	tonnes	78 309	116 285	137 626	158 827	145 819
Antimony						
Metal	tonnes	410	60	81	110	98
Oxide	tonnes	2 976	2 048	2 291	1 917	2 454
Arsenic						
Metallic arsenic	tonnes	165	3	49	70	52
Asbestos	tonnes	2 150	—	0	187	...
Barytes	tonnes	63 934	54 753	78 225	84 617	56 794
Bentonite and fuller's earth						
Bentonite	tonnes	187 750	151 179	173 483	157 388	205 853
Sepiolite	tonnes	51 044	65 565	72 340	...	...
Fuller's earth	tonnes	2 574	3 122	14 700	...	...
Bismuth						
Metal	tonnes	2 205	2 858	2 347	1 908	1 582
Bromine	kilograms	7 145 977	7 994 939	7 592 352	5 266 339	5 903 423
Cadmium						
Metal	tonnes	479	206	129	276	212
Cement						
Cement clinkers	tonnes	377 341	406 044	516 583	836 788	366 791
Portland cement	tonnes	2 033 772	1 645 088	1 397 025	1 534 683	1 731 228
Other cement	tonnes	64 289	37 705	26 790	26 215	28 324
Chromium						
Ores and concentrates	tonnes	130 841	122 042	74 907	103 551	117 715
Metal	tonnes	2 321	1 723	4 022	2 134	3 099
Coal						
Anthracite	tonnes	197 788	187 388	125 011	135 941	213 318
Other coal	tonnes	35 958 449	43 890 778	49 544 012	43 024 560	43 038 043
Briquettes	tonnes	8 498	6 554	9 995	6 501	14 131
Cobalt						
Metal	tonnes	3 862	3 888	4 427	5 422	5 395
Oxides	tonnes	525	107	195	180	138
Copper						
Unwrought, unrefined	tonnes	122	1 978	264	7 401	5 529
Unwrought, refined	tonnes	214 067	181 767	183 727	46 820	47 716
Unwrought alloys	tonnes	8 070	6 191	6 743	6 202	5 721
Scrap	tonnes	15 731	42 264	19 744	21 852	21 132
Diamond						
Unsorted	carats	10 557 063	33 441 810	14 408 621	13 661 786	10 283 610
Gem, rough	carats	68 227 020	78 735 595	78 790 692	81 195 314	59 534 653
Gem, cut	carats	9 317 146	12 039 040	7 370 573	973 433	1 343 330
Industrial	carats	30 993 560	25 367 064	11 884 651	7 524 168	5 127 610
Dust	carats	126 277 015	125 510 400	199 882 920	198 484 150	187 268 975
Diatomite	tonnes	34 988	29 208	28 290	24 224	23 084
Feldspar	tonnes	31 601	23 139	17 098	26 751	18 899
Fluorspar	tonnes	25 092	4 051	6 620	3 875	8 429

United Kingdom

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Gold						
Metal	kilograms	1 053 148	460 239	781 840	649 163	914 000
Waste and scrap	kilograms	274 919	66 198	7 925	17 046	43 143
Graphite	tonnes	19 075	17 766	16 978	17 225	14 309
Gypsum						
Crude	tonnes	64 043	627 595	369 714	196 613	140 783
Calcined	tonnes	163 025	133 522	92 069	52 678	88 766
Iodine	kilograms	802 782	1 092 633	1 019 543	1 225 368	1 106 864
Iron ore						
Iron ore	tonnes	15 298 713	16 204 615	16 370 705	17 435 472	15 282 786
Burnt pyrites	tonnes	2 436	1 911	1 282	131 230	693
Iron, steel and ferro-alloys						
Pig iron	tonnes	105 007	102 531	81 689	89 863	61 657
Sponge and powder	tonnes	21 059	21 914	34 768	11 766	27 003
Ferro-chrome	tonnes	112 234	63 478	52 494	46 975	79 692
Ferro-silico-chrome	tonnes	—	728	350	1 242	128
Ferro-silico-magnesium	tonnes	4 969	5 448	3 810	2 303	1 614
Ferro-manganese	tonnes	91 533	79 045	86 598	100 694	96 461
Ferro-silico-manganese	tonnes	63 633	57 136	59 985	56 036	52 966
Ferro-molybdenum	tonnes	836	861	640	515	369
Ferro-nickel	tonnes	14 628	11 325	13 169	14 960	16 520
Ferro-niobium	tonnes	1 236	1 175	1 098	1 490	1 189
Ferro-phosphorus	tonnes	1 687	3 261	386	2 070	2 473
Ferro-silicon	tonnes	71 973	58 225	64 610	66 838	59 438
Ferro-titanium and ferro-silico-titanium	tonnes	2 457	1 883	1 087	1 677	1 290
Ferro-vanadium	tonnes	1 262	609	1 623	755	543
Other ferro-alloys	tonnes	2 285	2 463	2 265	3 248	2 237
Silicon metal	tonnes	100 233	77 103	29 512	25 787	56 807
Ingots, blooms, billets	tonnes	758 615	722 452	1 053 176	849 803	679 019
Scrap	tonnes	225 483	180 261	154 967	204 100	228 294
Kaolin	tonnes	126 501	84 750	99 262	73 014	67 349
Lead						
Unwrought, base bullion (a)	tonnes	127 970	173 910	120 871	119 726	194 113
Unwrought, other	tonnes	51 382	31 347	53 892	31 187	19 924
Scrap	tonnes	6 278	3 898	5 914	17 685	4 621
Lithium						
Oxides	tonnes	498	446	385	614	466
Carbonate	tonnes	490	657	650	779	536
Magnesite and magnesia						
Magnesite	tonnes	11 187	13 896	10 644	10 194	7 016
Magnesia	tonnes	83 539	78 843	64 896	57 905	59 300
Manganese						
Ores and concentrates (b)	tonnes	2 585	698	4 229	1 569	4 133
Metal	tonnes	9 189	8 223	8 563	7 021	8 773
Mercury	kilograms	27 875	32 306	2 128	2 668	2 387
Mica						
Unmanufactured	tonnes	1 769	296	251	289	377
Ground	tonnes	6 286	6 684	5 856	6 705	7 061
Waste	tonnes	4 374	4 485	3 474	3 433	2 030
Molybdenum						
Ores and concentrates	tonnes	18 371	18 600	19 032	18 381	15 130
Metal	tonnes	1 854	2 877	3 445	1 390	1 085
Oxides	tonnes	2	630	635	513	1 433
Natural gas	tonnes	5 198 582	7 309 558	7 881 575	15 277 213	18 133 087
Nickel						
Mattes, sinters etc.	tonnes	64 192	57 492	56 336	62 637	63 553
Unwrought	tonnes	45 264	24 019	17 414	21 044	16 888
Unwrought alloys	tonnes	2 238	1 629	2 883	2 947	3 210
Scrap	tonnes	8 957	10 927	7 975	10 376	10 291
Oxides	tonnes	103	277	59	49	13
Crude petroleum	tonnes	56 128 686	54 067 943	55 735 570	44 129 689	52 103 843
Phosphates	tonnes	11 586	30 177	7 803	23 052	28 971
Platinum metals						
Platinum	kilograms	47 735	51 553	23 472	26 015	29 943
Palladium	kilograms	24 666	30 576	37 226	42 395	32 806
Other platinum metals	kilograms	8 267	7 134	9 127	6 507	5 409
Waste and scrap	kilograms	617 417	1 271 315	1 148 802	1 456 413	1 416 905

Imports continued

Commodity	Units	2004	2005	2006	2007	2008
Potash						
Fertiliser salts	tonnes	9 204	9 517	10 696	...	...
Chloride	tonnes	207 056	198 893	170 942	202 623	165 331
Other potassic fertilisers	tonnes	12 383	13 151	15 584	26 979	27 076
Rare earths						
Cerium compounds	tonnes	1 914	2 324	1 615	2 167	2 067
Other rare earth compounds	tonnes	775	775	600	664	251
Ferro-cerium and other pyrophoric alloys	tonnes	9	19	60	77	57
Metals	tonnes	135	166	88	88	133
Salt	tonnes	219 581	287 623	246 879	237 772	237 288
Sillimanite						
Sillimanite minerals	tonnes	24 348	39 650	10 268	10 239	11 920
Mullite	tonnes	12 392	10 430	7 468	12 036	6 488
Silver						
Ores and concentrates	kilograms	306 311	12 640	249	8 283	8 332
Metal	kilograms	2 105 057	1 485 290	7 316 639	5 518 256	3 943 638
Waste and scrap	kilograms	2 488 771	2 282 562	2 741 705	3 049 452	4 222 712
Sulphur and pyrites						
Pyrites	tonnes	29	26	19	105	704
Sulphur, crude	tonnes	44 963	24 222	11 608	5 101	64
Sulphur, refined	tonnes	3 984	7 263	7 334	8 577	9 574
Sulphur, sublimed and precipitated	tonnes	675	577	1 297	1 073	1 186
Talc	tonnes	66 722	65 496	55 200	54 812	53 864
Tantalum and niobium						
Tantalum	tonnes	243	97	119	96	161
Tin						
Unwrought	tonnes	5 861	4 812	3 558	13 630	7 181
Unwrought alloys	tonnes	1 145	2 067	891	525	400
Scrap	tonnes	215	468	1 728	452	448
Titanium						
Ilmenite	tonnes	110 596	80 435	175 882	181 794	194 719
Other titanium minerals	tonnes	113 852	109 238	48 147	42	37
Titanium slag	tonnes	...	64 849	91 603	151 494	158 195
Metal	tonnes	27 401	27 938	30 267	30 905	32 305
Oxides	tonnes	74 787	67 102	71 528	74 708	58 748
Tungsten						
Metal	tonnes	1 903	3 204	4 607	2 925	1 865
Carbide	tonnes	838	974	913	1 409	1 023
Vanadium						
Pentoxide	tonnes	306	339	472	425	344
Metal	tonnes	338	812	407	583	314
Zinc						
Unwrought	tonnes	139 477	135 840	119 676	122 458	119 911
Unwrought alloys	tonnes	15 960	16 128	15 666	13 201	8 524
Zirconium						
Concentrates	tonnes	32 917	19 519	13 729	11 007	13 092
Metal	tonnes	444	338	467	446	521

Note(s)

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

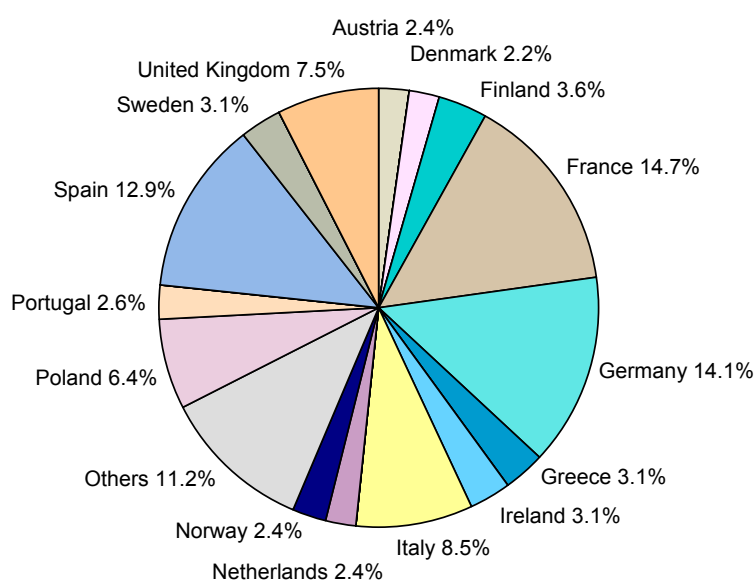
(b) Including manganiferous iron ore

STATISTICAL INFORMATION BY COMMODITY

Primary aggregates

- Primary aggregates are sand, gravel and crushed rock aggregates that are widely used in the construction industry. The trade data presented here are 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 used primarily by the construction industry to build and maintain the physical infrastructure on which everyone depends: houses, offices, roads, schools, hospitals, railways, shops, flood defences, etc. Aggregates are either used directly, for example for drainage or fill purposes, or are used to manufacture concrete and asphalt.
- France was the largest EU32 producer of primary aggregates in 2008, with just over 400 million tonnes (15 per cent of EU total), closely followed by Germany (14 per cent). This was the first time for many years that the output from these two countries was higher than Spain and this was due to a significant drop in Spain's production (down nearly 11 per cent compared to 2007).

EU32 Production of aggregates 2008



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

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Sand and gravel (a)	29 395 685	29 065 350	27 281 864	29 230 545	32 221 208
Crushed rock (a)	27 687 041	25 093 602	26 536 938	25 248 136	33 419 062
Belgium					
Sand and gravel (b) (c)	8 787 817	8 330 239	8 636 966	* 8 600 000	* 8 600 000
Crushed rock (b) (d)	36 980 382	38 826 735	39 937 651	* 43 000 000	* 4 000 000
Bulgaria					
Sand and gravel	9 719 350	12 835 622	15 289 051	17 607 212	17 033 156
Crushed rock	5 447 430	8 121 646	8 889 017	12 199 339	14 947 808
Cyprus					
Crushed rock	11 600 000	12 064 112	12 198 513	13 129 470	14 174 480
Czech Republic					
Sand and gravel	15 703 358	15 672 765	16 931 536	16 036 363	17 943 635
Crushed rock	28 846 776	30 221 600	32 731 255	35 302 421	36 282 774
Denmark					
Sand and gravel	57 300 000	69 500 000	72 508 000	68 255 000	59 937 000
Crushed rock	372 000	378 000	372 000	410 000	384 000
Estonia					
Sand and gravel	2 341 620	3 459 760	4 209 080	6 531 740	2 918 700
Crushed rock	5 426 600	6 828 600	8 298 400	8 855 800	7 891 000

Production continued

tonnes

Country	2004	2005	2006	2007	2008
Finland					
Sand and gravel	55 000 000	53 000 000	54 000 000	59 000 000	* 59 000 000
Crushed rock	43 000 000	45 000 000	46 000 000	54 000 000	* 54 000 000
France					
Sand and gravel	168 080 000	168 640 000	174 360 000	180 450 000	171 610 000
Crushed rock	223 170 000	222 780 000	233 090 000	242 950 000	236 770 000
Germany					
Sand and gravel	267 300 000	252 000 000	266 000 000	263 300 000	260 000 000
Crushed rock	125 600 000	122 244 000	138 700 000	134 000 000	132 500 000
Greece	* 90 000 000	* 90 000 000	* 90 000 000	* 90 000 000	* 85 000 000
Hungary					
Sand and gravel	46 354 829	69 027 609	46 458 296	34 815 891	36 647 400
Crushed rock	13 037 471	15 078 440	17 944 036	13 046 962	11 385 700
Ireland, Republic of					
Sand and gravel	* 40 000 000	* 40 000 000	* 64 000 000	* 40 000 000	* 25 000 000
Crushed rock	* 60 000 000	* 94 000 000	* 96 000 000	* 90 000 000	* 60 000 000
Italy					
Sand and gravel (a)	200 836 237	183 908 475	185 382 004	195 348 311	157 434 471
Crushed rock (a)	111 274 000	91 524 456	90 705 870	93 631 311	78 715 720
Latvia					
Sand and gravel	4 946 204	6 059 487	5 957 744	9 998 863	8 206 910
Crushed rock	414 305	586 607	582 081	552 145	507 591
Lithuania					
Sand and gravel	5 835 729	7 034 402	7 633 311	9 181 552	9 469 411
Crushed rock	3 683 266	4 757 023	5 259 535	6 424 791	6 913 160
Netherlands					
Sand and gravel	66 200 000	63 579 000	72 147 000	69 437 000	67 622 000
Norway					
Sand and gravel	15 000 000	15 000 000	13 418 000	14 855 000	14 817 000
Crushed rock	37 000 000	38 000 000	45 947 000	51 533 000	52 338 000
Poland					
Sand and gravel (e)	79 232 000	95 277 000	110 580 000	* 124 000 000	* 129 000 000
Crushed rock	29 271 189	33 098 360	38 835 618	46 854 829	49 442 388
Portugal					
Sand and gravel	9 405 437	8 284 238	9 764 029	10 664 828	* 11 000 000
Crushed rock	73 264 403	73 343 159	65 428 239	60 822 000	* 60 000 000
Romania					
Sand and gravel	14 567 501	17 030 886	21 817 372	26 276 857	31 377 110
Crushed rock	2 585 894	2 328 165	3 373 384	5 905 842	4 635 010
Slovakia					
Sand and gravel	4 892 089	6 807 116	7 522 034	6 470 725	7 517 655
Crushed rock	9 717 300	13 834 800	14 088 600	13 338 000	16 151 350
Slovenia					
Sand and gravel	12 373 000	12 432 000	17 873 000	21 548 000	4 500 000
Crushed rock	13 719 888	12 223 182	14 213 319	14 279 253	15 000 000
Spain					
Sand and gravel	113 947 729	125 299 480	130 000 000	120 000 000	90 000 000
Crushed rock	273 555 490	340 000 000	355 000 000	280 000 000	268 000 000
Sweden					
Sand and gravel	22 647 111	21 755 752	21 488 963	20 036 785	18 804 343
Crushed rock	54 737 031	62 313 089	70 517 845	64 047 058	66 757 671
Switzerland					
Sand and gravel	26 000 000	46 500 000	50 000 000	* 50 000 000	* 50 000 000
Crushed rock	3 000 000	5 300 000	5 700 000	* 5 700 000	* 5 700 000
United Kingdom					
Sand and gravel	97 333 000	94 666 000	92 107 000	93 236 000	85 473 000
Crushed rock (f)	147 067 000	141 636 000	145 578 000	148 534 000	127 996 000
EU32 Total	2 804 000 000	2 955 000 000	3 101 000 000	3 049 000 000	2 819 000 000

Note(s)
(see over)

Aggregates

Production continued

Note(s)

- (1) So far as possible, these production statistics include construction sand; gravel, pebbles, shingle and flint; crushed stone used for concrete aggregates, roadstone, and other construction uses; granules, chippings and powders. Listed under Prodcod codes 14211190, 14211210, 14211230, 14211250 and 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 EU32 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 construction sand and silica sand. Excludes gravel
 - (d) Includes gravel
 - (e) Includes an estimate for small producers
 - (f) Includes small quantities for other purposes in Northern Ireland

EU32 Production of aggregates 2004 - 08



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

tonnes

Country	2004	2005	2006	2007	2008
Austria	2 829 930	2 745 393	3 086 027	3 394 988	3 130 358
Belgium-Luxembourg	13 208 283	14 573 270	15 452 434	16 081 634	15 843 526
Bulgaria	384 420	160 032	282 018	330 088	268 120
Croatia	2 534 177	1 908 732	2 390 517	3 334 229	2 950 159
Cyprus	10	55	5 118	148 994	124 576
Czech Republic	344 850	468 540	772 913	716 787	699 987
Denmark	795 330	787 389	973 497	1 194 349	846 490
Estonia	487 863	522 792	563 697	573 530	701 067
Finland	422 709	580 815	735 655	837 957	850 685
France	9 389 763	8 492 936	8 928 358	8 383 027	8 565 175
Germany	21 817 271	21 698 651	25 912 337	29 024 954	29 470 321
Greece	108 042	43 306	48 990	49 781	50 453
Hungary	729 270	736 586	961 775	1 889 989	1 382 695
Ireland, Republic of	135 579	62 729	230 125	85 146	255 295
Italy	1 556 414	1 734 620	1 720 142	1 482 346	1 522 229
Latvia	10 278	13 178	11 618	32 783	54 321
Lithuania	460 569	957 488	871 522	1 053 802	943 673
Netherlands	8 300 000	6 900 000	9 100 000	9 300 000	10 400 000
Norway	12 561 778	13 334 212	14 357 509	16 183 927	16 683 638
Poland	790 734	1 237 482	1 671 890	1 378 634	1 237 976
Portugal	53 451	138 939	101 721	120 914	44 174
Romania	23 073	63 110	51 793	111 803	60 190
Slovakia (a)	* 552 000	* 796 000	* 644 000	* 744 000	* 1 388 000
Slovenia	166 176	221 830	324 830	437 208	402 033
Spain	1 694 285	1 546 315	2 489 305	2 042 075	1 478 362
Sweden	2 213 385	2 447 200	2 333 174	2 307 614	3 049 601
Switzerland	296 911	283 508	273 603	486 288	202 846
Turkey	758 169	1 631 232	586 393	73 162	1 183 150
United Kingdom	12 702 493	13 304 920	14 631 060	14 048 387	13 008 608

Note(s)

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

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

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

tonnes

Country	2004	2005	2006	2007	2008
Austria	2 087 667	2 516 839	2 622 855	3 961 223	3 447 013
Belgium-Luxembourg	20 219 032	20 831 220	22 303 782	23 810 336	27 170 472
Bulgaria	20 303	17 200	19 383	41 782	41 256
Croatia	2 404 091	4 603 358	3 867 559	4 583 241	4 618 579
Cyprus	(a)* 8 400	5 921	11 605	15 497	28 990
Czech Republic	509 217	574 008	690 730	252 049	333 726
Denmark	2 949 549	2 804 325	3 151 321	3 077 714	3 346 209
Estonia	446 019	933 376	932 688	929 218	988 981
Finland	75 016	43 488	254 665	326 347	280 600
France	9 431 953	10 264 292	12 064 403	11 381 954	11 214 300
Germany	11 127 947	11 563 984	11 147 034	11 913 688	13 369 162
Greece	199 144	22 026	45 081	341 376	425 485
Hungary	254 800	446 504	211 927	455 416	806 281
Ireland, Republic of	1 269 673	1 444 893	1 687 279	1 729 337	1 368 008
Italy	4 102 477	4 331 596	4 655 740	4 967 745	4 139 144
Latvia	629 613	1 320 287	1 412 127	1 663 783	2 033 701
Lithuania	1 069 921	1 289 117	1 214 058	1 333 772	1 301 091
Malta	8 880	4 529	11 666	29 929	27 924
Netherlands	37 100 000	40 800 000	43 000 000	33 400 000	38 100 000
Norway	85 471	67 562	66 708	72 906	80 161
Poland	1 756 513	1 775 291	2 976 252	5 566 874	5 868 908
Portugal	790 615	698 717	488 917	731 709	194 088
Romania	370 184	197 911	332 190	352 576	351 123
Slovakia	286 443	828 096	665 844	633 400	755 496

Aggregates

Imports continued

tonnes

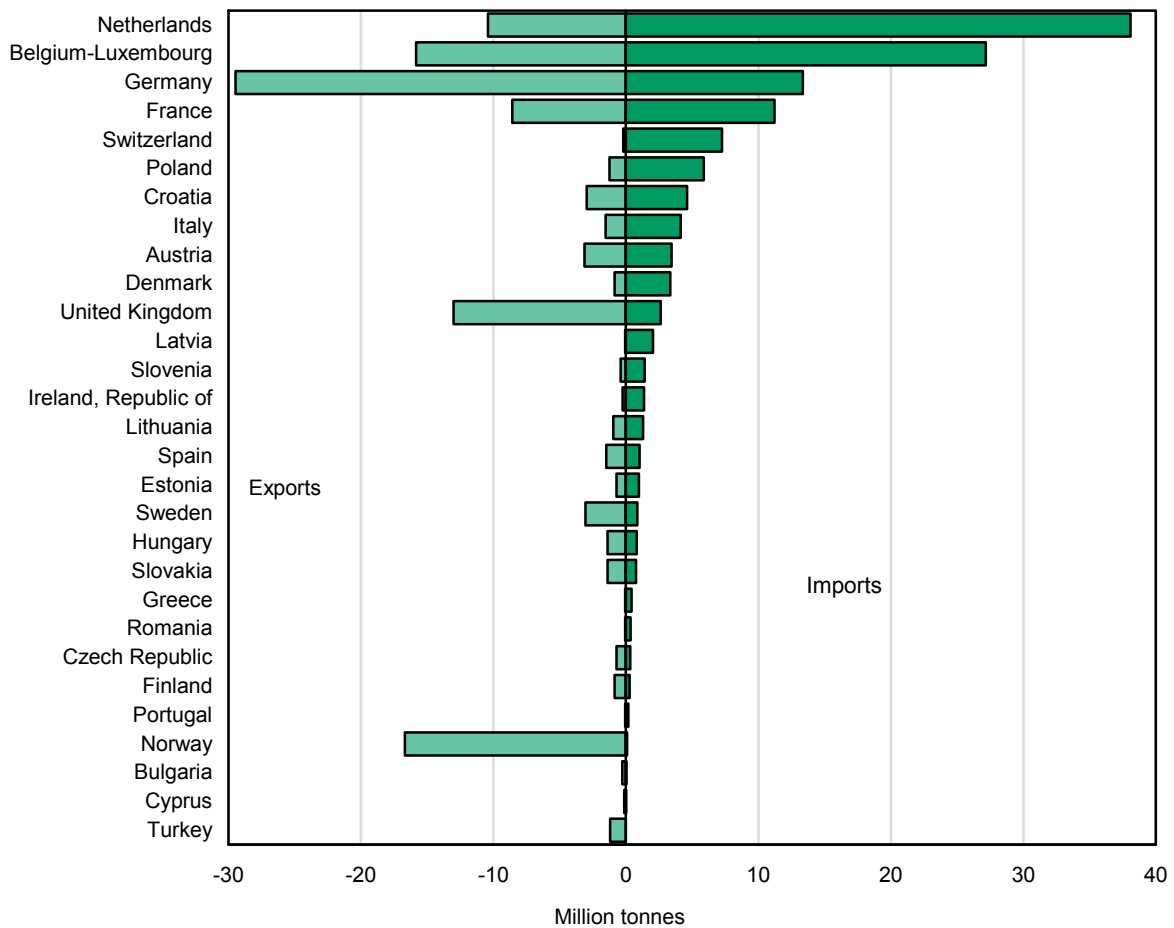
Country	2004	2005	2006	2007	2008
Slovenia	532 614	364 091	863 881	3 113 823	1 424 240
Spain	1 190 670	1 305 835	762 652	1 396 928	1 035 555
Sweden	729 992	810 385	1 135 048	1 068 840	864 988
Switzerland	6 413 474	6 261 007	6 700 038	7 371 907	7 256 472
Turkey	4 519	7 978	4 661	3 843	4 590
United Kingdom	1 543 380	2 160 513	2 905 198	2 806 448	2 631 986

Note(s)

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

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

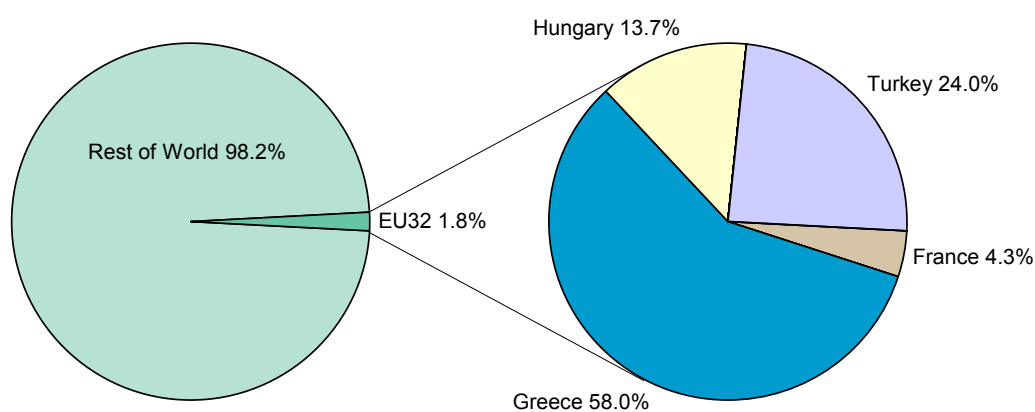
Aggregates - EU32 trade in 2008



Bauxite

- Bauxite is the only source of aluminium that is currently mined and is produced by deep chemical weathering of rocks in tropical to sub-tropical climates. There is limited EU32 production, leaving a very strong dependence on imports from countries outside the EU32.
- The chief use of bauxite is as a raw material for the production of alumina (aluminium oxide) the majority of which is converted to aluminium metal by electrolysis. Approximately ten per cent of bauxite is non-metallurgical grade and most of this is calcined for use in the abrasive or refractory markets.
- Australia continued to be the world's largest producer in 2008, with 31 per cent of the total world output. Greece was the largest producer within the EU32, with 58 per cent of EU32 production.
- Metallurgical grade bauxite is generally traded on long-term contracts and typical prices are not published. Chinese refractory grade bauxite generally traded in the range US\$550 per tonne to US\$650 per tonne for much of 2008, with Guyanan calcined bauxite slightly higher. However, as the global recession took hold, prices slipped to around US\$550 per tonne in January 2009 and to US\$400 per tonne to US\$535 per tonne by the end of 2009.

EU32 Production of bauxite 2008



Production of bauxite

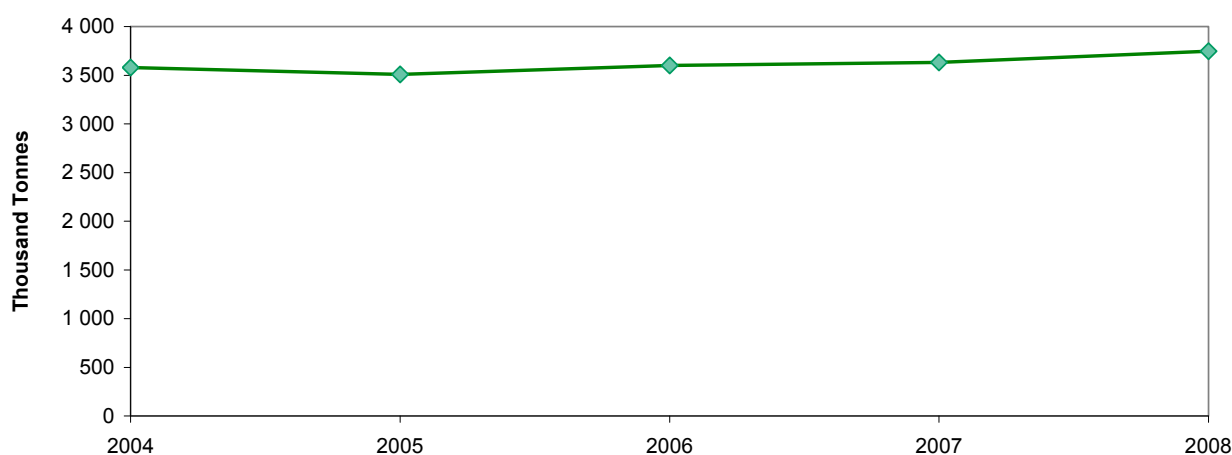
tonnes

Country	2004	2005	2006	2007	2008
France	170 000	175 000	160 000	* 160 000	* 160 000
Greece	2 396 065	2 441 443	2 162 900	2 093 433	2 174 000
Hungary	646 726	535 337	507 259	515 061	511 337
Turkey	365 836	356 480	771 227	863 404	* 900 000
EU32 Total	3 579 000	3 508 000	3 601 000	3 632 000	3 745 000

Note(s)

(1) This table includes production of refractory bauxite

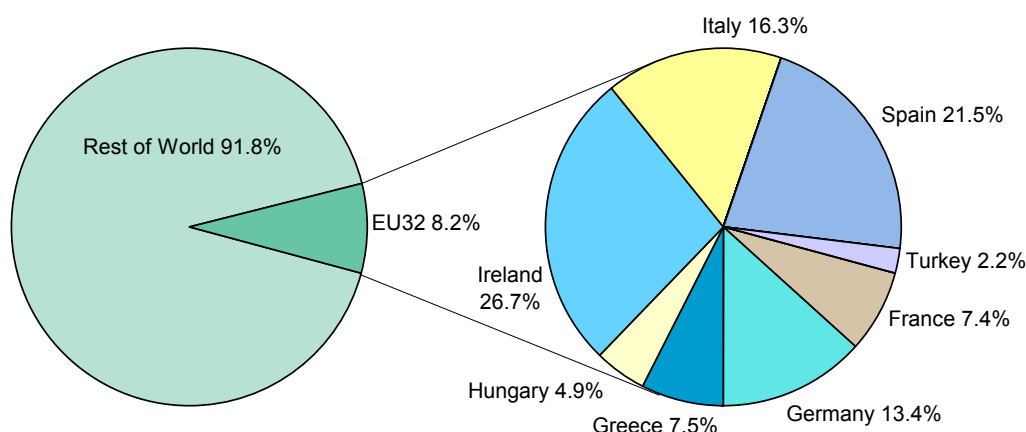
EU32 Production of bauxite 2004 - 08



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.
- China was the world's largest producer of alumina in 2008, with an increase in output of 17 per cent compared to 2007. The EU32 produced 6.7 million tonnes in 2008, representing 8.2 per cent of world production.
- Spot prices for metallurgical grade alumina fell during the latter part of 2008, as a result of the global recession, and continued to fall during the first part of 2009 reaching a low of US\$170 per tonne to US\$185 per tonne during March 2009, the lowest price since January 2003. However, prices subsequently recovered to end 2009 in the range US\$295 per tonne to US\$315 per tonne.

EU32 Production of alumina 2008



Production of alumina

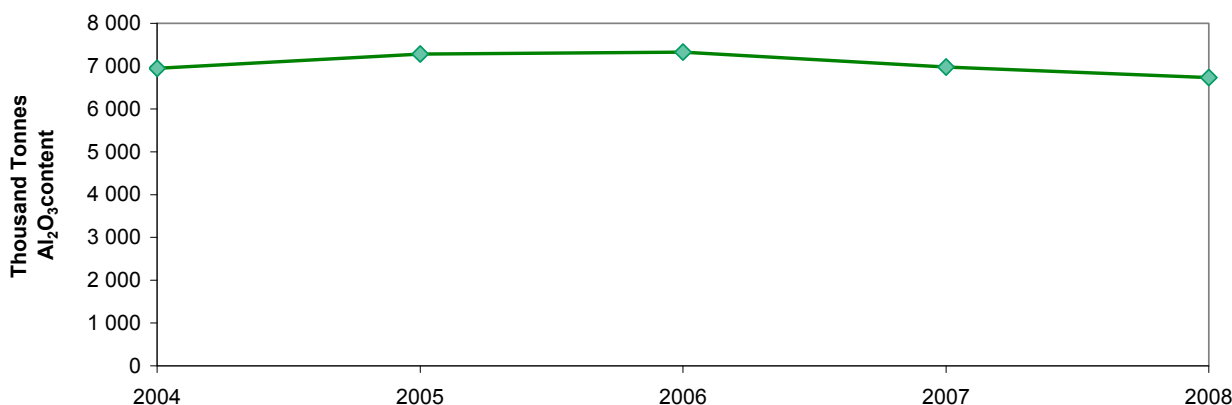
tonnes (Al₂O₃ content)

Country	2004	2005	2006	2007	2008
France	* 600 000	* 600 000	* 636 000	* 500 000	* 500 000
Germany	* 835 000	* 830 000	* 850 000	* 900 000	* 900 000
Greece	514 000	511 100	509 800	515 600	504 400
Hungary	* 304 000	* 270 000	* 270 000	* 300 000	* 330 000
Ireland, Republic of	* 1 500 000	* 1 800 000	1 800 000	1 800 000	1 800 000
Italy	1 064 000	1 070 000	1 090 000	1 327 000	* 1 100 000
Romania	560 243	689 329	622 083	22 830	344
Spain	* 1 400 000	* 1 400 000	* 1 400 000	* 1 450 000	* 1 450 000
Turkey	169 991	112 558	150 117	163 435	* 150 000
EU32 Total	6 947 000	7 283 000	7 328 000	6 979 000	6 735 000

Note(s)

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

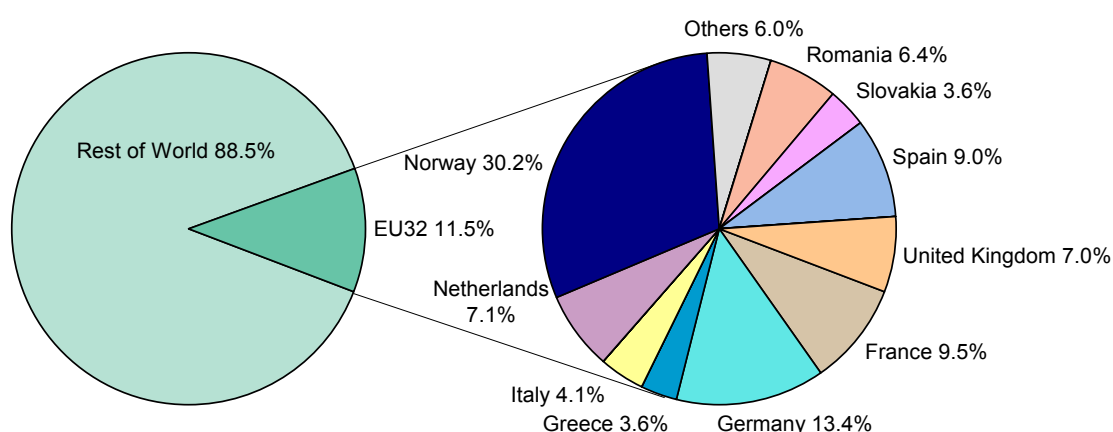
EU32 Production of alumina 2004 - 08



Aluminium metal

- Aluminium is a strong, lightweight metallic element that has many applications. The chief uses are in transportation, packaging and construction.
- China remained the world's largest producer in 2008, with 33 per cent of world production. The EU32 produced 4.5 million tonnes, representing 11 per cent of world production. Norway was the largest EU32 producer, with 30 per cent of the EU32 output.
- The London Metal Exchange official daily cash price for aluminium ingot increased sharply during the early part of 2008, reaching a peak of US\$3200 per tonne by July 2008. However, this was followed by an equally sharp fall towards the end of 2008 and this continued during the early months of 2009, reaching a low of US\$1253 per tonne in February, a drop of 62 per cent from its July 2008 peak. During the latter part of 2009, however, the price experienced a generally upward trend, finishing 2009 at US\$2200 per tonne.

EU32 Production of primary aluminium 2008

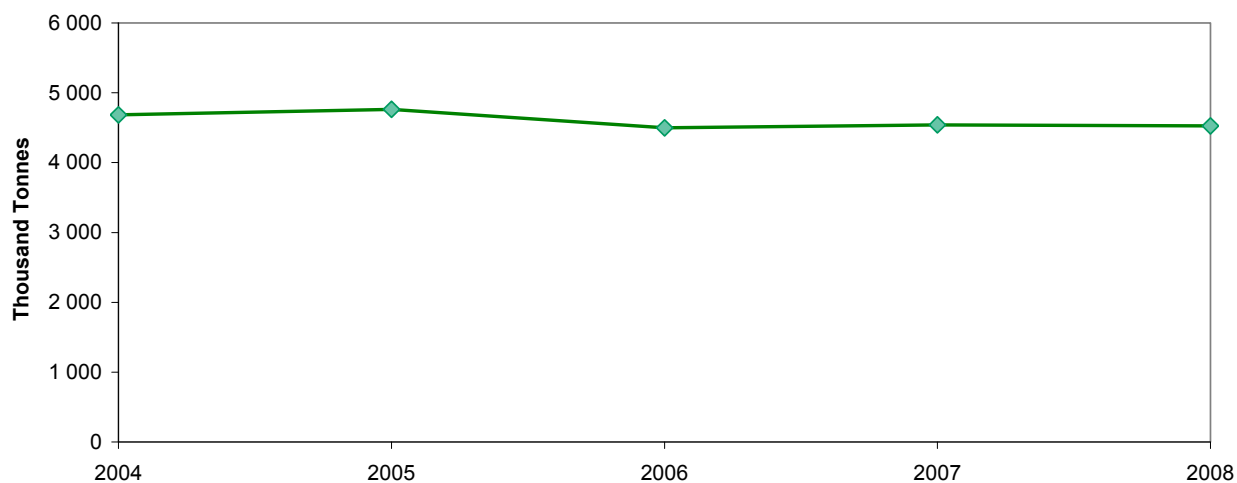


Production of primary aluminium

tonnes

Country	2004	2005	2006	2007	2008
France	447 000	440 000	442 879	430 159	431 600
Germany	667 800	647 900	515 539	551 000	605 880
Greece	166 634	165 300	164 500	167 937	162 339
Hungary	34 400	31 000	300	—	—
Italy	195 400	192 900	194 200	179 500	186 400
Netherlands	330 000	333 820	285 317	296 900	320 000
Norway	1 318 000	1 391 000	1 383 000	1 362 000	1 368 000
Poland	58 931	54 508	57 620	58 736	47 543
Romania	222 347	258 000	277 382	289 388	289 740
Slovakia	156 893	159 203	158 289	160 461	162 995
Slovenia	120 700	120 642	118 682	111 016	83 300
Spain	397 500	395 000	367 400	405 100	407 700
Sweden	100 591	102 107	101 668	99 842	81 913
Switzerland	44 879	44 800	12 000	—	—
Turkey	64 002	59 000	60 000	63 400	60 400
United Kingdom	359 631	368 477	360 325	364 595	316 000
EU32 Total	4 685 000	4 764 000	4 499 000	4 540 000	4 524 000

EU32 Production of primary aluminium 2004 - 08



Exports of bauxite, alumina and aluminium

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Bauxite	1 221	980	765	1 225	1 202
Unwrought	13 341	6 616	7 630	8 294	4 120
Unwrought alloys	122 693	125 796	119 058	111 571	109 757
Scrap	71 362	67 434	80 200	91 960	90 825
Belgium-Luxembourg					
Bauxite	54 734	46 717	53 680	75 904	53 444
Alumina	...	10 714	18 151	13 629	4 858
Unwrought	266 682	267 811	210 559	164 800	160 684
Unwrought alloys	42 010	38 889	29 871	268 119	175 510
Scrap	137 374	149 914	186 613	208 272	190 301
Bulgaria					
Unwrought alloys	4 616	5 254	11 692	10 290	8 931
Scrap	22 036	21 902	29 245	23 577	18 478
Croatia					
Scrap	12 024	15 927	19 832	20 886	17 769
Cyprus					
Scrap	3 699	4 578	4 880	4 745	4 409
Czech Republic					
Unwrought (a)	48 698	48 885	45 876	54 457	53 682
Scrap	43 223	39 297	53 986	61 067	59 196
Denmark					
Alumina	7 146	3 579	3 470	5 471	5 300
Unwrought alloys	14 019	23 509	31 768	36 831	32 499
Scrap	55 407	70 828	62 734	50 164	56 727
Estonia					
Unwrought (a)	5 522	2 414	3 013	8 083	27 839
Scrap	8 062	10 686	8 263	10 379	19 895
Finland					
Unwrought alloys	17 254	14 107	11 411	12 924	14 239
Scrap	22 946	21 053	25 921	38 364	37 345
France					
Bauxite	2 985	5 195	46 042	26 661	12 295
Alumina	232 762	255 392	224 866	276 207	319 388
Alumina hydrate	144 331	139 694	168 250	146 531	130 881
Unwrought	70 010	77 097	65 943	45 503	46 364
Unwrought alloys	78 047	95 700	148 253	136 803	139 176
Scrap	299 226	314 243	345 107	380 708	344 436

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Germany					
Bauxite	30 647	28 087	30 772	36 361	33 636
Alumina	294 034	204 075	313 586	282 245	305 514
Alumina hydrate	528 700	527 900	717 433	672 561	634 635
Unwrought	58 365	60 757	72 132	61 090	75 386
Unwrought alloys	354 998	330 843	360 157	361 917	359 628
Scrap	544 522	583 987	675 261	770 042	702 739
Greece					
Bauxite	925 282	1 136 505	912 093	1 086 405	787 160
Alumina	404 852	439 374	457 726	715 003	412 385
Alumina hydrate	3 760	2 944	8 239	21 716	29 552
Unwrought	61 846	60 964	64 487	27 195	26 083
Unwrought alloys	8 597	15 017	18 804	67 732	64 998
Scrap	13 777	15 205	19 105	13 566	13 261
Hungary					
Alumina	170 664	142 470	170 030	178 984	168 347
Alumina hydrate	80 314	75 811	90 705	98 187	102 652
Unwrought (a)	25 475	22 635	28 884	27 580	10 981
Scrap	38 684	41 192	34 986	29 228	22 098
Ireland, Republic of					
Bauxite	5	472	9 210	11 167	1 438
Alumina	1 388 723	1 459 036	1 534 845	1 652 967	1 709 302
Alumina hydrate	44 645	85 062	115 676	10 011	88 039
Unwrought alloys	3 776	3 542	4 637	5 425	3 711
Scrap	15 367	16 475	18 784	22 397	21 041
Italy					
Bauxite	40 512	121 029	12 082	49 989	26 718
Alumina	606 416	651 704	748 594	696 603	571 090
Alumina hydrate	24 895	26 652	26 668	34 521	35 538
Unwrought	4 203	8 742	20 315	18 971	18 249
Unwrought alloys	43 578	57 573	73 137	104 361	96 798
Scrap	26 630	35 904	50 024	42 052	56 214
Latvia					
Unwrought alloys	39 368	34 697	18 180	19 281	17 012
Scrap	748	910	1 767	2 416	4 203
Lithuania					
Unwrought alloys	3 943	3 922	3 410	3 453	3 994
Scrap	11 953	7 210	5 640	5 701	5 280
Macedonia					
Scrap	1 107	2 105	2 788	1 795	2 043
Malta					
Scrap	1 008	1 142	1 221	1 136	1 441
Netherlands					
Bauxite	96 740	93 993	107 660	41 170	129 186
Alumina	267 947	264 116	301 767	542 794	257 169
Alumina hydrate	42 398	48 643	45 480	151 641	85 713
Unwrought	314 462	304 993	370 471	490 373	332 871
Unwrought alloys	320 583	304 675	341 439	341 670	361 012
Scrap	234 761	265 755	334 426	317 877	264 142
Norway					
Unwrought	150 479	147 295	126 841	113 285	105 729
Unwrought alloys	1 333 251	1 365 929	1 412 569	1 496 556	1 484 854
Scrap	39 742	38 218	42 804	41 296	41 476
Poland					
Bauxite	2 378	1 300	1 693	596	536
Unwrought (a)	70 740	81 962	80 266	78 187	82 242
Scrap	71 525	82 875	107 939	113 649	123 468
Portugal					
Unwrought alloys	105 837	140 505	152 591	130 636	127 150
Scrap	28 576	41 797	38 026	41 603	40 020
Romania					
Bauxite	8 878	8 967	129	47	526
Alumina	209 950	261 862	137 753	5 191	0
Unwrought	59 363	31 543	12 672	23 193	61 638
Unwrought alloys	20 145	7 711	10 110	9 080	6 690
Scrap	4 703	4 829	11 132	14 332	16 021

Aluminium and Bauxite

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Slovakia					
Unwrought	6 827	15 302	66 893	61 319	44 845
Unwrought alloys	183 346	159 134	93 141	118 286	129 771
Scrap	7 594	8 042	9 876	10 421	10 109
Slovenia					
Bauxite	...	...	2 650	8 013	450
Alumina	24 278	205 584	241 631	243 062	258 238
Unwrought alloys	124 069	123 555	133 005	123 041	88 038
Scrap	14 971	21 103	27 584	30 132	26 863
Spain					
Bauxite	4 159	3 821	3 647	6 057	5 623
Alumina	491 808	561 125	511 992	539 739	671 009
Alumina hydrate	241 910	264 829	258 854	199 679	236 855
Unwrought	1 024	3 002	8 245	15 999	39 359
Unwrought alloys	102 146	111 992	128 262	125 008	123 577
Scrap	35 021	36 688	41 923	34 520	109 493
Sweden					
Alumina	6 160	14 133	14 481	14 278	13 919
Unwrought	22 096	9 390	910	735	6 307
Unwrought alloys	105 752	88 311	112 575	89 591	89 190
Scrap	79 433	69 166	67 879	107 946	106 581
Switzerland					
Unwrought (a)	8 180	14 499	21 257	22 645	9 938
Scrap	108 536	122 729	140 657	139 599	125 769
Turkey					
Bauxite	4 420	1 531	89 764	254 689	262 708
Alumina	29 915	45 914	73 707	142 557	118 915
Unwrought alloys	7 702	6 138	9 072	13 012	10 827
Unwrought	373	21 034	38 690	47 574	50 056
Scrap	9 955	12 558	14 275	13 415	16 218
United Kingdom					
Bauxite	6 576	4 325	28 636	4 276	6 121
Alumina	5 766	4 336	9 979	9 016	9 517
Alumina hydrate (b)	* 35 500	* 20 600	* 1 900	* 5 300	* 5 300
Unwrought	29 949	48 684	17 530	30 631	20 690
Unwrought alloys	306 372	329 691	331 598	269 523	265 018
Scrap	319 217	474 587	385 211	906 831	872 988

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

Imports of bauxite, alumina and aluminium

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Bauxite	36 791	36 123	25 291	16 717	21 727
Alumina	23 636	41 269	45 777	49 728	55 639
Alumina hydrate	6 372	10 125	12 821	16 056	20 205
Unwrought	106 348	82 597	113 047	140 286	154 792
Unwrought alloys	229 607	214 611	235 053	250 209	218 902
Scrap	128 798	150 412	157 256	161 995	170 315
Belgium-Luxembourg					
Bauxite	82 208	87 376	59 874	85 963	88 894
Alumina	12 942	10 879	28 030	28 985	14 918
Alumina hydrate	33 798	37 831	45 723	46 815	36 100
Unwrought	513 835	497 013	451 309	485 128	372 140
Unwrought alloys	235 761	265 937	286 345	329 777	245 870
Scrap	157 812	158 799	197 942	380 317	320 354

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Bulgaria					
Alumina	1 663	1 401	2 039	2 368	1 370
Unwrought	23 579	25 562	46 154	39 850	42 738
Unwrought alloys	11 936	15 185	20 490	19 617	18 557
Scrap	435	1 449	2 179	3 554	4 028
Croatia					
Bauxite	48 302	112 007	80 441	115 367	107 237
Alumina	1 885	1 672	1 405	2 431	2 440
Unwrought	47 437	56 509	53 021	54 067	57 828
Unwrought alloys	9 672	14 915	18 893	22 039	20 786
Cyprus					
Unwrought alloys	10 858	9 898	12 481	13 868	13 408
Czech Republic					
Bauxite	20 922	24 315	24 829	26 865	17 698
Alumina	26 898	28 458	24 078	30 523	28 245
Alumina hydrate	17 215	10 898	9 782	7 834	6 916
Unwrought	75 289	69 977	74 392	82 910	68 362
Unwrought alloys	90 688	96 702	104 238	119 773	124 643
Scrap	28 542	34 226	48 937	63 508	58 424
Denmark					
Bauxite	13 801	9 148	9 025	6 572	7 317
Alumina	23 666	21 979	28 709	25 643	27 582
Unwrought (a)	75 233	70 617	79 573	86 389	85 420
Scrap	39 949	63 678	64 803	66 038	70 726
Estonia					
Unwrought (a)	5 859	1 686	7 021	3 035	26 545
Scrap	431	453	1 338	808	485
Finland					
Bauxite	4 782	3 661	6 366	4 909	10 461
Alumina	2 220	2 659	2 327	3 296	2 350
Alumina hydrate	37 361	28 300	31 024	37 163	22 243
Unwrought	3 295	4 057	1 145	1 213	1 332
Unwrought alloys	37 999	40 510	39 755	49 299	41 635
Scrap	18 901	15 537	14 906	19 051	21 978
France					
Bauxite	1 507 504	1 799 671	1 664 642	2 001 899	1 788 358
Alumina	644 513	655 246	667 146	710 029	722 371
Alumina hydrate	41 187	41 682	45 085	46 584	51 289
Unwrought	144 053	150 798	198 042	147 693	113 771
Unwrought alloys	369 795	366 369	394 929	449 505	396 382
Scrap	143 833	135 611	208 142	191 897	197 876
Germany					
Bauxite	2 119 259	2 435 244	2 143 631	3 141 693	2 995 241
Alumina	1 107 265	999 798	912 564	790 515	1 017 746
Alumina hydrate	204 721	231 124	219 035	266 042	241 736
Unwrought	628 038	648 764	754 311	786 506	693 075
Unwrought alloys	1 170 875	1 121 715	1 318 713	1 444 289	1 370 179
Scrap	462 580	438 066	539 367	613 084	543 839
Greece					
Bauxite	247 358	206 870	268 899	376 304	226 374
Alumina	905	1 049	71 073	283 255	38 828
Unwrought	116 074	121 266	125 541	125 327	129 407
Unwrought alloys	51 522	68 958	62 828	73 561	63 670
Scrap	16 631	18 083	20 030	50 470	28 960
Hungary					
Bauxite	189 528	279 660	243 873	319 681	297 832
Alumina	8 751	15 638	2 558	3 350	9 505
Unwrought	337 995	109 382	109 506	132 695	122 319
Unwrought alloys	32 021	54 362	72 573	149 299	107 123
Scrap	13 111	17 164	49 076	37 204	56 347
Ireland, Republic of					
Bauxite	3 740 006	3 606 983	3 368 967	4 144 231	3 009 615
Alumina	6 626	4 252	7 470	9 268	9 579
Unwrought (a)	6 603	4 092	2 756	1 261	309

Aluminium and Bauxite

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Italy					
Bauxite	2 407 108	2 602 224	2 618 296	2 374 609	2 417 499
Alumina	142 931	147 537	137 469	148 384	144 473
Alumina hydrate	151 086	155 718	156 231	166 453	143 217
Unwrought	434 802	426 721	481 919	534 385	445 882
Unwrought alloys	468 500	463 411	504 142	545 052	436 207
Scrap	346 736	326 901	366 623	432 780	377 441
Latvia					
Unwrought (a)	6 100	1 810	577	154	21
Scrap	27 340	16 970	6 505	6 837	7 677
Lithuania					
Alumina	10 388	13 079	11 176	13 304	10 282
Scrap	1 131	1 841	1 964	3 380	1 887
Macedonia					
Unwrought (a)	1 753	1 610	2 941	3 930	3 446
Netherlands					
Bauxite	231 213	169 012	118 203	108 088	182 711
Alumina	671 167	654 487	440 195	706 255	689 724
Alumina hydrate	181 328	223 823	205 902	190 351	178 940
Unwrought	349 481	370 979	650 035	713 441	248 386
Unwrought alloys	249 182	287 504	321 582	358 930	479 786
Scrap	174 969	189 722	197 160	204 117	210 203
Norway					
Bauxite	9 035	16 601	11 384	3 446	10 232
Alumina	2 620 149	2 723 588	2 730 064	2 535 547	2 753 105
Alumina hydrate	42 775	45 957	43 721	48 560	50 401
Unwrought	325 514	328 722	352 293	435 126	381 638
Unwrought alloys	29 974	42 056	34 783	73 058	58 995
Scrap	70 430	20 806	26 326	32 024	37 386
Poland					
Bauxite	82 233	59 758	61 638	71 598	59 907
Alumina	124 274	102 845	114 800	120 768	126 143
Alumina hydrate	26 927	29 538	27 358	27 634	25 334
Unwrought	85 010	62 403	76 996	105 281	71 563
Unwrought alloys	119 305	140 792	167 914	192 930	195 072
Scrap	31 536	39 907	52 498	59 623	67 176
Portugal					
Alumina	9 257	6 250	7 760	9 325	9 750
Unwrought	10 903	13 941	16 292	16 859	17 732
Unwrought alloys	200 335	224 631	237 617	214 990	214 614
Scrap	4 214	2 651	1 487	3 994	2 409
Romania					
Bauxite	1 532 335	1 655 045	1 597 023	75 934	45 527
Alumina	120 826	27 498	28 342	482 375	487 304
Alumina hydrate	5 076	1 852	15 253	16 927	17 822
Unwrought (a)	7 449	2 849	4 151	10 191	16 416
Scrap	43	565	436	3 833	598
Slovakia					
Bauxite	7 991	3 669	5 886	7 524	5 778
Alumina	366 784	307 756	314 576	311 914	311 891
Unwrought (a)	45 913	31 683	31 521	52 718	41 681
Scrap	13 701	12 567	8 550	8 748	4 638
Slovenia					
Bauxite	44 560	47 935	51 064	63 229	40 006
Alumina	264 319	450 273	480 454	466 163	438 579
Alumina hydrate	14 131	23 581	24 102	28 628	27 121
Unwrought	57 362	73 137	48 337	65 589	67 405
Unwrought alloys	43 403	46 782	60 484	58 215	50 389
Scrap	27 390	47 381	50 865	52 338	51 319
Spain					
Bauxite	3 329 441	3 224 101	3 007 043	3 547 201	3 618 306
Alumina	55 184	58 627	56 961	53 579	50 417
Alumina hydrate	30 429	43 246	49 725	49 451	41 614
Unwrought	91 382	110 257	95 436	122 303	82 512
Unwrought alloys	235 123	223 627	303 607	328 314	281 270
Scrap	86 553	99 459	103 839	123 074	110 745

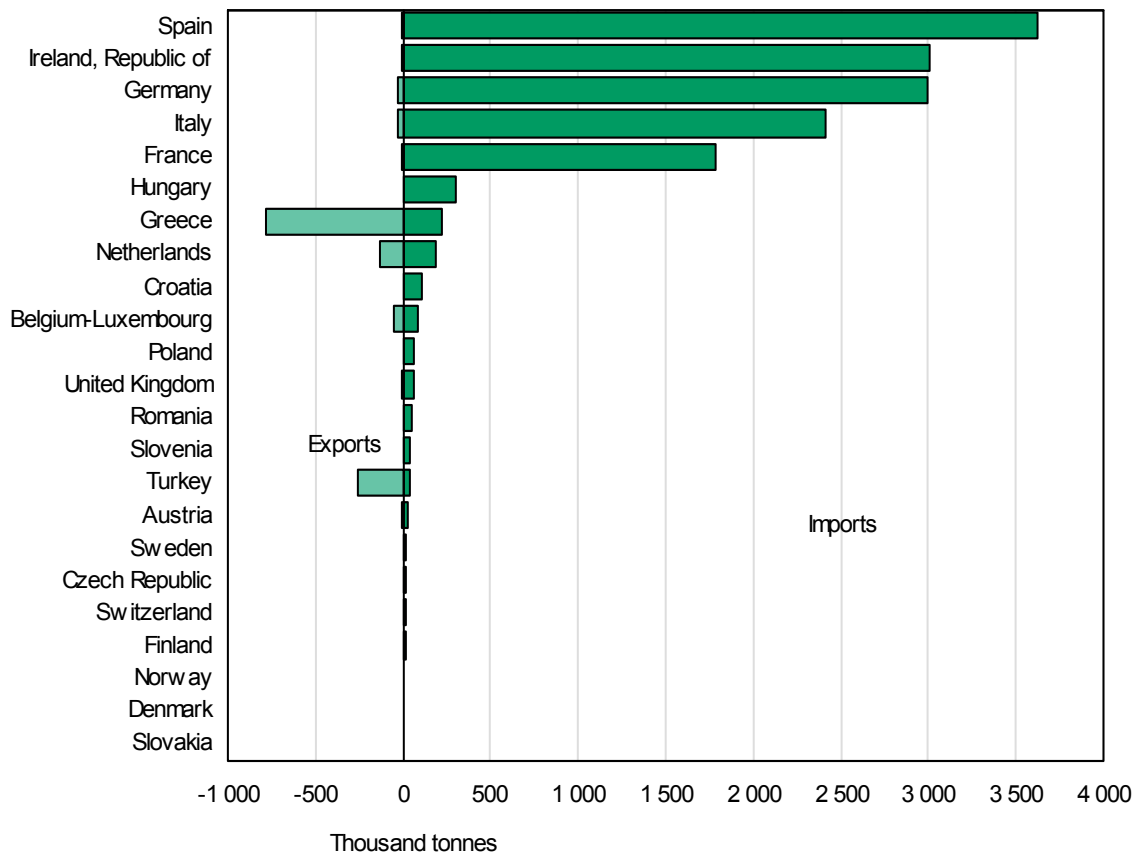
Imports continued						tonnes
Country	2004	2005	2006	2007	2008	
Sweden						
Bauxite	28 758	3 171	2 846	30 099	18 761	
Alumina	205 734	191 504	201 496	43 101	161 638	
Alumina hydrate	66 156	62 549	56 535	94 218	95 834	
Unwrought	29 493	17 916	7 959	46 431	47 534	
Unwrought alloys	120 732	117 202	135 270	159 628	144 343	
Scrap	24 082	24 309	32 198	36 838	40 125	
Switzerland						
Bauxite	8 066	9 929	5 901	5 850	12 439	
Alumina	87 235	88 358	21 431	10 745	11 036	
Alumina hydrate	16 945	16 823	18 333	17 875	17 235	
Unwrought	73 413	75 987	111 780	136 214	127 018	
Unwrought alloys	59 125	56 059	79 666	78 916	62 962	
Scrap	20 734	27 617	26 711	32 716	31 728	
Turkey						
Bauxite	34 592	46 016	52 627	53 202	39 256	
Alumina	19 341	19 665	23 179	12 713	39 507	
Unwrought	182 113	236 076	245 876	296 098	327 525	
Unwrought alloys	144 836	146 853	168 498	193 702	270 871	
Scrap	11 648	16 723	7 061	5 634	16 868	
United Kingdom						
Bauxite	122 021	103 522	86 882	48 741	57 971	
Alumina	748 933	755 443	823 115	787 218	705 033	
Alumina hydrate	124 451	130 321	101 126	112 287	110 503	
Unwrought	116 545	114 189	169 259	201 262	160 797	
Unwrought alloys	118 398	87 063	122 748	93 145	93 210	
Scrap	78 309	116 285	137 626	158 827	145 819	

Note(s)

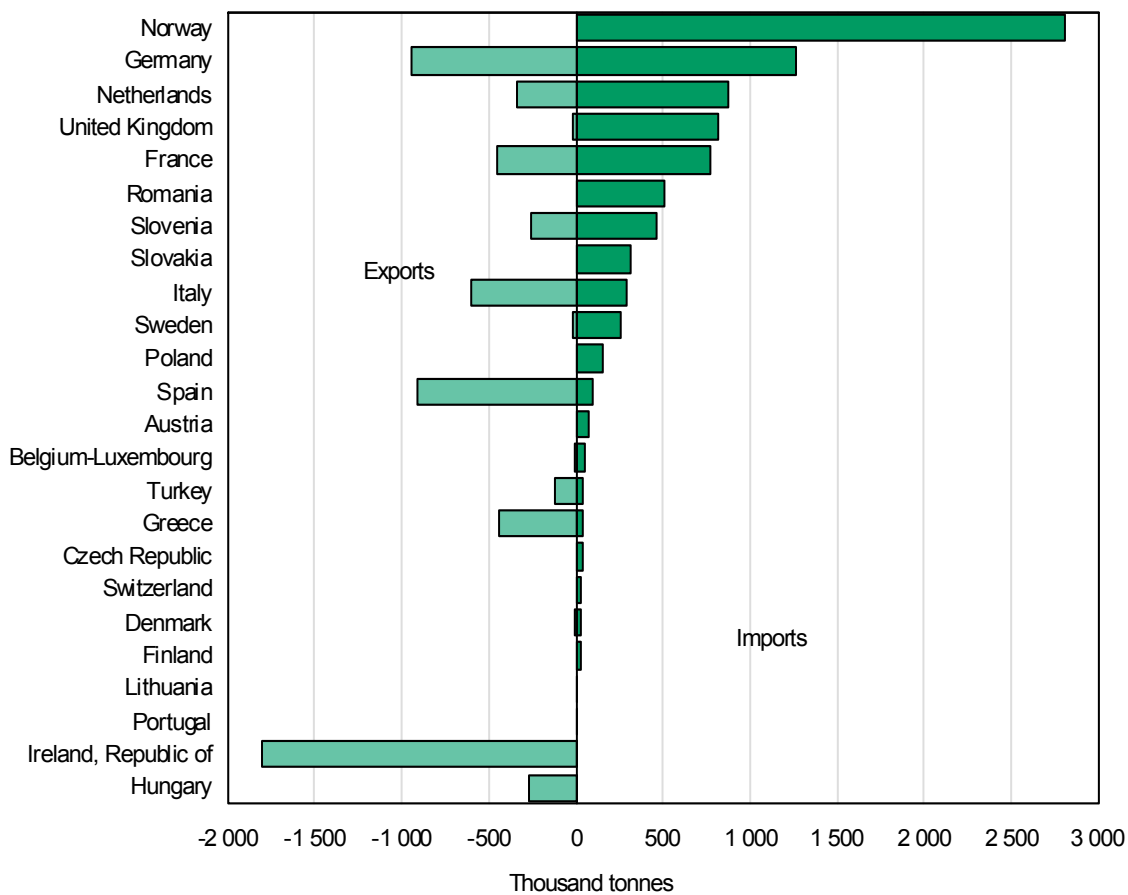
- (1) Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
- (2) In this table the term 'unwrought' aluminium corresponds to item 7601 of the Harmonised System and comprises ingots, blocks, unwrought bars, etc.
- (3) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

(a) Including alloys

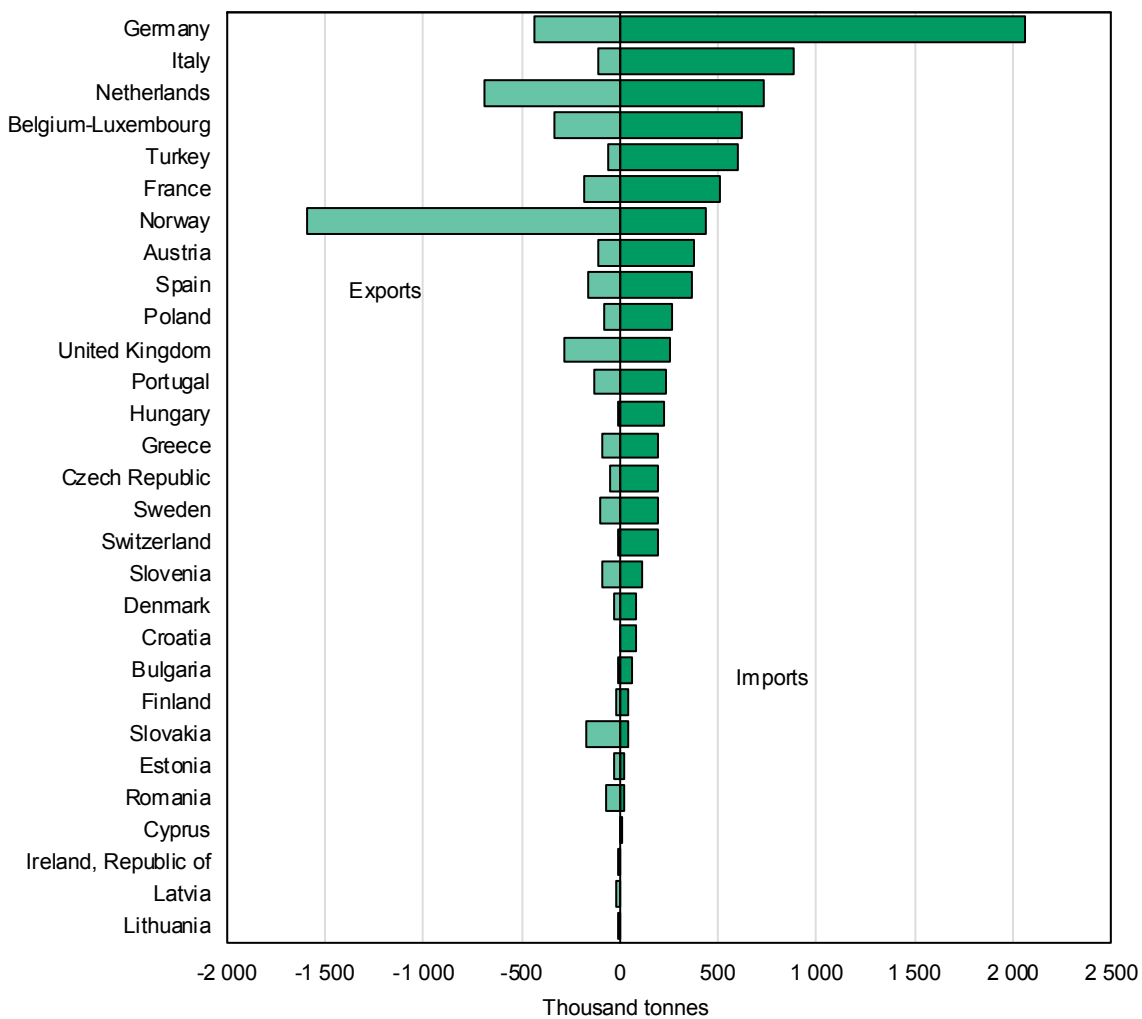
Bauxite - EU32 trade in 2008



Alumina and alumina hydrate - EU32 trade in 2008



Aluminium metal - EU32 trade in 2008



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 sheaths.
- China was by far the largest mine producer of antimony in 2008, with 90 per cent of world production. Antimony is also produced as a by-product of lead refining in many countries. Less than one per cent of world production of antimony is produced in the EU32.
- Antimony metal, minimum 99.65% Sb, and antimony oxide, a white powder, are the most commonly traded forms. In 2008 the price of antimony metal (free market in warehouse) rose from US\$5564–US\$5664 per tonne in January to a high of US\$6650–US\$6850 per tonne by September before falling sharply towards the end of the year. In 2009 the price reached a low in January of US\$4183–US\$4400 per tonne, but subsequently recovered to end the year in the range US\$6281–US\$6487 per tonne.

Mine production of antimony

tonnes (metal content)

Country	2004	2005	2006	2007	2008
Turkey	* 700	* 1 200	* 1 100	* 1 200	* 1 300

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	2004	2005	2006	2007	2008
Austria					
Metal	19	1 089	3	1	0
Belgium-Luxembourg					
Ores and concentrates	...	77	360	301	228
Metal	493	693	1 580	974	494
Oxide	12 443	11 526	12 661	11 643	9 636
Czech Republic					
Oxide	116	145	108	139	133
France					
Metal	79	186	53	19	44
Oxide	4 540	5 177	4 964	6 109	6 261
Germany					
Metal	12	15	30	141	33
Oxide	786	724	892	1 130	932
Greece					
Metal	3	141	160	143	81
Italy					
Ores and concentrates	100	274	250	355	386
Oxide	207	94	254	237	569
Netherlands					
Metal	212	570	886	308	185
Oxide	652	664	780	496	346
Portugal					
Metal	26	1	646	267	60
Spain					
Metal	409	13	21	17	143
Oxide	706	859	2 031	246	1 023
Turkey					
Ores and concentrates	700	920	679	819	1 000
Metal	25	63	5	28	0
United Kingdom					
Metal	88	54	27	21	35
Oxide	663	621	397	379	558

Imports of antimony

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Metal	53	74	51	104	63
Oxide	316	263	271	277	245
Belgium-Luxembourg					
Metal	12 225	10 722	11 543	11 915	8 851
Oxide	1 708	1 735	2 524	2 342	920
Bulgaria					
Metal	47	...	34	100	35
Czech Republic					
Metal	14	72	82	64	131
Oxide	557	588	503	604	521
Finland					
Oxide	248	199	256	281	160
France					
Metal	8 486	7 766	8 919	8 568	9 078
Oxide	2 096	2 243	2 092	3 315	1 923
Germany					
Metal	178	148	421	612	700
Oxide	7 072	6 560	8 305	8 527	8 672
Greece					
Ores and concentrates	119	95	131	83	27
Metal	46	24	0	21	63
Hungary					
Oxide	186	180	139	192	144
Italy					
Ores and concentrates	879	1 005	829	851	1 171
Metal	743	164	279	399	300
Oxide	5 528	5 543	6 061	5 950	6 168
Netherlands					
Metal	817	705	651	699	234
Oxide	2 932	3 717	35 127	3 783	51 439
Norway					
Metal	0	71	11	70	44
Oxide	775	305	507	337	371
Poland					
Metal	80	28	158	142	52
Oxide	1 042	1 231	1 338	1 315	1 086
Portugal					
Oxide	242	137	166	172	161
Romania					
Metal	62	55	43	68	30
Oxide	88	73	97	190	153
Slovakia					
Oxide	116	118	82	104	48
Slovenia					
Metal	84	137	98	110	71
Spain					
Ores and concentrates	105	108	175	164	154
Metal	2 270	1 881	1 596	1 676	1 987
Oxide	5 656	808	984	1 146	899
Sweden					
Metal	234	199	337	546	166
Oxide	328	377	296	319	293
Switzerland					
Ores and concentrates	5 004	1 722	201	38	—
Metal	93	58	56	57	18
Oxide	1 174	1 026	1 141	1 461	1 328
Turkey					
Metal	87	40	46	37	346
Oxide	460	377	135	106	522
United Kingdom					
Metal	410	60	81	110	98
Oxide	2 976	2 048	2 291	1 917	2 454

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 whilst arsenic metal has a number of minor uses.
- China was the largest producer of white arsenic in 2008 and is estimated to produce more than half of world output.
- In 2008 the price of metallic arsenic dropped from the range US\$0.83–US\$0.88 per pound to the range US\$0.65–US\$0.70 per pound. In 2009 it dropped slightly further to the range US\$0.60–US\$0.65 per pound but subsequently remained constant.

Production of white arsenic

tonnes

Country	2004	2005	2006	2007	2008
Belgium	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Portugal	* 15	* 15	* 15	* 15	* 15

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	2004	2005	2006	2007	2008
Belgium-Luxembourg					
Metallic arsenic	10	101	2 542	117	77
France					
Metallic arsenic	...	8	15	3	5
Germany					
Metallic arsenic	14	20	20	32	41
Italy					
Metallic arsenic	—	16	2	—	—
Netherlands					
Metallic arsenic	115	50	33	59	67

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	2004	2005	2006	2007	2008
Austria					
Metallic arsenic	...	2	1	1	3
Belgium-Luxembourg					
Metallic arsenic	95	164	105	466	65
Bulgaria					
Metallic arsenic	18	5	10	30	12
Czech Republic					
Metallic arsenic	8	9	11	10	26
France					
Metallic arsenic	9	21	20	19	8
Greece					
Metallic arsenic	21	35	16	9	9
Ireland, Republic of					
Metallic arsenic	...	158	125	137	95
Italy					
Metallic arsenic	84	54	52	64	43
Netherlands					
Metallic arsenic	110	85	20	19	8

Imports continued

Country	2004	2005	2006	2007	2008
Poland					
Metallic arsenic	14	39	21	24	42
Slovakia					
Metallic arsenic	6	0	5	2	6
Slovenia					
Metallic arsenic	5	5	12	11	—
Spain					
Metallic arsenic	92	112	143	116	192
Sweden					
Metallic arsenic	13	6	...	12	6
Switzerland					
Metallic arsenic	2	5	2	5	—
Turkey					
Metallic arsenic	48	98	77	63	71
United Kingdom					
Metallic arsenic	165	3	49	70	52

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, together with almost all production in the EU32. The largest producer in the world is Russia with 46 per cent of world production followed by China with 17 per cent of world production.
- The price of asbestos (U.S. chrysotile imports) was about US\$746 per tonne in 2008, an increase of 58 per cent compared to 2007. However during 2009 the price dropped by 18 per cent to US\$613 per tonne.

Production of asbestos

tonnes

Country	2004	2005	2006	2007	2008
Greece	* 4 000	—	—	—	—

Note(s)

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

EU32 Production of asbestos 2004 - 08



Exports of unmanufactured asbestos

tonnes

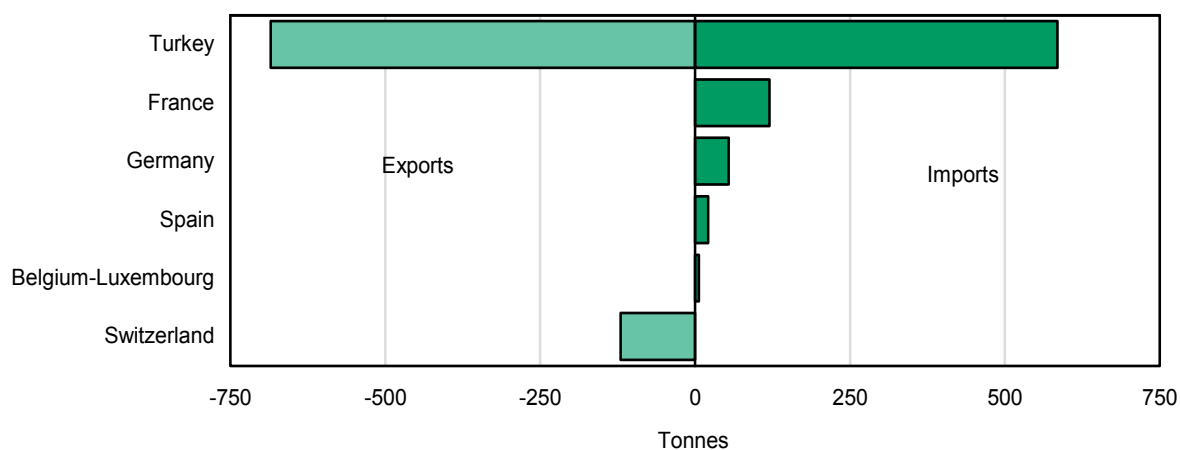
Country	2004	2005	2006	2007	2008
Belgium-Luxembourg	3	...	164	17	—
France	31	—	8	—	...
Greece	4 256	—	...	—	...
Italy	...	20	5	29	—
Malta	...	65	16	...	...
Switzerland	0	0	0	290	120
Turkey	0	—	3	990	685

Imports of unmanufactured asbestos

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg	64	13	200	200	6
Bulgaria	196	...	...	20	...
Croatia	3 251	2 429	...	...	...
Czech Republic	2 891	0	...	1	1
France	8	5	52	169	120
Germany	69	98	61	54	54
Ireland, Republic of	475	2 794	2 700	23	3
Latvia	34	4	28	1	1
Poland	16	6	52	...	...
Portugal	474	356	...	...	—
Romania	13 036	9 077	3 272	0	1
Slovenia	10	25	...	...	...
Spain	192	23	20	50	21
Turkey	13 509	12 576	6 124	2 518	585
United Kingdom	2 150	—	0	187	...

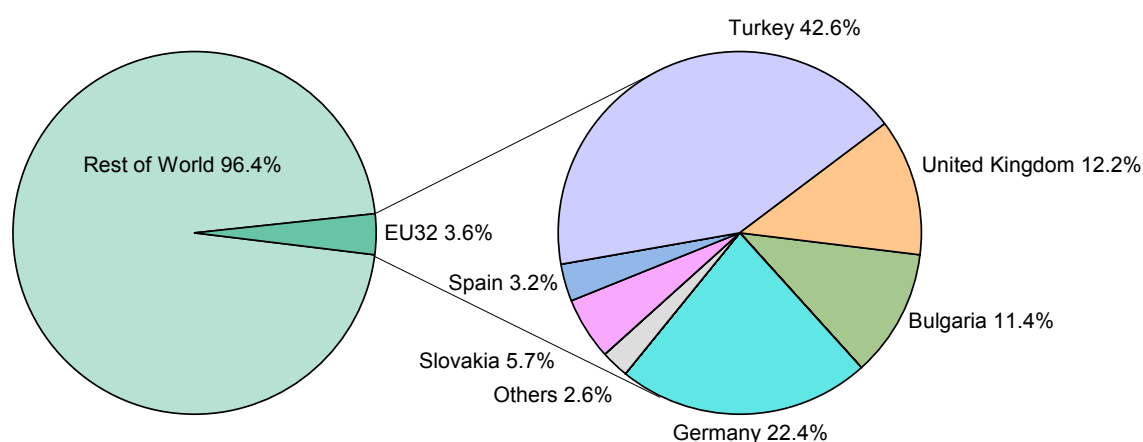
Asbestos - EU32 trade in 2008



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. About 88 per cent of barytes production is used in the manufacture and utilisation of drilling fluids in oil and gas exploration.
- The EU32 countries contributed nearly 3.6 per cent of world barytes production in 2008. The largest producer amongst the EU32 is Turkey, which produced more than a 43 per cent of the EU32 production. The largest world producer is China, which accounted for 52 per cent of world production in 2008.
- Two main grades of barytes are traded on world markets: paint grade (min. 99%) and drilling fluid grade (min. 95%). In 2008 and 2009 the price for paint grade barytes (ground, white, 96-98% BaSO₄, 325-35 mesh, ex-works USA) remained constant at US\$275-US\$325 per short ton. The price for drilling fluid grade barytes (ground, SG 4.22, bagged, F.O.B. Morocco) started 2008 at US\$110 per tonne but increased in March 2009 to the range US\$120-US\$128 per tonne, where it remained for the rest of the year.

EU32 Production of barytes 2008



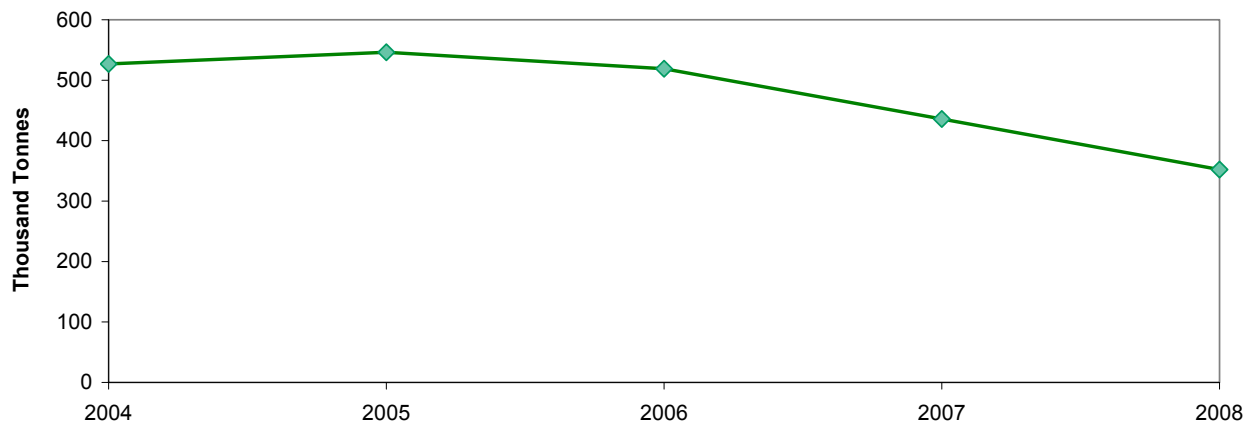
Production of barytes

Country	2004	2005	2006	2007	2008
Bulgaria	75 400	76 600	74 500	50 900	40 100
France	81 000	* 81 000	* 40 000	—	—
Germany	93 624	88 591	85 524	88 265	78 941
Italy	12 258	7 312	* 7 000	* 7 000	* 7 000
Poland	3 183	2 357	2 034	2 000	2 200
Slovakia	25 000	26 589	57 000	58 000	20 000
Spain	40 776	42 792	45 001	26 770	* 11 110
Turkey	134 504	157 200	160 000	150 000	150 000
United Kingdom	61 000	64 000	48 000	53 000	43 000
EU32 Total	527 000	546 000	519 000	436 000	352 000

Note(s)

(1) This table may include small quantities of witherite

EU32 Production of barytes 2004 - 08



Exports of barytes

tonnes

Country	2004	2005	2006	2007	2008
Austria	2 737	1 407	5 830	3 023	2 440
Belgium-Luxembourg	3 646	4 016	19 004	506	1 381
Bulgaria	75 393	76 644	74 523	50 922	46 907
Czech Republic	616	557	275	285	224
France (a)	* 75 900	* 57 700	* 36 300	* 37 100	* 10 000
Germany	32 383	32 375	33 947	43 104	38 111
Italy	1 951	505	1 000	2 239	1 238
Netherlands	77 269	52 444	37 392	68 798	58 740
Norway	15 888	1 482	14 199	13 425	5 608
Slovakia	7 919	7 876	13 843	9 174	685
Spain	33 930	27 389	27 743	31 693	33 676
Turkey	142 767	134 482	159 128	115 039	123 485
United Kingdom	12 873	16 334	4 250	9 242	9 976

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	2004	2005	2006	2007	2008
Austria	3 910	5 863	12 550	4 898	6 234
Belgium-Luxembourg	3 255	3 432	7 953	35 785	33 685
Croatia	1 878	715	893	98	1 525
Czech Republic	8 782	8 552	7 195	6 358	7 388
Denmark	36 133	28 788	58 303	38 096	22 324
Finland	3 559	3 931	4 498	5 018	4 735
France	28 748	31 965	24 471	40 760	34 166
Germany	226 706	231 471	272 526	320 702	278 335
Greece	858	996	1 065	1 255	1 348
Hungary	3 454	...	...	1 444	492
Ireland, Republic of	411	894	293	586	229
Italy	86 874	84 178	84 398	89 745	102 684
Netherlands	155 325	116 512	88 489	148 808	122 039
Norway	129 547	109 802	125 134	127 181	121 259
Poland	6 593	7 744	9 138	10 895	14 334
Portugal	2 630	5 382	3 099	1 934	3 806
Romania	9 943	5 747	7 604	14 040	25 475
Slovakia	927	814	872	147	142

Barytes

Imports continued

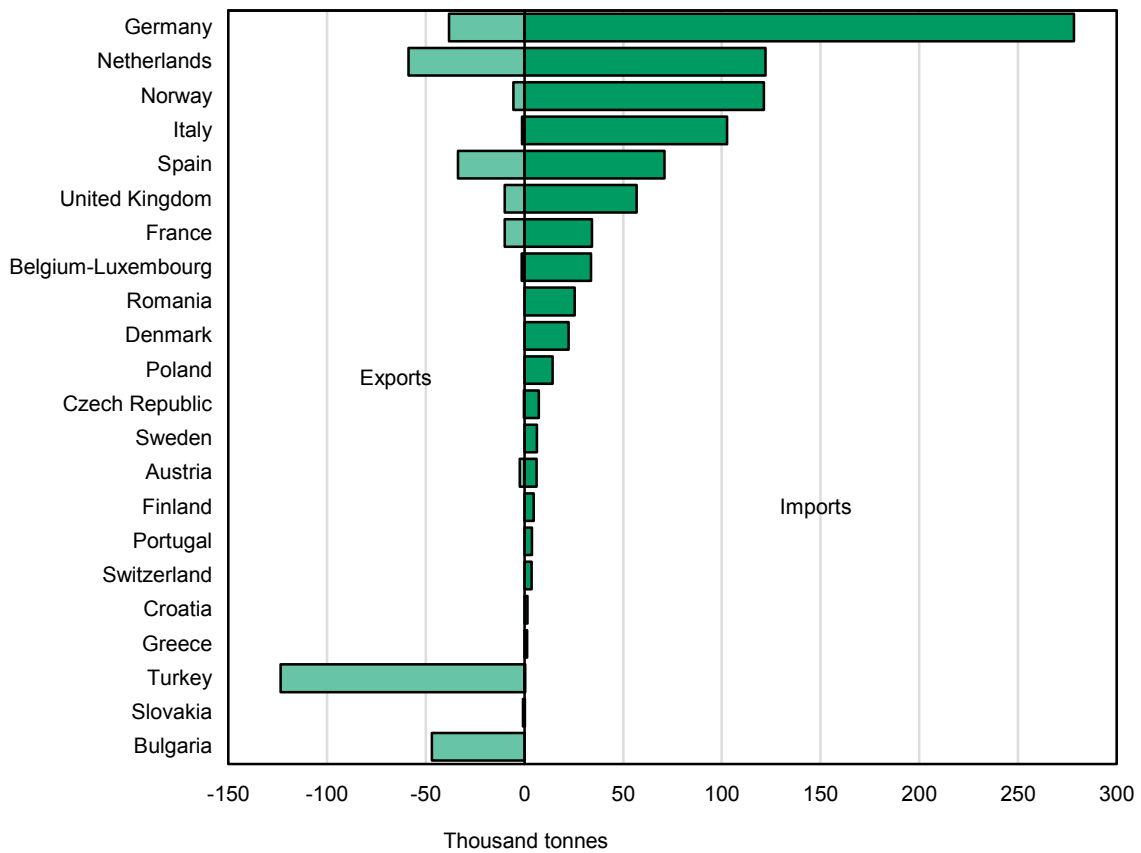
tonnes

Country	2004	2005	2006	2007	2008
Slovenia	896	845	1 044	585	596
Spain	59 378	47 923	50 743	65 569	71 025
Sweden	2 854	4 610	4 876	6 504	6 371
Switzerland	2 187	2 242	2 433	2 843	3 644
Turkey	258	2 003	279	741	455
United Kingdom	63 934	54 753	78 225	84 617	56 794

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

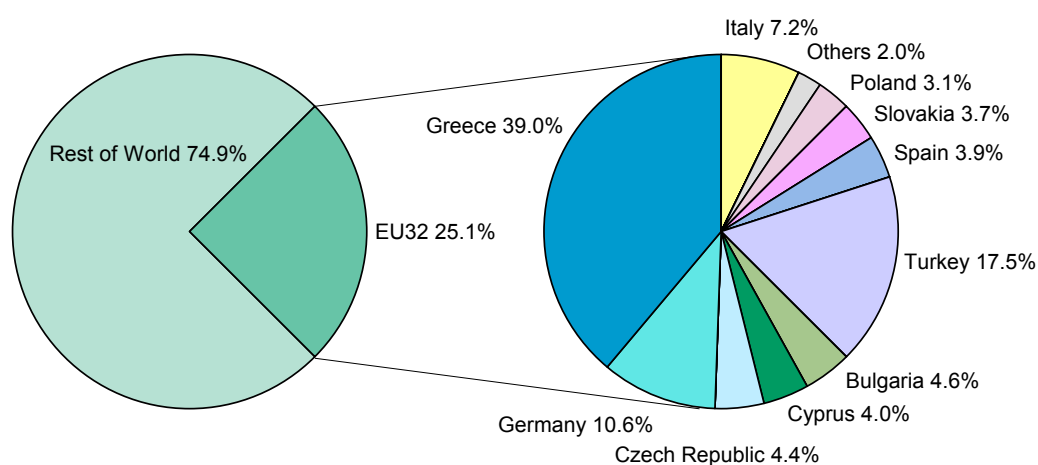
Barytes - EU32 trade in 2008



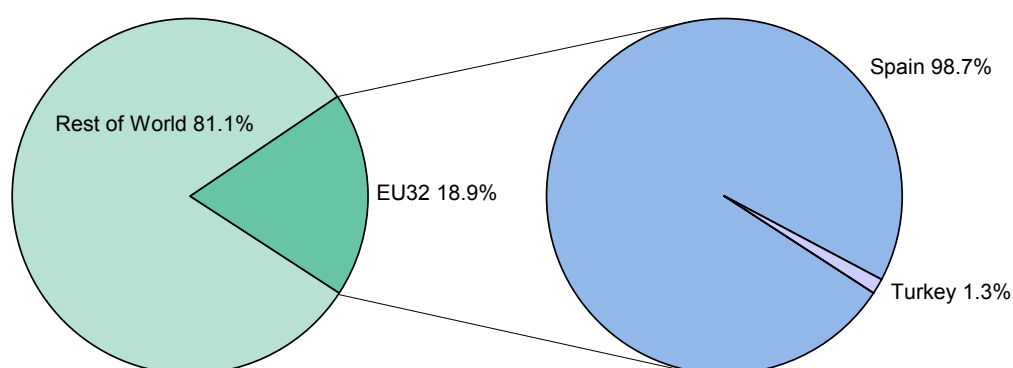
Bentonite and fullers earth

- Bentonites consist of montmorillonite (a clay mineral) that occurs 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, 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 EU32 countries produced 25 per cent of world bentonite in 2008. The world's largest producer was the USA with 31 per cent of world production. Greece is the largest producer of bentonite in the EU32 with a 39 per cent of EU32 production. UK production of fuller's earth ceased in 2005 and there is no longer any significant production in the EU32. Nearly 90 per cent of world production now comes from the USA. Most of Europe's sepiolite production in 2008 came from Spain, with a smaller (estimated) contribution from Turkey.
- Bentonite is traded in a variety of forms. For example, cat litter grade traded at US\$36–US\$38 per tonne during 2008 and the first part of 2009, but the range widened to US\$34–US\$38 per tonne later in 2009.

EU32 Production of bentonite 2008



EU32 Production of attapulgite and sepiolite 2008



Production of bentonite and fuller's earth

tonnes

Country	2004	2005	2006	2007	2008
Bulgaria					
Bentonite	224 900	181 200	134 500	99 000	178 700
Croatia					
Bentonite	15 674	17 391	16 410	19 578	19 759
Cyprus					
Bentonite	155 717	172 366	150 620	154 655	155 125

Bentonite and Fuller's Earth

Production continued

tonnes

Country	2004	2005	2006	2007	2008
Czech Republic					
Bentonite	224 000	216 000	267 000	335 000	174 000
Denmark					
Bentonite	18 352	18 515	19 211	20 093	22 458
Germany					
Bentonite	404 549	352 374	363 998	384 709	414 333
Greece					
Bentonite	1 030 556	1 124 795	* 1 200 000	(a) 1 389 800	(a) 1 525 000
Hungary					
Bentonite	9 300	4 900	6 635	54 231	7 464
Italy					
Bentonite	437 659	445 573	469 654	599 735	281 119
Fuller's earth	300	...	...	...	...
Macedonia					
Bentonite	16 373	14 958	20 353	22 509	13 689
Poland					
Bentonite	66 143	86 331	97 900	105 943	121 031
Romania					
Bentonite	18 161	18 190	21 165	16 911	16 638
Slovakia					
Bentonite	98 000	97 000	136 000	149 000	145 000
Spain					
Bentonite	156 760	163 290	154 746	147 253	152 927
Attapulgit	20 796	20 565	20 933	24 615	27 348
Sepiolite	655 346	807 820	806 345	717 728	737 659
Turkey					
Bentonite	643 153	582 735	* 600 000	748 170	683 253
Sepiolite	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
United Kingdom					
Fuller's earth (b)	27 540	6 200	—	—	—
EU32 Total					
Bentonite	5 519 000	3 496 000	3 658 000	4 247 000	3 910 000
Fullers Earth (a)	714 000	845 000	837 000	752 000	775 000

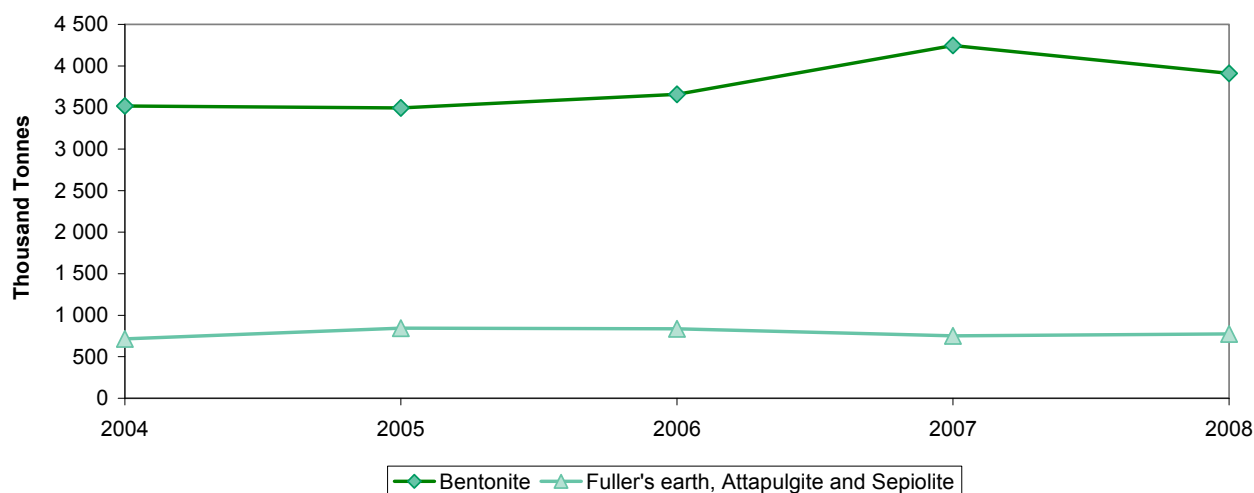
Note(s)

- (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 attapulgit, a mineralogically distinct clay mineral but exhibiting similar properties
- (4) In addition to the countries listed, Austria is believed to produce bentonite and France may produce fuller's earth

(a) Including attapulgit and sepiolite

(b) Saleable production based on data from producing companies

EU32 Production of bentonite, fuller's earth, attapulgit and sepiolite 2004 - 08



Exports of bentonite and fuller's earth

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Bentonite	8 242	10 173	8 112	5 589	5 225
Belgium-Luxembourg					
Bentonite	22 700	26 049	32 407	18 504	34 034
Fuller's earth	501	501	303	...	...
Bulgaria					
Bentonite	95 435	76 614	89 531	74 412	103 106
Cyprus					
Bentonite	81 596	85 724	159 472	156 871	92 089
Czech Republic					
Bentonite	62 012	85 093	86 296	97 358	105 403
Denmark					
Bentonite	17 279	17 066	19 214	19 495	15 734
Finland					
Bentonite	188	155	232	115	42
France					
Bentonite	7 696	9 243	9 788	13 454	12 231
Germany					
Bentonite	50 477	71 977	77 368	81 272	67 109
Fuller's earth	860	1 540	1 378	...	...
Greece					
Bentonite	15 612	1 283	12 620	168	8 885
Fuller's earth	8	90	122	...	...
Hungary					
Bentonite	897	442	860	849	1 191
Italy					
Bentonite	257 596	245 515	272 438	296 809	293 417
Lithuania					
Bentonite	218	26	2 491	5 457	1 929
Macedonia					
Bentonite	3 973	4 346	4 747	4 181	5 201
Netherlands					
Bentonite	203 897	186 286	132 076	129 692	120 946
Fuller's earth	9 085	2 931	2 141	...	...
Poland					
Bentonite	1 365	12 061	15 851	19 107	20 384
Fuller's earth	431	404	580	...	...
Portugal					
Bentonite	813	444	518	1 718	1 608
Romania					
Bentonite	8 810	7 154	521	68	10
Slovakia					
Bentonite	85 341	76 014	105 273	89 517	79 936
Fuller's earth	* 1 000	1 757	...	...	...
Spain					
Bentonite	80 410	75 450	73 767	72 278	75 287
Sepiolite	501 988	506 019	464 939	481 589	465 188
Fuller's earth	11 362	9 828	7 896	...	...
Sweden					
Bentonite	9 486	7 419	9 539	12 240	11 640
Turkey					
Bentonite	210 328	211 926	84 595	22 237	244 177
Fuller's earth	179	342	251	...	...
United Kingdom					
Bentonite	71 153	49 514	42 548	47 122	43 261
Fuller's earth	124	778	1 102	...	...

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, but these are not included in this table
- (5) From 2007 Harmonised System 2508.20, used in this table for fuller's earth, is no longer available

Imports of bentonite and fuller's earth

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Bentonite	53 871	58 344	60 667	58 727	68 703
Fuller's earth	615	374	427	...	...
Belgium-Luxembourg					
Bentonite	35 509	45 282	48 871	42 816	74 621
Fuller's earth	11 164	8 028	7 036	...	...
Bulgaria					
Bentonite	708	1 178	1 455	2 979	3 386
Fuller's earth	381	422	537	...	...
Croatia					
Bentonite	2 181	1 897	2 053	7 633	39 289
Fuller's earth	323	136	260	...	...
Cyprus					
Bentonite	18 052	3 057	9 063	10 556	12 496
Czech Republic					
Bentonite	19 852	14 776	18 452	23 559	24 239
Fuller's earth	564	1 290	1 039	...	...
Denmark					
Bentonite	37 253	47 386	49 695	43 555	34 012
Fuller's earth	107	137	921	...	...
Estonia					
Bentonite	1 356	2 014	2 223	1 995	1 506
Fuller's earth	260	132	145	...	...
Finland					
Bentonite	27 321	26 395	32 520	37 741	31 445
Fuller's earth	322	201	109	...	...
France					
Bentonite	220 260	163 999	220 996	243 350	198 787
Fuller's earth	17 907	18 445	23 522	...	...
Germany					
Bentonite	218 349	253 226	323 999	351 991	361 782
Fuller's earth	11 202	9 571	9 371	...	...
Greece					
Bentonite	8 902	22 164	14 573	19 780	21 261
Fuller's earth	633	844	811	...	...
Hungary					
Bentonite	4 963	2 794	4 850	2 933	3 095
Fuller's earth	251	281	...	...	...
Ireland, Republic of					
Bentonite	2 042	2 658	953	2 914	2 634
Italy					
Bentonite	153 410	138 973	121 697	155 568	136 417
Fuller's earth	5 760	7 893	8 208	...	...
Latvia					
Bentonite	1 917	1 629	1 544	1 850	2 628
Lithuania					
Bentonite	2 472	2 675	2 838	3 105	3 068
Netherlands					
Bentonite	358 305	199 692	281 144	305 364	314 298
Fuller's earth	76 177	70 482	80 511	...	...
Norway					
Bentonite	13 667	10 000	15 246	14 399	14 783
Fuller's earth	170	260	209	...	...
Poland					
Bentonite	126 127	115 208	153 266	162 424	171 633
Fuller's earth	1 749	2 566	2 564	...	...
Portugal					
Bentonite	17 907	16 881	17 640	18 480	20 304
Fuller's earth	662	483	379	...	...
Romania					
Bentonite	4 192	3 805	4 685	5 253	6 014
Fuller's earth	460	321	358	...	...
Slovakia					
Bentonite	6 040	6 863	6 916	7 145	8 987
Fuller's earth	866	1 082	886	...	...
Slovenia					
Bentonite	3 555	3 612	4 981	4 048	3 976

Imports continued

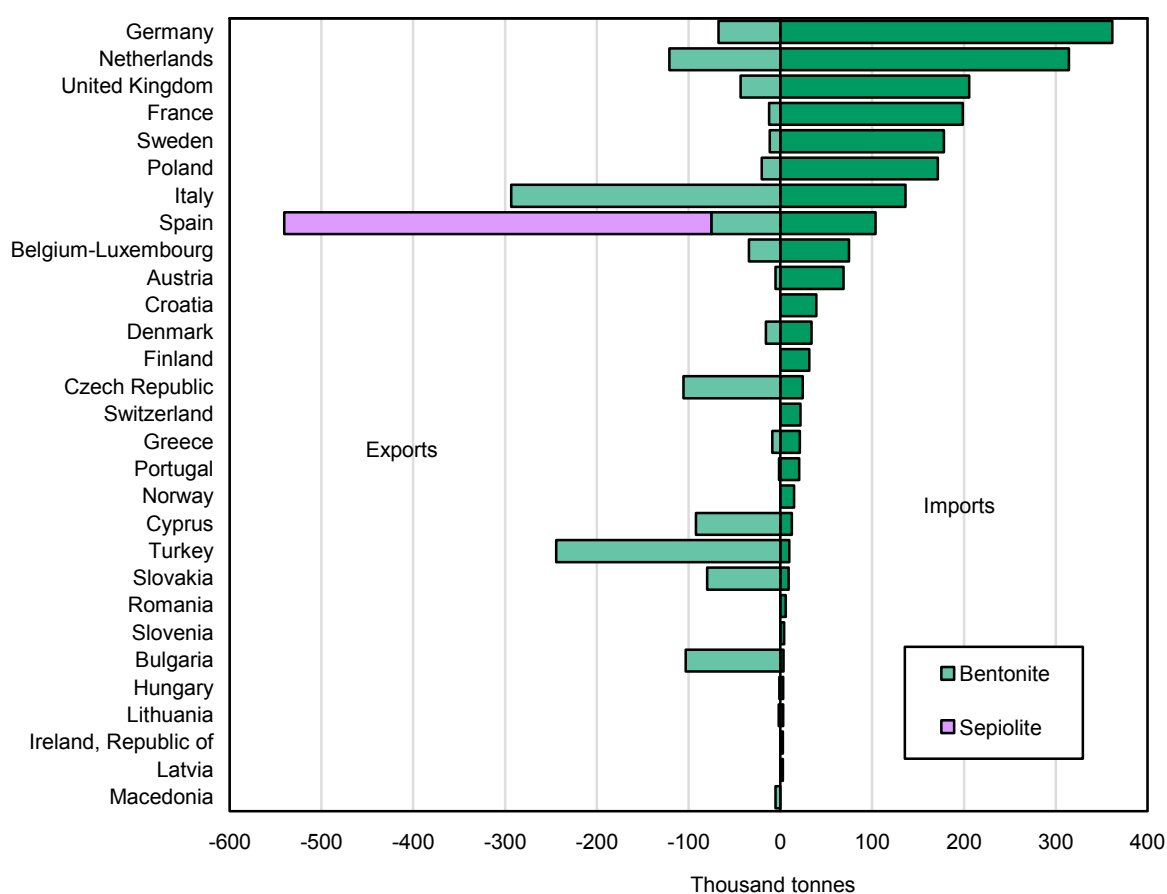
tonnes

Country	2004	2005	2006	2007	2008
Spain					
Bentonite	60 709	83 784	82 645	104 057	103 602
Fuller's earth	271	238	159	...	...
Sweden					
Bentonite	82 414	48 564	125 491	184 313	178 308
Switzerland					
Bentonite	20 027	20 861	24 407	21 334	21 876
Fuller's earth	1 641	1 844	916	...	...
Turkey					
Bentonite	832	4 127	2 127	3 202	9 803
Fuller's earth	157	159	93	...	...
United Kingdom					
Bentonite	187 750	151 179	173 483	157 388	205 853
Sepiolite	51 044	65 565	72 340	...	...
Fuller's earth	2 574	3 122	14 700	...	...

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, but these are not included in this table
- (5) From 2007 Harmonised System 2508.20, used in this table for fuller's earth, is no longer available

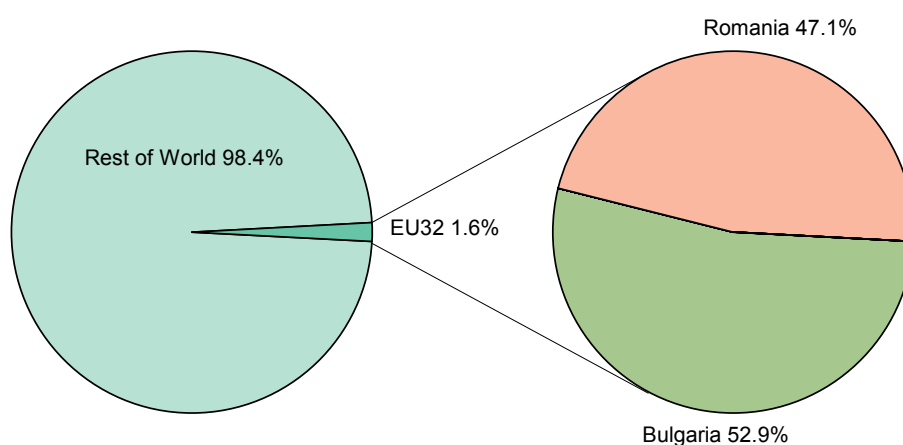
Bentonite and Sepiolite - EU22 trade in 2008



Bismuth

- Bismuth is a metallic element, chiefly used in its compound form, in pharmaceuticals and as metal in fusible (low-melting) alloys. It is also highly valued as a substitute for lead.
- China, Mexico and Peru are the world's largest producers of bismuth, with 79 per cent of world production in 2008 coming from these three countries. There is very little mine production in the EU32, although, bismuth is produced as a by-product of lead and zinc refining.
- The price of bismuth in 2008 increased to a high of US\$16.25–US\$17.25 per pound in April before falling to end the year at US\$8.50–US\$10.25 per pound. In 2009, the price continued to fall reaching a low of US\$5.90–US\$7.70 per pound in July and August. It then recovered to US\$8.70–US\$9.70 per pound in September before falling back to end 2009 at US\$7.25–US\$8.00 per pound.

EU32 Production of bismuth 2008



Mine production of bismuth

tonnes (metal content)

Country	2004	2005	2006	2007	2008
Bulgaria	* 40	* 40	* 45	* 45	* 45
Romania	* 40	* 40	* 40	* 40	* 40
EU32 Total	80	80	85	85	85

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	2004	2005	2006	2007	2008
Austria					
Metal	8	8	0	12	1
Belgium-Luxembourg					
Metal	0	* —	* —	355	162
France					
Metal	28	39	24	52	74
Germany					
Metal	275	371	534	901	276
Netherlands					
Metal	136	97	48	238	196
Spain					
Metal	2	9	118	32	19
United Kingdom					
Metal	2 633	2 426	2 703	2 588	905

Note(s)

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

Imports of bismuth

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Metal	114	62	114	42	148
Belgium-Luxembourg					
Metal	20	27	109	111	190
Croatia					
Metal	3	10	5	10	8
Czech Republic					
Metal	64	50	77	70	78
France					
Metal	830	1 029	547	382	219
Germany					
Metal	1 693	1 508	1 337	1 130	1 262
Greece					
Metal	23	6	6	11	3
Ireland, Republic of					
Metal	2	6	8	12	38
Italy					
Metal	175	203	251	316	269
Netherlands					
Metal	166	85	168	127	120
Poland					
Metal	6	14	14	15	25
Slovenia					
Metal	43	69	66	90	60
Spain					
Metal	206	179	297	190	212
Sweden					
Metal	13	11	8	5	12
Switzerland					
Metal	6	15	6	8	12
Turkey					
Metal	6	7	11	14	21
United Kingdom					
Metal	2 205	2 858	2 347	1 908	1 582

Note(s)

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

Bromine

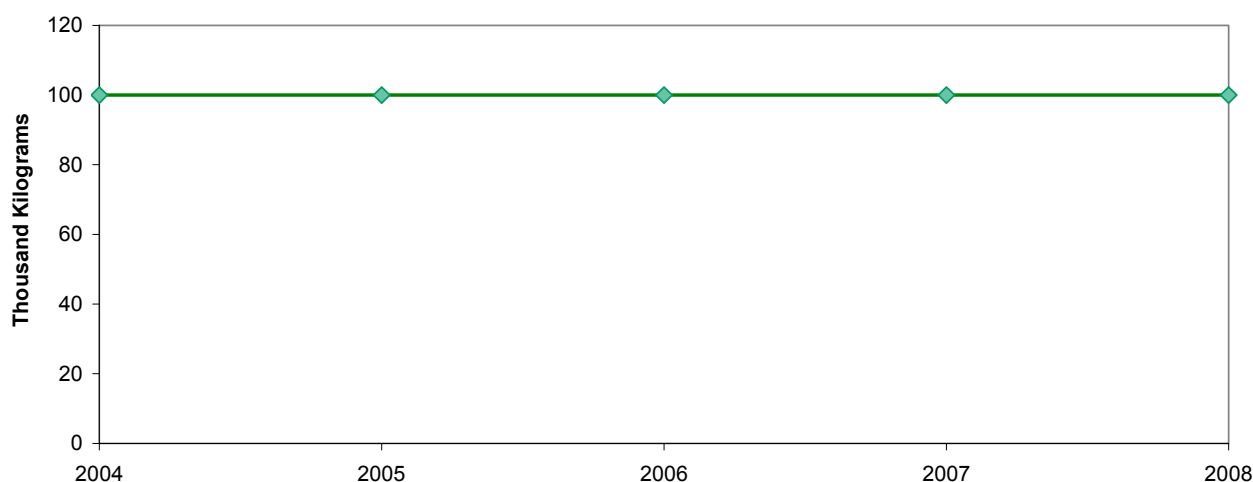
- Bromine is the only non-metallic element that is liquid at room temperature. It is strongly reactive and hazardous in pure forms and has a wide range of uses including medicines, fumigants, dyes, and pesticides.
- Bromine is almost entirely produced from processing sea-water. The two largest producers are the USA (42 per cent) and Israel (30 per cent), the latter taking advantage of the relatively high bromine content of the Dead Sea.
- Recent price information is not available.

Production of bromine

kilograms

Country	2004	2005	2006	2007	2008
Spain	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000

EU32 Production of bromine 2004 - 08



Exports of bromine

kilograms

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg	21 275 800	19 124 000	20 738 100	17 430 000	20 963 000
Germany	5 600	3 000	4 600	3 400	14 400
Italy	505	1 000	228 287	55 156	1 000
Netherlands (a)	964 481	1 388 695	1 285 156	1 364 466	1 820 693
Poland	...	3 000	5 500	9 400	5 000
Spain	291	1 000	192 339	418 531	2 000
United Kingdom	1 126 043	234 977	1 137 544	1 469 781	1 015 304

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

kilograms

Imports of bromine

Country	2004	2005	2006	2007	2008
Austria	93 000	222 000	228 600	463 900	488 000
Belgium-Luxembourg	23 466 200	25 108 000	24 553 300	21 768 500	26 540 000
Czech Republic	8 121	1 174	5 066	7 700	12 000
Finland	71 251	71 000	36 158	100	146 800
France	12 595 900	13 989 000	13 971 600	12 146 400	12 428 800
Germany	1 626 600	1 304 000	801 100	607 500	646 400
Hungary	(a) 5 623	12 000	9 300	(a) 29 143	9 900
Italy	355 734	281 000	522 069	374 426	598 800
Netherlands (a)	148 000	5 019 289	3 037	4 403	7 661
Poland	(a) 9 000	6 000	16 000	14 300	10 600
Romania (a)	3 010	9 827	9 104	152 319	267 073
Slovakia	(a) 1 372	(a) 364	(a) 9 658	2 600	(a) 582
Spain	73 493	53 000	82 351	77 578	169 159
Sweden	5 000	13 000	9 000	2 800	31 700
Turkey	(a) 149 960	105 000	24 426	77	384
United Kingdom	7 145 977	7 994 939	7 592 352	5 266 339	5 903 423

Note(s)

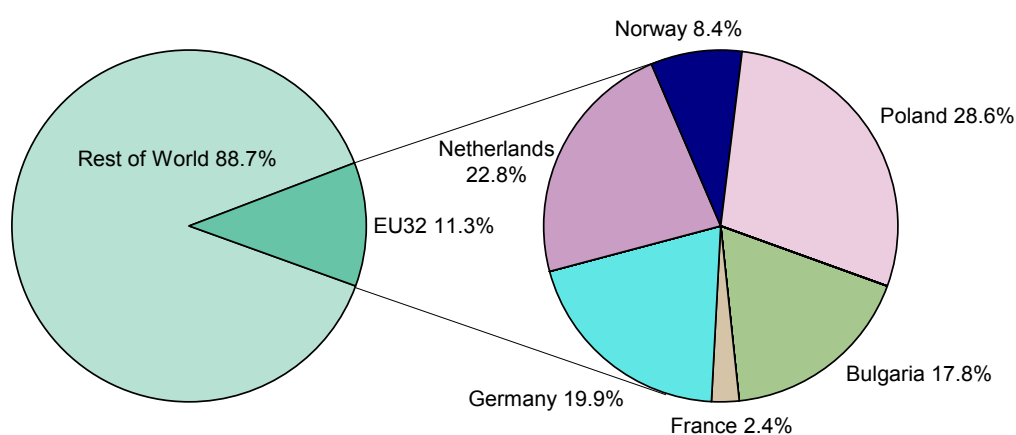
(1) This table does not purport to be comprehensive: trade in bromine is not separately distinguished from other halogens by many countries

(a) May include some fluorine

Cadmium

- Cadmium is a highly toxic metallic element mostly produced as a by-product of zinc refining. The bulk of cadmium in use is in nickel-cadmium (NiCd) rechargeable batteries. Other major uses are in pigments and in metal coatings.
- The three largest world producers in 2008 were China (23 per cent of the world total), the Republic of Korea (16.5 per cent) and Japan (11 per cent). The EU32 contributed 11 per cent of world production in 2008. Poland was the largest EU32 producer accounting for about 29 per cent of EU32 production, followed by the Netherlands (23 per cent) and Germany (20 per cent).
- Prices for cadmium metal (min. 99.95% Cd) began 2008 at US\$3.25–US\$3.50 per pound but fell sharply as the recession took hold later in the year, finishing at US\$0.63–US\$0.90 per pound. During 2009 the price recovered to some extent, despite a drop in April, and ended the year at US\$1.30–US\$1.45 per pound.

EU32 Production of cadmium 2008



Production of cadmium

Country	2004	2005	2006	2007	2008
Bulgaria	356	319	320	318	376
France	* 120	* 100	* 90	* 50	* 50
Germany	* 500	* 490	* 490	* 475	* 420
Netherlands	493	494	524	495	* 480
Norway	141	153	125	269	178
Poland	356	408	373	421	603
EU32 Total	2 000	2 000	1 900	2 000	2 100

Note(s)

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

EU32 Production of cadmium 2004 - 08



Exports of cadmium

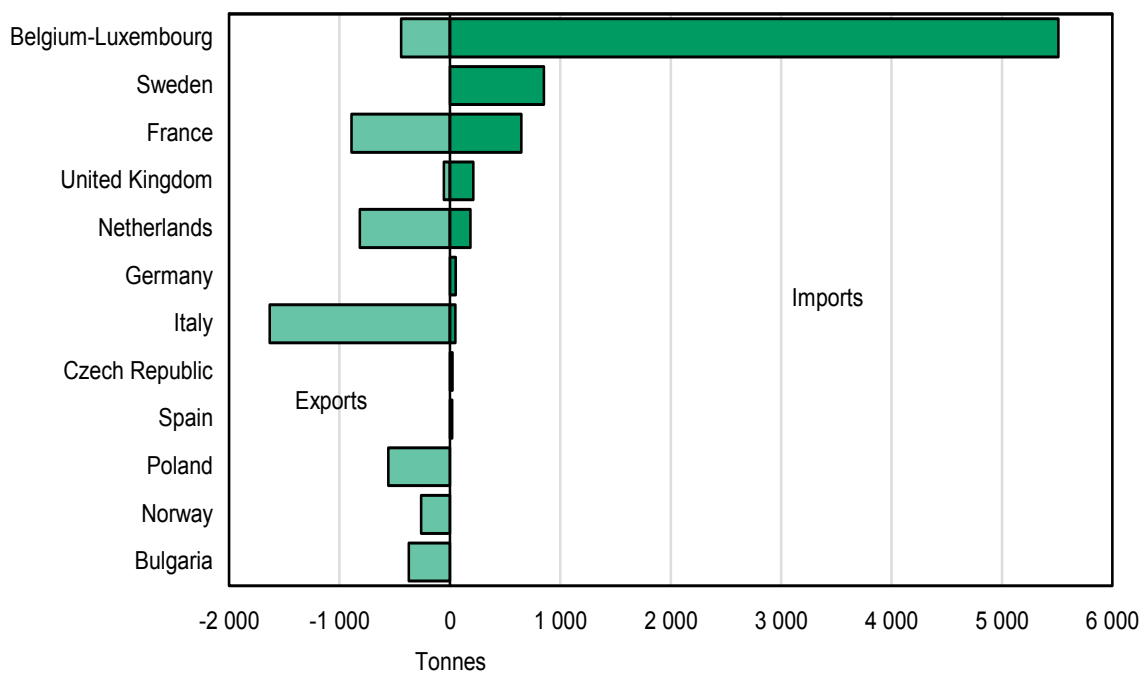
tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg					
Metal	746	639	298	181	442
Sulphide	15	29	7	...	...
Bulgaria					
Metal	378	316	369	434	374
France					
Metal	604	533	798	815	890
Germany					
Sulphide	6	14	4	...	...
Italy					
Metal	54	18	1	796	1 633
Macedonia					
Metal	500	...	...	...	...
Netherlands					
Metal	621	553	1 064	544	816
Norway					
Metal	304	132	90	205	259
Poland					
Metal	665	610	364	368	558
Sweden					
Oxide	139	140	...	322	448
Turkey					
Metal	95	25	27	—	8
United Kingdom					
Metal	27	79	7	76	54

Imports of cadmium

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg					
Metal	4 064	4 779	3 948	5 038	5 511
Oxide	61	26	13	2	10
Sulphide	—	29	13	...	...
Czech Republic					
Metal	...	2	1	1	24
Oxide	...	251	...	338	463
Sulphide	19	21	14	...	...
France					
Metal	1 465	2 114	527	771	645
Oxide	743	584	...	885	1 114
Sulphide	5 802	6	—	...	...
Germany					
Metal	39	16	7	22	53
Oxide	139	231	...	423	507
Sulphide	6	18	9	...	...
Italy					
Metal	87	72	30	40	49
Oxide	96	55	...	1	3
Netherlands					
Metal	284	233	113	437	186
Spain					
Metal	22	2	19	0	21
Oxide	28	53	17	22	25
Sweden					
Metal	330	282	388	491	851
Oxide	71	35	...	25	83
Switzerland					
Metal	30	5	7	3	8
United Kingdom					
Metal	479	206	129	276	212

Cadmium metal - EU32 trade in 2008

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 or 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 five per cent gypsum/anhydrite to produce finished cement.
- Turkey was the largest producer of cement clinker in the EU32 during 2008, with 26 per cent of EU32 production. Italy is normally also a significant producer but accurate data are difficult to obtain. Turkey is also the largest producer of finished cement with 17 per cent of the EU32 total. There is significant international trade in both clinker and finished cement.

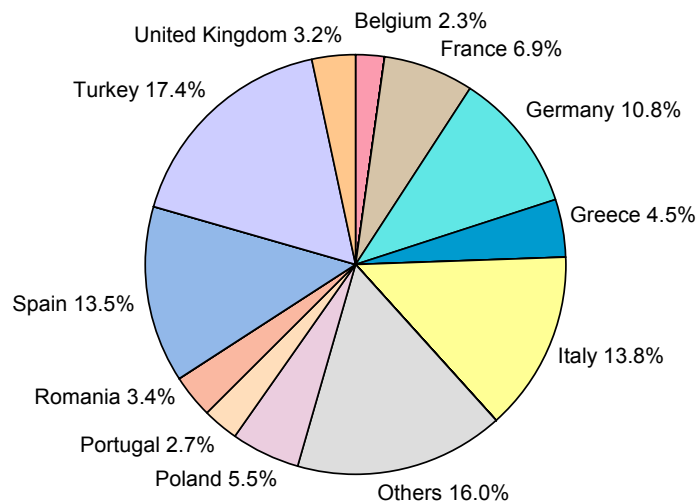
Production of cement clinker

tonnes

Country	2004	2005	2006	2007	2008
Austria	...	90 053	188 588	221 684	275 483
Bulgaria	...	402 684	400 315	* 400 000	* 400 000
Cyprus	68 865	37 891	97 846	—	—
Czech Republic	...	...	...	3 127 530	3 137 828
Denmark	52 758	42 691	5 499	21 209	16 092
Estonia	622 900	635 500	704 700	1 042 800	1 040 000
France	17 157 000	17 332 000	17 731 000	18 046 000	16 885 000
Germany	26 281 000	24 315 000	24 921 000	26 992 000	25 366 000
Greece	12 185 001	12 442 361	10 852 453	12 035 077	* 12 000 000
Hungary	...	...	2 533 076	2 500 698	* 2 500 000
Italy	33 048 546	...	...	...	...
Latvia	250 000	...	...	...	...
Luxembourg	847 000	834 000	816 000	817 000	761 800
Poland	9 620 601	9 468 410	11 219 940	13 167 950	12 443 103
Portugal (a)	1 082 678	1 450 646	1 484 856	1 513 487	1 760 510
Sweden	2 385 509	2 457 245	2 660 045	1 712 626	* 1 700 000
Turkey	...	31 355 180	32 824 687	39 363 683	41 652 824
United Kingdom	10 402 000	10 074 000	10 069 000	10 227 000	8 700 000
EU32 Total	*152 000 000	*150 000 000	*153 000 000	*164 000 000	*162 000 000

Note(s)
(a) Sales

EU32 Production of finished cement 2008



Production of finished cement

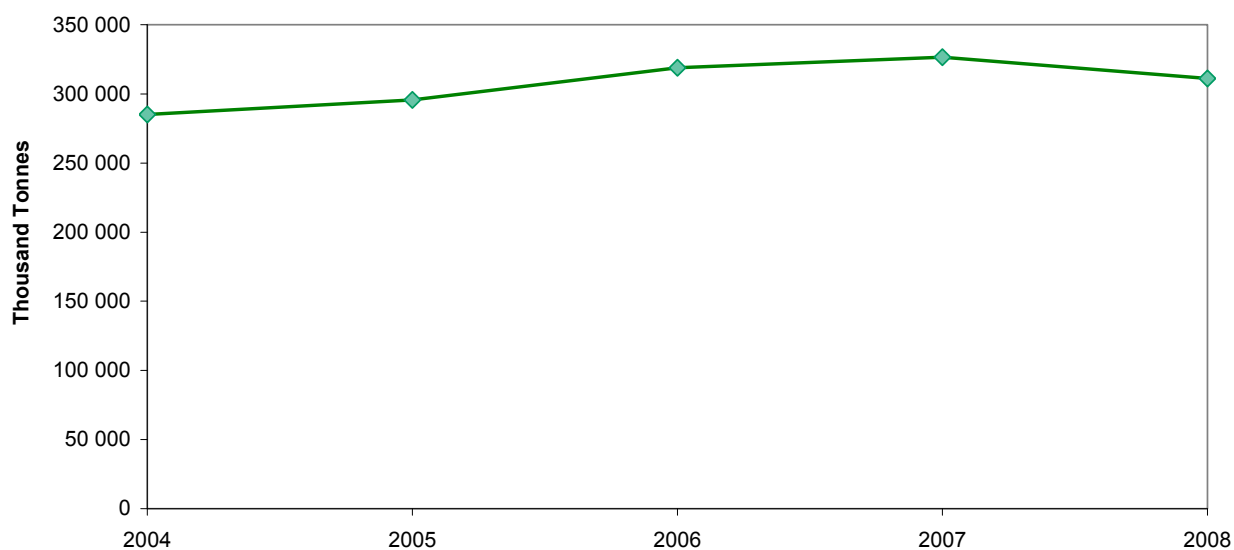
tonnes

Country	2004	2005	2006	2007	2008
Austria	4 040 000	4 676 768	5 293 370	5 518 303	5 709 315
Belgium	6 216 000	6 587 000	6 965 000	6 930 000	7 135 000
Bulgaria	* 2 920 000	3 559 420	4 003 664	* 4 290 000	4 894 903
Cyprus	1 688 917	1 804 645	1 786 488	1 872 531	1 913 620
Czech Republic	3 828 677	3 978 056	4 677 150	4 898 530	4 804 845
Denmark	2 892 831	2 880 554	2 937 132	2 871 402	2 538 822
Estonia	614 600	726 000	848 900	937 400	806 000
Finland (a)	1 295 000	1 347 000	1 684 507	1 771 000	1 638 000
France	20 962 000	21 277 000	22 268 000	22 268 000	21 443 000
Germany	31 900 000	30 600 000	33 630 000	33 382 000	33 581 000
Greece	14 800 861	15 191 761	15 723 088	14 356 483	14 036 951
Hungary	3 349 000	3 371 000	3 724 153	3 551 746	3 544 000
Ireland, Republic of	...	* 4 900 000	* 4 700 000	* 4 700 000	* 4 400 000
Italy	45 342 868	46 400 000	47 400 000	46 700 000	43 000 000
Latvia	283 647	280 000	* 280 000	* 300 000	* 300 000
Lithuania	753 069	832 076	1 065 367	1 105 365	1 075 581
Luxembourg	797 000	767 000	796 000	908 000	907 500
Netherlands	2 380 000	2 496 000	2 790 000	2 700 000	* 2 700 000
Norway	1 420 000	1 613 000	1 695 000	1 700 000	* 1 700 000
Poland	12 566 000	12 646 223	14 688 353	16 963 752	17 206 735
Portugal	8 839 048	(a) 8 426 830	(a) 8 326 687	(a) 9 178 735	(a) 8 365 242
Romania	6 238 584	7 032 100	8 198 090	9 844 706	10 461 456
Slovakia	3 158 308	3 498 685	3 592 509	3 718 410	4 157 356
Slovenia	1 186 000	1 114 000	1 269 000	* 1 500 000	* 1 500 000
Spain	46 595 560	50 300 000	54 032 770	54 504 607	* 42 000 000
Sweden	2 712 810	2 731 000	2 952 000	2 950 000	* 2 950 000
Switzerland (b)	3 954 816	4 267 854	4 231 294	4 252 574	4 238 000
Turkey	38 019 112	41 100 274	47 906 365	50 995 107	54 027 283
United Kingdom	11 405 000	11 216 000	11 469 000	11 887 000	10 071 000
EU32 Total	285 100 000	295 600 000	318 900 000	326 600 000	311 100 000

Note(s)

(a) Sales

(b) Includes production in Liechtenstein

EU32 Production of finished cement 2004 - 08

Exports of cement

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Cement clinkers	58 262	32 877	136 381	189 450	243 906
Portland cement	185 069	151 330	201 687	314 112	344 338
Other cement	40 830	53 951	38 926	59 361	82 570
Belgium-Luxembourg					
Cement clinkers	842 257	833 257	544 183	1 078 149	1 075 183
Portland cement	1 598 742	1 715 979	1 811 884	2 087 094	2 069 807
Other cement	616 066	612 642	609 236	606 807	821 103
Bulgaria					
Cement clinkers	392 414	338 505	293 031	353 996	120 588
Portland cement	460 281	455 824	334 013	52 803	130 932
Other cement	50	27	40	1 067	22 589
Croatia					
Cement clinkers	44 297	196 594	244 043	310 378	235 377
Portland cement	1 039 442	1 254 309	1 282 560	855 579	667 503
Other cement	95 310	92 074	89 957	94 185	468 597
Cyprus					
Cement clinkers	31 215	37 891	91 635	0	...
Portland cement	146 669	219 460	155 271	51 022	...
Czech Republic					
Cement clinkers	91 626	29 169	32 521	29 924	19 039
Portland cement	576 531	526 784	394 105	458 701	436 600
Other cement	3 216	34 046	67 930	151 422	196 133
Denmark					
Cement clinkers	85 967	54 542	11 981	9 673	7 287
Portland cement	1 127 638	1 235 477	1 290 816	1 094 730	969 666
Other cement	13 535	13 118	14 153	16 222	25 482
Estonia					
Cement clinkers	113 105	97 442	87 638	325 263	426 384
Portland cement	209 168	225 729	228 971	274 997	383 449
Other cement	3	13	29	452	1 387
Finland					
Portland cement	11 449	3 367	647	982	2 618
France					
Cement clinkers	460 364	310 228	325 352	325 897	260 529
Portland cement	785 100	792 192	683 110	590 684	578 230
Other cement	112 828	102 222	113 145	13 999	10 056
Germany					
Cement clinkers	868 384	773 394	687 056	1 051 733	1 120 078
Portland cement	3 496 157	3 587 966	4 251 126	4 874 062	5 115 858
Other cement	1 580 315	1 876 289	1 852 990	2 086 591	2 077 175
Greece					
Cement clinkers	257 136	304 750	356 077	848 925	722 151
Portland cement	2 679 607	3 502 085	2 816 832	2 685 623	2 842 584
Other cement	170 640	242 957	181 529	207 665	205 640
Hungary					
Cement clinkers	78 590	27 328	—	—	—
Portland cement	244 276	274 262	257 050	177 191	329 647
Other cement	855	123	32	4 448	25 169
Ireland, Republic of					
Cement clinkers	—	0	—	16 033	—
Portland cement	1 133 469	942 655	972 585	1 120 808	1 144 186
Other cement	850	10	1 489	1 596	1 512
Italy					
Cement clinkers	8 965	19 427	61 437	143 235	38 106
Portland cement	1 903 368	2 379 941	2 091 427	2 143 940	2 094 130
Other cement	130 920	130 120	660 595	536 324	491 150
Latvia					
Cement clinkers	—	184	326	35 307	—
Portland cement	26 144	10 762	5 528	43 951	240 311
Other cement	—	1	141	10 178	20
Lithuania					
Portland cement	247 918	299 782	246 350	154 649	204 951
Other cement	2	10	16	893	1 531
Macedonia					
Cement clinkers	16 762	129 570	151 663	90 869	173 089
Portland cement	189 166	207 457	220 588	308 468	281 782

Cement

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Netherlands					
Cement clinkers	1 562	2 513	3 119	10 725	0
Portland cement	326 234	295 457	410 232	278 904	298 133
Other cement	30 013	18 513	134 225	12 931	6 217
Norway					
Cement clinkers (a)	* 100	* 50 000	* 65 000	* 117 000	* 118 000
Portland cement (a)	* 413 000	* 569 000	* 369 000	* 236 000	* 152 000
Poland					
Cement clinkers	226 981	256 621	856 035	181 690	163 902
Portland cement	341 112	460 479	402 741	313 361	314 733
Other cement	7 059	49 970	67 457	65 822	78 349
Portugal					
Cement clinkers	148 984	1 271 578	1 138 307	1 263 190	1 448 397
Portland cement	286 819	1 110 739	1 204 981	1 481 219	1 102 589
Other cement	13 267	17 301	11 364	58 931	11 139
Romania					
Cement clinkers	669 204	465 660	608 616	243 116	111 719
Portland cement	701 686	739 215	447 713	134 044	7 449
Slovakia					
Cement clinkers	4 768	26 549	27 092	30 800	53 871
Portland cement	1 470 728	1 433 926	1 372 554	1 346 692	1 622 292
Other cement	24 408	44 670	35 596	85 987	144 311
Slovenia					
Cement clinkers	18 577	58 765	21 440	2	1
Portland cement	101 842	56 776	73 187	55 803	77 656
Other cement	16 154	63 732	115 104	156 183	227 400
Spain					
Cement clinkers	9 491	13 259	28 809	37 343	907 694
Portland cement	1 681 953	1 713 572	1 386 652	1 358 857	1 474 428
Other cement	59 696	51 340	43 262	46 348	63 825
Sweden					
Portland cement	867 450	1 295 834	1 208 231	845 235	723 793
Other cement	2 492	2 555	12 144	15 237	14 082
Switzerland					
Cement clinkers	106 263	121 014	103 367	114 075	91 167
Portland cement	33 524	46 939	23 437	13 704	35 925
Other cement	2 046	2 692	988	4 014	9 009
Turkey					
Cement clinkers	2 359 071	2 990 365	1 559 980	1 539 287	2 558 779
Portland cement	7 907 130	6 713 088	3 277 480	4 323 666	11 010 951
Other cement	147 792	261 816	112 683	124 395	150 785
United Kingdom					
Cement clinkers	82 936	134 992	91 357	28 432	15 071
Portland cement	214 420	320 680	521 784	459 629	230 920
Other cement	76 517	68 554	69 692	88 452	93 122

Note(s)

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

Imports of cement

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Cement clinkers	443 956	532 745	487 406	520 714	456 127
Portland cement	773 897	860 087	686 652	626 723	753 529
Other cement	51 811	43 083	31 100	39 568	40 766
Belgium-Luxembourg					
Cement clinkers	553 911	442 986	545 575	798 670	664 109
Portland cement	956 062	898 871	897 315	892 981	988 208
Other cement	314 515	275 177	277 825	391 850	315 620
Bulgaria					
Cement clinkers	23 048	180 254	586 194	123 806	248 737
Portland cement	51 493	23 787	9 127	5 690	13 645
Other cement	920	1 128	1 665	1 829	1 110
Croatia					
Cement clinkers	61 672	25	...	27 488	50
Portland cement	214 400	379 711	447 202	340 112	393 886
Other cement	287	1 569	5 547	5 242	7 447
Cyprus					
Cement clinkers	28 622	43 375	17 819	17 498	66 787
Portland cement	2 092	2 339	1 241	1 017	29 311
Czech Republic					
Cement clinkers	167 711	95 108	117 477	109 392	134 179
Portland cement	1 105 823	1 027 011	1 001 321	918 739	932 685
Other cement	24 799	38 434	38 439	30 602	23 816
Denmark					
Cement clinkers	22 506	31 634	46 600	35 555	33 825
Portland cement	187 982	230 842	274 151	243 348	289 307
Other cement	33 913	36 753	54 194	52 662	38 687
Estonia					
Cement clinkers	...	21 219	44 059	31 127	25 438
Portland cement	16 827	3 311	1 833	2 536	4 613
Finland					
Cement clinkers	28 129	17 594	95 730	314 436	236 439
Portland cement	423 958	383 260	380 296	341 748	281 924
Other cement	9 344	13 211	12 176	16 006	15 911
France					
Cement clinkers	865 213	946 642	1 010 056	1 739 962	1 338 362
Portland cement	1 114 684	1 271 478	1 556 864	1 793 027	1 940 065
Other cement	927 157	984 597	1 120 524	1 223 442	1 185 083
Germany					
Cement clinkers	370 454	289 600	235 023	92 757	14 184
Portland cement	1 002 404	934 865	794 716	833 311	770 566
Other cement	343 597	380 858	345 286	311 152	293 583
Greece					
Cement clinkers	1 237	1 494	50 907	45 388	23 558
Portland cement	1 754	425	3 237	3 603	74 239
Other cement	3 497	4 548	3 228	3 010	2 618
Hungary					
Cement clinkers	583	9 051	65 437	40 099	...
Portland cement	451 613	565 366	455 108	560 863	643 776
Other cement	579 735	508 067	375 337	144 824	55 798
Ireland, Republic of					
Cement clinkers	226 116	245 955	395 053	592 721	36 153
Portland cement	281 044	335 055	559 645	664 977	780 528
Other cement	9 132	8 958	9 079	16 409	14 649
Italy					
Cement clinkers	2 720 499	2 828 906	2 872 114	2 827 333	2 095 716
Portland cement	2 130 079	2 014 905	1 564 049	1 162 254	962 746
Other cement	146 033	152 325	184 862	287 190	295 988
Latvia					
Cement clinkers	...	38 589	43 774	29 438	30 233
Portland cement	204 353	234 862	322 187	431 482	353 174
Lithuania					
Cement clinkers	22 496	766	416	104 219	79 102
Portland cement	183 712	265 103	209 400	170 955	111 578
Macedonia					
Portland cement	81 250	59 679	44 542	69 220	136 030

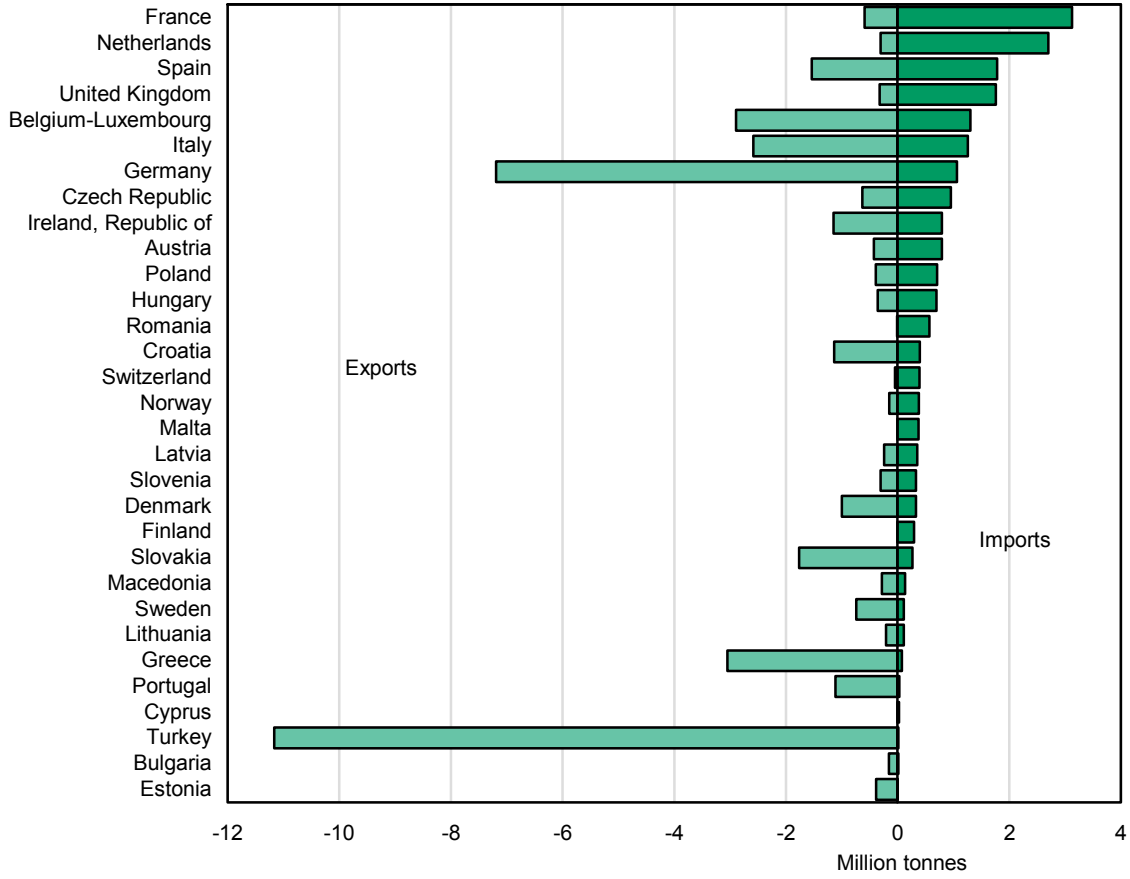
Cement

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Malta					
Portland cement	288 610	316 012	389 690	356 365	374 392
Netherlands					
Cement clinkers	581 267	388 146	494 944	228 817	380 281
Portland cement	1 812 884	1 632 872	1 925 756	2 072 034	1 705 144
Other cement	774 050	846 622	1 452 353	722 635	993 318
Norway					
Cement clinkers	2 307	6 615	8 782	14 895	36 704
Portland cement	236 622	373 788	443 104	441 619	361 216
Other cement	10 738	12 319	14 147	19 062	22 317
Poland					
Cement clinkers	13 746	33 673	45 560	65 632	127 428
Portland cement	540 342	444 855	285 135	520 330	680 447
Other cement	2 323	5 537	5 700	22 982	29 529
Portugal					
Cement clinkers	8 775	17 084	140 673	331 025	196 929
Portland cement	1 066 969	669 272	356 040	45 012	22 862
Other cement	65 793	10 479	14 286	11 966	8 842
Romania					
Cement clinkers	3	50	280	500 794	486 462
Portland cement	228 506	167 686	102 759	142 476	538 259
Other cement	1 755	1 653	3 085	12 072	32 765
Slovakia					
Cement clinkers	33 021	68 894	42 666	52 608	94 510
Portland cement	85 834	88 403	98 625	123 589	172 555
Other cement	19 636	49 619	56 418	58 035	93 031
Slovenia					
Cement clinkers	61 151	1 343	11 970	145 638	5 783
Portland cement	219 774	215 473	249 749	328 312	326 096
Other cement	4 411	2 906	6 917	17 037	4 618
Spain					
Cement clinkers	6 266 470	7 852 531	9 108 499	10 894 888	5 496 563
Portland cement	2 549 086	2 845 856	2 771 668	2 929 208	1 729 088
Other cement	21 527	20 031	40 164	74 401	58 007
Sweden					
Cement clinkers	24 491	14 601	13 238	29 344	37 009
Portland cement	218 928	242 326	249 670	55 784	61 891
Other cement	27 286	34 597	41 176	52 359	50 333
Switzerland					
Cement clinkers	64 882	71 542	115 001	15 292	8 596
Portland cement	313 292	352 409	380 862	348 262	361 305
Other cement	58 671	48 309	49 317	37 522	30 908
Turkey					
Cement clinkers	375 619	567 256	1 209 618	1 360 090	380 516
Portland cement	9 096	66 260	71 237	39 270	12 279
Other cement	4 268	4 693	3 979	4 202	5 036
United Kingdom					
Cement clinkers	377 341	406 044	516 583	836 788	366 791
Portland cement	2 033 772	1 645 088	1 397 025	1 534 683	1 731 228
Other cement	64 289	37 705	26 790	26 215	28 324

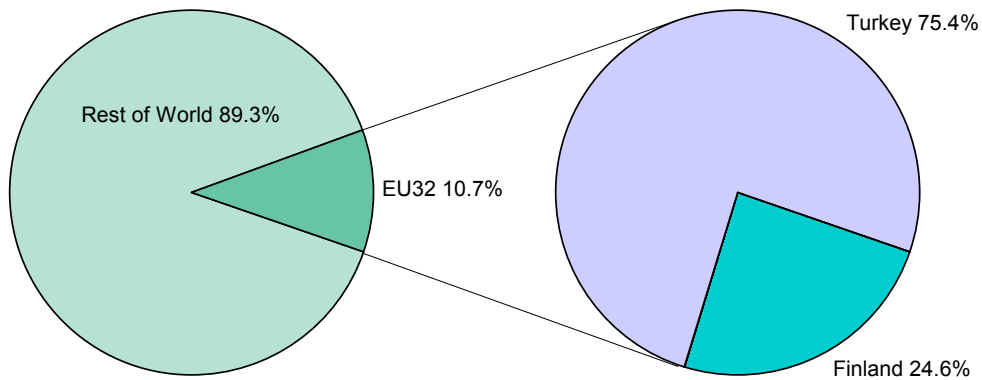
Cement - EU32 trade in 2008



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 of chromium ores and concentrates is dominated by South Africa, India and Kazakhstan which together produced 73 per cent of the world total in 2008. Finland and Turkey are the only countries in Europe with significant production, which amounted to nearly 11 per cent of the world total.
- The price of chromium ore (South African, metallurgical grade, C.I.F. Chinese ports), in August 2008, was in the range US\$330-US\$350 per tonne. However, like many metals, the price fell later in 2008 due to the global recession and it ended the year at US\$160-US\$180 per tonne. During the early part of 2009, the price fell further reaching a low of US\$80-US\$100 in May before recovering to US\$180-US\$200 per tonne by the end of the year.
- The price of chromium metal (alumino-thermic, min. 99% in warehouse) increased during the first part of 2008 from its starting position of US\$9200-US\$9500 per tonne to reach a high in August of US\$13 500-US\$14 000 per tonne. During the latter part of 2008 and early 2009 the price fell sharply to a low of US\$7600-US\$8000 per tonne by April. The price experienced only a slight recovery throughout the rest of 2009 and ended the year at US\$8100-US\$8350 per tonne.

EU32 Production of chromium ores and concentrates 2008



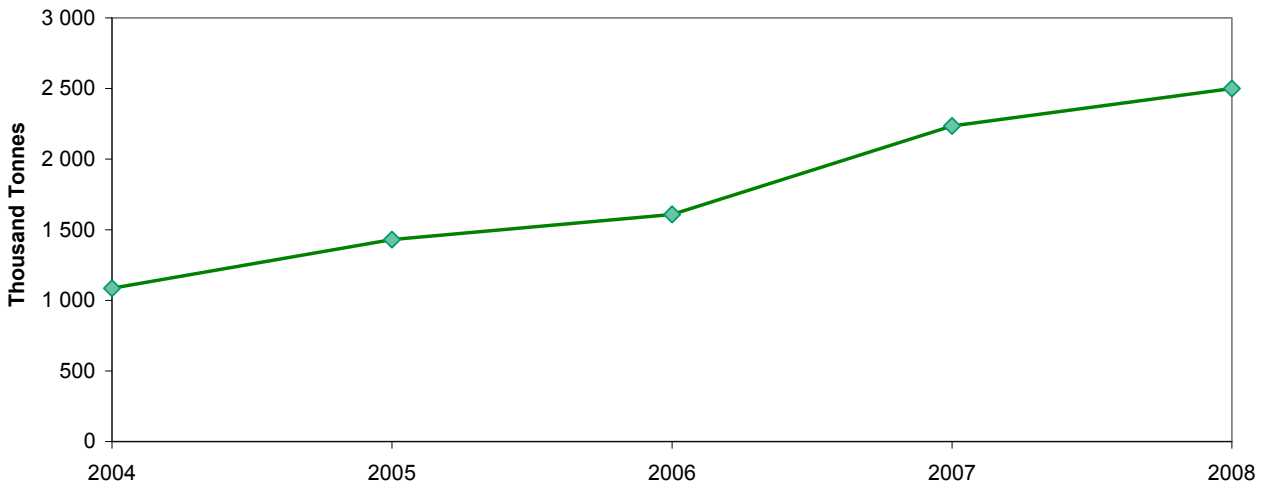
Production of chromium ores and concentrates

Country	2004	2005	2006	2007	2008
Finland	580 000	572 000	549 000	556 000	614 000
Turkey	506 421	858 729	1 059 901	1 678 932	1 885 712
EU32 Total	1 086 000	1 431 000	1 609 000	2 235 000	2 500 000

Note(s)

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

EU32 Production of chromium ores and concentrates 2004 - 08



Exports of chromium

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Ores and concentrates	392	276	136	491	833
Metal	7 194	8 893	11 770	14 739	6 596
Belgium-Luxembourg					
Ores and concentrates	2 433	10 777	14 485	11 405	48 086
Metal	852	782	520	635	772
Czech Republic					
Ores and concentrates	236	523	645	800	507
Metal	364	109	2 104	946	594
Denmark					
Metal	661	703	855	549	1 262
Finland					
Ores and concentrates	708	841	1 570	2 492	3 041
France					
Ores and concentrates	2 928	2 340	2 013	2 391	4 694
Metal	7 182	8 074	6 457	7 225	7 844
Germany					
Ores and concentrates	12 691	14 188	24 185	20 629	23 563
Metal	1 256	1 478	2 877	3 114	5 379
Greece					
Ores and concentrates	21	249	726	—	98
Italy					
Ores and concentrates	3 803	4 673	5 446	3 980	2 567
Metal	4 184	1 070	111	1 666	166
Lithuania					
Ores and concentrates	...	948	2 213	1 156	240
Macedonia					
Ores and concentrates	247	46	...	1 835	160
Netherlands					
Ores and concentrates	58 623	72 062	74 909	78 433	117 639
Metal	2 655	3 543	4 430	2 125	4 282
Norway					
Metal	413	116	203	96	128
Poland					
Metal	82	1	13	1 556	1 465
Portugal					
Ores and concentrates	...	1 111	591	295	70
Slovakia					
Metal	2 362	1 876	1 735	1 116	1 299
Spain					
Ores and concentrates	2 113	1 314	1 908	1 529	1 073
Metal	905	709	990	779	1 165
Sweden					
Metal	75	55	105	102	225
Switzerland					
Metal	319	249	530	74	54
Turkey					
Ores and concentrates	575 030	834 034	887 689	1 265 036	1 816 427
Metal	33	238	6	7	122
United Kingdom					
Ores and concentrates	622	228	47	178	—
Metal	4 776	4 547	5 123	6 777	6 501

Note(s)

(1) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

Imports of chromium

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Ores and concentrates	26 761	21 398	37 326	39 071	42 008
Metal	3 731	4 440	8 879	14 480	8 006
Belgium-Luxembourg					
Ores and concentrates	6 094	18 464	22 053	20 761	56 183
Metal	821	1 245	1 264	1 188	1 114
Bulgaria					
Ores and concentrates	812	997	1 440	969	793
Croatia					
Ores and concentrates	459	537	615	584	568
Metal	279	54	51	280	394
Czech Republic					
Ores and concentrates	11 365	12 440	11 380	13 936	12 990
Metal	60	149	123	281	282
Denmark					
Ores and concentrates	594	837	774	945	974
Metal	90	53	27	31	10
Finland					
Ores and concentrates	6 092	6 962	8 388	9 324	8 866
Metal	164	258	575	282	327
France					
Ores and concentrates	19 770	18 980	23 031	20 156	26 952
Metal	1 323	669	1 040	717	1 335
Germany					
Ores and concentrates	128 886	141 483	126 874	154 367	175 277
Metal	5 599	5 428	7 552	8 454	7 022
Greece					
Ores and concentrates	122	477	732	257	298
Hungary					
Ores and concentrates	367	388	306	492	479
Metal	69	182	289	28	86
Ireland, Republic of					
Metal	25	40	44	101	120
Italy					
Ores and concentrates	30 872	39 999	41 992	46 433	36 552
Metal	677	958	830	891	742
Macedonia					
Ores and concentrates	...	3	709	1 432	306
Netherlands					
Ores and concentrates	88 660	80 622	99 305	125 778	145 698
Metal	612	1 838	3 632	2 222	3 897
Norway					
Ores and concentrates (a)	* 400	* 500	* 500	* 20	* 600
Metal	88	92	73	253	128
Poland					
Ores and concentrates	13 053	9 391	16 161	38 543	36 646
Metal	242	54	45	1 717	2 137
Portugal					
Ores and concentrates	1 547	2 599	2 845	3 339	5 369
Metal	18	18	336	55	53
Romania					
Ores and concentrates	2 562	2 828	1 675	1 856	77 546
Metal	58	245	958	78	64
Slovakia					
Ores and concentrates	24 479	12 475	11 252	16 819	11 969
Metal	2	55	11	20	104
Slovenia					
Ores and concentrates	406	446	1 414	986	999
Metal	31	122	97	85	313
Spain					
Ores and concentrates	3 947	10 262	5 906	6 437	6 721
Metal	1 520	1 206	1 552	1 393	1 219
Sweden					
Ores and concentrates	457 000	240 000	315 000	350 000	337 933
Metal	1 903	1 150	1 639	2 145	12 782

Imports continued

tonnes

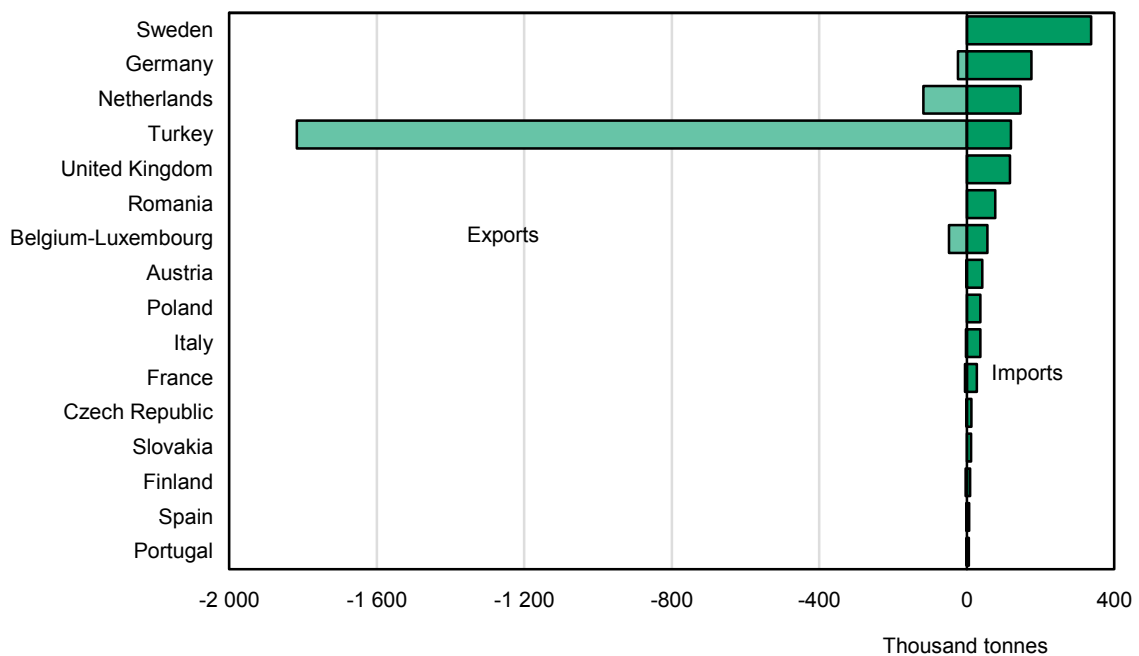
Country	2004	2005	2006	2007	2008
Switzerland					
Ores and concentrates	671	624	1 080	1 339	1 510
Metal	141	127	162	114	134
Turkey					
Ores and concentrates	56 836	89 844	84 467	107 524	119 806
Metal	85	26	33	60	60
United Kingdom					
Ores and concentrates	130 841	122 042	74 907	103 551	117 715
Metal	2 321	1 723	4 022	2 134	3 099

Note(s)

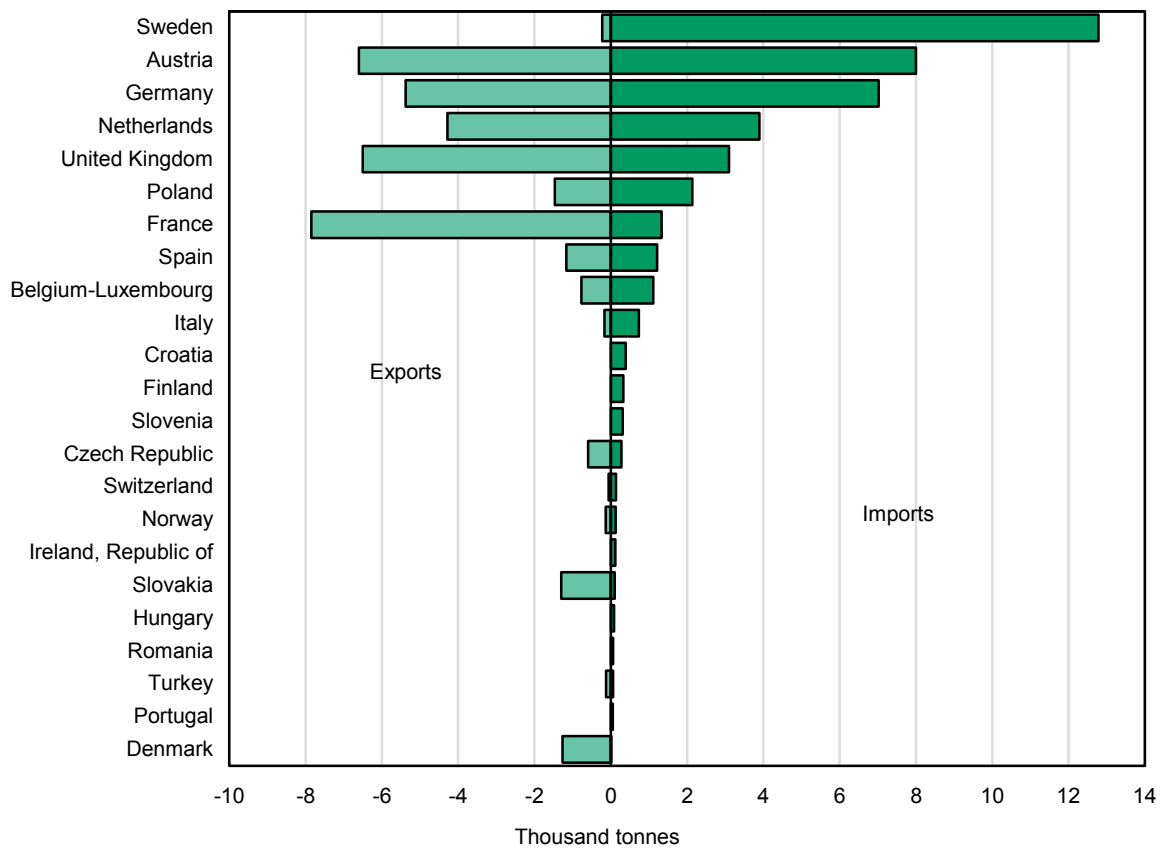
(1) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

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

Chromium ores and concentrates - EU28 trade in 2008



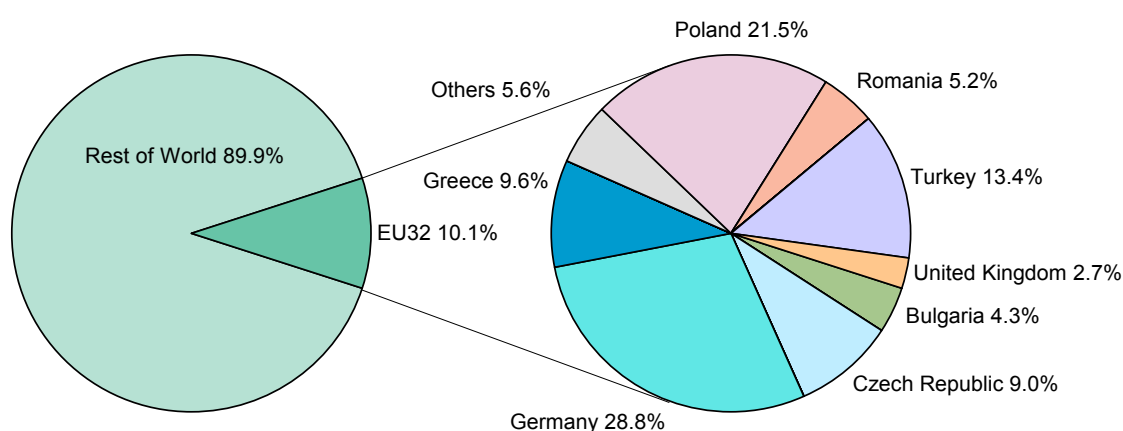
Chromium metal - EU32 trade in 2008



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 and bituminous) and brown coal (lignite) are used as steam coal; only bituminous coal is used as coking coal.
- In 2008 the EU32 countries produced 10 per cent of the world's coal (all types) of which approximately half was contributed by Germany and Poland. China, the world's largest coal producer, has seen an increase in production of 34 per cent between 2004 and 2008, and now accounts for nearly 40 per cent of the world total.
- The pricing of coal is complex, based on coal type, net calorific value and content of impurities such as sulphur. The Global Coal RB Index gave a price for coal in December 2009 of US\$77.56 per tonne.

EU32 Production of coal 2008



Production of coal

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Brown coal and lignite (a)	235 397	13 931	7 854	—	—
Bulgaria					
Anthracite and Bituminous	170 000	—	—	—	—
Lignite	23 384 500	22 146 100	22 749 500	25 325 000	26 007 800
Brown coal	2 724 200	2 469 200	2 556 900	2 833 500	2 643 200
Czech Republic					
Bituminous	14 648 000	12 778 000	13 017 000	12 462 000	12 197 000
Lignite	450 000	467 000	459 000	437 000	416 000
Brown coal	47 840 000	48 658 000	48 915 000	49 134 000	47 456 000
France					
Anthracite and Bituminous	200 000	—	—	—	—
Germany					
Anthracite and Bituminous	25 871 882	24 909 867	20 882 119	21 531 956	17 171 232
Brown coal	181 926 060	177 907 945	176 324 117	180 411 991	175 313 020
Greece					
Lignite	71 237 228	70 600 000	64 800 000	66 100 000	64 521 000
Hungary					
Bituminous	280 000	—	—	—	—
Lignite	8 470 258	8 153 968	8 467 220	8 351 563	8 041 168
Brown coal	2 500 000	1 426 000	1 431 700	1 450 400	1 386 140
Macedonia					
Lignite	7 129 535	6 879 726	6 650 182	6 569 220	7 669 103
Norway					
Bituminous (b)	3 018 500	1 667 000	2 359 000	3 223 000	3 429 000

Coal

Production continued

tonnes

Country	2004	2005	2006	2007	2008
Poland					
Bituminous	100 087 100	97 903 730	95 222 512	88 313 369	84 345 443
Lignite	61 197 500	61 636 445	60 844 278	57 537 727	59 668 166
Romania					
Anthracite and Bituminous	3 016 000	3 079 000	—	—	—
Lignite	29 726 895	28 491 480	32 753 526	35 671 000	34 529 000
Brown coal	220 157	62 609	* 58 000	97 000	205 000
Slovakia					
Lignite	289 000	35 000	6 000	20 000	87 000
Brown coal	2 523 000	2 268 000	2 016 000	1 839 000	2 075 000
Slovenia					
Lignite	4 195 953	3 945 100	3 932 842	4 037 766	4 008 440
Brown coal	611 349	594 456	587 912	483 417	488 830
Spain					
Anthracite	3 692 220	3 888 838	3 775 504	3 439 879	3 148 603
Bituminous	5 220 407	4 664 589	4 572 350	4 304 938	4 156 918
Sub-bituminous	3 426 001	3 354 014	3 221 083	3 182 556	2 896 654
Lignite	8 146 908	7 587 113	6 859 641	6 112 946	—
Turkey					
Anthracite	2 842 952	2 785 505	3 070 793	3 230 787	3 343 409
Bituminous	738 915	737 701	...	...	...
Lignite	43 754 159	60 867 574	61 010 000	74 316 728	86 074 626
United Kingdom					
Bituminous (c)	25 096 000	20 498 000	18 517 000	17 070 000	17 912 000
EU32 Total	684 900 000	680 500 000	665 100 000	677 500 000	669 200 000

Note(s)

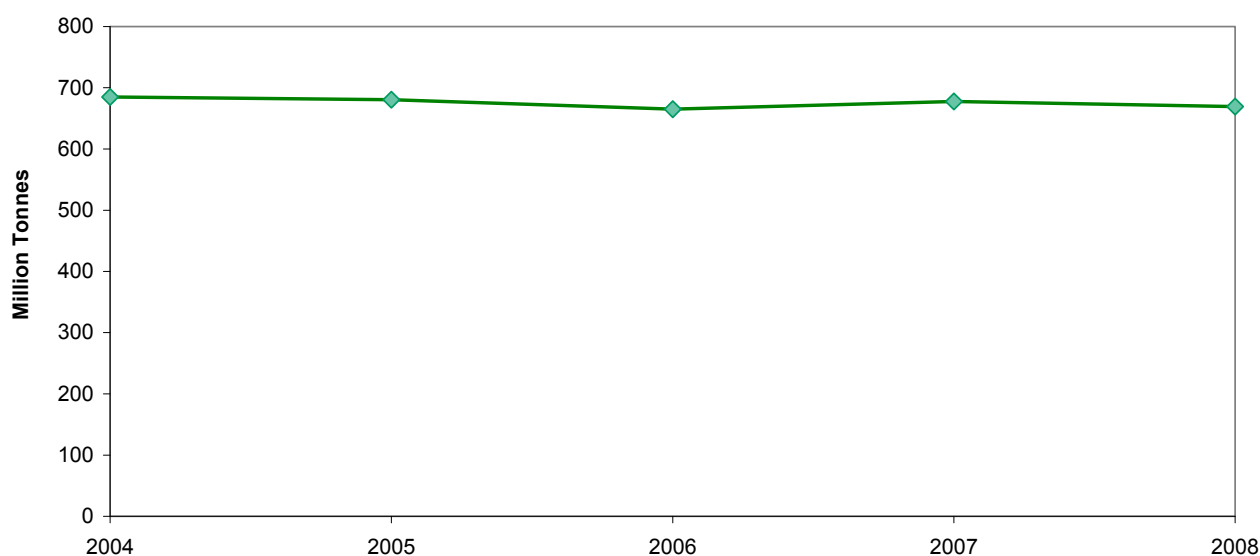
(1) There is no international agreement as to the separate definition of lignite and brown coal. In some cases they are distinguished. Elsewhere both may be aggregated under one or other term

(a) Coal; all forms

(b) Spitzbergen: not including production from mines controlled by Russia

(c) Including anthracite

EU32 Production of coal 2004 - 08



Exports of coal

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg					
Anthracite	1 399 280	1 463 646	1 521 523	1 454 115	1 400 377
Other coal	2 273 223	2 948 838	3 734 518	3 670 706	4 416 217
Briquettes	1 454	11 682	7 923	8 214	11 331
Bulgaria					
Hard coal (a)	9 513	3 920	5 372	17 358	36 095
Czech Republic					
Hard coal (a)	5 706 798	5 260 739	6 690 917	6 732 974	5 993 824
Lignite	1 072 275	1 324 025	1 300 406	1 076 140	1 561 097
Briquettes	160 823	148 966	213 621	112 447	75 459
Denmark					
Hard coal (a)	7 380	86 739	54 338	75 866	27 069
France					
Anthracite	1 077	14 913	10 442	13 161	57 436
Other coal	93 265	68 197	128 523	200 682	128 614
Germany					
Anthracite	...	...	...	7 444	16 575
Other coal	183 694	251 623	305 046	309 501	518 629
Lignite	430	73	27 801	140 400	425 680
Briquettes	87 022	74 952	83 990	72 008	370 211
Greece					
Hard coal (a)	16 229	11 673	15 852	25 717	8 426
Briquettes	67 702	51 752	23 465	12	25
Hungary					
Lignite	81 047	366 132	—	—	89 444
Ireland, Republic of					
Anthracite	1 037	501	3 791	30 451	...
Other coal	8 749	9 800	6 382	4 395	6 158
Briquettes	18 049	13 103	4 823	4 083	6 508
Italy					
Hard coal (a)	92 227	66 115	38 239	41 075	31 201
Netherlands					
Anthracite	161 320	165 918	196 407	158 572	109 516
Other coal	8 624 870	8 445 919	11 940 024	14 089 233	6 399 941
Briquettes	71 710	58 241	73 524	10 188	15
Poland					
Anthracite	8 599	23 331	31 200	30 256	16 173
Other coal	19 684 005	20 816 121	16 586 467	11 761 743	7 775 799
Lignite	26 929	8 211	317	—	1 009
Romania					
Hard coal (a)	1 390	661	7 997	67 304	5 331
Slovakia					
Hard coal (a)	44 068	33 608	33 665	26 600	30 131
Slovenia					
Lignite	1 959	6 881	29 794	2 150	377
Spain					
Anthracite	48 710	49 563	74 826	101 968	186 293
Other coal	14 624	8 208	135 401	872 269	1 636 071
Briquettes	33	1	53	20	21 735
Turkey					
Anthracite	11 077	10 324	1 259	—	1 043
United Kingdom					
Anthracite	172 486	169 252	137 353	123 549	165 473
Other coal	439 930	380 426	354 281	419 193	742 582
Lignite	2 335	2 321	2 748	1 965	2 334
Briquettes	41 094	20 713	20 037	27 591	52 605

Note(s)

(1) This table excludes bunker shipments

(a) Including anthracite

Coal

Imports of coal

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Hard coal (a)	3 552 594	4 108 821	3 912 731	4 509 917	4 118 906
Lignite	38 833	2 139	2 294	53 331	46 392
Briquettes	83 035	96 318	101 389	12 877	25 919
Belgium-Luxembourg					
Anthracite	4 134 160	3 293 344	2 608 840	2 864 554	3 999 349
Other coal	9 728 235	8 997 265	10 534 424	9 679 689	10 252 899
Lignite	232 809	229 192	279 982	278 700	372 271
Briquettes	3 924	14 120	29 848	26 260	21 776
Bulgaria					
Anthracite	1 464 605	2 016 911	2 170 631	2 229 619	2 841 458
Other coal	2 784 512	2 270 525	2 221 526	2 415 165	2 054 649
Briquettes	2 486	38	39	112 775	66 678
Croatia					
Hard coal	1 218 407	957 899	1 082 446	1 101 803	1 189 379
Lignite	79 921	77 959	78 226	62 789	58 417
Briquettes	2 981	4 734	6 084	2 604	2 796
Cyprus					
Hard coal (a)	108	3	23 473	56 896	46 258
Briquettes	1 028	935	869	844	988
Czech Republic					
Anthracite	52 247	43 713	61 255	45 114	39 211
Other coal	1 642 568	1 192 214	1 896 977	2 507 091	2 181 691
Lignite	1 083	1 371	24 412	33 472	33 579
Briquettes	3 410	853	23 837	1 393	18 654
Denmark					
Anthracite	77 502	52 143	85 883	47 233	45 282
Other coal	7 487 269	5 881 938	9 234 248	8 034 596	7 412 557
Briquettes	9 851	15 865	511	194	1 000
Estonia					
Hard coal (a)	44 399	53 647	95 079	175 599	123 194
Finland					
Hard coal (a)	8 283 891	4 724 392	6 683 990	6 669 717	5 671 385
France					
Anthracite	2 076 592	3 266 840	3 018 025	3 532 378	2 817 048
Other coal	17 619 595	16 234 759	16 372 754	15 425 960	18 470 782
Lignite	40 405	34 396	36 436	51 589	68 426
Briquettes	75 872	116 845	147 381	174 170	154 140
Germany					
Anthracite	1 413 902	991 877	2 499 908	4 353 426	4 137 690
Other coal	31 047 441	29 452 512	35 218 836	37 993 445	37 215 220
Lignite	10 570	9 890	10 070	15 411	39 248
Briquettes	95 446	110 971	128 877	96 163	70 400
Greece					
Anthracite	37 633	35 475	39 250	59 007	41 475
Other coal	753 949	724 600	461 181	382 933	288 441
Lignite	2	0	50	3 029	35 457
Briquettes	1 929	1 803	1 382	1 144	111
Hungary					
Hard coal (a)	1 347 232	1 298 122	1 765 117	1 950 139	1 907 548
Lignite	403 297	710 417	686 862	572 742	767 480
Briquettes	12 295	14 310	15 416	13 590	16 093
Ireland, Republic of					
Anthracite	100 792	60 325	68 190	33 175	47 392
Other coal	2 930 298	2 641 074	1 908 618	1 830 979	2 169 185
Briquettes	48 348	35 959	48 158	14 278	19 049
Italy					
Anthracite	338 706	369 840	282 831	406 331	490 757
Other coal	25 382 339	24 714 768	24 860 362	25 111 043	25 745 375
Briquettes	9 374	9 136	10 207	6 914	5 392
Latvia					
Hard coal (a)	94 896	115 720	159 787	153 806	169 211
Lithuania					
Hard coal (a)	260 684	290 058	391 032	356 342	382 695
Macedonia					
Hard coal	53 495	98 024	179 193	199 946	214 078
Briquettes	190 519	188 634	103 508	63 805	56 640

Imports continued

tonnes

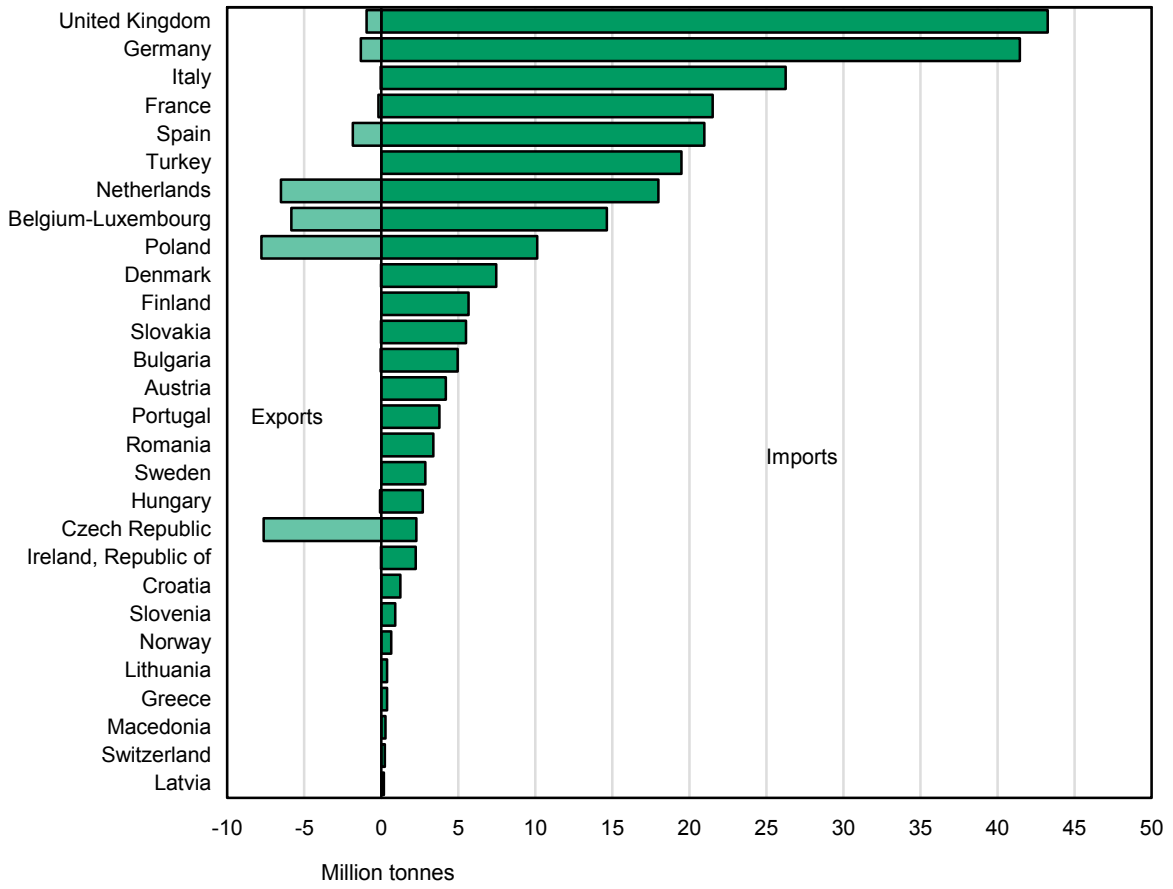
Country	2004	2005	2006	2007	2008
Netherlands					
Anthracite	293 892	186 936	218 516	62 577	79 784
Other coal	22 241 661	21 958 859	21 368 119	24 622 621	17 843 689
Lignite	18 294	30 769	22 548	29 517	5 265
Briquettes	15 510	58 737	83 734	68 765	53 432
Norway					
Anthracite (b)	71 785	92 673	55 914	76 744	81 955
Other coal (b)	693 106	575 921	472 129	* 527 000	* 538 000
Briquettes	904	282	349	706	24 406
Poland					
Anthracite	168 095	263 929	295 026	449 362	553 152
Other coal	2 231 606	3 112 462	4 866 783	5 442 327	9 531 959
Lignite	...	...	4 406	8 946	18 057
Briquettes	2 368	2 118	3 932	3 710	10 960
Portugal					
Anthracite	30 630	48 785	30 688	44 447	48 793
Other coal	5 241 255	5 386 968	5 630 721	4 733 158	3 721 513
Romania					
Anthracite	74 708	82 683	60 272	68 924	110 484
Other coal	3 584 413	3 681 406	3 398 344	4 421 709	3 008 391
Lignite	44 787	367 781	620 251	575 514	121 227
Briquettes	251	282	95	237 051	148 890
Slovakia					
Anthracite	61 361	112 482	38 147	176 682	258 597
Other coal	5 387 110	5 249 848	4 411 685	4 802 258	4 253 530
Lignite	692 059	704 690	889 241	725 586	983 151
Briquettes	12 464	33 067	12 150	5 813	6 733
Slovenia					
Hard coal (a)	38 849	51 173	47 221	83 100	74 508
Lignite	584 117	543 465	614 851	567 139	833 308
Spain					
Anthracite	2 376 019	2 534 019	2 508 261	1 019 341	957 293
Other coal	22 098 156	22 222 316	21 196 872	23 420 766	20 010 533
Sweden					
Anthracite	7 304	13 013	28 506	25 832	36 163
Other coal	3 059 218	3 187 798	3 003 919	3 154 331	2 811 668
Briquettes	4 371	8 443	27 164	287	9 029
Switzerland					
Anthracite	7 396	6 640	7 978	9 539	18 721
Other coal	169 472	93 584	143 425	214 684	132 824
Lignite	455	34 897	86 762	84 654	80 814
Briquettes	3 917	5 137	4 584	3 908	3 986
Turkey					
Anthracite	397 125	413 333	502 178	530 393	707 425
Other coal	16 033 118	16 126 628	14 658 368	13 850 371	18 781 879
United Kingdom					
Anthracite	197 788	187 388	125 011	135 941	213 318
Other coal	35 958 449	43 890 778	49 544 012	43 024 560	43 038 043
Briquettes	8 498	6 554	9 995	6 501	14 131

Note(s)

(a) Including anthracite

(b) Excludes coal imported from Spitzbergen

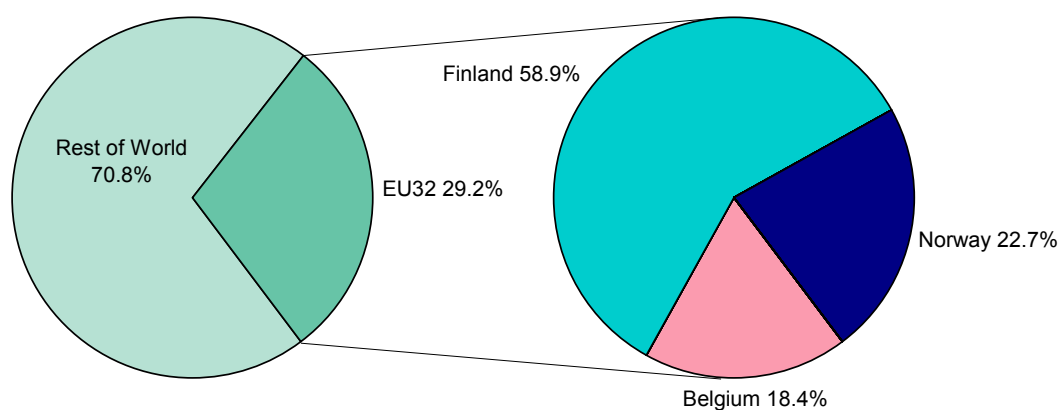
Coal - EU32 trade in 2008



Cobalt

- Cobalt is a lustrous, greyish-silver, brittle metal. It is also very hard and can take a high polish. It retains its strength at high temperatures and is ferromagnetic, which means it is capable of being magnetised. Cobalt is extensively used as an alloying metal and is valued for its ability to produce very hard superalloys with useful magnetic properties and resistance to high temperatures. It is also used in the manufacture of chemical compounds for a wide range of industrial uses, in rechargeable batteries and as a pigment in glass, enamels, pottery and china.
- Democratic Republic of Congo was the largest world producer of mined cobalt in 2008, with 48 per cent of the world total. Canada, Australia, Brazil, Zambia and Cuba also produced between five and nine per cent each. There was no mine production within the EU32.
- China was the world's largest producer of cobalt metal, producing 32.5 per cent of the world total in 2008. Finland was the second largest world producer, with 17 per cent. Altogether, the EU32 contributed 29 per cent to the world's total output of cobalt metal.
- Cobalt prices have long been volatile. Average prices in 2008 were 30 per cent higher than the previous year, despite the monthly average price for December 2008 having dropped by 60 per cent year-on-year to US\$14.5 per pound. During 2009 prices gradually increased driven by high demand, although they remained highly volatile, and finished the year at around US\$20 per pound.

EU32 Production of cobalt metal 2008



Production of cobalt metal

tonnes

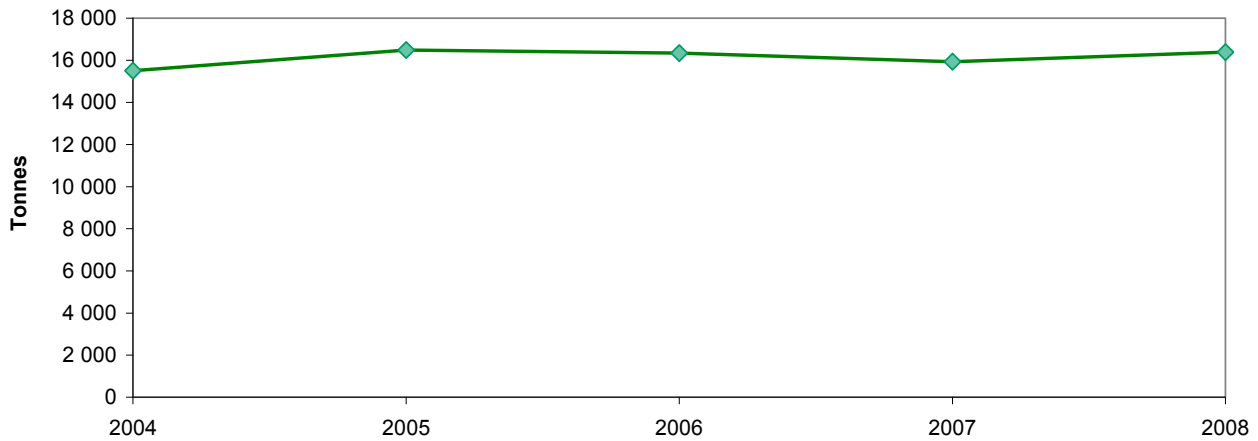
Country	2004	2005	2006	2007	2008
Belgium (a)	2 947	3 298	2 840	2 825	3 020
Finland	7 893	8 171	8 582	9 173	9 645
Norway	4 670	5 021	4 927	3 939	3 719
EU32 Total	15 500	16 500	16 300	15 900	16 400

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

EU32 Production of cobalt metal 2004 - 08



Exports of cobalt

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Metal	22	5	10	19	31
Belgium-Luxembourg					
Ore	1 064	543	197	1 204	1 112
Metal	(a)* 3 900	(a)* 3 100	4 329	5 104	4 393
Oxides (a)	* 7 300	* 5 500	* 5 800	* 6 000	* 7 000
Finland					
Metal (a)	* 5 200	* 5 800	* 5 700	* 5 700	* 5 700
Oxides (a)	* 2 100	* 1 700	* 2 200	* 2 400	* 2 600
France					
Metal	675	699	709	1 006	859
Oxides	221	57	68	91	28
Germany					
Ore	367	171	...	457	145
Metal	1 441	1 395	1 602	2 067	1 588
Oxides	233	185	140	158	158
Ireland, Republic of					
Metal	32	42	43	45	47
Oxides	11	—	38	152	0
Italy					
Metal	236	97	224	168	220
Oxides	123	63	77	223	235
Netherlands					
Metal	1 954	1 326	587	1 579	1 090
Oxides	953	1 323	112	127	959
Norway					
Metal	4 744	4 997	4 990	4 030	3 731
Poland					
Metal	26	19	8	11	11
Slovenia					
Metal	40	42	16	31	24
Spain					
Metal	35	7	22	12	8
Oxides	33	59	30	56	7
Sweden					
Metal	127	127	110	152	67
Switzerland					
Metal	95	140	105	94	120
United Kingdom					
Metal	1 882	1 471	1 695	2 300	2 614
Oxides	1 233	994	750	689	798

Note(s)

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

Imports of cobalt

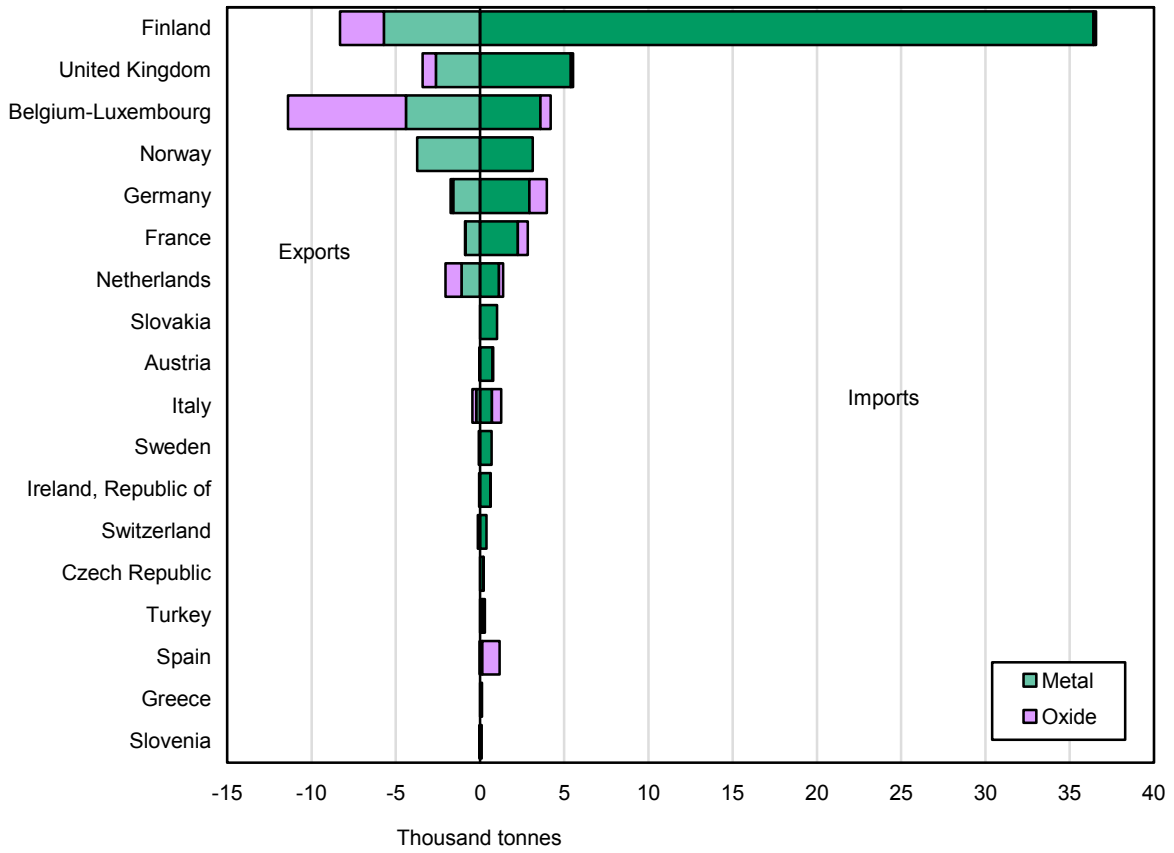
tonnes

Country	2004	2005	2006	2007	2008
Austria					
Metal	585	694	438	631	740
Oxides	11	5	7	4	40
Belgium-Luxembourg					
Ore	455	263	107	153	222
Metal (a)	* 7 000	* 4 700	* 4 300	* 6 600	* 3 600
Oxides	1 103	(a)* 1 300	(a)* 600	(a)* 600	(a)* 600
Czech Republic					
Metal	81	75	84	108	199
Oxides	33	18	24	26	21
Finland					
Ore	80 202	54 794	31 186	26 449	26 500
Metal	(a)* 700	13 611	26 928	27 590	36 405
Oxides	126	336	186	346	167
France					
Metal	1 681	2 038	2 117	3 137	2 251
Oxides	522	474	562	658	574
Germany					
Metal	2 602	2 990	3 532	3 150	2 921
Oxides	448	542	759	898	1 057
Greece					
Metal	89	31	30	42	123
Ireland, Republic of					
Ore	30	28	35	571	36
Metal	273	390	464	298	622
Oxides	5	13	43	7	4
Italy					
Ore	122	5	11	17	12
Metal	440	468	587	626	703
Oxides	1 004	1 128	1 161	1 682	561
Netherlands					
Metal	1 340	1 532	1 511	1 270	1 124
Oxides	369	351	269	489	244
Norway					
Metal	9 629	5 775	6 362	3 871	3 131
Poland					
Metal	44	35	52	69	51
Oxides	37	121	63	18	30
Slovakia					
Metal	38	5	13	37	1 020
Slovenia					
Metal	162	209	209	96	93
Spain					
Metal	181	158	180	121	131
Oxides	1 249	1 352	1 254	1 187	1 038
Sweden					
Metal	711	660	743	676	698
Switzerland					
Metal	361	423	408	454	386
Turkey					
Metal	170	167	186	176	148
Oxides	134	139	165	142	152
United Kingdom					
Metal	3 862	3 888	4 427	5 422	5 395
Oxides	525	107	195	180	138

Note(s)

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

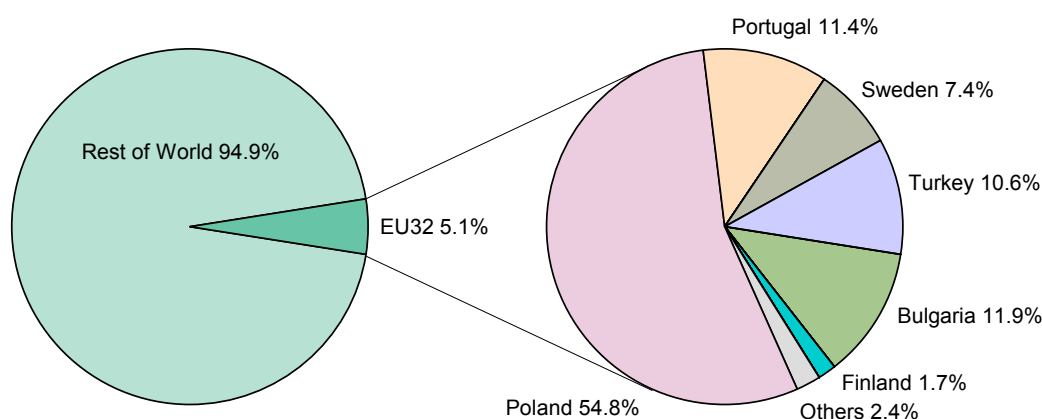
Cobalt - EU32 trade in 2008



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.
- World mine production in 2008 was dominated by Chile (34 per cent) although many countries have some form of copper production. Chile (17 per cent of total) was also the second largest refined copper producer in the world after China (21 per cent). The EU32 countries contributed five per cent to the world mined copper total and 15 per cent to world refined copper production. Poland was the largest mine producer in the EU32 and second largest refined metal producer, after Germany where refined copper production is based on imported materials.
- Following the all-time record high copper price of US\$8985 per tonne attained in July 2008, prices declined sharply over the remainder of the year in response to the deteriorating global economic climate. By December prices had fallen below US\$3000 per tonne, the lowest price since September 2004 and a fall of around 69 per cent from the July 2008 peak. Throughout 2009 the copper price generally recovered, albeit with some considerable fluctuation, to end the year above US\$7300 per tonne. However, the average annual price for 2009 was approximately US\$5200 per tonne, around 25 per cent lower than for 2008.

EU32 Mine production of copper 2008

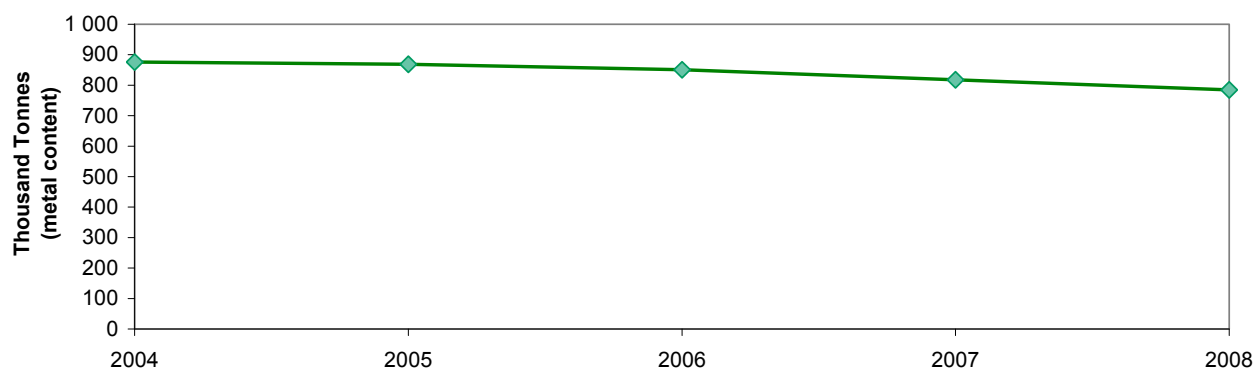


Mine production of copper

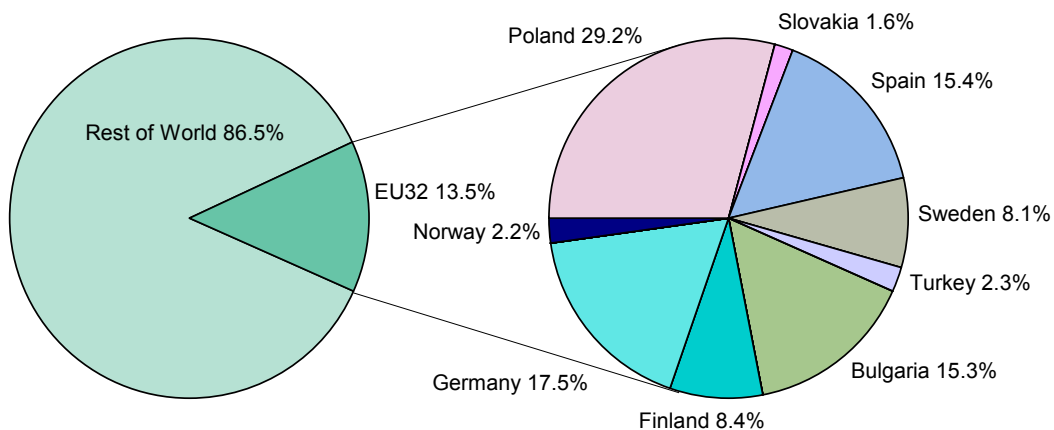
tonnes (metal content)

Country	2004	2005	2006	2007	2008
Bulgaria	79 600	82 700	99 000	99 000	93 000
Cyprus	—	—	900	2 900	3 000
Finland	15 500	15 000	13 000	13 600	13 300
Macedonia	—	4 799	7 054	7 029	8 051
Poland	530 768	511 799	497 200	451 900	429 400
Portugal	95 700	89 541	78 576	90 182	89 026
Romania	20 380	16 286	12 535	2 213	308
Spain	1 308	7 358	8 700	6 281	7 071
Sweden	82 415	87 068	86 746	62 905	57 688
Turkey	49 800	54 100	46 400	81 400	83 300
EU32 Total	875 000	869 000	850 000	817 000	784 000

EU32 Mine production of copper 2004 - 08



EU32 Smelter production of copper 2008



Smelter production of copper

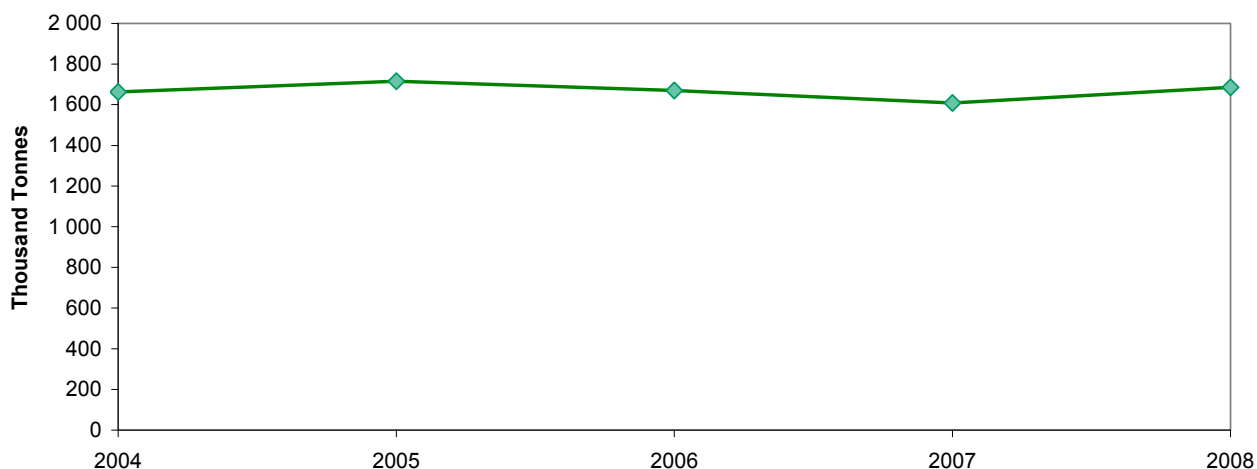
tonnes

Country	2004	2005	2006	2007	2008
Bulgaria	215 800	225 000	217 000	217 600	257 100
Finland	151 647	157 933	164 306	118 911	142 154
Germany	278 600	257 200	273 800	275 300	295 000
Norway	35 643	38 681	39 700	34 200	37 000
Poland	547 228	555 681	555 907	518 303	492 942
Romania	61	—	—	—	—
Slovakia	...	...	—	20 485	27 337
Spain	224 249	284 215	263 662	257 348	259 897
Sweden	174 459	168 763	129 951	148 835	136 409
Turkey	34 700	27 700	26 300	17 900	38 000
EU32 Total	1 662 000	1 715 000	1 671 000	1 609 000	1 686 000

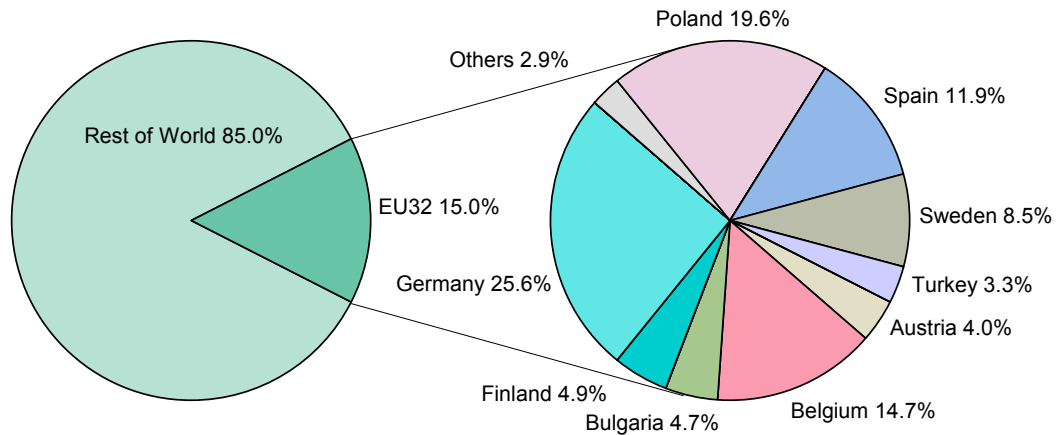
Note(s)

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

EU32 Smelter production of copper 2004 - 08



EU32 Production of refined copper 2008



Production of refined copper

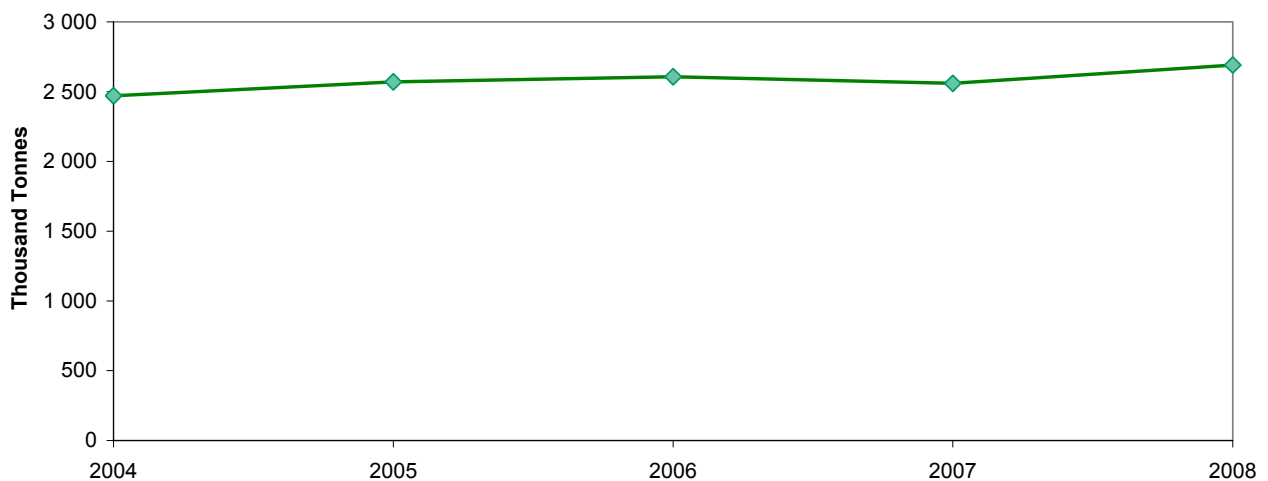
tonnes

Country	2004	2005	2006	2007	2008
Austria	74 200	72 300	72 600	81 400	106 700
Belgium	383 000	382 900	378 600	394 000	395 800
Bulgaria	55 300	60 100	65 600	70 000	126 700
Cyprus	1 344	—	880	3 012	2 986
Finland	132 384	132 126	137 961	109 870	131 249
Germany	652 600	638 800	662 338	665 517	689 763
Italy	33 600	32 200	36 400	28 600	24 200
Norway	35 643	38 681	39 700	34 200	37 000
Poland	550 066	560 256	556 625	532 975	526 808
Romania	24 526	20 739	21 583	18 289	14 120
Spain	228 466	313 105	299 146	308 372	319 050
Sweden	235 620	223 482	229 241	213 894	227 774
Turkey	63 800	94 900	105 800	99 600	89 100
EU32 Total	2 471 000	2 570 000	2 606 000	2 560 000	2 691 000

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

EU32 Production of refined copper 2004 - 08



Copper

Exports of copper

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Matte and cement	4 686	2 901	651	2 323	719
Unwrought	71 119	83 750	84 104	82 985	114 978
Unwrought alloys	580	604	2 509	1 239	938
Scrap	36 476	33 274	39 169	38 642	35 582
Belgium-Luxembourg					
Ores and concentrates	1 478	1 887	1 778	1 061	2 155
Matte and cement	493	401	1 026	1 104	4 139
Unwrought, unrefined	19 942	4 499	8 833	10 730	10 534
Unwrought, refined	169 556	241 363	236 804	199 650	257 907
Unwrought alloys	13 556	14 463	13 419	15 081	12 929
Scrap	169 397	177 787	163 418	194 666	164 502
Bulgaria					
Ores and concentrates	78 563	124 717	193 389	168 155	105 889
Matte and cement	6 718	5 750	4 818	6 335	3 559
Unwrought	219 415	219 009	210 520	185 012	252 018
Scrap	9 480	8 244	13 163	11 590	10 547
Croatia					
Scrap	9 613	10 814	12 105	12 378	10 884
Cyprus					
Unwrought	1 322	...	879	3 006	2 986
Scrap	2 221	2 548	2 684	2 122	2 381
Czech Republic					
Unwrought	7 834	4 251	12 651	10 301	7 829
Scrap	53 086	53 707	57 152	58 534	63 825
Denmark					
Scrap	38 573	27 227	31 076	31 569	33 421
Estonia					
Scrap	6 479	6 660	11 801	7 784	8 185
Finland					
Unwrought, unrefined	25 618	29 685	34 962	10 490	27 525
Unwrought, refined	27 650	40 170	55 239	32 956	67 908
Unwrought alloys	903	746	1 533	587	423
Scrap	23 543	30 577	31 182	32 872	32 585
France					
Unwrought	60 745	48 050	47 839	67 765	55 405
Unwrought alloys	11 940	9 851	9 680	13 140	13 049
Scrap	243 074	262 874	290 528	284 890	266 930
Germany					
Ores and concentrates	49 617	46 139	54 167	61 535	48 234
Matte and cement	944	536	101	24	2
Unwrought, unrefined	53	232	3 244	105	182
Unwrought, refined	137 238	149 083	146 137	117 596	124 980
Unwrought alloys	21 038	20 232	22 941	22 436	16 485
Scrap	373 809	439 134	465 264	480 700	478 643
Greece					
Unwrought, refined	1 894	1 242	2 541	1 944	356
Unwrought alloys	1 273	365	1 142	995	1 198
Scrap	8 517	15 126	16 889	14 669	12 314
Hungary					
Scrap	31 741	34 861	27 051	23 394	20 958
Ireland, Republic of					
Ores and concentrates	...	3	922	1 024	49
Scrap	16 118	13 152	15 784	9 836	21 421
Italy					
Matte and cement	366	107	1 511	2 244	911
Unwrought	22 988	6 387	13 567	22 424	13 381
Unwrought alloys	16 772	14 128	14 620	20 830	15 268
Scrap	97 964	110 711	102 463	120 231	148 923
Latvia					
Unwrought	384	503	2 734	3 272	4 117
Scrap	7 153	9 207	7 116	7 309	6 900
Lithuania					
Scrap	7 611	5 821	5 020	4 814	4 675
Macedonia					
Ores and concentrates	648	21 441	31 547	32 224	...
Scrap	1 413	1 926	3 190	2 277	2 302

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Malta					
Scrap	1 461	1 242	1 036	1 790	1 890
Netherlands					
Unwrought	32 548	39 638	31 204	49 300	65 343
Scrap	140 909	207 551	306 132	229 090	241 332
Norway					
Unwrought	35 632	37 430	38 232	34 007	36 734
Unwrought alloys	988	1 707	1 141	1 161	756
Scrap	21 256	22 667	24 205	24 066	22 561
Poland					
Matte and cement	1 606	3 673	6 774	2 187	2 989
Unwrought	275 089	290 462	287 666	239 508	296 738
Unwrought alloys	5 007	6 183	6 205	6 397	5 469
Scrap	42 763	47 463	55 285	64 377	63 779
Portugal					
Ores and concentrates	346 534	375 312	328 296	399 589	375 755
Unwrought	1 165	9 356	918	227	600
Scrap	35 927	33 583	29 736	24 566	22 184
Romania					
Ores and concentrates	81 485	84 084	72 900	23 689	33 391
Matte and cement	3 482	...	2 818	11 569	8 494
Unwrought	815	614	735	125	153
Scrap	15 979	22 665	41 911	35 856	39 733
Slovakia					
Unwrought	15 680	19 130	27 178	34 232	35 141
Scrap	12 764	14 752	18 821	23 502	21 144
Slovenia					
Scrap	12 564	13 054	15 922	17 810	15 606
Spain					
Ores and concentrates	4 327	14 434	5 835	905	463
Unwrought, unrefined	50 901	62 269	45 906	37 210	41 676
Unwrought, refined	32 366	44 365	38 205	48 288	85 899
Unwrought alloys	11 724	9 810	10 590	12 679	12 139
Scrap	77 850	99 600	84 570	88 429	83 820
Sweden					
Unwrought, refined	81 878	99 824	86 726	65 926	70 047
Unwrought alloys	5 040	5 247	6 443	8 837	5 610
Scrap	44 366	43 816	45 456	54 673	57 245
Switzerland					
Unwrought	1 872	1 069	1 036	1 002	1 159
Scrap	69 243	74 878	74 079	75 542	82 687
Turkey					
Ores and concentrates	180 609	145 118	68 286	36 046	251 958
Unwrought	12 863	13 524	13 876	11 813	41 780
Scrap	4 529	15 083	12 630	8 920	9 670
United Kingdom					
Matte and cement	79	41	515	16	28
Unwrought	7 362	16 253	6 122	9 276	7 916
Unwrought alloys	22 035	15 013	17 251	18 142	17 822
Scrap	244 749	238 557	311 058	346 361	358 981

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

Copper

Imports of copper

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Unwrought, unrefined	15 203	20 081	26 508	26 678	39 590
Unwrought, refined	18 429	21 176	29 298	20 614	8 855
Unwrought alloys	2 460	2 260	2 979	2 485	1 866
Scrap	87 807	82 787	88 684	91 043	113 109
Belgium-Luxembourg					
Ores and concentrates	1 003	5 225	17 263	21 137	12 039
Matte and cement	4 801	370	1 112	6 360	4 485
Unwrought, unrefined	291 111	237 645	267 505	224 439	206 660
Unwrought, refined	17 318	9 515	21 818	28 746	54 463
Unwrought alloys	1 510	1 906	1 083	3 324	1 898
Scrap	256 504	257 738	300 260	328 676	258 551
Bulgaria					
Ores and concentrates	561 613	632 255	581 055	539 325	609 258
Matte and cement	383	562	5 003	10 025	34 997
Unwrought	8 599	18 613	19 735	28 226	30 422
Scrap	2 935	5 094	7 784	12 899	23 856
Czech Republic					
Unwrought	5 644	4 551	8 321	18 911	15 336
Scrap	5 601	6 114	8 104	8 966	8 677
Denmark					
Unwrought	2 065	1 702	4 081	2 901	2 818
Scrap	16 446	13 827	14 646	9 187	11 235
Finland					
Ores and concentrates	528 930	504 658	544 149	448 119	536 584
Unwrought alloys	2 778	3 229	3 996	4 178	3 542
Scrap	1 735	2 423	1 259	2 644	4 146
France					
Unwrought, unrefined	168	248	275	328	125
Unwrought, refined	590 304	516 881	506 721	431 897	435 330
Unwrought alloys	7 564	10 132	11 029	14 389	8 987
Scrap	78 853	75 464	97 462	90 195	81 036
Germany					
Ores and concentrates	1 141 843	1 149 088	1 148 316	1 300 491	1 088 291
Matte and cement	15 085	25 931	30 463	14 880	10 102
Unwrought, unrefined	11 635	36 671	41 589	31 830	24 706
Unwrought, refined	584 852	624 688	881 427	844 747	833 354
Unwrought alloys	24 066	26 657	36 770	48 261	40 073
Scrap	426 995	432 147	552 413	595 751	563 560
Greece					
Unwrought	120 088	90 557	106 404	105 722	79 928
Unwrought alloys	550	488	4 439	6 855	9 393
Scrap	1 864	930	2 141	10 148	18 628
Hungary					
Unwrought	11 365	3 269	2 175	2 492	3 016
Scrap	512	399	571	1 405	5 933
Italy					
Unwrought, unrefined	216	955	323	796	370
Unwrought, refined	700 101	652 089	774 140	746 482	617 420
Unwrought alloys	16 723	8 053	15 174	24 996	18 531
Scrap	128 501	124 737	214 289	177 546	167 212
Latvia					
Unwrought	401	606	1 199	1 396	3 609
Netherlands					
Unwrought, unrefined	10 185	10 485	18 333	18 130	...
Unwrought, refined	125 310	135 004	147 428	151 515	35 077
Unwrought alloys	2 172	1 904	2 214	3 379	2 440
Scrap	98 396	92 927	110 753	117 259	116 503
Norway					
Unwrought	2 594	3 190	3 133	3 650	3 133
Scrap	11 270	12 420	12 759	13 486	11 189
Poland					
Ores and concentrates	30	43 504	112 708	61 319	62 443
Matte and cement	1	312	5 310	10 062	—
Unwrought	3 071	7 118	40 899	35 420	43 646
Scrap	14 973	5 855	4 885	18 596	19 269

Imports continued

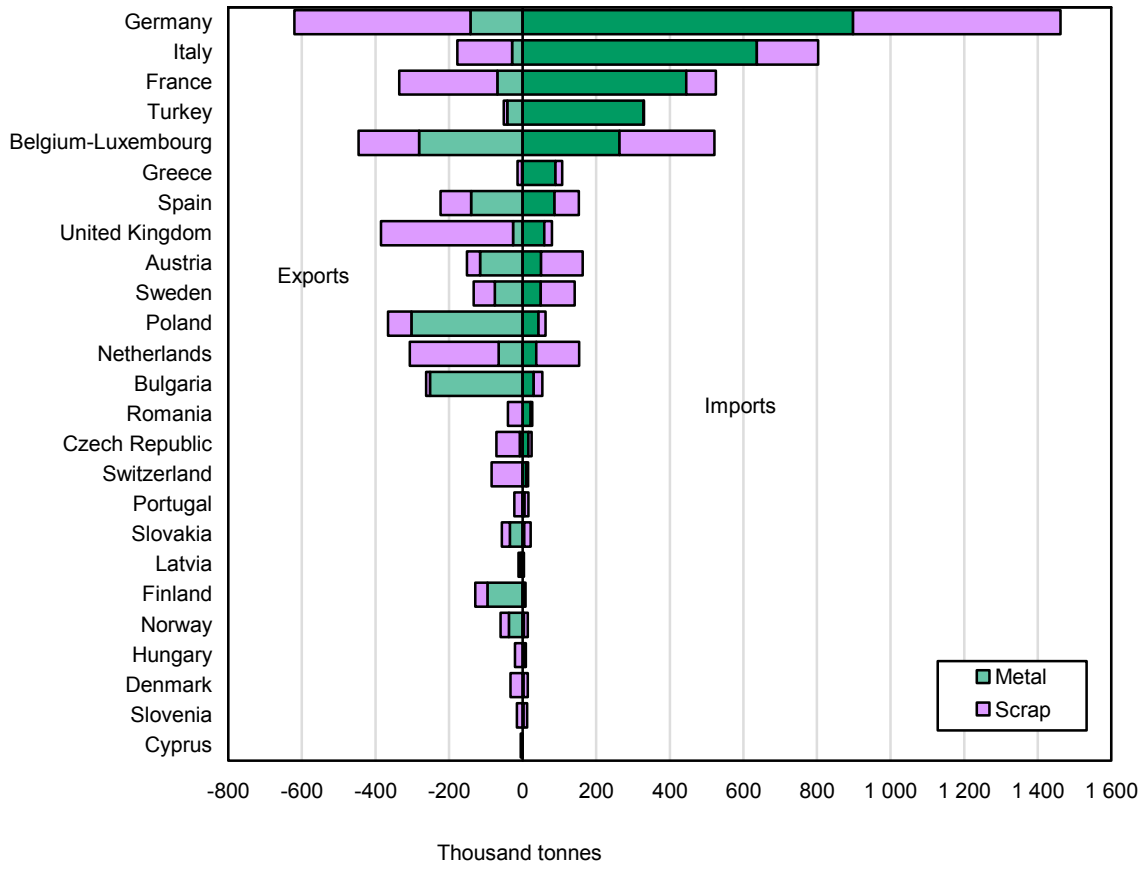
tonnes

Country	2004	2005	2006	2007	2008
Portugal					
Unwrought	7 740	4 572	5 752	5 309	5 534
Scrap	1 874	3 329	5 946	8 503	10 229
Romania					
Unwrought	7 255	9 723	12 794	25 093	22 116
Scrap	3 359	1 528	2 946	1 710	4 197
Slovakia					
Matte and cement	758	4 342	1 071	...	...
Unwrought	1 269	1 718	2 084	1 557	4 120
Scrap	20 776	19 977	17 973	17 476	17 350
Slovenia					
Unwrought	2 948	2 764	3 150	2 809	2 649
Scrap	3 743	5 762	9 000	10 431	9 687
Spain					
Ores and concentrates	776 980	1 040 099	1 100 338	1 001 284	1 122 093
Unwrought, unrefined	2 488	312	2 631	1 032	3 733
Unwrought, refined	74 277	69 039	62 982	56 237	79 125
Unwrought alloys	5 254	4 458	5 898	5 417	4 352
Scrap	112 934	84 824	89 252	56 754	65 765
Sweden					
Ores and concentrates	340 858	311 085	267 753	420 050	393 295
Unwrought, unrefined	2	15 452	35 496	10 495	23 539
Unwrought, refined	34 912	40 106	41 036	31 535	21 123
Unwrought alloys	2 762	2 926	3 944	5 867	5 239
Scrap	76 672	50 940	54 483	81 015	91 839
Switzerland					
Unwrought	6 779	4 734	4 843	5 960	5 903
Unwrought alloys	4 481	3 897	4 695	4 089	3 925
Scrap	11 881	9 937	7 641	7 995	5 266
Turkey					
Ores and concentrates	10 370	44 633	18 111	32	3 884
Unwrought, unrefined	29 555	53 214	54 790	34 389	38 116
Unwrought, refined	217 290	223 978	150 412	128 077	287 705
Unwrought alloys	4 685	3 212	2 160	1 975	3 060
Scrap	34 975	10 104	6 602	3 013	1 263
United Kingdom					
Unwrought, unrefined	122	1 978	264	7 401	5 529
Unwrought, refined	214 067	181 767	183 727	46 820	47 716
Unwrought alloys	8 070	6 191	6 743	6 202	5 721
Scrap	15 731	42 264	19 744	21 852	21 132

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

Copper - EU32 trade in 2008



Diamond

- Diamond is a polymorph of carbon and is the hardest substance known. It is used mainly in jewellery, abrasives and cutting tools.
- Africa (chiefly Democratic Republic of Congo, Botswana and South Africa) dominates world production with 58 per cent of all carats produced in 2008. However, Russia is the world's largest producing country (22 per cent of world production). Australia and Canada are also significant diamond producers. There is no mine production of diamond in the EU32 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 their unique qualities and are seldom priced at less than US\$1000 per carat. Rough (i.e. uncut) diamonds typically average between US\$72 to US\$84 per carat. Prices for industrial diamonds, which are predominantly synthetic, are typically about US\$10 per carat.

Exports of diamond

Country	2004	2005	2006	2007	2008
carats					
Austria					
Unsorted	£477 000	£188 000	£211 000	£85 000	£71 000
Gem, cut	£1 665 000	£2 895 000	£3 157 000	£2 792 000	£5 778 000
Dust	£432 000	£406 000	£45 000	£115 000	£165 000
Belgium-Luxembourg					
Unsorted	...	£785 000	£889 000	...	£503 000
Gem, rough	154 000 000	147 000 000	128 000 000	135 000 000	99 500 000
Gem, cut	6 000 000	5 500 000	4 500 000	8 035 000	5 950 000
Industrial	7 000 000	5 500 000	2 000 000	5 000 000	500 000
Dust	42 500 000	40 000 000	35 500 000	27 000 000	23 000 000
Czech Republic					
Gem, cut	£161 000	£331 000	£451 000	£529 000	£3 947 000
France					
Unsorted	858	14 853	40 105	22 863	9 386
Gem	75 969	98 712	164 433	227 372	293 420
Dust	528 370	1 273 515	1 069 100	430 000	838 620
Germany					
Unsorted	£663 000	£756 000	£21 000	£112 000	£127 000
Gem	190 272	169 535	175 658	157 055	153 893
Industrial	7 997	5 255	7 510	8 952	11 966
Dust	54 314 035	42 628 300	27 074 465	3 366 830	3 410 935
Italy					
Gem, cut	99 218	119 462	105 514	131 174	1 830 000
Dust	49 921 702	49 139 151	18 028 081	65 975 744	10 865 000
Netherlands					
Unsorted	£1 883 000	£928 000	£849 000	£1 000 000	£442 000
Gem, cut	£5 843 000	£8 690 779	£8 997 000	£6 214 000	£7 567 000
Industrial	£188 000	£842 000	£4 146 000	£1 891 000	£2 156 000
Dust	£724 000	£44 000	£112 000	£82 000	£45 000
Portugal					
Gem, cut	£45 779 000	£17 981 000	£8 000	£105 000	£55 000
Spain					
Unsorted	£792 000	£673 000	£531 000	£346 000	£503 000
Gem, cut	£1 855 000	£5 275 000	£61 119 000	£8 478 000	£6 631 000
Industrial	£212 000	£325 000	£331 000	£208 000	£498 000
Dust	...	1 607 384	210 000	254 600	630 000
Switzerland					
Gem, rough	139 400	195 614	119 619	4 360	5 000
Gem, cut	338 524	500 591	543 079	559 591	360 000
Industrial	18 185	13 934	76 604	12 100	15 000
Dust	120 790 000	126 190 000	128 180 000	40 985 000	44 105 000
Turkey					
Dust	£3 000	£29 000	£15 000	£28 000	£146 000

Diamond

Exports continued

carats

Country	2004	2005	2006	2007	2008
United Kingdom					
Unsorted	6 394 541	16 818 545	3 544 216	5 307 857	3 388 395
Gem, rough	78 613 304	76 400 064	88 991 279	84 573 134	66 479 817
Gem, cut	1 592 715	5 330 874	2 341 635	477 463	795 612
Industrial	22 821 714	21 647 850	13 652 233	4 754 029	6 121 081
Dust	149 415 960	124 529 495	111 788 350	104 552 775	122 681 695

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	2004	2005	2006	2007	2008
Austria					
Unsorted	£1 193 000	£1 218 000	£978 000	£957 000	£1 648 000
Gem, cut	£4 660 000	£5 743 000	£5 892 000	£6 405 000	£8 881 000
Industrial	£631 000	£706 000	£841 000	£884 000	£473 000
Dust	24 000 000	23 000 000	28 000 000	26 000 000	33 000 000
Belgium-Luxembourg					
Unsorted	£41 932 000	£37 971 000	£38 530 000	£32 612 000	£27 166 000
Gem, rough	121 500 000	134 500 000	67 500 000	63 500 000	55 000 000
Gem, cut	7 500 000	6 500 000	6 000 000	29 500 000	91 500 000
Industrial	£54 551 000	£46 159 000	£44 325 000	£35 072 000	£41 557 000
Dust	£8 250 000	£8 989 000	£7 464 000	£9 606 000	£13 140 000
Cyprus					
Gem, cut	£788 000	£690 000	£1 387 000	£1 311 000	£1 564 000
Industrial	£1 161 000	£750 000	£1 072 000	£1 042 000	£1 311 000
Czech Republic					
Gem, cut	2 322	2 755	18 182	5 837	116 669
Industrial	17 460	27 453	30 377	43 006	30 181
Dust	£776 000	£956 000	£867 000	£884 000	£1 369 000
Denmark					
Unsorted	£294 000	£597 000	£686 000	£928 000	£1 168 000
Gem, cut	£9 319 000	£6 506 000	£7 252 000	£8 473 000	£7 424 000
Industrial	£105 000	£81 000	£184 000	£388 000	£104 000
Dust	485 358	696 038	769 511	1 056 203	791 502
Finland					
Unsorted	55 000	120 000	105 000	...	...
Gem, cut	£2 840 000	£3 082 000	£3 264 000	£3 004 000	£3 698 000
Dust	320 000	450 000	620 000	682 850	625 200
France					
Unsorted	101 610	263 542	45 393	32 997	18 648
Gem, rough	67	3 526	729	656	344
Gem, cut	539 724	355 505	331 348	439 204	450 568
Industrial	56 456	33 869	44 334	81 570	73 641
Dust	11 327 446	10 013 030	10 037 456	8 984 745	13 938 146
Germany					
Gem	513 371	443 747	487 354	515 262	699 619
Industrial	763 745	1 572 864	1 554 184	1 090 991	502 045
Dust	96 561 025	63 878 900	53 291 240	45 596 025	45 888 930
Greece					
Unsorted	4 725 000	9 570 000	20 035 000	7 000 000	116 000 000
Gem, rough	45 000	85 000	55 000	205 000	425 000
Gem, cut	5 990 000	10 375 000	10 075 000	9 470 000	2 815 000
Industrial	7 685 000	6 770 000	9 720 000	11 355 000	22 810 000
Dust	8 390 000	19 475 000	10 550 000	17 573 974	13 598 082
Hungary					
Gem, cut	£1 669 000	£849 000	£246 000	£52 000	£220 000

Imports continued

carats

Country	2004	2005	2006	2007	2008
Ireland, Republic of					
Unsorted	33 525 000	39 900 000	67 655 000	42 460 000	17 535 000
Gem, rough	1 815 000	3 815 000	4 140 000	4 365 000	3 240 000
Gem, cut	21 175 000	36 975 000	44 635 000	46 100 000	28 020 000
Industrial	26 740 000	30 680 000	70 840 000	35 720 000	10 560 000
Dust	...	30 924 437	200 868 966	233 626 080	83 596 315
Italy					
Unsorted	280 000	350 000	150 000	915 000	1 905 000
Gem, rough	95 000	115 000	75 000	80 000	10 000
Gem, cut	11 635 000	11 760 000	4 855 000	14 560 000	12 135 000
Industrial	1 670 000	1 110 000	650 000	880 000	1 145 000
Dust	135 820 000	141 970 000	152 680 000	161 010 000	252 290 000
Netherlands					
Unsorted	£3 423 000	£344 000	£225 000	£299 000	£803 000
Gem, rough	£137 000	£79 000	£369 000	£320 000	£1 071 000
Gem, cut	£15 736 000	£16 550 000	£22 397 000	£13 943 000	£17 750 000
Industrial	£1 033 000	£2 027 000	£1 850 000	£859 000	£1 088 000
Dust	2 961 380	2 919 740	3 998 115	1 089 105	791 805
Poland					
Industrial	67 042	43 583	31 323	150 918	237 903
Dust	3 799 175	4 042 100	...	3 149 550	27 584 081
Portugal					
Gem, rough	45 000	77 027	...	2 359	...
Gem, cut	£11 608 000	£7 015 000	£2 940 000	£3 435 000	£3 949 000
Industrial	£669 000	£565 000	£381 000	£427 000	£296 000
Dust	2 954 899	2 870 000	...	8 473 445	5 891 661
Slovenia					
Dust	2 035 000	1 136 505	1 287 165	1 670 815	1 395 416
Spain					
Unsorted	£5 431 000	£6 908 000	£4 616 000	£3 667 000	£1 959 000
Gem, cut	£41 732 000	£37 408 000	£47 084 000	£57 921 000	£40 012 000
Industrial	£1 412 000	£1 421 000	£2 701 000	£1 396 000	£1 485 000
Dust	89 035 000	10 685 000	8 750 000	18 980 000	...
Sweden					
Unsorted	£309 000	£220 000	£143 000	£141 000	£100 000
Gem, cut	22 325	7 132	8 573	9 465	9 323
Industrial	207 247	198 724	188 546	224 486	217 127
Dust	15 000 000	5 000 000	10 000 000	11 500 000	4 000 000
Switzerland					
Gem, rough	144 732	195 180	118 710	8 634	11 566
Gem, cut	861 211	1 182 706	1 112 264	1 209 708	1 147 690
Industrial	56 909	100 219	63 939	39 174	20 205
Dust	126 815 000	142 135 000	127 740 000	59 930 000	54 445 000
Turkey					
Gem	207 903	124 043	112 906	135 413	141 553
Industrial	11 633	27 325	44 601	36 999	102 596
Dust	15 900 000	26 765 000	13 675 000	9 835 000	18 430 000
United Kingdom					
Unsorted	10 557 063	33 441 810	14 408 621	13 661 786	10 283 610
Gem, rough	68 227 020	78 735 595	78 790 692	81 195 314	59 534 653
Gem, cut	9 317 146	12 039 040	7 370 573	973 433	1 343 330
Industrial	30 993 560	25 367 064	11 884 651	7 524 168	5 127 610
Dust	126 277 015	125 510 400	199 882 920	198 484 150	187 268 975

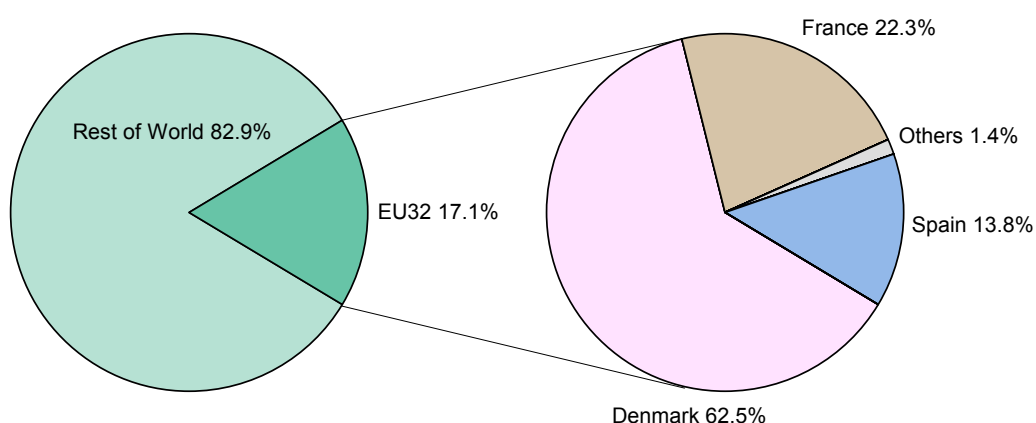
Note(s)

- (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
- (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

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 33 per cent of the world production, despite a five per cent reduction in output in 2008 compared to 2007. This was more than offset by a 54 per cent increase in production from Mexico. EU32 production amounted to 17 per cent of world production in 2008. Production in the EU32 countries is dominated by Denmark, which produces 62.5 per cent of EU32 output, although this is moler, an impure diatomite.
- Diatomite (US calcined filter-aids delivered to the UK) traded between £370 per tonne and £410 per tonne throughout 2008 and continued at the same rate until April 2009 when they increased to between £380 per tonne and £420 per tonne.

EU32 Production of Diatomite 2008



Production of diatomite

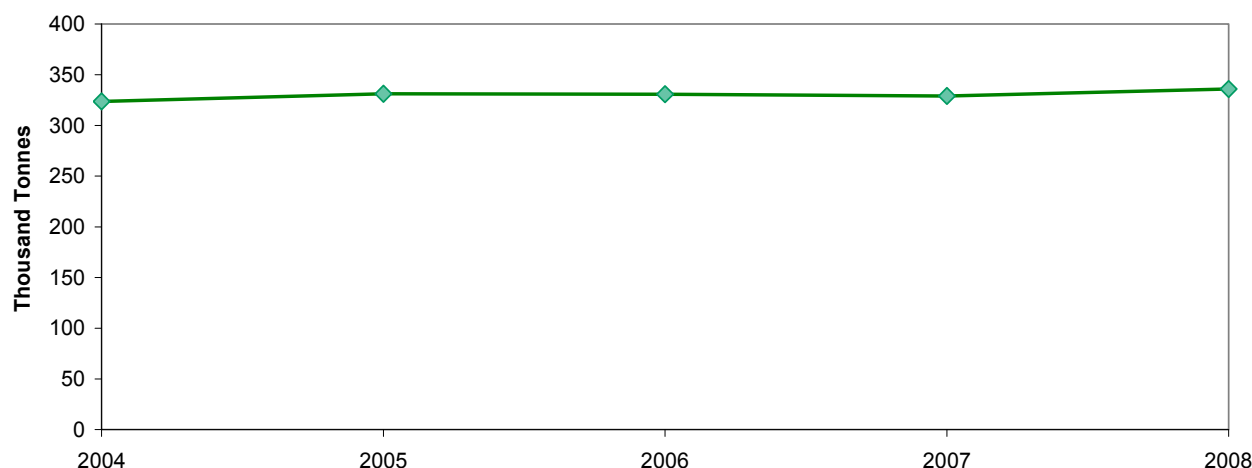
Country	2004	2005	2006	2007	2008	tonnes
Czech Republic	3 800	4 100	4 827	3 600	4 100	
Denmark						
Moler (a)	188 000	209 000	196 000	201 000	210 000	
France	* 75 000	* 75 000	* 75 000	* 75 000	* 75 000	
Hungary	1 640	2 190	495	1 424	—	
Poland	800	500	600	* 600	* 600	
Romania	20 626	1 402	1 719	2 057	—	
Spain (b)	33 799	39 101	52 123	45 480	46 192	
EU32 Total	324 000	331 000	331 000	329 000	336 000	

Note(s)

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

(b) Including Tripoli

EU32 Production of diatomite 2004 - 08



Exports of diatomite

tonnes

Country	2004	2005	2006	2007	2008
Austria	5 347	5 375	4 171	4 455	3 043
Belgium-Luxembourg	1 856	1 330	1 949	1 145	2 633
Czech Republic	4 734	4 247	4 566	1 094	4 128
Denmark (a)	* 75 800	* 69 300	* 71 500	* 63 600	* 67 800
France	26 043	25 379	24 866	29 607	23 239
Germany	20 312	7 000	11 500	7 949	7 189
Hungary	452	12	44	44	37
Italy	1 745	1 138	1 110	3 884	9 991
Netherlands	1 569	804	1 395	348	301
Norway	81	1 362	281	566	770
Poland	536	455	527	774	277
Portugal	7 755	11	286	943	554
Spain	5 278	6 694	6 118	6 399	5 306
Sweden	492	4 423	568	3 497	749
Turkey	14 581	23 366	(a) 32 000	34 424	40 370
United Kingdom	2 123	708	687	1 238	903

Note(s)

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

Imports of diatomite

tonnes

Country	2004	2005	2006	2007	2008
Austria	13 178	12 892	11 693	13 710	12 561
Belgium-Luxembourg	9 052	8 192	7 450	8 633	8 506
Bulgaria	1 292	1 312	1 156	436	587
Croatia	703	495	633	610	511
Czech Republic	1 969	2 263	2 288	3 318	4 768
Denmark	5 001	6 561	4 974	4 244	5 849
Finland	5 881	2 700	2 339	3 510	3 344
France	12 368	11 181	12 712	14 371	14 308
Germany	48 644	40 224	40 197	42 882	49 237
Greece	610	645	757	958	790
Hungary	1 390	1 158	1 476	2 111	1 110
Ireland, Republic of	594	641	943	859	1 458
Italy	14 744	9 141	5 179	4 487	3 939
Latvia	592	389	467	545	681
Lithuania	917	520	504	1 178	763
Netherlands	10 806	7 967	6 799	7 214	6 275

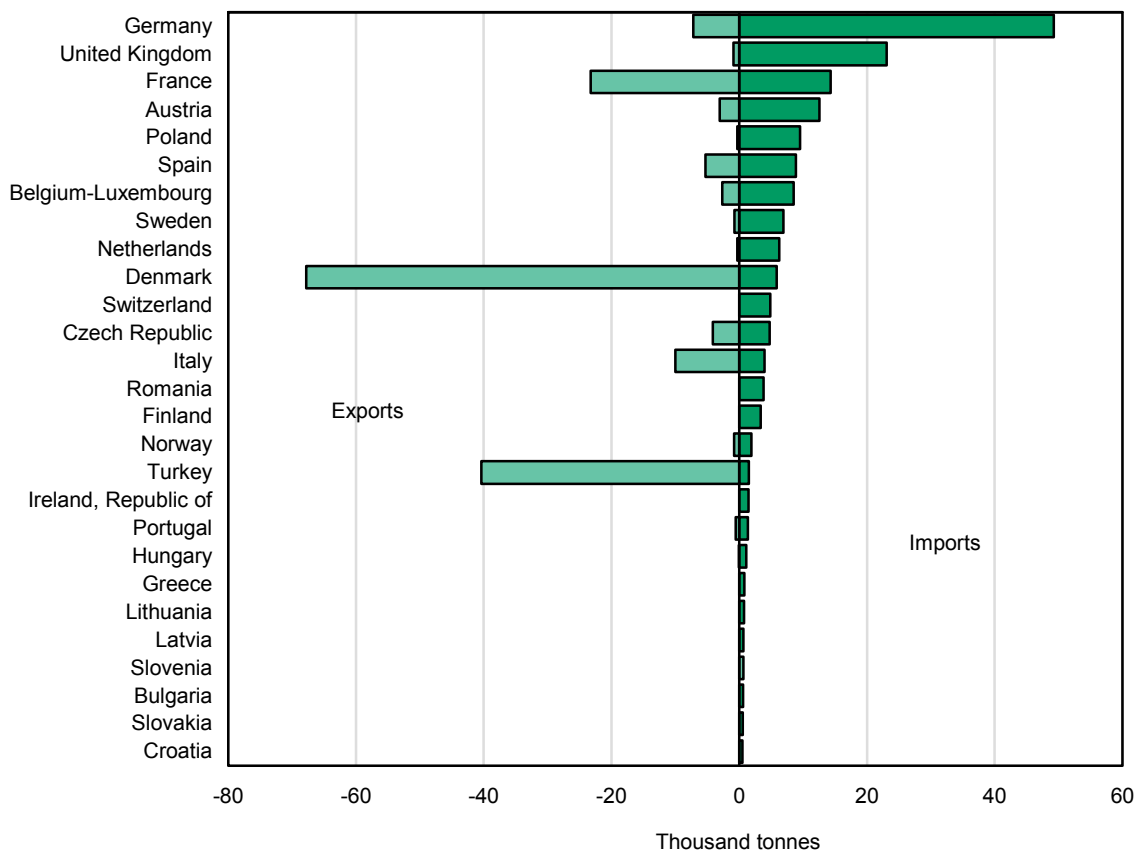
Diatomite

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Norway	2 500	2 044	1 228	1 645	1 891
Poland	6 387	6 465	5 997	8 235	9 504
Portugal	2 263	3 946	3 432	1 731	1 372
Romania	3 294	3 183	3 707	3 254	3 798
Slovakia	865	675	698	549	577
Slovenia	730	846	738	686	644
Spain	7 004	5 186	7 281	9 447	8 861
Sweden	5 475	5 096	6 095	6 976	6 929
Switzerland	11 204	3 291	3 157	4 636	4 864
Turkey	1 211	1 460	1 619	1 385	1 491
United Kingdom	34 988	29 208	28 290	24 224	23 084

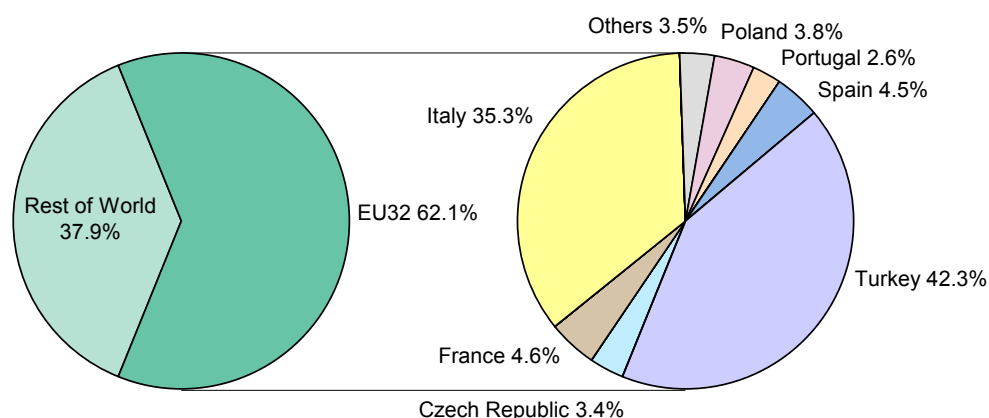
Diatomite - EU32 trade in 2008



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.
- Turkey is the largest world producer (26 per cent of the world total) and Italy is the second largest world producer (22 per cent). Together, the EU32 countries accounted for 62 per cent of world feldspar production in 2008.
- Feldspar is traded in several forms and prices appear to be stable, for example Turkish crude was priced between US\$22–US\$23 per tonne throughout all of 2008 and 2009, while glass grade -500 microns was priced at US\$70 per tonne.

EU32 Production of feldspar 2008



Production of feldspar

tonnes

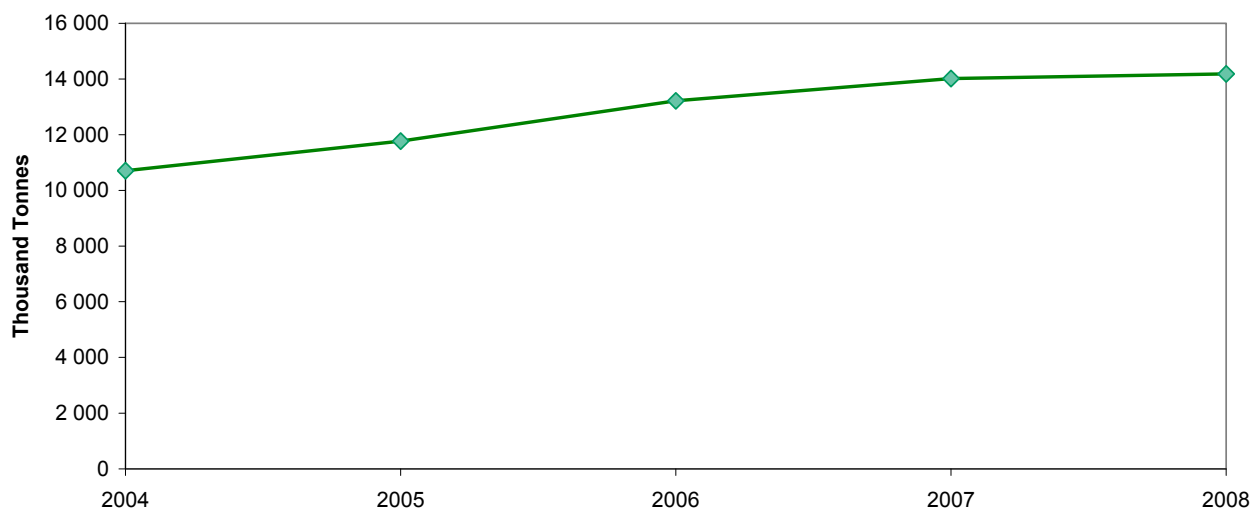
Country	2004	2005	2006	2007	2008
Bulgaria	86 608	72 867	93 091	* 90 000	* 90 000
Czech Republic	488 000	472 000	487 000	514 000	488 000
Finland	44 495	42 783	43 187	48 980	45 250
France	628 000	651 000	* 650 000	* 650 000	* 650 000
Germany	182 842	168 640	167 332	171 303	161 416
Greece	88 274	100 586	* 100 000	95 000	62 000
Italy	3 251 264	3 995 233	4 600 903	4 726 908	* 5 000 000
Macedonia	22 921	27 076	38 124	32 814	28 920
Norway	67 000	* 67 000	65 000	65 000	62 000
Poland	373 459	426 914	457 600	501 800	* 545 000
Portugal	221 312	238 843	257 570	371 952	* 370 000
Romania	60 924	74 927	33 100	41 477	22 995
Spain	552 507	650 061	696 912	682 884	* 632 120
Sweden	38 000	30 000	24 000	25 000	22 000
Turkey	4 600 000	4 750 000	5 500 000	6 000 000	* 6 000 000
United Kingdom (a)	2 274	1 835	1 441	1 112	430
EU32 Total	10 708 000	11 770 000	13 215 000	14 018 000	14 180 000

Note(s)

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

(a) China stone

EU32 Production of feldspar 2004 - 08



Exports of feldspar

tonnes

Country	2004	2005	2006	2007	2008
Austria	18 864	18 998	17 977	15 058	15 194
Bulgaria	1 131	452	6 159	22 519	16 912
Czech Republic	143 941	160 469	154 672	168 259	171 596
Finland	42 612	37 386	41 437	37 392	36 482
France	219 741	255 836	224 062	261 112	244 785
Germany	118 838	113 329	121 046	125 258	121 777
Greece	8 515	4 755	5 258	6 052	5 806
Italy	204 096	302 715	238 555	226 963	324 977
Macedonia	18 661	22 369	36 539	28 766	23 762
Netherlands	81	17	552	456	555
Norway	60 972	58 821	66 838	66 484	58 211
Poland	1 441	1 509	2 749	1 849	2 049
Portugal	—	1 546	862	4 048	873
Romania	28 820	28 859	20 563	25 102	16 438
Spain	71 993	66 427	77 348	74 461	79 120
Sweden	23 752	16 515	15 880	14 383	10 670
Turkey (a)	* 3 600 000	* 3 800 000	* 4 300 000	* 4 300 000	* 4 600 000
United Kingdom	261	48	38	40	82

Note(s)

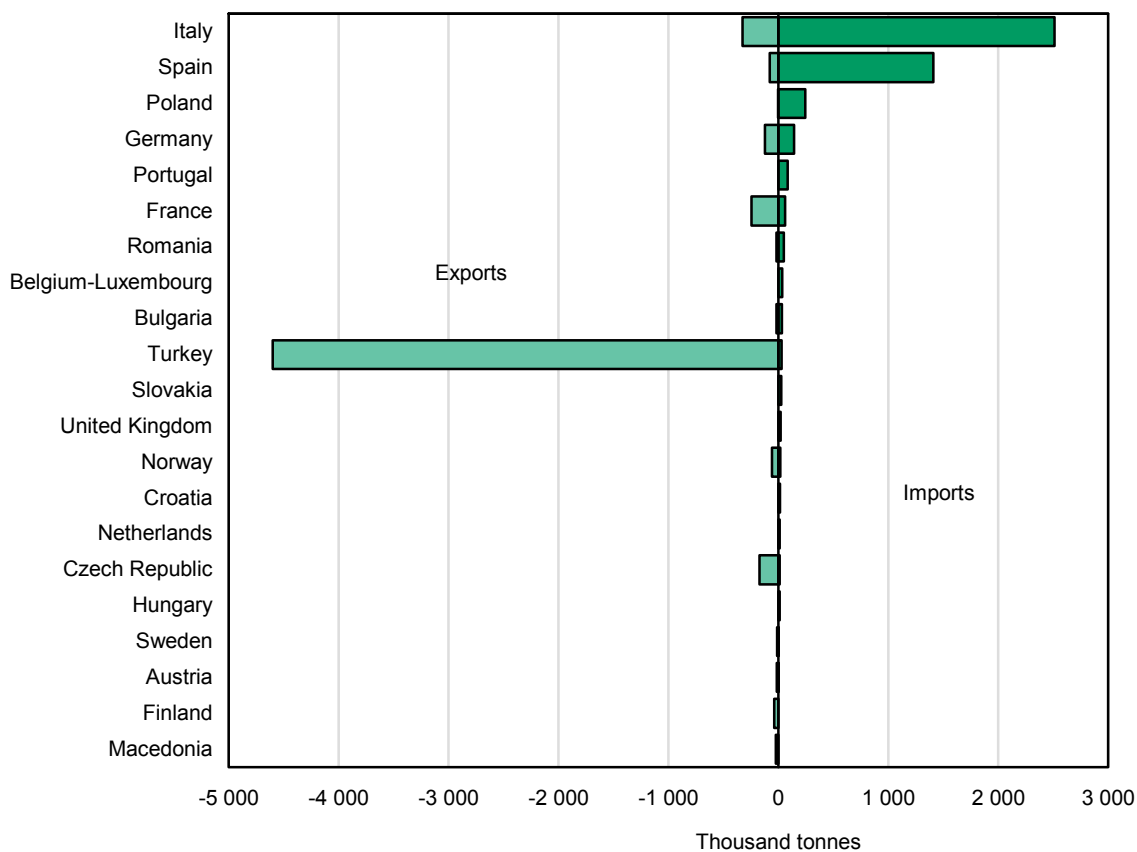
(a) BGS estimates, based on known imports into certain countries

Imports of feldspar

tonnes

Country	2004	2005	2006	2007	2008
Austria	418	1 549	2 220	3 816	1 928
Belgium-Luxembourg	30 969	25 876	21 483	26 151	34 988
Bulgaria	30 805	34 723	40 416	35 851	31 346
Croatia	13 713	17 011	15 986	16 212	15 983
Czech Republic	8 785	13 315	16 032	14 213	11 414
Denmark	3 878	3 868	2 590	3 145	2 678
Finland	257	380	796	1 023	699
France	44 615	85 460	54 106	20 974	59 857
Germany	70 064	101 931	126 834	143 596	143 758
Greece	499	3 032	439	478	2 830
Hungary	19 205	20 184	16 091	13 567	10 418
Italy	2 693 951	2 623 428	2 603 981	2 573 637	2 511 704
Lithuania	7 461	4 166	1 933	1 693	1 516
Netherlands	9 606	7 721	7 505	8 529	12 633
Norway	15 490	17 103	17 199	12 930	17 367
Poland	201 509	215 185	219 719	237 963	243 798
Portugal	96 049	115 286	98 106	108 150	85 400
Romania	38 470	39 448	31 433	48 999	49 160
Slovakia	39 689	36 989	30 726	27 548	24 788
Slovenia	10 045	5 852	5 813	6 877	6 576
Spain	955 039	1 231 861	1 422 514	1 407 350	1 410 760
Sweden	7 019	9 387	4 029	6 021	3 861
Switzerland	8 347	7 977	6 219	8 056	7 653
Turkey	40 733	40 739	44 159	46 323	28 594
United Kingdom	31 601	23 139	17 098	26 751	18 899

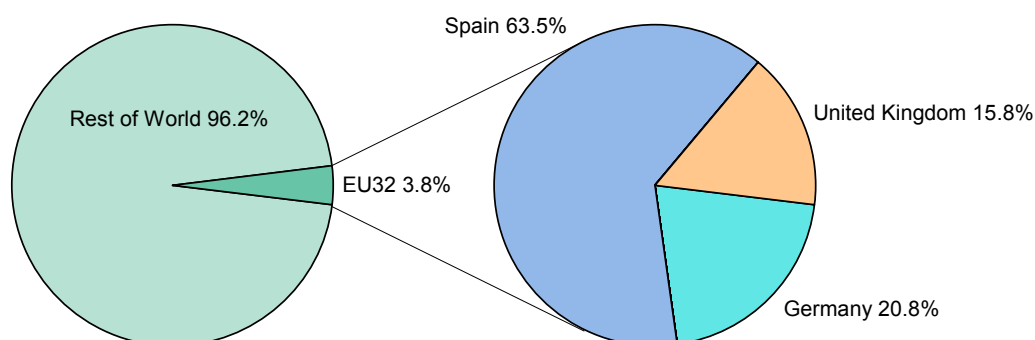
Feldspar - EU32 trade in 2008



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 which is used primarily in the pharmaceutical and agricultural industries. Fluorspar is also used in steel and aluminium manufacture.
- China dominated world production, producing 53 per cent of all fluorspar in 2008. The EU32 countries represent four per cent of world fluorspar production, but there has been a reduction in output of 31 per cent between 2004 and 2008 due, in part, to the cessation of output from France and Italy. Spain was the largest EU32 producer with 63 per cent of EU32 production in 2008, despite a fall in output of nearly six per cent compared to 2007.
- During 2008 the price for Chinese acidspars filtercake (C.I.F. Rotterdam) increased from a starting point of US\$340–US\$350 per tonne to US\$530–US\$570 per tonne by September. It remained at a similar level until June 2009, when the price fell sharply to US\$350–US\$380 per tonne. It fell further, although less dramatically, during the latter part of 2009 to end the year at US\$310–US\$340 per tonne.

EU32 Production of fluorspar 2008



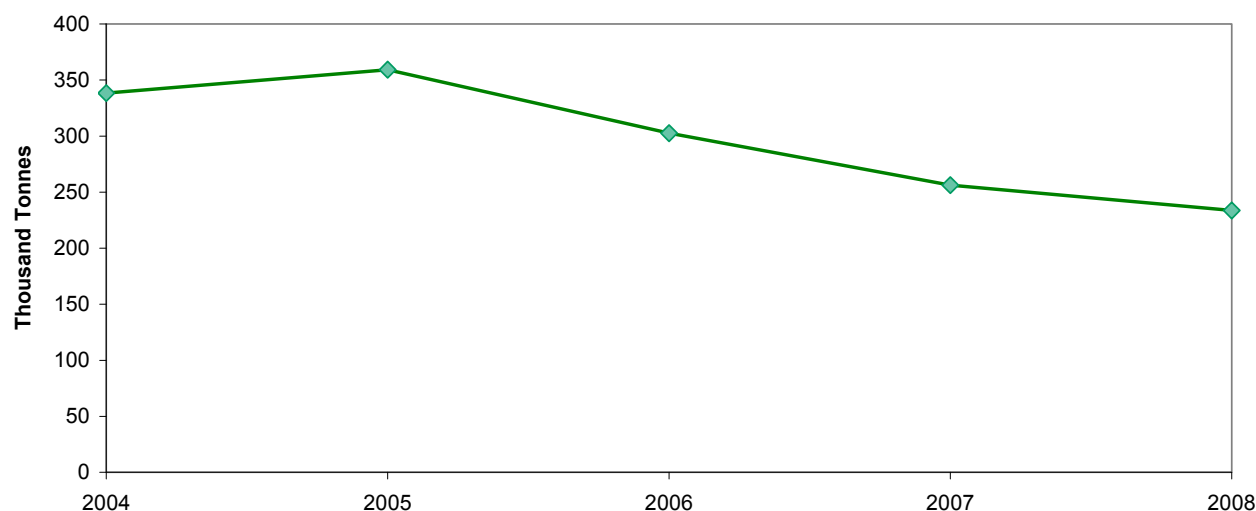
Production of fluorspar

Country	2004	2005	2006	2007	2008	tonnes
France	70 000	53 000	* 40 000	—	—	
Germany	33 203	35 364	53 009	54 359	48 519	
Italy	24 339	70 326	* 15 000	—	—	
Romania	* 15 000	—	—	—	—	
Spain	145 694	144 126	144 845	156 970	148 207	
Turkey	880	—	—	—	—	
United Kingdom	50 080	56 417	49 676	44 936	36 801	
EU32 Total	339 000	359 000	303 000	256 000	234 000	

Note(s)

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

EU32 Production of fluorspar 2004 - 08



Exports of fluorspar

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg	4 208	26 395	110 965	105 822	156 066
Czech Republic	10 073	8 677	9 954	8 415	4 488
France	12 002	6 821	28	3 770	58
Germany	17 594	24 061	35 207	56 023	50 338
Italy	20 607	28 699	16 710	19 281	31 271
Netherlands	3 019	37 113	1 587	27 213	12 665
Spain	2 221	4 434	10 518	29 117	13 109
Sweden	8 702	8 206	7 450	7 764	11 538
United Kingdom	4 593	5 803	3 016	589	187

Imports of fluorspar

tonnes

Country	2004	2005	2006	2007	2008
Austria	3 078	2 561	2 722	2 517	3 405
Belgium-Luxembourg	10 571	70 149	123 392	130 437	170 562
Bulgaria	1 882	1 210	2 321	1 326	651
Croatia	204	143	124	149	289
Czech Republic	28 408	24 009	24 637	24 915	3 440
Denmark	16 005	15 124	12 635	8 218	17 003
Finland	17 069	16 597	15 011	15 064	12 366
France	10 457	21 526	34 972	48 758	21 256
Germany	302 071	264 896	293 737	346 581	357 914
Greece	20 720	10 681	2 855	2 232	2 281
Hungary	4 366	(a)* 2 900	2 801	7 460	4 512
Italy	212 975	249 756	237 597	236 797	238 008
Latvia	240	216	204	220	240
Macedonia	172	92	218	380	300
Netherlands	108 312	45 073	7 836	48 089	13 860
Poland	7 501	6 290	7 834	8 682	8 691
Portugal	158	1 633	2 530	2 423	1 828
Romania	4 117	6 285	3 915	4 738	2 526
Slovakia	1 574	1 615	1 543	908	1 143
Slovenia	1 178	1 031	1 184	1 017	1 326
Spain	15 006	10 859	28 908	29 560	32 016

Fluorspar

Imports continued

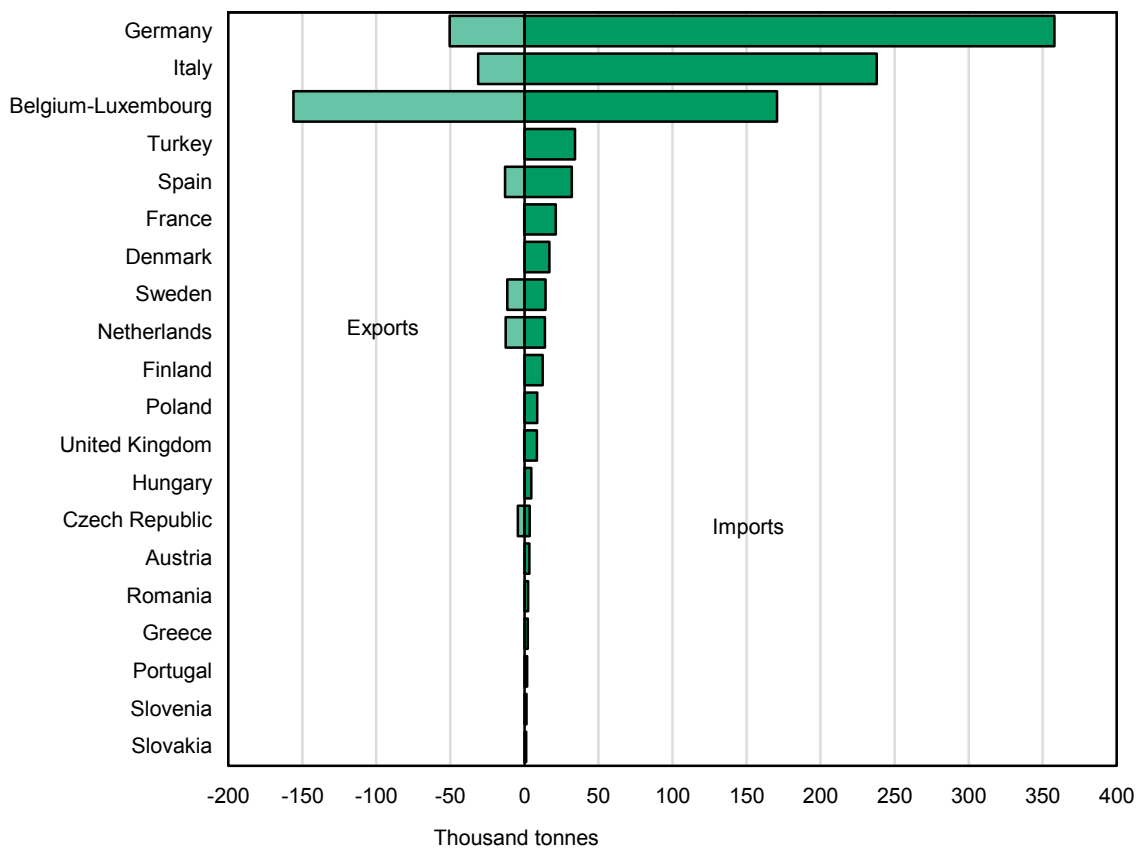
tonnes

Country	2004	2005	2006	2007	2008
Sweden	14 640	15 790	16 176	12 089	14 214
Switzerland	991	714	704	533	571
Turkey	31 908	30 446	21 750	23 139	34 073
United Kingdom	25 092	4 051	6 620	3 875	8 429

Note(s)

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

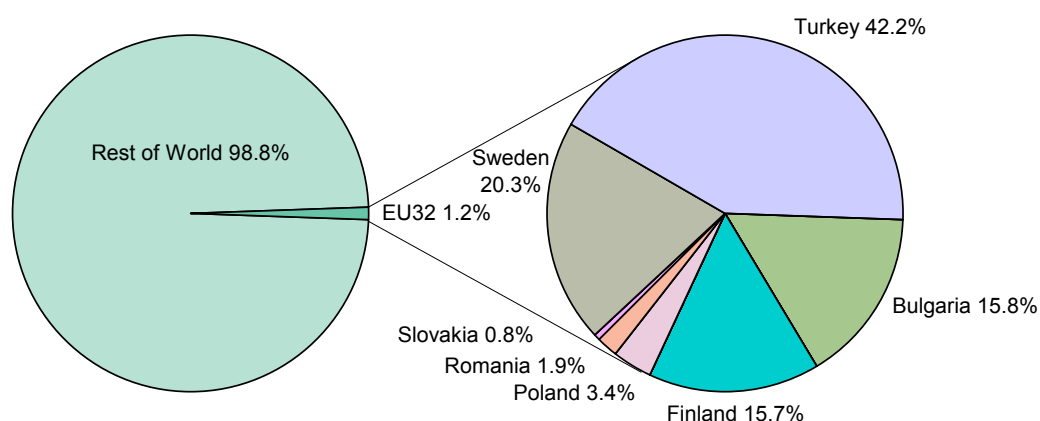
Fluorspar - EU32 trade in 2008



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.
- China, the USA, Australia and South Africa were the four largest gold producers in 2008, although China was the only one of these where production increased in 2008 compared to 2007. Together these four countries produced 41 per cent of the total world output. In the EU32 Turkey (41 per cent of the EU32 total) and Sweden (20 per cent) were the largest producers in 2008, although the EU32 countries produced only one per cent of world output in 2008.
- The gold price can be volatile but has strengthened considerably in recent years due to declining mine output, increasing jewellery demand, speculative activity, devaluation of the US dollar and other factors. The gold price rose above US\$1000 per troy ounce for the first time in March 2008 in response to a weak US dollar and rising oil prices, although it dropped back later in the year and finished 2008 at US\$880 per troy ounce. In 2009 the price of gold experienced a generally upward trend, albeit with some significant fluctuations, and remained above US\$1000 per troy ounce from October to the end of the year when it finished at around US\$1100 per troy ounce.

EU32 Production of gold 2008



Mine production of gold

kilograms

Country	2004	2005	2006	2007	2008
Bulgaria	2 431	3 868	3 818	3 964	4 160
Finland	* 1 300	* 1 300	5 292	4 621	4 148
Poland (a)	527	713	1 700	883	902
Romania	1 430	* 500	* 500	* 500	* 500
Slovakia	107	109	84	92	198
Spain	5 248	2 145	1 565	—	—
Sweden	6 564	6 564	6 848	5 159	5 341
Turkey	3 260	4 170	8 040	9 920	11 120
EU32 Total	21 000	19 000	28 000	25 000	26 000

Note(s)

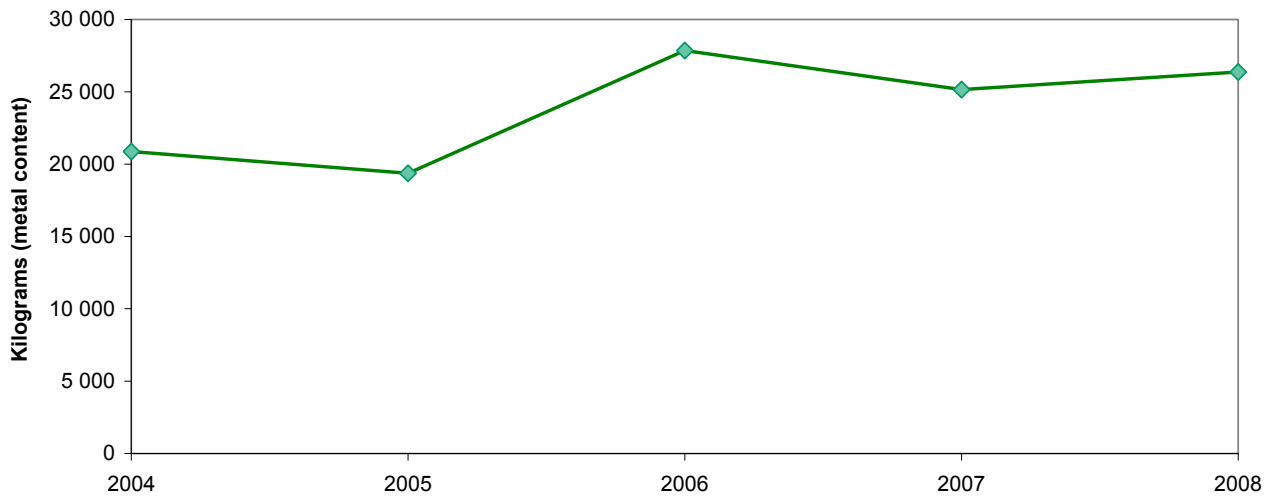
(1) In several countries substantial amounts of gold produced in small operations are not recorded in the official statistics used when compiling this table

(2) Greece and Norway are believed to produce gold

(a) Metal production

Gold

EU32 Production of gold 2004 - 08



Exports of gold

kilograms

Country	2004	2005	2006	2007	2008
Austria					
Metal	11 500	8 500	11 100	14 900	18 700
Waste and scrap	2 900	5 500	600	17 300	2 200
Belgium-Luxembourg					
Metal	1 200	100	300	16 200	56 100
Waste and scrap	...	458 400	438 000	128 400	134 500
Czech Republic					
Metal	12 247	1 100	4 100	3 900	4 000
Waste and scrap	31	600	700	6 100	5 200
Denmark					
Metal	803	1 064	1 253	366	397
Waste and scrap	1	120	3 531	600	600
Finland					
Waste and scrap	368	778	886	200	466
France					
Metal	31 890	20 053	24 302	20 229	22 247
Waste and scrap	70 500	29 600	29 600	29 300	50 700
Germany					
Metal	36 500	47 600	65 200	71 250	5 400
Waste and scrap	29 600	30 600	7 500	14 800	4 800
Greece					
Metal	15	3	311	900	400
Hungary					
Metal	828	628	470	871	657
Ireland, Republic of					
Metal	£1 076 000	£942 000	£1 400 000	£1 678 000	£1 180 000
Waste and scrap	£1 672 000	£1 429 000	£1 313 000	£902 000	£577 000
Italy					
Metal	44 180	60 480	55 847	56 360	51 260
Waste and scrap	27	—	16	160	1 376
Netherlands					
Metal	24 557	11 603	19 634	22 468	37 439
Waste and scrap	62 212	72 427	98 813	4 433	45 456
Norway					
Metal	2 293	2 415	2 337	2 601	3 847
Waste and scrap	127	137	182	426	600
Poland					
Metal	...	100	1 100	300	105 000
Waste and scrap	4 074	1 100	1 600	700	4 800
Portugal					
Waste and scrap	...	4 800	400	1 100	36 100

Exports continued

kilograms

Country	2004	2005	2006	2007	2008
Slovakia					
Metal	274	268	569	300	800
Waste and scrap	357	986	1 000	1 600	800
Slovenia					
Metal	254	101	100	1 300	3 000
Waste and scrap	1 649	—	3 700	—	—
Spain					
Metal	6 490	3 520	3 679	23 667	6 966
Waste and scrap	2 908	38	2 636	92	1 147
Sweden					
Metal	19 000	18 000	19 000	17 800	19 400
Waste and scrap	20 000	1 000	32 000	65 700	29 400
Switzerland					
Metal	1 125 319	1 340 948	965 959	1 095 682	1 312 906
Waste and scrap	55 166	2 823	2 802	102 745	125 459
Turkey					
Metal	9 845	29 624	13 581	12 068	142 244
United Kingdom					
Metal	407 467	638 262	166 080	224 598	600 018
Waste and scrap	471 657	541 399	313 712	282 298	272 339

Note(s)

- (1) In this table the term 'metal' includes both unwrought and partly worked gold and alloys but excludes gold coin
(2) Kilograms 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
(3) See explanatory notes at the front of the volume regarding currency conversion

Imports of gold

kilograms

Country	2004	2005	2006	2007	2008
Austria					
Metal	17 300	22 100	9 300	30 900	72 300
Waste and scrap	200	1 800	300	100	400
Belgium-Luxembourg					
Metal	12 400	14 400	9 600	18 300	53 000
Waste and scrap	(a)* 109 000	(a)* 34 000	147 099	362 364	(a)* 124 000
Croatia					
Metal	1 156	1 083	992	1 608	693
Czech Republic					
Metal	1 957	769	1 570	8 813	3 047
Waste and scrap	1 911	13 000	15 000	46 200	19 100
Denmark					
Metal	1 948	2 095	1 643	2 350	2 000
Estonia					
Metal	74	234	365	900	1 200
Finland					
Metal	1 332	949	931	100	200
Waste and scrap	67 582	22 981	4	1	—
France					
Metal	24 446	28 834	23 605	23 567	20 071
Waste and scrap	...	5 200	1 500	1 100	3 300
Germany					
Metal	51 356	52 827	56 743	68 549	118 516
Waste and scrap	1 375 800	1 923 600	1 821 100	1 304 700	1 390 000
Greece					
Metal	37 484	56 572	60 999	48 500	114 500
Hungary					
Metal	1 514	1 380	235	229	...
Ireland, Republic of					
Metal	£7 480 000	£7 227 000	£7 213 000	£6 260 000	£5 271 000
Waste and scrap	4 880	2 567	904	47	987
Italy					
Metal	274 841	250 938	204 012	206 914	166 506
Waste and scrap	3 612	904	810	17 885	851

Gold

Imports continued

kilograms

Country	2004	2005	2006	2007	2008
Lithuania					
Waste and scrap	(a)* 16 000	114 600	12 470	2	—
Malta					
Metal	5 194	7 258	7 900	9 034	6 820
Netherlands					
Metal	16 218	22 754	22 122	21 706	41 012
Waste and scrap	1	1	92 890	19 174	2 422
Norway					
Metal	1 253	2 099	1 739	1 448	1 146
Waste and scrap	987	1 049	1 304	1 455	3 940
Poland					
Metal	2 420	100	400	6 100	3 800
Portugal					
Metal	...	6 074	5 234	2 003	1 535
Slovakia					
Metal	417	42 001	13 901	92 400	74 800
Slovenia					
Metal	385	239	445	600	1 700
Waste and scrap	363	214	1 600	100	—
Spain					
Metal	29 702	20 594	15 072	6 641	489 893
Waste and scrap	5 018	139	233	2 352	252
Sweden					
Metal	£8 498 000	£8 625 000	£10 124 000	£18 292 000	£25 583 000
Waste and scrap	£5 726	£180 000	£7 000	£112 000	£565 000
Switzerland					
Metal	1 048 597	1 655 691	1 498 693	1 667 100	2 101 027
Waste and scrap	52 053	72 764	104 957	57 001	214 839
Turkey					
Metal	262 519	403 415	157 792	155 471	179 606
United Kingdom					
Metal	1 053 148	460 239	781 840	649 163	914 000
Waste and scrap	274 919	66 198	7 925	17 046	43 143

Note(s)

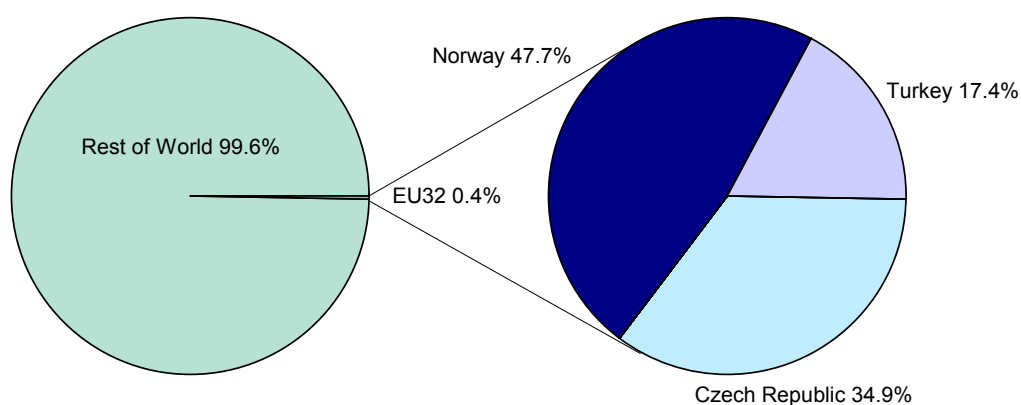
- (1) In this table the term 'metal' includes both unwrought and partly worked gold but excludes gold coin
(2) Kilograms have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling
(3) See explanatory notes at the front of the volume regarding currency conversions

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

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.
- Production in the EU32 countries rose slightly in 2008 compared to 2007, but was still 43 per cent lower than in 2006 and represents less than one per cent of the world total. World output is dominated by China which produced 86 per cent of the total.
- Graphite is traded in several different forms with prices depending largely on flake size. During 2008 and 2009 graphite traded between US\$450 and US\$1350 per tonne.

EU32 Production of graphite 2008



Production of graphite

tonnes

Country	2004	2005	2006	2007	2008
Czech Republic	5 000	3 000	5 000	3 000	3 000
Germany	3 155	2 638	—	—	—
Norway	6 000	9 000	9 000	3 000	4 100
Romania	395	486	—	—	—
Turkey	* 1 000	* 1 100	1 200	* 1 500	* 1 500
EU32 Total	16 000	16 000	15 000	8 000	9 000

Note(s)

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

EU32 Production of graphite 2004 - 08



Graphite

Exports of graphite

tonnes

Country	2004	2005	2006	2007	2008
Austria	5 094	7 082	7 416	7 460	8 853
Belgium-Luxembourg	581	834	460	438	3 815
Czech Republic	3 924	3 489	3 518	4 029	4 076
Finland	0	0	2	46 162	0
France	122	225	85	163	269
Germany	14 783	14 241	20 777	23 993	18 950
Italy	625	274	442	401	308
Netherlands	5 987	3 240	2 991	4 308	1 378
Spain	27 634	11 972	6 356	8 728	10 499
Sweden	260	195	230	273	252
Switzerland	335	326	225	384	600
Turkey	...	72	57	13	390
United Kingdom	4 348	2 685	2 979	3 065	3 156

Note(s)

(1) This table excludes synthetic graphite

Imports of graphite

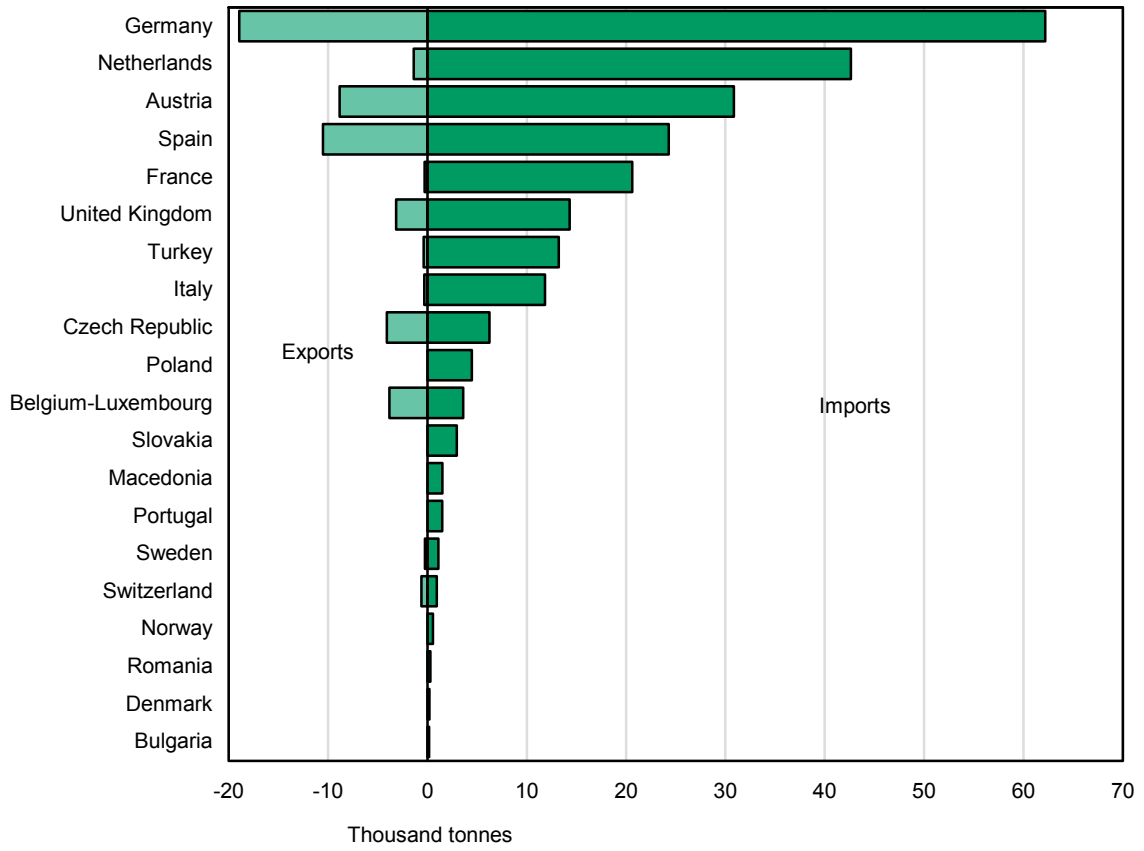
tonnes

Country	2004	2005	2006	2007	2008
Austria	7 229	13 655	10 704	17 757	30 863
Belgium-Luxembourg	3 301	3 040	1 836	2 323	3 625
Bulgaria	420	319	433	250	158
Czech Republic	3 663	4 787	3 485	5 301	6 233
Denmark	478	288	268	212	185
Finland	168	84	63	62	54
France	15 083	20 449	19 430	19 250	20 618
Germany	53 602	55 843	45 884	54 627	62 180
Greece	127	91	83	111	142
Hungary	234	191	192	178	147
Ireland, Republic of	288	177	23	73	12
Italy	10 699	11 102	11 548	11 362	11 832
Macedonia	—	107	648	1 969	1 522
Netherlands	18 139	15 205	5 362	13 463	42 612
Norway	548	423	296	980	561
Poland	3 089	3 028	3 658	5 701	4 474
Portugal	1 317	1 722	1 954	2 210	1 493
Romania	315	548	488	542	304
Slovakia	1 667	1 031	1 382	2 246	2 981
Slovenia	155	112	161	108	141
Spain	9 402	8 334	10 143	15 582	24 284
Sweden	1 473	1 539	1 252	1 592	1 091
Switzerland	395	652	722	966	931
Turkey	10 212	11 956	6 300	6 095	13 230
United Kingdom	19 075	17 766	16 978	17 225	14 309

Note(s)

(1) This table excludes synthetic graphite

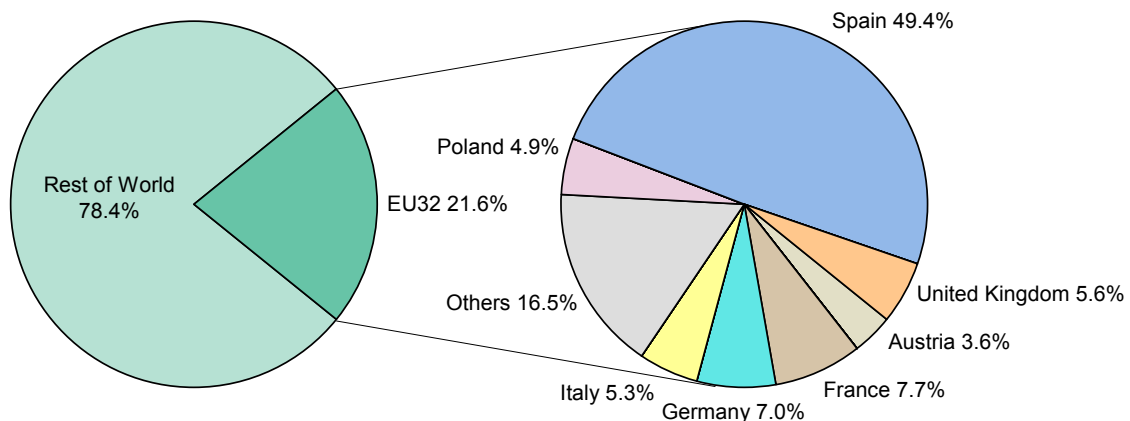
Graphite - EU32 trade in 2008



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 per cent) to make building and decorative plaster. It is used as an additive to cement, in farming as a soil conditioner, as a filler and in the chemical industry.
- The EU32 produced nearly 22 per cent of world natural gypsum in 2008. The largest EU32 producer is Spain which accounted for 49 per cent of EU32 production (or 11 per cent of the world total). China was the largest gypsum producer in the world in 2008 with 25 per cent of the world total.
- 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.
- The price of crude gypsum (ex-mine US) averaged US\$8.70 per tonne in 2008 and US\$8.50 per tonne in 2009.

EU32 Production of gypsum 2008



Production of gypsum

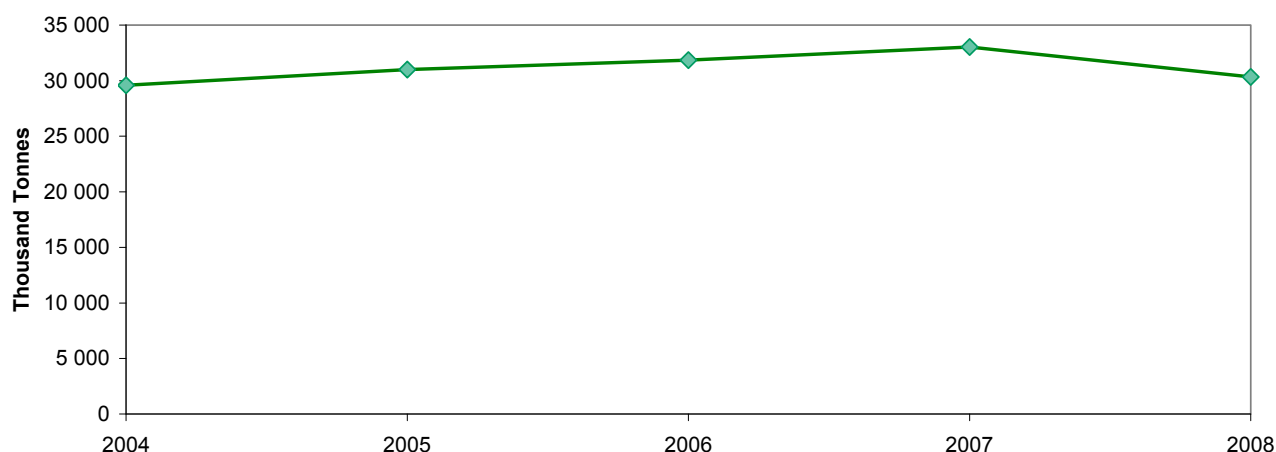
Country	2004	2005	2006	2007	2008
Austria					
Gypsum	920 809	911 162	936 072	1 006 416	1 022 983
Anhydrite	117 318	106 032	135 380	57 428	64 276
Bulgaria	175 900	187 700	215 800	234 300	21 200
Croatia	193 263	196 133	170 351	170 721	* 170 000
Cyprus	255 000	215 500	270 000	330 000	412 000
Czech Republic	68 000	24 000	19 000	66 000	35 000
France (a)	* 5 700 000	4 902 498	* 4 800 000	* 4 800 000	2 339 380
Germany (a)	1 579 000	1 644 000	1 771 000	1 898 000	2 112 000
Greece	856 606	865 216	* 850 000	836 967	830 000
Hungary (a)	55 000	19 000	30 000	26 000	15 940
Ireland, Republic of	* 650 000	* 700 000	* 700 000	* 700 000	* 600 000
Italy	1 615 287	* 1 600 000	1 600 000	* 1 600 000	* 1 600 000
Latvia (a)	225 742	* 220 000	* 230 000	230 000	* 230 000
Macedonia	165 416	190 232	267 760	255 500	242 400
Poland					
Gypsum	970 786	1 048 000	1 172 000	1 298 000	(a) 1 499 901
Anhydrite	196 000	195 000	181 000	194 000	...
Portugal	461 212	389 180	366 599	* 400 000	* 400 000
Romania	490 372	532 867	615 072	1 004 150	832 248
Slovakia (a)	125 000	107 500	126 200	151 000	152 000
Spain	12 533 972	14 453 053	14 596 559	15 000 000	* 15 000 000
Switzerland	300 000	300 000	300 000	300 000	* 300 000
Turkey	250 099	* 500 000	* 800 000	* 770 000	...
United Kingdom	1 686 000	* 1 700 000	* 1 700 000	* 1 700 000	* 1 700 000
EU32 Total	29 600 000	31 000 000	31 900 000	33 000 000	30 300 000

Note(s)

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

(a) Including anhydrite

EU32 Production of gypsum 2004 - 08



Exports of gypsum

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Crude	22 732	21 433	30 002	89 128	26 402
Calcined	100 444	94 207	99 013	121 473	89 906
Belgium-Luxembourg					
Crude	91 110	46 691	62 303	54 953	89 627
Calcined	175 496	2 709	4 707	4 271	4 369
Bulgaria					
Crude and calcined	2 231	2 347	2 439	1 439	787
Croatia					
Crude and calcined	5 796	4 890	6 349	4 808	4 738
Cyprus					
Crude and calcined	215 297	73 741	152 621	203 109	279 902
Czech Republic					
Crude	90 750	33 307	46 837	105 394	60 018
Calcined	5 563	4 272	6 249	5 973	7 881
Denmark					
Crude	81 318	111 720	165 656	197 920	141 124
Calcined	13 837	25 474	356 443	1 740	4 173
France					
Crude	324 894	250 845	321 789	414 428	381 841
Calcined	311 437	350 955	349 703	356 716	338 682
Germany					
Crude	197 613	259 631	391 494	423 152	447 140
Calcined	1 033 057	991 946	1 471 660	1 703 212	1 775 467
Greece					
Crude	106 082	88 187	116 442	47 694	21 258
Calcined	549	926	752	1 842	937
Hungary					
Crude and calcined	1 305	2 648	6 408	8 626	19 259
Ireland, Republic of					
Crude	919	1 022	1 054	1 058	1 094
Calcined	40 636	42 212	40 027	37 914	32 821
Italy					
Crude	8 040	12 641	141	17 748	24 525
Calcined	42 223	41 404	69 272	27 123	24 496
Latvia					
Crude and calcined	24 782	48 896	109 404	74 627	63 732
Macedonia					
Crude and calcined	15 408	9 779	9 488	10 167	12 496
Netherlands					
Crude	37 920	53 351	32 425	49 394	37 991
Calcined	11 088	61 508	70 005	17 744	15 228
Norway					
Crude and calcined	30 879	49 511	40 811	51 212	69 976

Gypsum

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Poland					
Crude and calcined	29 467	33 277	40 832	56 003	58 644
Portugal					
Crude and calcined	1 424	1 332	4 349	8 362	22 707
Romania					
Crude and calcined	14 277	15 089	14 283	13 507	13 069
Slovenia					
Crude and calcined	164	993	9 502	36 039	8 575
Spain					
Crude	2 820 367	3 228 806	3 568 327	3 335 273	3 458 773
Calcined	470 437	391 274	306 791	274 781	228 060
Sweden					
Crude and calcined	7 343	7 832	9 954	12 694	11 525
Switzerland					
Crude and calcined	1 160	1 095	1 158	2 754	5 207
Turkey					
Crude	7 859	4 346	26 683	43 195	37 899
Calcined	434 910	477 710	481 313	544 954	838 314
United Kingdom					
Crude	3 903	2 299	2 679	1 248	1 493
Calcined	49 945	54 356	63 533	57 988	48 340

Note(s)

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

Imports of gypsum

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Crude	16 985	15 280	11 057	14 651	10 118
Calcined	70 261	66 118	61 713	97 281	67 712
Belgium-Luxembourg					
Crude	713 502	768 702	811 923	1 118 788	1 232 112
Calcined	366 504	460 067	449 433	521 942	531 049
Bulgaria					
Crude	49 426	18 684	10 088	8 240	12 223
Calcined	35 558	49 163	56 869	58 880	70 280
Croatia					
Crude	14 974	41 665	25 095	48 775	38 120
Calcined	37 499	33 316	37 052	37 034	34 224
Cyprus					
Crude and calcined	74	3 501	9 849	12 932	15 045
Czech Republic					
Crude	29 328	19 253	38 983	70 972	76 119
Calcined	43 894	37 637	43 282	45 167	75 278
Denmark					
Crude	283 604	317 736	330 476	388 662	379 094
Calcined	38 650	45 691	52 788	53 647	52 087
Estonia					
Crude and calcined	37 826	20 957	40 876	46 336	38 062
Finland					
Crude	278 645	341 680	310 245	423 355	408 509
Calcined	7 010	7 517	9 958	8 588	6 598
France					
Crude	311 411	361 820	588 367	580 341	492 072
Calcined	85 845	60 358	68 652	111 325	116 678
Germany					
Crude	102 596	66 590	79 798	80 449	54 216
Calcined	116 628	73 647	85 665	93 275	76 992
Greece					
Crude and calcined	14 440	6 071	14 321	4 747	3 093
Hungary					
Crude and calcined	64 726	60 336	65 546	66 039	55 933

Imports continued

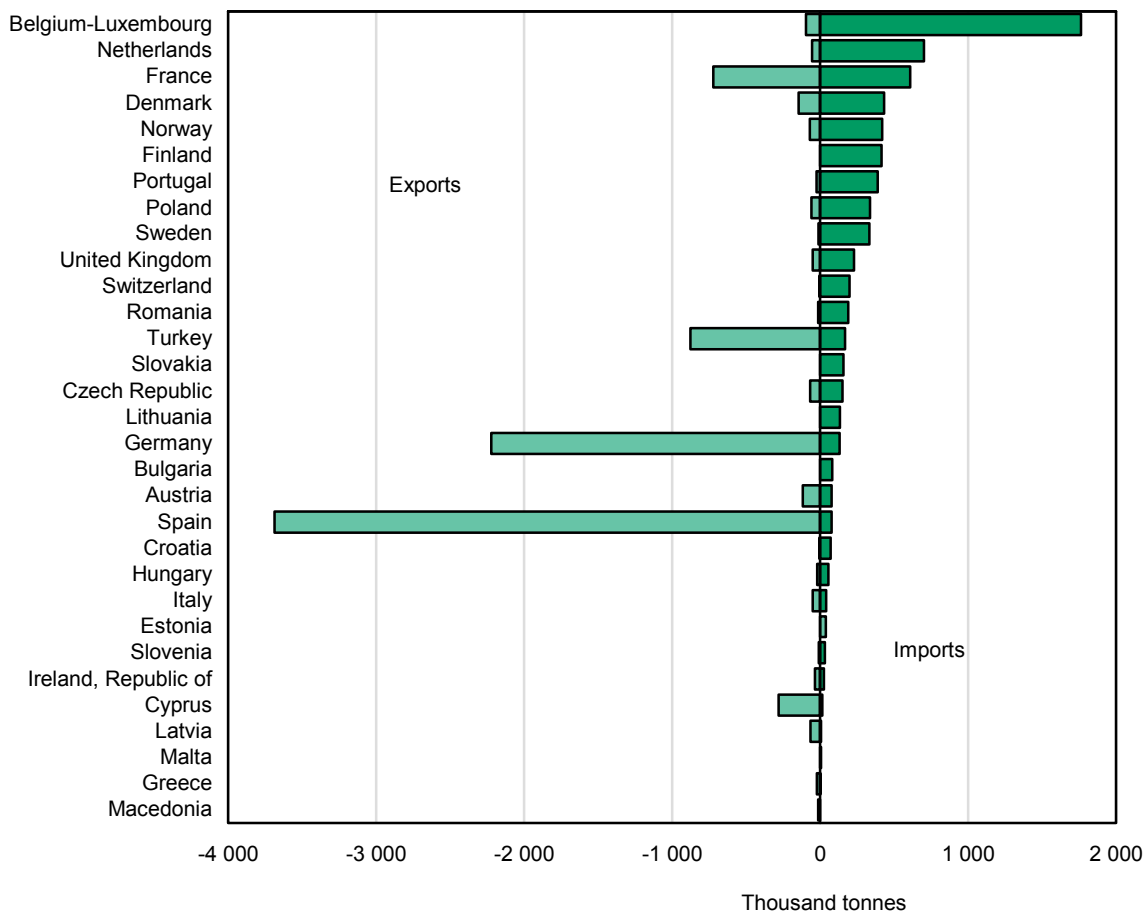
tonnes

Country	2004	2005	2006	2007	2008
Ireland, Republic of					
Crude	536	1 056	2 064	7 487	1 412
Calcined	6 015	20 024	22 500	22 676	24 877
Italy					
Crude	5 024	6 134	5 285	6 814	21 411
Calcined	22 515	22 076	20 028	21 088	19 621
Latvia					
Crude and calcined	2 931	3 563	9 960	13 670	5 818
Lithuania					
Crude	39 653	58 859	71 649	78 185	90 320
Calcined	16 245	20 990	36 588	47 112	43 127
Macedonia					
Crude and calcined	819	1 165	1 106	1 080	976
Malta					
Crude and calcined	5 309	5 981	7 549	6 309	5 505
Netherlands					
Crude	176 349	155 519	227 950	402 915	285 990
Calcined	492 478	686 085	483 249	430 550	415 623
Norway					
Crude	109 069	119 962	117 892	128 045	121 440
Calcined	259 001	274 006	287 568	328 003	298 394
Poland					
Crude	163 227	150 622	175 567	283 724	154 273
Calcined	100 886	91 356	150 619	216 536	182 150
Portugal					
Crude	82 603	79 370	96 070	75 794	89 627
Calcined	340 665	361 284	307 953	320 174	298 708
Romania					
Crude	12 588	28 044	53 211	66 231	90 194
Calcined	25 217	40 983	65 441	77 900	100 471
Slovakia					
Crude	79 729	76 298	85 408	88 083	111 188
Calcined	27 823	39 836	26 794	29 894	47 044
Slovenia					
Crude	39 062	29 388	31 312	38 588	24 660
Calcined	7 429	7 429	8 167	7 936	8 622
Spain					
Crude	43 004	47 585	59 656	53 028	43 171
Calcined	14 462	32 078	20 440	14 129	33 825
Sweden					
Crude	269 060	206 972	263 582	244 986	178 364
Calcined	160 784	97 746	166 829	146 638	154 201
Switzerland					
Crude	64 677	76 460	87 964	93 365	101 731
Calcined	81 971	88 511	92 787	95 000	97 296
Turkey					
Crude and calcined	170 958	196 747	278 129	180 159	167 572
United Kingdom					
Crude	64 043	627 595	369 714	196 613	140 783
Calcined	163 025	133 522	92 069	52 678	88 766

Note(s)

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

Gypsum - EU32 trade in 2008



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 (56 per cent). The EU32 produces no iodine.
- Prices for crude iodine crystals (drums, 99.5% min) tend to be stable for several months at a time. In 2008 prices started at US\$25.00 per kilogram and increased to US\$28.00–US\$30.00 per kilogram in October. The price increased further in February 2009 to US\$30.80–US\$32.00 per kilogram but then remained relatively constant for the rest of the year.

Exports of iodine

kilograms

Country	2004	2005	2006	2007	2008
Austria	100	37	600	300	100
Belgium-Luxembourg	3 646 100	3 460 200	3 272 600	2 633 100	3 560 100
Bulgaria	...	1 199	781	51 610	200
Czech Republic	537	1 000	800	1 000	300
Denmark	6 921	3 058	6 301	100	1
France	30 500	40 900	51 300	91 100	100 500
Germany	640 400	465 800	340 600	183 200	97 400
Ireland, Republic of	—	1 462	—	1 944	1 536
Italy	3 080	14 499	7 067	2 613	2 119
Lithuania	7 502	33	4 800	20	3
Netherlands	58 633	59 228	76 080	517 872	773 705
Norway	—	—	17	7 200	—
Poland	100	100	200	1 300	5 100
Spain	31 156	21 089	7 356	7 689	46 873
Sweden	—	4 000	40	48	122
Switzerland	5 228	4 179	1 342	1 205	1 605
Turkey	118	21 250	20 213	11 098	1 212
United Kingdom	107 007	197 086	314 659	368 785	174 965

Imports of iodine

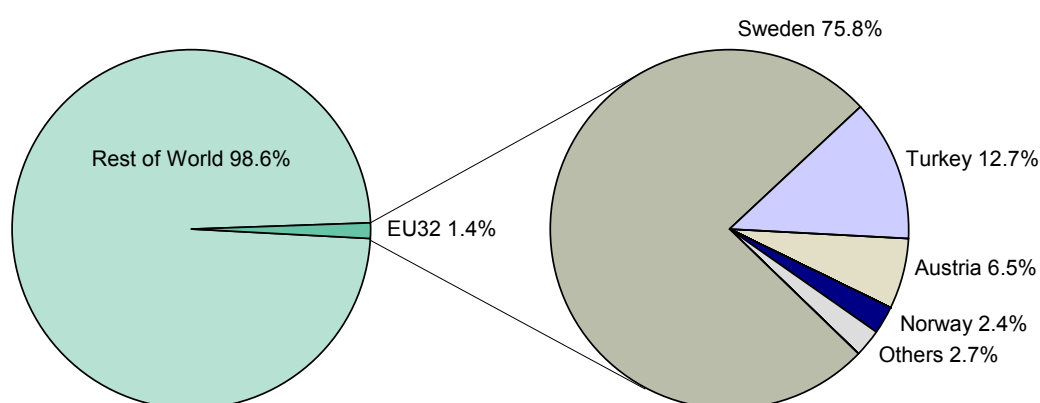
kilograms

Country	2004	2005	2006	2007	2008
Austria	124 100	92 700	173 600	145 500	139 700
Belgium-Luxembourg	3 419 800	3 332 800	3 513 200	2 774 500	3 586 200
Bulgaria	6 755	5 080	3 990	6 500	2 900
Czech Republic	31 420	28 400	31 600	32 300	25 200
Denmark	9 023	13 109	16 345	110 285	66 805
Finland	27 020	6 209	2 066	3 400	3 400
France	1 317 700	1 685 200	1 929 100	1 687 900	1 875 400
Germany	1 422 800	1 302 300	1 205 800	1 102 600	1 150 600
Greece	1 673	2 247	2 153	500	600
Hungary	3 257	6 700	1 800	4 400	7 900
Ireland, Republic of	18 215	11 921	9 705	10 318	21 515
Italy	1 127 906	854 831	1 033 737	1 231 082	1 343 977
Lithuania	1 828	6 929	5 023	470	383
Netherlands	357 223	21 015	158 145	1 870	800 817
Norway	1 294 934	1 748 110	1 919 848	1 785 526	1 668 339
Poland	18 687	10 200	18 700	18 800	24 100
Portugal	14 717	12 000	1 400	900	100
Romania	833	1 054	1 107	2 700	1 400
Spain	710 814	781 787	790 641	582 029	541 706
Sweden	1 000	2 000	2 000	5 000	600
Switzerland	7 428	7 949	11 133	18 136	7 260
Turkey	31 797	5 634	3 219	8 594	9 498
United Kingdom	802 782	1 092 633	1 019 543	1 225 368	1 106 864

Iron ore

- There are two main commercial ores of iron — magnetite and haematite (both 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 in 2008 was China (38 per cent of the world total) where output has increased by 166 per cent since 2004. EU32 iron ore production was only 1.4 per cent of the world total in 2008 and has increased by only six per cent since 2004. Sweden is the largest EU32 producer (76 per cent of EU32 production).
- Iron ore trade is characterised by consumers having fixed contracts with producers, which are negotiated annually. However, price volatility and a failure by producers to fix a contract price with China in 2009 led to a record amount of ore being traded on the spot market. Iron ore prices remained high (above US\$200 per tonne) until September 2008 after which they dropped sharply to end the year at around US\$100 per tonne. The price has remained volatile throughout 2009, heavily dependant on demand from China and India, and price increases have been modest.

EU32 Production of iron ore 2008



Production of iron ore

Country	2004	2005	2006	2007	2008
Austria (a)	1 889 419	2 047 950	2 092 996	2 152 825	2 032 671
Bulgaria	82 700	—	—	—	—
Germany (b) (c)	412 238	362 106	416 000	421 711	455 100
Norway	586 100	713 000	620 000	630 000	746 000
Romania	231 417	220 788	122 684	8 157	—
Slovakia	305 072	258 500	311 000	349 000	392 000
Spain	10 879	—	—	—	—
Sweden	22 272 000	23 255 000	23 302 000	24 714 000	23 888 000
Turkey	3 856 536	3 889 934	3 251 969	4 549 556	3 990 110
United Kingdom	* 500	354	341	* 300	145
EU32 Total	29 647 000	30 748 000	30 117 000	32 826 000	31 504 000

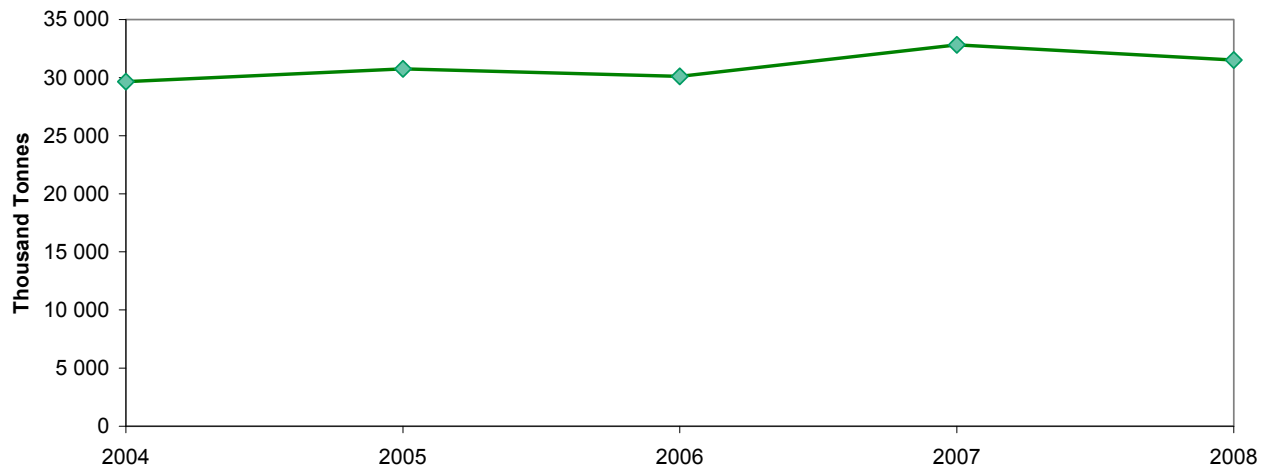
Note(s)

(a) Including micaceous iron oxide

(b) Including manganiferous iron ore

(c) Used as aggregate in the construction industry

EU32 Production of iron ore 2004 - 08



Exports of iron ore

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg	23 450	81 560	43 555	41 440	85 701
Finland					
Burnt pyrites	52	59 433	67 503	146 844	396 064
France	38 452	107 042	76 097	69 376	57 720
Germany					
Iron ore	8 756	7 023	18 294	17 770	34 495
Burnt pyrites	3 241	7 257	6 623	7 491	12 700
Italy					
Iron ore	242	365	18 929	7 026	1 598
Burnt pyrites	11 086	9 410	4 407	1 544	101
Netherlands	1 384 740	1 977 965	2 491 191	2 710 120	85 710
Norway					
Iron ore	648 583	721 975	720 582	739 731	615 296
Burnt pyrites	117 389	14 730	2 658	...	...
Poland	...	50	—	27	10 198
Romania					
Burnt pyrites	...	...	1	24 068	15 567
Slovakia	135 398	8 581	141 448	4 353	53 434
Spain (a)	171 551	231 059	90 447	69 590	62 125
Sweden	17 336 835	17 597 351	18 409 475	19 033 842	17 617 162

Note(s)

(a) Including burnt pyrites

Imports of iron ore

tonnes

Country	2004	2005	2006	2007	2008
Austria (a)	5 783 671	7 423 189	8 412 038	9 061 870	7 996 632
Belgium-Luxembourg (a)	10 655 764	9 384 885	11 387 178	9 583 857	12 337 572
Bulgaria					
Iron ore	1 570 605	1 050 925	1 305 110	919 785	208 559
Burnt pyrites	357 898	437 710	450 004	464 580	188 923
Croatia (a)	10 758	12 605	12 604	14 444	17 177
Czech Republic	(a) 7 636 968	6 576 885	7 984 718	(a) 6 578 116	(a) 6 799 756
Denmark					
Iron ore	4 356	8 450	4 318	72 806	111 302
Burnt pyrites	80 853	86 399	81 341	13 157	—
Finland	(a) 3 921 570	4 215 633	3 481 019	3 156 096	3 121 303

Iron Ore

Imports continued

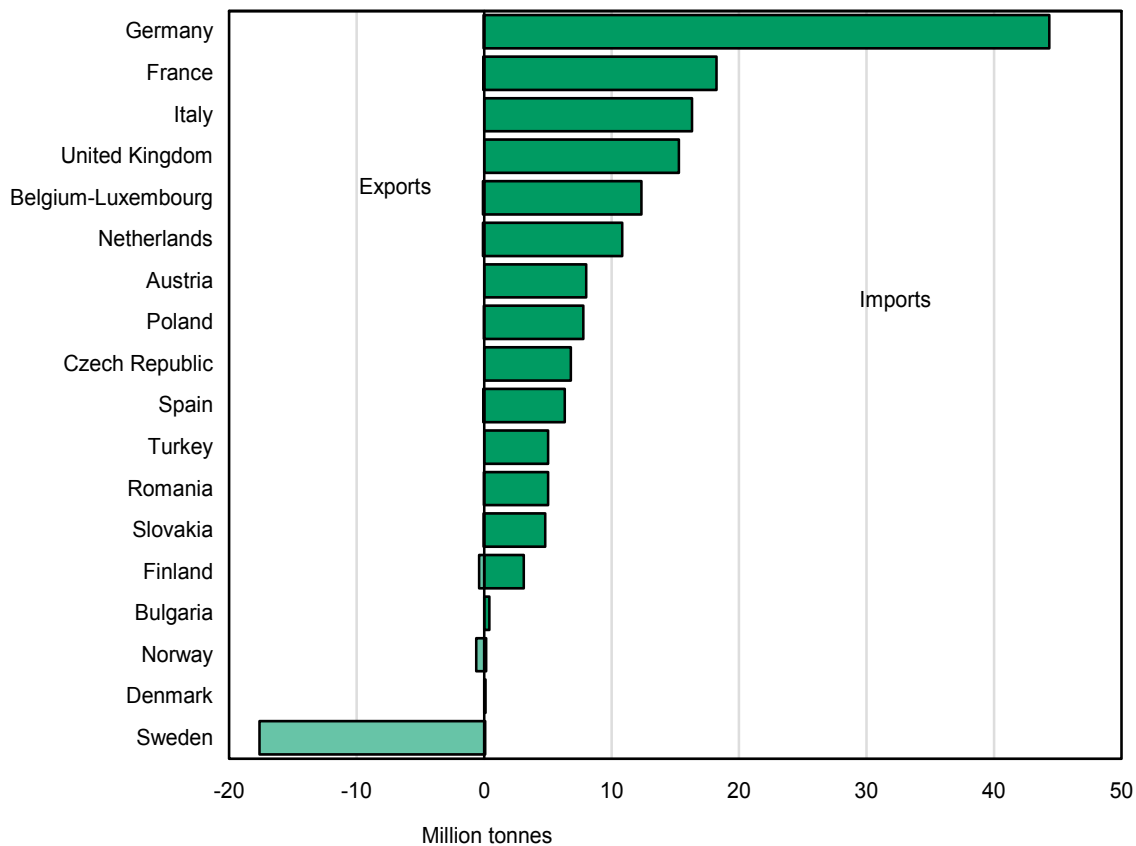
tonnes

Country	2004	2005	2006	2007	2008
France					
Iron ore	20 777 700	19 506 894	19 463 057	20 065 037	18 220 893
Burnt pyrites	65	160	3 451	2 107	4 948
Germany					
Iron ore	43 317 039	39 061 160	44 850 286	46 194 376	44 339 072
Burnt pyrites	37 194	20 496	36 299	570	—
Greece	(a) 4 714	(a) 55 530	(a) 9 755	(a) 23 775	1 567
Hungary	1 063 931	996 277	987 543	966 633	...
Ireland, Republic of	10 306	(a) 580	1 161	(a) 4 594	(a) 13 478
Italy	(a) 16 714 771	17 551 785	(a) 17 776 812	17 013 076	16 313 184
Latvia	...	...	3 919	46 109	44 607
Netherlands	(a) 12 649 345	12 285 177	10 833 565	12 693 210	10 831 769
Norway	495 047	(a) 526 738	216 372	179 727	151 503
Poland	(a) 10 933 453	6 788 655	9 607 629	8 746 836	(a) 7 784 529
Romania					
Iron ore	6 609 026	6 601 393	6 054 765	6 259 705	5 003 811
Burnt pyrites	—	...	62 505	2 824	17 770
Slovakia	(a) 6 109 379	5 513 902	6 406 019	5 853 880	4 802 516
Spain	6 119 146	6 248 781	5 511 247	5 719 062	6 329 188
Sweden	(a) 110 157	(a) 104 570	82 211	(a) 69 937	71 441
Switzerland (a)	5 660	15 145	16 019	15 626	18 704
Turkey					
Iron ore	4 573 864	4 621 446	7 197 305	6 925 163	5 004 509
Burnt pyrites	22 047	63 666	11 596	...	17 092
United Kingdom					
Iron ore	15 298 713	16 204 615	16 370 705	17 435 472	15 282 786
Burnt pyrites	2 436	1 911	1 282	131 230	693

Note(s)

(a) Including burnt pyrites

Iron ore - EU28 trade in 2008



Production of pig iron

tonnes

Country	2004	2005	2006	2007	2008
Austria	4 846 740	5 444 000	5 547 000	5 908 000	5 795 000
Belgium	8 224 000	7 254 000	7 516 000	6 577 000	6 977 000
Bulgaria	1 158 000	1 150 000	1 147 000	1 069 000	441 000
Czech Republic	5 385 000	4 627 000	5 192 000	5 287 000	4 737 000
Finland	3 036 566	3 056 165	3 157 894	2 915 130	2 942 946
France	13 087 705	12 595 584	12 873 900	12 425 703	11 371 879
Germany	30 628 000	29 294 000	30 940 000	31 700 000	29 105 000
Hungary	1 350 000	1 329 000	1 340 000	1 393 655	1 288 758
Italy	10 566 000	11 392 000	11 500 000	11 100 000	10 300 000
Netherlands	6 011 000	6 031 000	5 417 000	6 412 000	6 130 000
Norway	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Poland	6 292 341	4 476 831	5 332 632	5 804 418	4 933 781
Romania	4 243 956	4 097 998	3 945 975	3 923 244	2 957 715
Slovakia	3 765 000	3 681 000	4 145 000	4 012 000	3 529 000
Spain	4 036 000	4 160 000	3 432 000	3 976 000	3 995 000
Sweden	3 992 000	3 844 000	3 701 000	3 947 000	3 708 000
Switzerland	1 000 000	1 158 000	1 252 000	1 264 000	1 312 000
Turkey	5 835 889	5 398 500	5 952 000	6 235 537	6 697 372
United Kingdom	10 179 600	10 188 800	10 695 700	10 959 800	10 136 800
EU32 Total	123 740 000	119 280 000	123 190 000	125 010 000	116 460 000

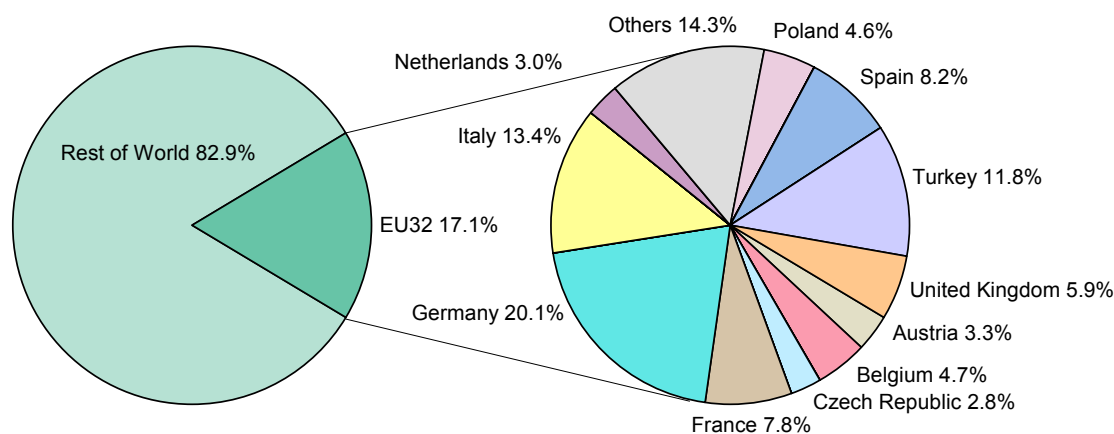
Note(s)

(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 EU32 and world total steel production.
- The majority of industrialised countries produce steel. In 2008 the largest producer was China, with 38 per cent of the world total and with production 77 per cent higher than in 2004. The EU32 countries produced 17 per cent of the world total and the largest producer in the EU32 was Germany, which produced 20 per cent of EU32 steel output.
- Prices for hot-rolled coil steel increased during the first half of 2008 to about US\$1100 per tonne, however once the global economic conditions started to take effect the price dropped, finishing the year at about US\$500 per tonne. It dropped further during the early part of 2009, to a low of US\$430 per tonne in July, before recovering, to some extent, to the end the year at US\$560 per tonne.

EU32 Production of crude steel 2008



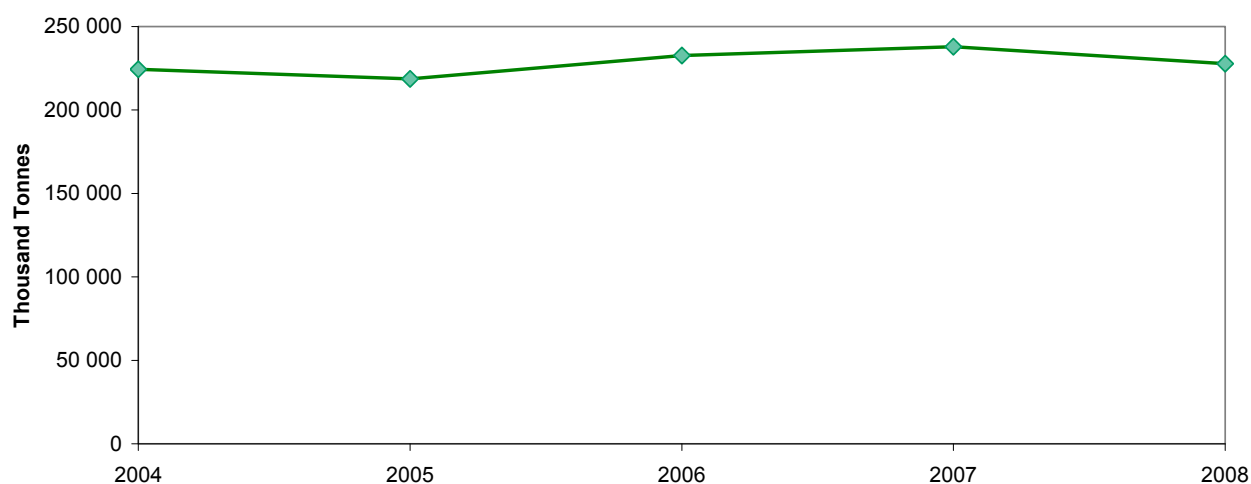
Production of crude steel

tonnes

Country	2004	2005	2006	2007	2008
Austria	6 529 000	7 031 000	7 129 000	7 577 000	7 593 000
Belgium	11 697 000	10 422 000	11 631 000	10 692 000	10 673 000
Bulgaria	2 106 000	1 969 000	2 102 000	1 909 000	1 330 000
Croatia	85 947	73 640	80 516	76 252	121 759
Czech Republic	7 033 000	6 189 000	6 862 000	7 059 000	6 387 000
Finland	4 832 427	4 738 446	5 053 714	4 430 726	4 416 792
France	20 770 252	19 480 777	19 852 125	19 249 862	17 879 161
Germany	46 374 000	44 524 000	47 223 000	48 550 000	45 832 000
Greece	1 967 000	2 266 000	2 416 000	2 554 000	2 477 000
Hungary	1 944 017	2 004 250	2 084 000	2 227 000	2 096 000
Italy	28 603 000	29 349 000	31 624 000	31 506 000	30 589 000
Latvia	550 000	550 000	* 690 000	* 696 000	* 635 000
Luxembourg	2 684 000	2 194 000	2 802 000	2 858 000	2 582 000
Macedonia	319 873	321 170	326 484	370 317	344 866
Netherlands	6 848 000	6 919 000	6 372 000	7 368 000	6 853 000
Norway	725 000	705 000	684 000	708 000	560 000
Poland	10 578 482	8 335 898	9 991 638	10 630 716	10 380 738
Portugal	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000
Romania	6 076 600	6 280 000	6 266 036	6 269 486	5 035 164
Slovakia	4 454 000	4 485 000	5 093 000	5 082 000	4 489 000
Slovenia	565 000	582 000	628 000	638 000	640 000
Spain	17 700 000	17 825 000	18 391 000	18 998 000	18 640 000
Sweden	5 978 000	5 725 600	5 466 100	5 672 900	5 196 000
Switzerland	1 000 000	1 158 000	1 252 000	1 264 000	1 312 000
Turkey	19 868 118	20 961 240	23 307 523	25 760 889	26 809 050
United Kingdom	13 765 700	13 238 900	13 904 600	14 392 300	13 520 500
EU32 Total	224 454 000	218 728 000	232 632 000	237 939 000	227 792 000

Note(s)

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

EU32 Production of crude steel 2004 - 08

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 included within the ferro-alloys table as it is used for the same purpose.
- Ferro-alloy production is usually undertaken close to the mine site or at distant locations where cheap energy supplies are available.
- China is the largest world producer but in the EU32, Norway is the largest producer based on imported metal ores and indigenous resources of silica.

Production of ferro-alloys

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Ferro-molybdenum	4 700	5 000	5 000	5 000	4 500
Ferro-nickel	1 900	2 500	2 500	3 000	2 000
Ferro-vanadium	5 800	6 250	6 250	6 500	6 300
Bulgaria					
Ferro-silicon	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Czech Republic					
Ferro-vanadium	* 3 400	* 2 600	* 2 800	* 1 700	* 2 800
Finland					
Ferro-chrome	264 492	234 881	243 350	241 760	233 550
France					
Ferro-manganese and spiegeleisen	110 072	109 111	139 533	98 066	* 100 000
Ferro-silico-manganese	64 100	52 300	63 300	* 65 000	* 65 000
Ferro-silicon	* 87 000	* 67 000	* 67 000	* 71 000	* 70 000
Silicon metal	* 85 000	* 100 000	* 100 000	* 120 000	* 120 000
Germany					
Ferro-chrome	24 857	22 672	26 710	22 030	26 960
Other ferro-alloys	* 26 000	* 25 000	* 20 500	* 20 000	* 20 000
Silicon metal	28 773	29 349	29 865	29 379	29 092
Greece					
Ferro-nickel	90 600	* 96 000	* 89 000	93 300	83 200
Italy					
Ferro-manganese	38 000	32 000	* 30 000	* 30 000	* 30 000
Ferro-silico-manganese	108 000	99 000	96 600	87 000	87 000
Macedonia					
Ferro-nickel	5 313	8 141	10 942	15 321	15 026
Ferro-silicon	66 769	71 249	59 023	78 892	97 605
Norway					
Ferro-manganese	* 130 000	* 130 000	* 130 000	* 130 000	* 130 000
Ferro-silico-manganese	* 260 000	* 290 000	* 310 000	* 280 000	* 260 000
Ferro-silicon	389 599	329 316	123 819	170 024	185 344
Other ferro-alloys	* 60 000	* 60 000	* 60 000	* 62 000	* 60 000
Silicon metal	193 566	178 572	* 150 000	* 140 000	* 155 000
Poland					
Ferro-manganese	46 898	7 782	4 089	2 093	8 475
Ferro-silico-manganese	29 600	10 242	3 310	15 590	25 061
Ferro-silicon	83 552	65 118	13 034	58 538	56 031
Other ferro-alloys	1 419	3 663	4 488	6 255	2 948
Romania					
Ferro-chrome	—	—	—	—	6 179
Ferro-manganese	191	18 625	3 777	—	—
Ferro-silico-manganese	194 754	100 957	66 476	26 868	9 979
Slovakia					
Ferro-chrome	1 784	867	19	—	—
Ferro-silico-manganese	64 862	47 843	59 128	71 587	...
Ferro-silicon	34 684	16 512	16 155	8 583	20 679
Other ferro-alloys	68 096	48 161	65 498	74 065	...
Slovenia					
Ferro-silicon	22 482	15 529	12 550	* 6 000	* —

Iron, Steel and Ferro-Alloys

Production continued					tonnes
Country	2004	2005	2006	2007	2008
Spain					
Ferro-manganese	* 35 000	* 35 000	* 35 000	* 35 000	* 35 000
Ferro-silico-manganese	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Ferro-silicon	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Silicon metal	* 25 000	* 25 000	* 25 000	* 25 000	* 25 000
Sweden					
Ferro-chrome	127 300	127 500	136 400	124 400	118 700
Ferro-silicon	18 500	9 800	4 600	4 300	—
Turkey					
Ferro-chrome	33 686	26 043	67 975	69 730	75 840
Ferro-silico-chrome	5 560	6 695	7 310	6 624	6 094

Exports of iron, steel and ferro-alloys

					tonnes
Country	2004	2005	2006	2007	2008
Austria					
Pig iron	6 585	6 614	5 695	6 958	7 539
Ferro-alloys	5 999	9 476	10 218	9 100	7 541
Silicon metal	598	628	1 884	5 166	5 412
Ingots, blooms, billets	334 124	484 431	303 284	286 765	284 063
Scrap	1 099 278	1 024 301	1 140 091	1 279 775	1 351 725
Belgium-Luxembourg					
Pig iron	225 486	201 577	230 490	275 411	283 034
Sponge and powder	29 127	15 850	19 750	36 997	20 773
Ferro-chrome	32 998	31 851	38 401	54 201	38 927
Ferro-silico-chrome	7 214	9 107	17 169	15 141	12 463
Ferro-silico-magnesium	39	11	52	6 744	6 172
Ferro-manganese	9 621	11 674	11 122	16 126	24 024
Ferro-silico-manganese	41 307	29 858	41 422	52 431	40 777
Ferro-molybdenum	19 219	22 420	22 679	20 153	17 759
Ferro-silicon	31 000	21 812	39 501	68 385	54 905
Other ferro-alloys	6 523	6 689	6 498	1 988	5 401
Silicon metal	6 078	9 095	6 765	5 869	6 673
Ingots, blooms, billets	368 589	639 936	859 247	1 089 364	958 406
Scrap	2 851 040	2 712 683	3 052 438	3 268 578	3 754 867
Bulgaria					
Pig iron	114	51	44 549	62 032	23 553
Ferro-silico-manganese	4 034	1 501	3 638	6 845	288
Ferro-silicon	1 329	1 499	3 345	4 972	2 076
Other ferro-alloys	283	72	180	2 072	550
Silicon metal	11	15	11	2 374	46
Ingots, blooms, billets	277 332	97 757	163 020	135 710	85 466
Scrap	769 559	784 778	722 261	677 347	740 414
Croatia					
Scrap	279 852	318 840	398 070	427 540	357 487
Cyprus					
Scrap	46 316	55 240	65 998	63 662	72 106
Czech Republic					
Pig iron	55 687	15 526	17 599	31 182	30 457
Ferro-silicon	7 342	5 396	6 516	8 254	8 780
Ferro-vanadium	3 417	2 613	2 763	1 685	2 830
Other ferro-alloys	5 772	14 358	15 078	8 704	13 897
Silicon metal	4 488	512	1 040	1 118	1 375
Ingots, blooms, billets	267 912	251 513	324 619	587 296	500 423
Scrap	1 930 343	1 351 676	1 456 061	1 678 565	1 792 889

Exports continued						tonnes
Country	2004	2005	2006	2007	2008	
Denmark						
Ferro-silicon	20 935	23 295	14 611	64	70	
Other ferro-alloys	187	139	238	701	585	
Ingots, blooms, billets	16 223	1 203	2 199	12 820	16 775	
Scrap	1 564 469	1 402 982	1 414 060	1 263 987	1 372 424	
Estonia						
Pig iron	...	(f)* 200	...	(f)* 1 360	1	
Ferro-alloys	1 238	665	672	159	153	
Ingots, blooms, billets	762	...	425	5 985	1 392	
Scrap	358 185	440 622	592 372	572 216	650 099	
Finland						
Pig iron	0	8 040	3 045	0	14 070	
Ferro-chrome	35 780	39 341	37 663	100 022	37 709	
Ingots, blooms, billets	624 170	436 083	284 313	185 229	281 325	
Scrap	315 977	286 494	220 124	253 732	308 047	
France						
Pig iron	679	350	113 729	89 768	88 462	
Sponge and powder	5 221	6 465	13 059	17 948	14 698	
Ferro-chrome	1 074	857	875	1 217	2 098	
Ferro-silico-magnesium	5 521	6 829	2 165	16 377	28 255	
Ferro-manganese	14 360	7 181	7 483	8 049	2 457	
Ferro-silico-manganese	63 483	76 021	53 278	41 110	42 260	
Ferro-molybdenum	538	547	673	481	374	
Ferro-niobium	521	240	596	948	984	
Ferro-silicon	65 881	69 551	63 432	50 334	73 824	
Ferro-titanium and ferro-silico-titanium	1 305	1 542	1 992	2 292	1 493	
Other ferro-alloys	29 320	27 432	22 699	357	150	
Ingots, blooms, billets	3 833 258	3 914 427	3 071 836	2 650 976	2 830 986	
Scrap	5 578 148	4 955 474	6 019 890	6 210 854	6 028 712	
Germany						
Pig iron	112 911	82 834	180 939	145 453	153 917	
Sponge and powder	148 734	175 291	197 636	147 303	95 846	
Ferro-chrome	22 758	26 472	36 289	39 892	36 856	
Ferro-silico-magnesium	13 887	14 254	12 142	24 051	22 191	
Ferro-manganese	13 776	12 660	24 659	14 733	11 802	
Ferro-silico-manganese	9 286	2 928	9 748	8 684	10 354	
Ferro-molybdenum	2 597	3 867	3 499	3 636	3 858	
Ferro-nickel	625	31	115	2 116	1 036	
Ferro-niobium	1 076	1 448	1 130	1 149	1 057	
Ferro-phosphorus	786	936	977	839	477	
Ferro-silicon	61 239	53 979	53 963	51 343	63 858	
Ferro-titanium and ferro-silico-titanium	3 069	5 263	4 795	6 011	4 237	
Ferro-tungsten and ferro-silico-tungsten	178	176	423	480	460	
Ferro-vanadium	600	528	268	558	413	
Other ferro-alloys	12 691	10 652	10 720	...	...
Silicon metal	18 064	—	—	—	—	
Ingots, blooms, billets	2 104 580	1 950 158	2 171 036	2 496 951	2 047 223	
Scrap	6 956 839	6 692 022	7 605 306	7 770 479	8 268 662	
Greece						
Ferro-alloys	5 528	1 044	511	340	3 671	
Ingots, blooms, billets	64 105	48	13 899	121 989	162 819	
Scrap	59 502	37 164	126 188	34 584	36 018	
Hungary						
Ferro-alloys	701	234	—	829	47	
Ingots, blooms, billets	24 042	24 923	14 731	36 548	90 282	
Scrap	887 069	761 464	658 499	567 923	691 805	
Ireland, Republic of						
Scrap	347 479	352 028	398 587	478 562	485 387	

Iron, Steel and Ferro-Alloys

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Italy					
Pig iron	41 068	15 740	22 114	50 789	36 137
Sponge and powder	62	163	194	1 097	615
Ferro-chrome	8 411	3 753	8 276	5 411	4 593
Ferro-silico-magnesium	3 163	30	93	2 061	1 681
Ferro-manganese	8 857	10 380	8 670	14 562	12 890
Ferro-silico-manganese	3 167	3 511	4 086	7 048	6 882
Ferro-molybdenum	162	90	174	68	277
Ferro-nickel	...	3 967	173	239	123
Ferro-silicon	3 594	5 035	4 457	7 113	7 094
Other ferro-alloys	...	996	1 986	84	95
Silicon metal	1 667	3 931	3 304	4 576	6 007
Ingots, blooms, billets	402 967	698 402	958 626	983 369	964 245
Scrap	211 385	185 688	190 139	240 735	387 528
Latvia					
Ingots, blooms, billets	306	667	2 626	4 371	4 010
Scrap	64 936	217 361	313 455	245 958	388 456
Lithuania					
Ferro-alloys	...	13 293	17 952	15 437	11 188
Scrap	677 727	599 084	681 692	661 349	659 646
Macedonia					
Ferro-silico-manganese	138	1 673	6 682	48 258	...
Ferro-nickel	16 260	34 419	45 058	71 189	...
Ferro-silicon	67 929	74 450	62 794	30 139	...
Scrap	61 690	85 745	98 763	124 200	104 326
Malta					
Scrap	12 424	5 252	19 012	28 083	25 379
Netherlands					
Pig iron	31 821	40 552	28 806	134 324	170 468
Sponge and powder	15 794	46 464	22 899	543	382
Ferro-chrome	70 272	81 105	92 920	94 048	103 036
Ferro-silico-chrome	18	508	299	25	15
Ferro-silico-magnesium	751	4 195	...	...	...
Ferro-manganese	53 367	49 203	28 423	42 958	65 203
Ferro-silico-manganese	16 109	13 994	14 118	21 432	17 571
Ferro-molybdenum	2 712	4 304	5 652	5 579	3 150
Ferro-nickel	9 855	23 252	42 421	42 331	5 086
Ferro-niobium	47	126	217	1 439	1 736
Ferro-phosphorus	12 515	12 173	7 910	...	...
Ferro-silicon	27 328	95 845	97 120	106 764	71 762
Ferro-titanium and ferro-silico-titanium	660	6 235	4 281	3 706	3 046
Ferro-tungsten and ferro-silico-tungsten	193	624	477	2 010	1 168
Ferro-vanadium	2 901	22 495	5 855	7 263	2 274
Other ferro-alloys	5 925	9 700	5 683	7 719	22 603
Silicon metal	10 319	40 393	56 525	15 237	15 547
Ingots, blooms, billets	309 454	152 593	378 061	1 111 462	806 999
Scrap	3 859 394	4 140 362	4 786 987	4 500 919	4 523 660
Norway					
Pig iron (a)	* 123 600	* 66 800	* 149 400	* 119 800	* 110 100
Ferro-chrome (a)	* 600	* 200	* 200	* 100	* 75
Ferro-manganese (a)	* 336 800	* 274 200	* 287 500	* 329 400	* 354 000
Ferro-silico-manganese	264 163	289 497	306 932	280 028	257 804
Ferro-silicon	256 018	179 503	90 556	155 198	209 669
Other ferro-alloys	59 696	55 564	58 033	...	57 954
Silicon metal	176 458	168 790	152 514	144 607	155 385
Ingots, blooms, billets	148 514	151 882	180 500	176 755	62 625
Scrap	270 903	267 051	337 088	290 644	269 370
Poland					
Pig iron	57 696	4 917	19 286	7 481	5 189
Ferro-manganese and ferro-silico-manganese	66 666	22 713	11 954	20 412	37 978
Ferro-silicon	85 538	64 974	16 023	46 923	52 976
Other ferro-alloys	195	915	1 630	2 364	2 752
Ingots, blooms, billets	1 585 494	1 249 618	964 361	1 575 099	1 580 450
Scrap	1 973 116	1 426 831	1 197 827	1 199 620	1 368 952

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Portugal					
Ingots, blooms, billets	184 547	159 868	79 697	138 692	164 425
Scrap	259 297	330 536	479 017	378 043	172 133
Romania					
Pig iron	3 339	0	1	5	1
Sponge and powder	9 187	12 522	12 851	17 832	18 697
Ferro-silico-manganese	179 788	142 617	41 000	33 529	5 793
Other ferro-alloys	3 891	8 657	3 561	872	1 493
Ingots, blooms, billets	161 438	100 515	87 685	183 551	220 136
Scrap	2 394 490	1 661 747	1 862 498	1 963 213	1 985 977
Slovakia					
Pig iron	73 303	31 261	50 497	10 588	20 676
Ferro-manganese	57 440	41 918	59 475	49 723	48 747
Ferro-silico-manganese	66 902	51 623	73 050	62 898	55 873
Ferro-silicon	40 135	29 130	25 240	16 437	21 352
Other ferro-alloys	11 834	10 741	8 033	13 604	15 436
Ingots, blooms, billets	286 072	289 090	654 743	508 620	241 811
Scrap	544 714	390 620	524 597	404 401	525 777
Slovenia					
Pig iron	574	752	3 511	14 942	24 639
Ferro-silicon	25 894	24 290	26 859	15 277	20 826
Other ferro-alloys	11 820	27 120	22 497	24 205	12 516
Silicon metal	1 608	252	3 006	1 875	1 149
Ingots, blooms, billets	15 327	12 647	12 273	31 849	21 006
Scrap	186 726	225 627	222 403	245 869	199 016
Spain					
Pig iron	3 258	12 709	4 202	12 491	9 747
Sponge and powder	4 914	4 397	4 030	6 404	4 763
Ferro-chrome	551	775	1 024	2 461	4 768
Ferro-manganese	82 733	101 850	91 018	71 345	65 330
Ferro-silico-manganese	40 130	42 916	32 806	33 636	34 307
Ferro-molybdenum	60	331	317	70	45
Ferro-silicon	19 332	11 843	7 759	18 323	9 562
Other ferro-alloys	558	992	493	1 170	1 285
Silicon metal	13 254	16 742	16 566	16 175	16 008
Ingots, blooms, billets	130 079	118 414	114 897	91 085	310 671
Scrap	205 298	140 200	137 273	162 371	214 913
Sweden					
Pig iron	116 550	99 496	145 733	152 911	62 588
Sponge and powder	12 306	9 064	15 238	26 666	19 844
Ferro-chrome	1 830	1 801	1 973	2 247	3 534
Ferro-silico-magnesium	235	60	739	1 260	...
Ferro-manganese and ferro-silico-manganese	1 605	3 456	2 584	3 859	3 620
Ferro-molybdenum	87	158	157	304	301
Ferro-phosphorus	281	294	706	1 128	1 370
Ferro-silicon	441	731	1 968	2 892	2 616
Ferro-vanadium	99	249	61	135	112
Other ferro-alloys	2 280	1 171	1 289	216	895
Silicon metal	6 387	6 049	2 321	1 474	2 458
Ingots, blooms, billets	367 562	232 958	116 880	134 568	102 086
Scrap	741 254	863 474	847 179	1 069 335	1 449 311
Switzerland					
Sponge and powder	1 679	2 222	2 233	2 537	2 126
Ferro-alloys	1 261	867	616	653	642
Ingots, blooms, billets	51 639	83 219	88 289	104 433	65 257
Scrap	539 629	561 972	582 567	585 342	636 462
Turkey					
Pig iron	50 165	9 358	1 150	—	10 372
Ferro-chrome	16 286	39 038	60 952	63 209	39 324
Other ferro-alloys	5 092	1 356	1 747	7 122	5 682
Ingots, blooms, billets	3 769 934	2 174 257	1 630 209	1 660 642	2 501 135
Scrap	82 460	64 281	44 474	29 237	77 654

Iron, Steel and Ferro-Alloys

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
United Kingdom					
Pig iron	957	1 387	5 407	15 892	2 523
Sponge and powder	4 003	3 605	2 346	4 969	43 775
Ferro-chrome and ferro-silico-chrome	2 384	6 238	4 066	2 973	1 385
Ferro-silico-magnesium	316	542	653	917	976
Ferro-manganese	1 554	661	473	1 136	1 210
Ferro-silico-manganese	8 247	5 003	60	7	49
Ferro-molybdenum	14 213	11 501	12 004	11 823	11 283
Ferro-nickel	125	55	329	52	81
Ferro-niobium	47	79	74	49	58
Ferro-phosphorus	1 336	189	36	33	45
Ferro-silicon	2 699	2 652	2 733	2 314	3 299
Ferro-titanium and ferro-silico-titanium	20 703	17 361	17 645	19 515	18 557
Ferro-vanadium	17	156	151	96	79
Other ferro-alloys	3 892	5 473	3 655	2 925	4 012
Silicon metal	1 555	2 466	6 963	11 325	151 132
Ingots, blooms, billets	1 712 102	2 246 377	2 692 654	3 514 850	3 348 794
Scrap	6 772 111	6 105 955	7 407 174	6 013 907	6 616 708

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) BGS estimates, based on known imports into certain countries

Imports of iron, steel and ferro-alloys

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Pig iron	66 196	51 982	40 133	69 614	43 663
Sponge and powder	10 917	25 214	20 542	31 775	56 471
Ferro-chrome	43 438	41 046	34 196	49 977	47 748
Ferro-silico-magnesium	627	678	522	1 746	2 021
Ferro-manganese	39 026	37 865	29 385	38 857	36 491
Ferro-silico-manganese	6 817	26 572	22 456	30 340	22 322
Ferro-molybdenum	1 011	617	1 632	1 370	1 552
Ferro-niobium	934	899	955	956	1 125
Ferro-phosphorus	1 433	1 749	1 520	1 692	2 011
Ferro-silicon	47 223	32 445	25 609	26 180	27 850
Ferro-titanium and ferro-silico-titanium	961	1 121	1 081	793	879
Ferro-tungsten and ferro-silico-tungsten	589	535	677	796	1 277
Ferro-vanadium	587	256	100	186	289
Other ferro-alloys	1 279	1 554	1 611	7	61
Silicon metal	9 127	11 698	12 937	16 581	15 601
Ingots, blooms, billets	156 796	108 004	132 901	208 910	191 426
Scrap	1 017 497	1 113 082	1 089 942	1 371 393	1 629 170

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg					
Pig iron	396 174	330 709	560 116	552 212	548 129
Sponge and powder	107 639	48 915	102 543	33 539	22 021
Ferro-chrome	215 638	220 896	342 280	452 118	378 018
Ferro-silico-chrome	7 435	9 587	19 190	17 149	15 483
Ferro-silico-magnesium	993	1 656	2 040	12 168	10 433
Ferro-manganese	49 305	60 564	54 402	65 987	89 088
Ferro-silico-manganese	56 622	60 454	69 526	149 121	92 194
Ferro-molybdenum	4 317	5 199	5 929	5 405	2 339
Ferro-nickel	51 796	61 454	73 384	90 808	89 430
Ferro-niobium	712	849	936	3 252	2 003
Ferro-phosphorus	1 237	1 700	1 607	2 185	10 421
Ferro-silicon	93 591	79 901	109 389	150 254	126 700
Ferro-titanium and ferro-silico-titanium	1 677	2 141	3 016	3 553	5 595
Ferro-vanadium	568	650	338	615	693
Other ferro-alloys	7 366	7 499	6 887	—	—
Silicon metal	15 136	18 563	20 117	17 307	20 098
Ingots, blooms, billets	2 814 705	3 452 850	2 876 977	3 500 081	3 540 429
Scrap	4 413 160	3 761 788	4 297 928	7 416 312	8 095 587
Bulgaria					
Pig iron	14 228	19 624	15 278	26 932	27 941
Sponge and powder	446	384	542	31 306	1 282
Ferro-chrome	1 026	836	1 088	916	656
Ferro-manganese	5 116	5 540	6 133	7 981	4 206
Ferro-silico-manganese	459	666	1 885	3 336	4 325
Ferro-silicon	4 564	3 897	4 410	2 977	3 331
Other ferro-alloys	1 392	1 140	1 789	2 390	1 906
Silicon metal	663	585	9 733	873	763
Ingots, blooms, billets	280 895	275 001	417 485	462 348	567 381
Scrap	90 491	108 450	188 698	295 555	237 055
Croatia					
Pig iron	15 175	15 270	16 994	17 011	15 031
Ferro-alloys	2 980	2 893	3 031	3 027	4 790
Ingots, blooms, billets	3 562	12 421	27 291	20 953	20 077
Scrap	7 156	18 407	17 563	29 553	19 400
Czech Republic					
Pig iron	88 014	88 549	150 032	108 715	111 872
Sponge and powder	5 661	6 130	10 136	20 580	24 791
Ferro-chrome	16 248	16 772	20 492	34 123	26 043
Ferro-silico-magnesium	...	941	1 236	6 297	5 778
Ferro-manganese	27 051	30 921	32 355	35 500	33 704
Ferro-silico-manganese	59 361	53 258	57 857	52 153	48 962
Ferro-molybdenum	1 710	1 744	1 889	2 025	2 049
Ferro-silicon	34 812	34 114	36 361	41 482	37 230
Ferro-vanadium	395	564	429	440	578
Other ferro-alloys	9 817	10 018	9 080	1 697	1 644
Silicon metal	8 401	2 589	4 986	6 584	5 826
Ingots, blooms, billets	352 672	484 450	409 753	445 181	525 598
Scrap	593 330	392 135	560 676	521 779	502 256
Denmark					
Pig iron	14 844	12 720	18 128	18 349	14 064
Sponge and powder	103 479	29 188	80 148	61 079	3 602
Ferro-silico-magnesium	—	—	1 322	1 795	1 465
Ferro-silicon	3 564	2 548	4 069	1 887	1 702
Other ferro-alloys	975	1 345	1 771	595	1 080
Silicon metal	1 061	659	1 586	741	263
Ingots, blooms, billets	598 552	551 407	588 053	780 837	672 439
Scrap	250 551	313 558	238 142	213 776	392 453

Iron, Steel and Ferro-Alloys

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Estonia					
Ferro-alloys	2 132	2 125	1 815	1 240	1 114
Scrap	85 689	111 930	64 110	53 155	37 774
Finland					
Pig iron	30 453	27 160	45 364	53 901	42 681
Sponge and powder	16 906	969	779 146	880 575	942 664
Ferro-chrome	6 562	7 404	17 926	9 650	11 182
Ferro-manganese	15 805	14 728	14 828	18 138	15 709
Ferro-silico-manganese	40 800	38 375	38 440	34 994	34 139
Ferro-molybdenum	2 709	2 293	1 948	1 892	1 730
Ferro-nickel	60 213	47 531	53 741	54 106	50 294
Ferro-niobium	470	478	493	570	757
Ferro-phosphorus	570	489	550	560	380
Ferro-silicon	32 507	25 723	36 659	31 814	29 740
Ferro-titanium and ferro-silico-titanium	2 063	1 912	1 558	1 707	1 857
Other ferro-alloys	4 128	4 849	4 252	4 300	4 193
Silicon metal	2 097	1 306	1 402	1 318	1 638
Ingots, blooms, billets	253 730	51 678	5 138	7 649	11 114
Scrap	865 142	756 267	1 013 675	687 887	596 792
France					
Pig iron	237 824	249 585	183 755	195 466	202 077
Sponge and powder	151 090	184 661	219 813	147 662	89 809
Ferro-chrome	224 722	192 129	159 940	106 513	111 584
Ferro-silico-chrome	59	122	677	8	69
Ferro-silico-magnesium	15 928	25 046	18 536	26 899	26 786
Ferro-manganese	96 276	55 239	57 240	63 487	69 464
Ferro-silico-manganese	61 446	58 403	49 287	45 827	54 004
Ferro-molybdenum	5 474	5 235	5 223	5 650	5 637
Ferro-nickel	10 966	9 229	4 487	6 373	5 887
Ferro-niobium	2 297	2 722	2 597	2 785	3 266
Ferro-phosphorus	2 942	2 536	2 360	2 528	2 698
Ferro-silicon	62 260	71 269	64 727	52 945	61 740
Ferro-titanium and ferro-silico-titanium	4 768	6 448	9 037	10 009	8 293
Ferro-tungsten and ferro-silico-tungsten	346	523	839	597	666
Ferro-vanadium	1 031	1 351	1 396	1 432	1 575
Silicon metal	19 299	25 257	21 813	19 659	23 885
Ingots, blooms, billets	1 803 335	1 621 219	1 557 219	1 998 943	1 747 005
Scrap	3 449 108	2 819 160	3 319 269	3 197 843	3 241 199
Germany					
Pig iron	342 152	320 481	422 525	655 022	713 470
Sponge and powder	180 615	156 048	193 503	249 673	90 069
Ferro-chrome	440 993	454 703	458 070	484 276	544 619
Ferro-silico-chrome	11 367	1 429	12 867	14 426	12 886
Ferro-silico-magnesium	1 722	6 831	23 761	25 758	23 645
Ferro-manganese	175 176	170 967	195 387	217 428	209 083
Ferro-silico-manganese	172 164	172 967	181 726	210 703	156 484
Ferro-molybdenum	13 214	15 594	17 473	18 423	17 434
Ferro-nickel	90 614	157 091	150 789	169 677	177 851
Ferro-niobium	3 864	4 361	6 063	6 176	6 269
Ferro-phosphorus	4 131	4 985	5 575	6 519	4 801
Ferro-silicon	237 700	238 120	214 736	274 783	215 374
Ferro-titanium and ferro-silico-titanium	6 845	10 302	13 492	15 339	13 824
Ferro-tungsten and ferro-silico-tungsten	400	600	990	1 512	2 182
Ferro-vanadium	4 006	4 843	5 171	5 711	5 333
Other ferro-alloys	16 901	13 323	13 698	—	—
Silicon metal	130 408	156 690	184 499	190 933	225 185
Ingots, blooms, billets	1 945 817	2 331 264	2 578 298	3 095 162	2 970 042
Scrap	5 411 710	5 026 286	5 592 745	5 920 061	5 675 167

Imports continued						tonnes
Country	2004	2005	2006	2007	2008	
Greece						
Pig iron	15 494	6 415	9 172	10 461	9 185	
Sponge and powder	3 507	3 374	492	6 741	7 709	
Ferro-chrome	565	674	871	1 016	1 146	
Ferro-manganese	2 604	1 293	640	2 654	1 753	
Ferro-silico-manganese	23 808	31 657	31 524	38 321	24 943	
Ferro-silicon	7 899	6 339	4 694	18 783	8 170	
Other ferro-alloys	1 026	474	444	546	504	
Silicon metal	1 055	1 126	1 408	1 383	2 312	
Ingots, blooms, billets	229 854	90 412	120 241	250 572	171 231	
Scrap	1 178 451	1 545 912	1 517 545	1 637 437	1 485 316	
Hungary						
Pig iron	14 429	8 808	14 821	13 285	12 951	
Ferro-manganese	9 152	2 898	15 611	4 311	4 318	
Ferro-silico-manganese	1 842	1 368	3 303	4 168	4 661	
Ferro-silicon	5 295	5 013	4 821	5 907	5 232	
Other ferro-alloys	2 534	4 049	1 677	1 535	13 393	
Silicon metal	5 196	2 260	4 847	2 982	2 184	
Ingots, blooms, billets	82 336	102 861	38 956	29 820	273 585	
Scrap	62 753	45 860	65 136	87 369	146 494	
Ireland, Republic of						
Pig iron	3 812	3 215	2 710	939	2 359	
Ingots, blooms, billets	1 487	1 637	7 928	8 319	5 459	
Scrap	1 277	1 137	3 650	4 179	4 206	
Italy						
Pig iron	1 304 367	1 729 086	1 791 165	2 235 376	2 238 037	
Sponge and powder	206 956	424 810	468 825	465 834	396 660	
Ferro-chrome	400 159	428 716	464 364	419 392	389 002	
Ferro-silico-magnesium	7 826	5 409	6 809	16 751	15 716	
Ferro-manganese	79 827	84 920	95 010	108 976	96 771	
Ferro-silico-manganese	182 945	174 391	216 632	229 755	186 135	
Ferro-molybdenum	7 289	7 294	7 469	7 433	8 318	
Ferro-nickel	82 107	141 603	129 870	91 651	104 198	
Ferro-niobium	1 403	2 457	2 194	2 783	2 733	
Ferro-phosphorus	830	987	547	721	488	
Ferro-silicon	119 820	141 789	147 121	154 797	122 236	
Ferro-titanium and ferro-silico-titanium	3 379	3 978	3 922	4 230	3 861	
Ferro-tungsten and ferro-silico-tungsten	229	208	307	385	578	
Ferro-vanadium	1 890	1 945	1 839	2 521	2 445	
Other ferro-alloys	8 411	11 799	9 727	1	243	
Silicon metal	46 108	49 129	51 696	57 854	57 493	
Ingots, blooms, billets	3 874 346	4 310 404	5 792 203	5 991 974	5 311 325	
Scrap	5 606 124	5 367 259	5 668 405	5 242 020	5 705 462	
Latvia						
Pig iron	75 448	54 639	57 696	65 437	56 964	
Ferro-manganese	3 576	3 119	3 281	3 021	10 334	
Ferro-silico-manganese	5 793	5 024	5 628	14 947	23 477	
Ferro-silicon	6 620	3 876	2 550	3 086	18 466	
Other ferro-alloys	251	203	418	373	323	
Silicon metal	2 220	1 711	1 409	656	467	
Ingots, blooms, billets	195 467	206 550	145 037	158 649	146 505	
Scrap	171 941	161 538	266 616	294 904	412 240	
Lithuania						
Ferro-chrome	...	5 210	6 140	9 705	9 634	
Ferro-silico-manganese	...	3 153	6 864	5 983	...	
Other ferro-alloys	562	3 047	1 413	437	457	
Ingots, blooms, billets	2 351	4 279	5 260	6 011	9 661	
Scrap	82 325	74 816	103 878	64 661	64 462	
Macedonia						
Pig iron	1 484	1 970	3 781	2 467	2 609	
Ferro-alloys	4 907	2 786	2 860	3 737	3 402	
Ingots, blooms, billets	137 447	226 286	359 029	501 134	482 294	
Scrap	129 487	264 067	277 360	310 410	255 543	

Iron, Steel and Ferro-Alloys

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Netherlands					
Pig iron	71 664	107 828	122 097	158 199	292 867
Sponge and powder	59 030	131 170	251 304	244 874	253 882
Ferro-chrome	176 862	170 806	204 637	325 741	275 995
Ferro-silico-chrome	616	621	1 125	674	1
Ferro-manganese	112 073	115 972	102 493	105 789	96 135
Ferro-silico-manganese	33 492	30 114	47 986	81 034	70 108
Ferro-molybdenum	5 282	5 100	7 554	11 826	8 566
Ferro-nickel	38 872	39 305	17 866	16 878	17 602
Ferro-niobium	16	51	159	465	2 074
Ferro-silicon	153 434	145 459	122 016	160 792	114 290
Ferro-titanium and ferro-silico-titanium	4 272	11 496	11 005	10 730	6 781
Ferro-tungsten and ferro-silico-tungsten	625	1 148	965	1 186	1 572
Ferro-vanadium	3 608	5 100	4 409	4 132	2 042
Other ferro-alloys	5 680	7 412	25 282	12 829	30 407
Silicon metal	36 792	52 931	69 104	68 719	57 446
Ingots, blooms, billets	302 637	322 908	390 652	269 481	283 834
Scrap	2 250 964	2 030 115	2 321 144	1 669 159	1 842 597
Norway					
Pig iron	8 823	10 841	12 813	11 335	11 198
Sponge and powder	38 519	13 729	320	2 355	1 589
Ferro-chrome	860	1 251	1 440	1 303	929
Ferro-manganese	9 703	6 154	5 328	10 639	7 448
Ferro-silico-manganese	933	1 071	2 729	1 034	1 960
Ferro-silicon	11 684	25 663	26 931	43 350	13 502
Other ferro-alloys	1 885	1 877	3 392	3 681	2 471
Silicon metal	17 653	26 714	37 439	39 961	40 878
Ingots, blooms, billets	150 611	142 986	161 778	195 928	167 309
Scrap	416 062	345 634	313 184	267 085	96 427
Poland					
Pig iron	150 163	239 240	220 163	228 445	236 682
Sponge and powder	34 456	24 490	12 448	10 282	8 390
Ferro-chrome	10 352	10 863	12 318	14 113	13 713
Ferro-manganese	46 414	29 230	35 508	42 352	31 876
Ferro-silico-manganese	64 985	51 197	63 332	79 942	47 964
Ferro-molybdenum	1 138	1 178	1 168	1 527	1 554
Ferro-phosphorus	(a) ...	1 056	1 195	1 492	1 386
Ferro-silicon	29 551	22 769	24 986	24 846	20 424
Ferro-vanadium	393	313	480	445	418
Other ferro-alloys	7 454	10 815	14 326	9 741	8 793
Silicon metal	9 967	9 243	11 935	13 946	11 652
Ingots, blooms, billets	191 722	298 314	569 057	679 404	584 305
Scrap	278 271	238 113	289 956	313 907	465 978
Portugal					
Pig iron	16 089	19 713	15 149	17 468	13 824
Ferro-chrome	1 487	884	1 160	1 050	1 093
Ferro-silico-magnesium	518	1 028	1 005	6 070	6 228
Ferro-manganese	889	885	816	1 281	908
Ferro-silico-manganese	1 742	10 021	12 779	9 835	10 063
Ferro-silicon	1 881	3 028	3 341	3 355	3 479
Other ferro-alloys	1 930	5 389	7 270	187	393
Ingots, blooms, billets	7 167	10 538	14 494	84 769	26 532
Scrap	292 753	653 988	1 056 949	1 075 517	1 128 391
Romania					
Pig iron	3 702	19 339	9 872	53 779	37 889
Ferro-chrome	4 342	5 286	3 022	2 838	3 423
Ferro-manganese	50 754	38 323	36 872	34 126	28 773
Ferro-silico-manganese	7 088	18 752	18 432	37 558	17 919
Ferro-silicon	27 466	17 170	17 152	21 156	13 190
Other ferro-alloys	2 652	3 048	3 167	3 191	2 412
Silicon metal	3 401	2 813	8 947	1 192	3 155
Ingots, blooms, billets	559 793	448 454	633 196	922 499	757 551
Scrap	2 027	545	9 867	15 771	17 886

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Slovakia					
Pig iron	29 498	39 400	59 145	59 778	70 034
Sponge and powder	11 141	13 832	24 994	51 560	138 216
Ferro-chrome	968	2 630	2 597	9 818	7 539
Ferro-manganese	14 858	14 245	23 409	20 410	19 503
Ferro-silico-manganese	431	1 480	3 016	977	2 776
Ferro-niobium	345	393	849	906	897
Ferro-silicon	14 245	21 742	19 395	26 142	23 747
Other ferro-alloys	5 031	4 044	5 216	3 874	5 408
Silicon metal	8 199	6 279	5 416	6 004	6 391
Ingots, blooms, billets	15 927	10 753	17 086	20 708	18 953
Scrap	241 718	197 550	243 822	257 815	217 558
Slovenia					
Pig iron	27 783	32 217	70 254	102 973	68 153
Ferro-chrome	21 299	23 308	26 992	23 645	25 665
Ferro-manganese	4 165	4 410	4 467	6 061	5 663
Ferro-silico-manganese	2 022	2 443	3 691	4 789	3 373
Ferro-molybdenum	916	550	539	569	540
Ferro-nickel	2 335	2 321	2 457	2 364	538
Ferro-silicon	7 730	13 486	17 937	14 017	24 651
Other ferro-alloys	5 787	8 111	10 027	4 914	5 402
Silicon metal	10 171	6 393	9 945	7 654	6 536
Ingots, blooms, billets	3 199	3 505	3 444	11 479	12 930
Scrap	386 832	434 585	434 330	363 362	367 968
Spain					
Pig iron	593 588	806 327	793 050	652 786	688 421
Sponge and powder	670 063	516 423	641 804	611 893	621 627
Ferro-chrome	221 156	200 543	253 172	1 123 216	203 518
Ferro-silico-magnesium	6 183	5 256	2 891	7 289	9 890
Ferro-manganese	19 817	16 489	14 406	24 599	17 126
Ferro-silico-manganese	75 061	66 531	42 326	48 205	74 962
Ferro-molybdenum	3 456	6 327	10 473	5 863	3 777
Ferro-nickel	58 664	59 113	92 147	75 625	68 355
Ferro-niobium	491	906	515	8 283	685
Ferro-phosphorus	2 072	2 036	1 771	2 554	1 488
Ferro-silicon	56 736	39 623	52 215	71 487	46 445
Ferro-titanium and ferro-silico-titanium	1 212	1 880	796	1 276	1 006
Ferro-vanadium	1 077	824	515	1 189	1 122
Other ferro-alloys	3 095	6 546	4 586	82	4 378
Silicon metal	5 660	4 160	2 837	3 640	8 856
Ingots, blooms, billets	1 495 840	1 219 342	1 601 769	1 733 247	1 587 605
Scrap	7 093 195	6 975 101	7 437 224	6 316 516	7 408 237
Sweden					
Pig iron	29 369	38 223	43 492	59 661	80 450
Sponge and powder	3 074	2 091	7 346	16 799	11 861
Ferro-chrome	72 926	86 040	86 160	125 057	114 712
Ferro-silico-chrome	2 521	2 030	1 370	3 104	3 873
Ferro-manganese	32 782	43 005	49 295	75 409	68 246
Ferro-silico-manganese	17 887	18 995	20 566	17 085	10 677
Ferro-molybdenum	4 369	5 364	4 976	4 377	5 693
Ferro-nickel	948	7 431	8 076	9 162	6 803
Ferro-niobium	809	1 156	1 504	1 242	1 264
Ferro-phosphorus	920	314	433	1 331	386
Ferro-silicon	38 534	48 950	37 095	42 315	34 249
Ferro-titanium and ferro-silico-titanium	1 627	3 212	1 681	691	1 370
Ferro-tungsten and ferro-silico-tungsten	564	195	119	105	153
Ferro-vanadium	1 375	1 316	1 202	1 005	956
Other ferro-alloys	5 614	5 574	5 860	5 986	8 916
Silicon metal	10 542	10 832	7 531	6 756	7 631
Ingots, blooms, billets	491 102	294 616	108 821	137 032	264 782
Scrap	271 041	254 358	279 956	242 167	193 207

Iron, Steel and Ferro-Alloys

Imports continued

tonnes

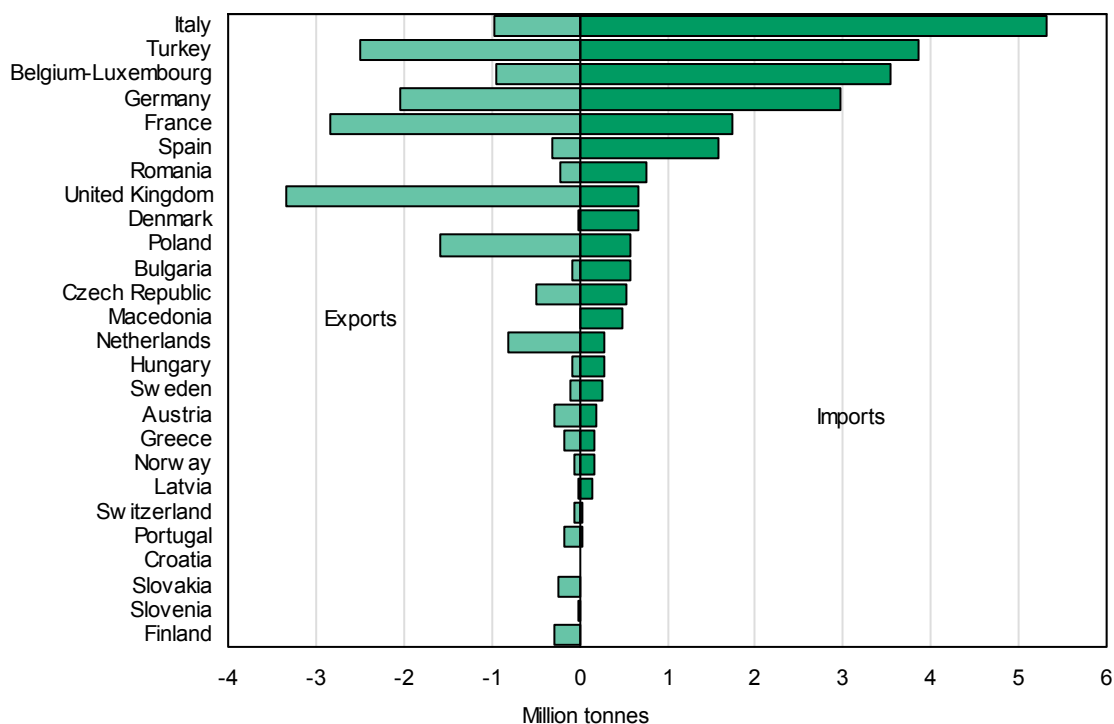
Country	2004	2005	2006	2007	2008
Switzerland					
Pig iron	22 954	24 628	24 497	28 095	28 630
Sponge and powder	7 631	9 035	8 900	9 685	8 873
Ferro-chrome	1 161	1 203	1 306	1 834	1 803
Ferro-manganese	7 884	9 033	10 423	9 922	11 696
Ferro-silico-manganese	6 481	4 341	3 717	5 992	5 011
Ferro-silicon	5 194	4 630	7 122	5 287	5 264
Other ferro-alloys	1 203	1 602	1 435	1 478	1 086
Silicon metal	694	1 135	1 164	1 508	1 255
Ingots, blooms, billets	20 896	38 694	47 524	50 301	29 911
Scrap	544 911	390 607	499 914	475 542	505 597
Turkey					
Pig iron	286 589	396 658	333 981	338 641	802 741
Sponge and powder	18 084	68 952	34 440	19 801	96 393
Ferro-chrome	5 321	5 443	4 610	11 138	11 321
Ferro-manganese	44 406	43 743	60 213	56 619	73 319
Ferro-silico-manganese	189 294	159 496	216 036	236 039	195 623
Ferro-molybdenum	838	1 253	1 020	1 628	1 645
Ferro-niobium	211	433	435	446	609
Ferro-phosphorus	(a) ...	1 710	919	246	1 731
Ferro-silicon	82 543	58 007	72 599	100 758	90 477
Ferro-titanium and ferro-silico-titanium	441	447	649	616	634
Ferro-vanadium	462	426	483	472	529
Other ferro-alloys	7 629	5 983	7 357	9 642	12 345
Silicon metal	4 649	4 794	5 233	2 530	6 207
Ingots, blooms, billets	1 531 529	1 816 973	1 504 374	1 930 627	3 849 141
Scrap	12 892 546	13 010 728	12 860 533	13 335 810	17 414 983
United Kingdom					
Pig iron	105 007	102 531	81 689	89 863	61 657
Sponge and powder	21 059	21 914	34 768	11 766	27 003
Ferro-chrome	112 234	63 478	52 494	46 975	79 692
Ferro-silico-chrome	—	728	350	1 242	128
Ferro-silico-magnesium	4 969	5 448	3 810	2 303	1 614
Ferro-manganese	91 533	79 045	86 598	100 694	96 461
Ferro-silico-manganese	63 633	57 136	59 985	56 036	52 966
Ferro-molybdenum	836	861	640	515	369
Ferro-nickel	14 628	11 325	13 169	14 960	16 520
Ferro-niobium	1 236	1 175	1 098	1 490	1 189
Ferro-phosphorus	1 687	3 261	386	2 070	2 473
Ferro-silicon	71 973	58 225	64 610	66 838	59 438
Ferro-titanium and ferro-silico-titanium	2 457	1 883	1 087	1 677	1 290
Ferro-vanadium	1 262	609	1 623	755	543
Other ferro-alloys	2 285	2 463	2 265	3 248	2 237
Silicon metal	100 233	77 103	29 512	25 787	56 807
Ingots, blooms, billets	758 615	722 452	1 053 176	849 803	679 019
Scrap	225 483	180 261	154 967	204 100	228 294

Note(s)

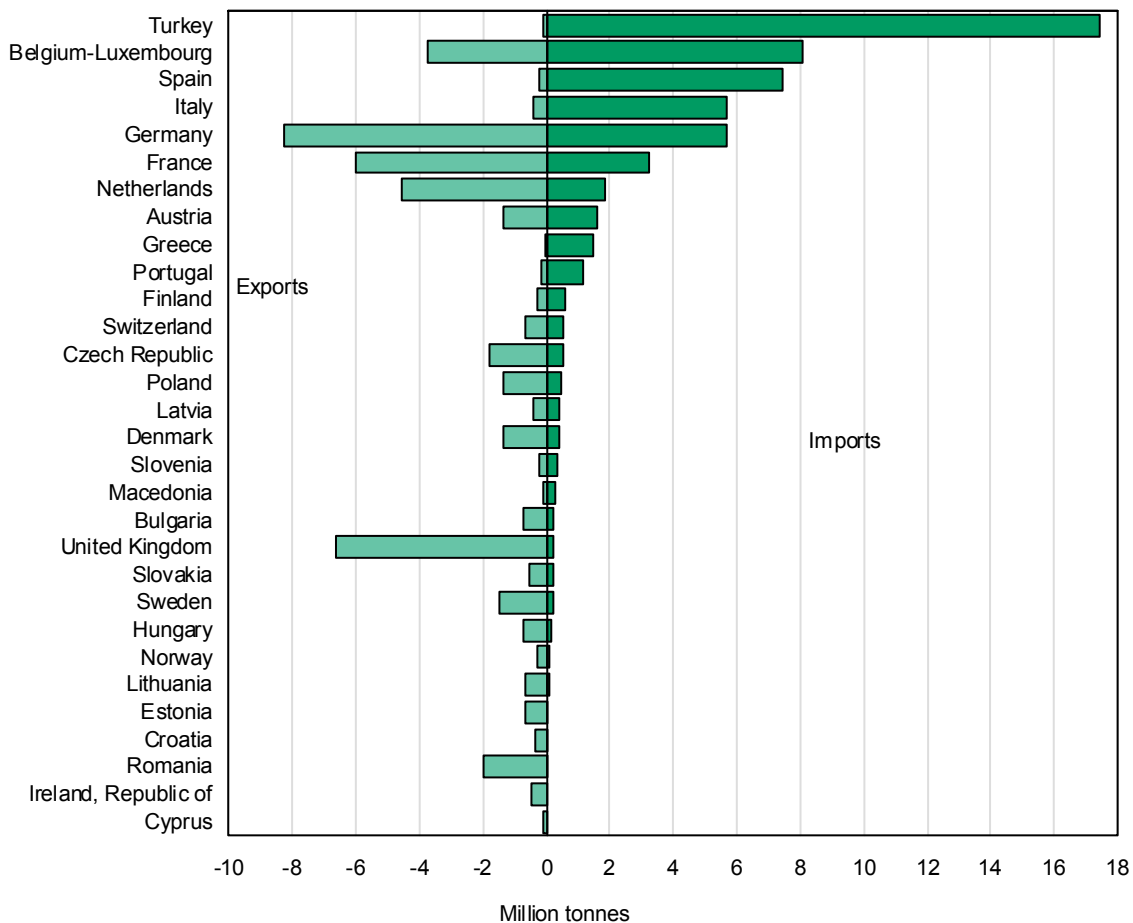
(1) In this table the term 'ingots, blooms, billets' corresponds to items 7206, 7207, 7218 and 7224 of the Harmonised System which includes those of alloy and high carbon steel

(a) Included with 'other ferro-alloys'

Iron and steel ingots, blooms and billets - EU32 trade in 2008



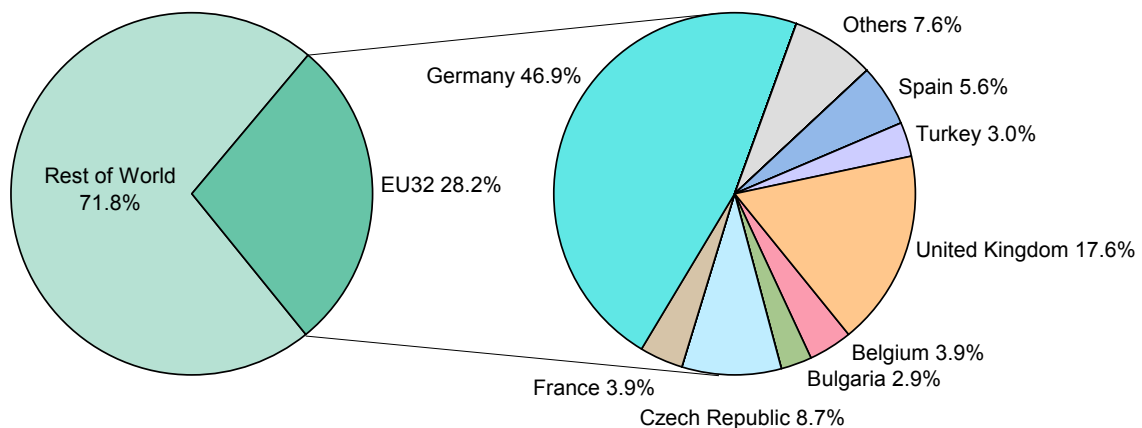
Iron and steel scrap - EU32 trade in 2008



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 per cent of printing paper can be kaolin.
- Kaolin production is fairly stable in the EU32 countries, which in 2008 produced 28 per cent of world kaolin. Germany and the UK are the two largest producers in the EU32 and are the second and fifth biggest producers in the world, respectively. The USA was the world's largest producer in 2008, with 25 per cent of the total.
- Kaolin is traded in several different forms; throughout 2008 and 2009 Brazilian paper-coating grade traded in the range US\$170 per tonne to US\$215 per tonne.

EU32 Production of kaolin 2008



Production of kaolin

Country	2004	2005	2006	2007	2008
Austria	16 345	16 410	17 431	16 929	16 460
Belgium	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Bulgaria	* 190 000	* 200 000	* 240 000	* 240 000	* 220 000
Czech Republic (a)	596 000	649 000	673 000	682 000	672 000
France	316 000	319 464	* 300 000	307 253	* 300 000
Germany (b)	3 751 874	3 767 662	3 815 173	3 842 514	3 622 159
Greece	53 438	49 912	* 40 000	30 000	4 360
Hungary	3 300	1 300	1 350	2 136	—
Italy	246 608	183 804	* 180 000	* 180 000	* 180 000
Poland (c)	130 596	159 207	148 579	153 670	165 615
Portugal	152 077	164 072	167 792	* 170 000	* 170 000
Romania	22 338	26 772	11 063	7 576	3 060
Slovakia	46 000	31 000	58 000	46 000	44 000
Spain (c)	437 990	463 398	476 327	426 124	* 430 000
Turkey	536 008	615 271	* 600 000	456 238	232 746
United Kingdom (d) (e)	1 944 955	1 910 874	1 762 328	1 671 426	1 355 365
EU32 Total	8 700 000	8 900 000	8 800 000	8 500 000	7 700 000

Note(s)

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

(a) Beneficiated

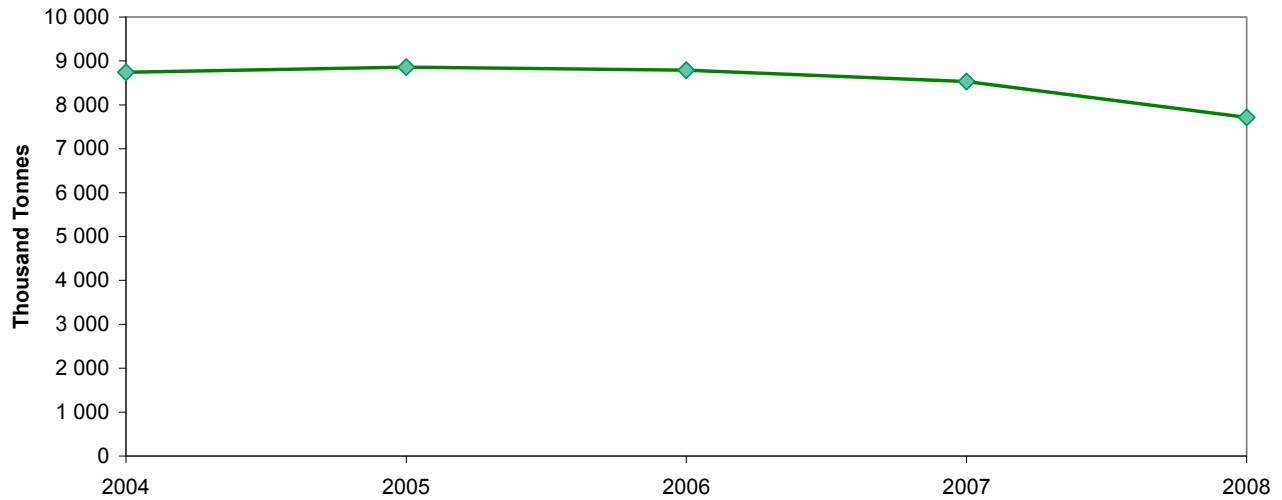
(b) Washed and dried

(c) Washed

(d) Sales

(e) Dry weight

EU32 Production of kaolin 2004 - 08



Exports of kaolin

tonnes

Country	2004	2005	2006	2007	2008
Austria	2 277	3 019	3 649	2 292	2 445
Belgium-Luxembourg	664 743	777 451	628 479	612 062	1 030 344
Bulgaria	114 399	124 899	149 559	160 372	139 069
Croatia	351	15	35	32	51
Czech Republic	483 636	268 850	261 019	173 251	233 819
Denmark	461	637	443	351	486
Finland	8 111	7 378	8 373	10 597	8 587
France	484 554	421 927	968 538	412 284	319 301
Germany	369 141	301 870	463 804	507 867	498 165
Greece	131	129	472	276	384
Hungary	7 180	6 252	3 781	3 762	3 110
Italy	29 995	40 800	17 287	16 265	13 627
Netherlands	307 337	441 248	431 027	416 108	72 264
Poland	9 941	6 194	7 177	10 401	8 936
Portugal	11 383	31 484	46 494	70 580	47 562
Slovakia	475	2 332	10 946	12 546	593
Spain	154 667	192 735	213 955	199 541	155 563
Sweden	15 544	18 473	15 735	18 229	30 495
Switzerland	408	246	433	786	128
Turkey	267 817	177 881	192 298	132 834	130 923
United Kingdom (a)	1 728 161	1 698 747	1 566 025	1 490 416	1 188 261

Note(s)

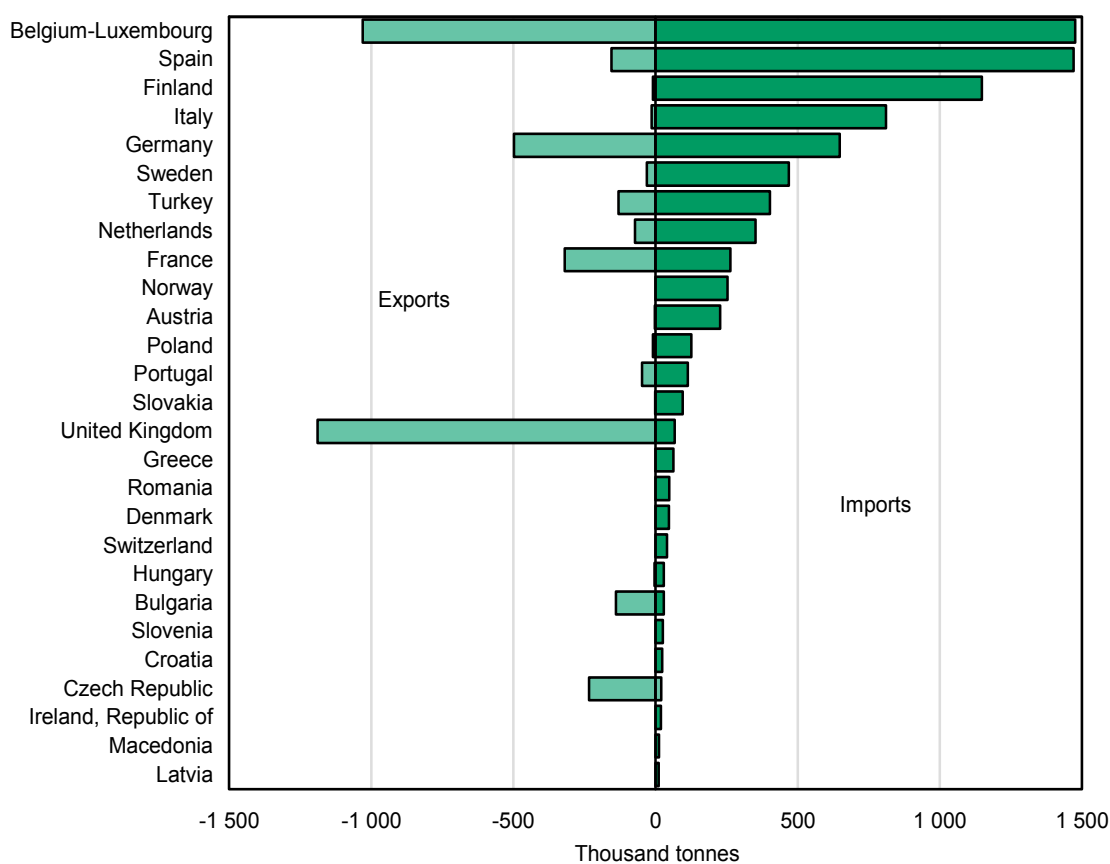
(a) Dry weight

Imports of kaolin

tonnes

Country	2004	2005	2006	2007	2008
Austria	249 353	234 906	222 007	218 813	226 682
Belgium-Luxembourg	1 023 999	962 536	868 255	862 714	1 476 705
Bulgaria	75 425	76 231	91 831	29 717	28 748
Croatia	6 472	7 941	16 423	21 845	24 009
Czech Republic	14 034	16 895	22 962	23 461	20 662
Denmark	13 056	14 117	19 572	35 288	47 525
Estonia	964	1 058	1 090	3 214	3 902
Finland	1 301 806	1 144 335	1 261 699	1 155 041	1 147 687
France	349 353	338 848	320 425	311 060	263 449
Germany	774 307	803 001	809 329	717 102	647 278
Greece	56 380	54 293	68 083	40 298	62 415
Hungary	23 417	33 075	25 282	25 168	29 089
Ireland, Republic of	22 213	22 764	19 647	19 322	18 766
Italy	939 832	956 948	978 378	881 968	810 560
Latvia	5 096	5 016	5 422	11 071	11 173
Lithuania	701	802	1 399	568	607
Macedonia	6 966	19 414	9 797	16 849	12 259
Netherlands	646 638	564 518	627 768	612 720	352 122
Norway	237 725	250 879	241 976	208 709	253 361
Poland	89 139	90 931	94 257	122 245	126 426
Portugal	124 508	143 943	137 656	154 891	114 041
Romania	71 987	55 653	54 862	51 347	48 422
Slovakia	76 440	94 705	100 551	87 956	95 911
Slovenia	28 782	25 928	24 389	28 363	25 682
Spain	1 209 303	1 366 226	1 506 142	1 571 143	1 470 440
Sweden	452 215	480 358	451 919	448 129	468 491
Switzerland	41 350	37 368	41 481	45 629	39 932
Turkey	218 838	265 530	190 924	163 015	402 812
United Kingdom	126 501	84 750	99 262	73 014	67 349

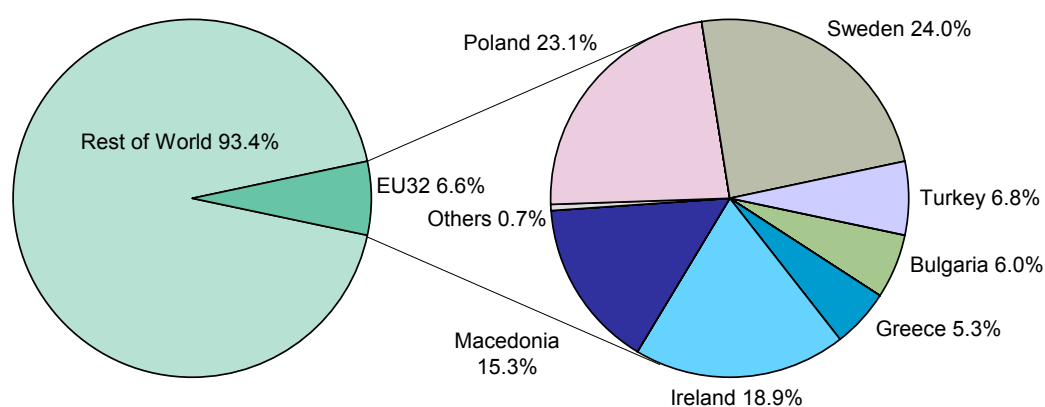
Kaolin - EU32 trade in 2008



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 world's largest mine producer in 2008 (with 39 per cent of the total) and refiner of lead (with 34 per cent of the total). In the EU32 the largest mine producer of lead was Sweden (24 per cent of the EU32 total), followed by Poland (23 per cent) and the Republic of Ireland (19 per cent). The largest producers of refined lead, based on imported materials and recycling, were Germany (25 per cent) and the UK (17 per cent). It is estimated that worldwide more than 50 per cent of refined lead produced is from recycled material.
- During 2008, the London Metal Exchange (LME) price for lead (cash, monthly average) increased to a high of US\$3079 per tonne in February but generally decreased thereafter to end 2008 at US\$962 per tonne. Prices more than doubled over the course of 2009; rising from around US\$1000 per tonne in January 2009 to around the US\$2400 per tonne by the end of the year.

EU32 Mine production of lead 2008

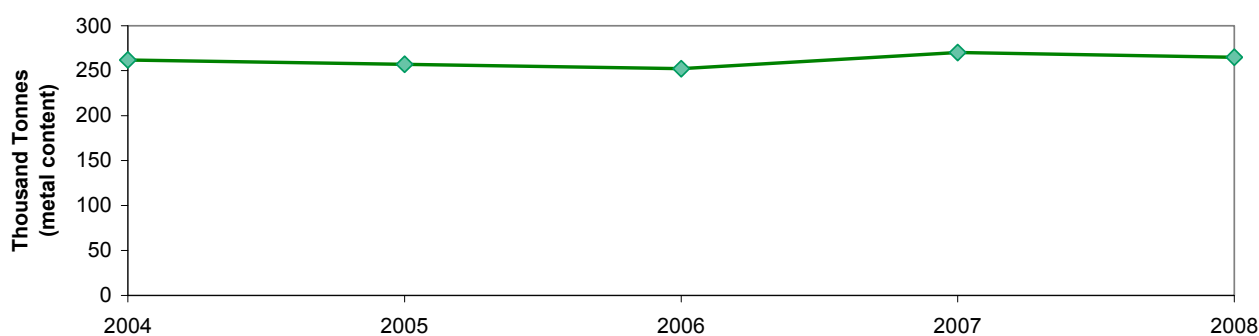


Mine production of lead

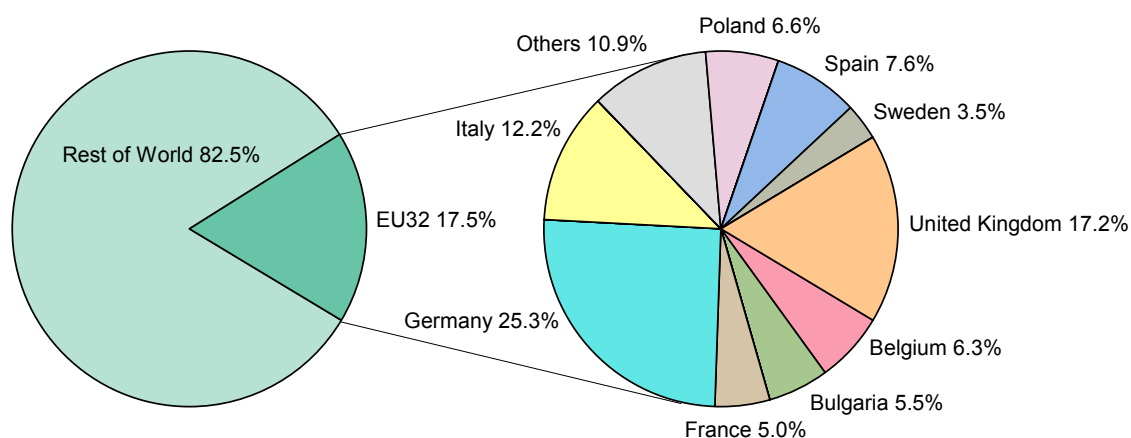
tonnes (metal content)

Country	2004	2005	2006	2007	2008
Bulgaria	* 19 400	* 18 500	* 16 000	* 17 600	* 15 800
Greece	—	3 000	10 400	13 400	14 000
Ireland, Republic of	63 800	72 200	61 800	56 800	50 200
Italy	800	* 800	* 800	* 800	* 800
Macedonia	—	—	9 349	29 221	40 441
Poland	86 000	78 980	77 450	74 200	61 110
Portugal	—	—	—	—	1 000
Romania	18 297	11 610	6 269	784	—
Sweden	54 347	60 445	55 644	63 224	63 489
Turkey	18 792	11 341	14 000	14 000	18 000
United Kingdom	* 500	* 400	* 400	* 100	* 100
EU32 Total	261 900	257 300	252 100	270 100	264 900

EU32 Mine production of lead 2004 - 08



EU32 Production of refined lead 2008



Production of refined lead

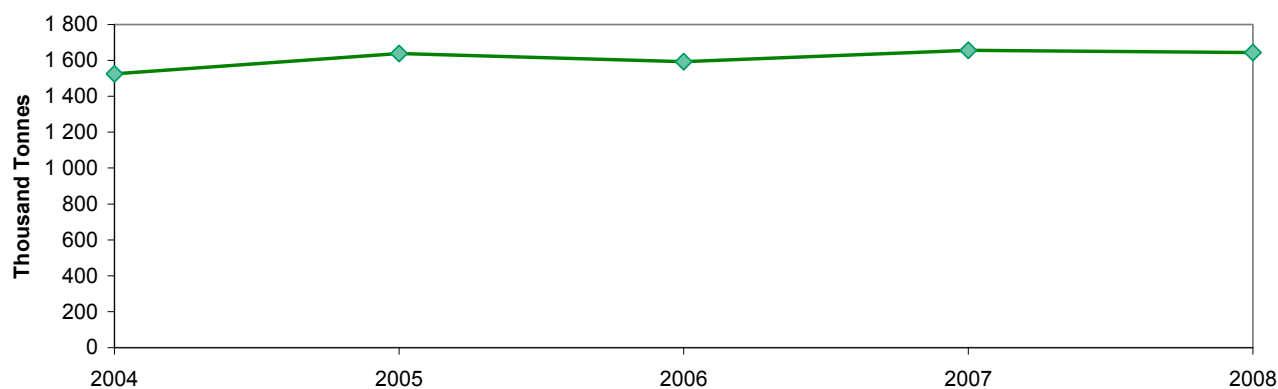
tonnes

Country	2004	2005	2006	2007	2008
Austria	* 26 000	* 24 000	* 22 000	* 22 000	22 000
Belgium	86 000	103 000	101 000	117 000	104 000
Bulgaria	66 000	81 000	76 000	87 000	90 900
Czech Republic	* 25 000	26 000	26 100	26 000	26 000
Estonia	3 000	7 000	9 000	10 000	10 000
France	89 000	* 90 000	* 88 000	* 88 000	82 100
Germany	413 500	417 700	379 000	405 070	415 100
Greece	* 3 000	* —	* 6 000	* 11 000	* 11 000
Ireland, Republic of	19 600	22 500	21 700	22 500	20 000
Italy	201 600	211 000	190 500	211 800	199 900
Macedonia	3 591	—	—	—	—
Netherlands	* 17 000	* 17 000	* 16 000	* 16 000	* 16 000
Poland	73 900	81 000	73 000	104 200	108 300
Portugal	4 000	3 000	3 000	5 000	* 5 000
Romania	37 600	37 900	34 133	39 369	39 596
Slovenia	15 000	15 000	15 000	15 000	15 000
Spain	105 600	110 000	129 000	128 000	125 000
Sweden	73 548	72 760	70 239	69 730	56 812
Switzerland	9 300	9 600	* 9 000	* 9 000	* 8 000
Turkey	* 6 000	* 6 000	* 6 000	* 6 000	* 6 000
United Kingdom	245 938	304 350	318 703	263 391	283 000
EU32 Total	1 524 000	1 639 000	1 593 000	1 656 000	1 644 000

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

EU32 Production of refined lead 2004 - 08



Exports of lead

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Unwrought	14 504	10 746	13 129	13 629	13 844
Scrap	252	1 514	1 027	1 018	600
Belgium-Luxembourg					
Ores and concentrates	109 580	96 610	113 576	96 059	114 105
Unwrought	93 316	110 372	98 077	111 344	95 883
Scrap	12 736	9 142	15 071	20 780	18 639
Bulgaria					
Ores and concentrates	10 370	6 165	10 900	23 417	9 555
Unwrought	54 686	69 825	65 400	66 384	80 972
Croatia					
Scrap	853	794	1 057	3 590	1 872
Cyprus					
Scrap	1 711	1 212	129	488	...
Czech Republic					
Unwrought	7 230	8 665	10 359	16 707	18 713
Scrap	3 059	4 948	6 648	6 855	8 136
Denmark					
Unwrought	1 930	1 312	1 071	721	78
Scrap	1 805	3 067	2 954	1 685	1 159
Estonia					
Unwrought	3 846	7 774	6 054	10 091	10 473
Scrap	1 414	153	184	323	176
Finland					
Scrap	884	3 589	2 421	605	588
France					
Unwrought	6 182	6 920	25 933	14 936	17 630
Scrap	27 003	24 683	21 854	29 544	15 888
Germany					
Ores and concentrates	3 423	102	475	467	—
Unwrought	120 361	122 120	126 790	136 609	177 129
Scrap	12 412	11 064	8 390	17 799	13 133
Greece					
Unwrought	3 003	4 017	3 292	9 913	5 792
Scrap	240	848	1 256	769	1 390
Hungary					
Scrap	2 377	2 987	3 286	2 369	4 052
Ireland, Republic of					
Ores and concentrates	84 115	92 813	129 748	108 645	91 728
Italy					
Unwrought	28 295	18 244	8 143	8 008	34 904
Scrap	1 262	2 477	3 806	7 661	6 897
Lithuania					
Scrap	6 613	7 848	6 118	11 776	9 730
Macedonia					
Ores and concentrates	0	233	16 371	47 209	...
Unwrought	1 135	54	...	70	184
Scrap	1 468	935	2 511	2 622	2 209
Netherlands					
Ores and concentrates	2 730	17 161	27 068	2 897	55 980
Unwrought	34 426	24 382	11 133	14 824	7 725
Scrap	12 395	11 950	16 067	21 822	12 278
Norway					
Scrap	601	1 013	892	974	695
Poland					
Ores and concentrates	94 126	92 226	73 902	70 970	69 852
Unwrought	39 287	44 008	68 635	34 455	40 017
Scrap	963	1 652	2 168	3 120	1 110
Portugal					
Unwrought	1 988	1 269	2 018	3 092	4 950
Scrap	3 452	4 127	9 471	9 961	3 105
Romania					
Ores and concentrates	25 092	25 012	18 104	10 501	17 396
Unwrought	20 894	22 120	18 786	23 289	22 752
Scrap	1 689	3 295	4 389	4 659	2 997
Slovakia					
Unwrought	2 119	1 662	98	221	94

Lead

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Slovenia					
Unwrought	4 701	5 818	6 524	8 860	6 960
Scrap	568	572	843	1 415	391
Spain					
Ores and concentrates	6 057	2	29	130	1 015
Unwrought	8 301	9 805	7 830	9 242	14 771
Scrap	6 399	9 128	6 460	7 023	6 616
Sweden					
Ores and concentrates	60 105	62 155	50 854	56 581	61 439
Unwrought	68 215	70 042	76 777	65 733	53 715
Scrap	554	307	703	734	816
Switzerland					
Unwrought	5 407	4 657	7 966	7 383	7 387
Scrap	1 320	2 932	3 124	4 860	3 236
Turkey					
Ores and concentrates (a)	29 423	30 226	18 415	34 715	52 988
Unwrought	6 190	2 875	4 271	930	832
United Kingdom					
Unwrought	34 859	52 593	89 271	68 152	57 466
Unwrought alloys	31 148	38 806	48 589	39 246	79 520
Scrap	32 934	27 248	1 859	31 942	47 660

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

Imports of lead

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Unwrought	39 533	23 062	29 184	27 015	27 475
Scrap	2 192	1 068	890	661	263
Belgium-Luxembourg					
Ores and concentrates	117 597	134 300	120 136	108 165	97 474
Unwrought	27 042	18 807	15 081	36 620	30 543
Scrap	26 904	26 699	41 070	55 153	25 873
Bulgaria					
Ores and concentrates	74 163	83 398	100 736	92 929	119 522
Unwrought	5 558	10 723	11 305	15 854	15 529
Scrap	441	1 227	1 346	3 338	5 830
Croatia					
Unwrought	1 460	1 492	1 415	911	680
Czech Republic					
Unwrought	73 472	69 135	67 850	66 060	59 318
Scrap	1 348	4 147	4 411	6 519	4 672
Denmark					
Unwrought	2 072	2 135	2 322	1 033	192
Scrap	2 366	2 288	2 209	2 228	1 984
Finland					
Unwrought	2 582	2 854	1 571	2 283	3 195
France					
Unwrought	91 979	109 426	121 930	118 384	103 535
Scrap	34 513	33 818	32 705	34 169	22 490
Germany					
Ores and concentrates	202 309	171 533	161 113	211 132	212 602
Unwrought	112 975	108 533	134 805	138 978	118 779
Scrap	11 757	15 419	18 141	30 313	28 231
Greece					
Unwrought	28 460	5 112	5 401	11 792	6 875
Scrap	1 284	85	138	2 071	2 800

Imports continued

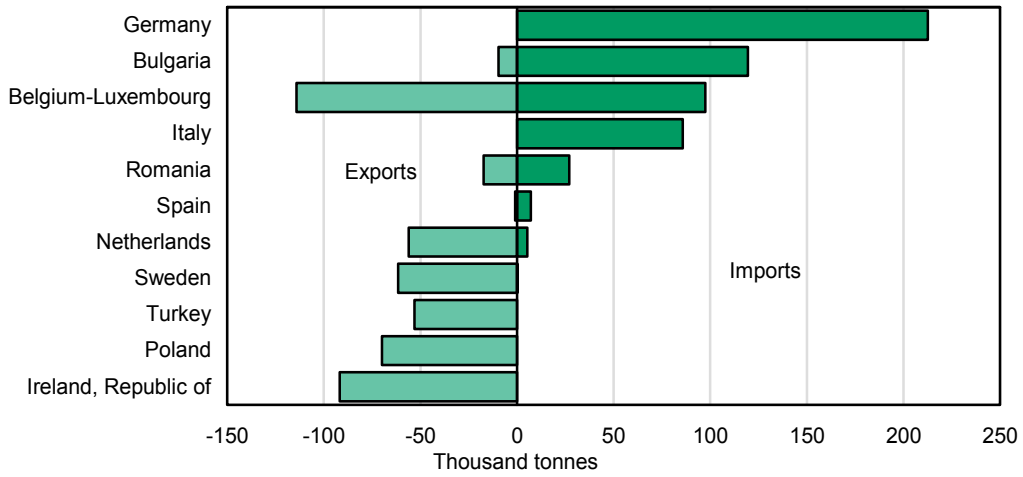
tonnes

Country	2004	2005	2006	2007	2008
Hungary					
Unwrought	4 545	5 028	4 063	5 802	2 711
Ireland, Republic of					
Unwrought	26 896	30 999	28 386	35 675	23 480
Scrap	18 290	28 530	31 794	25 828	17 702
Italy					
Ores and concentrates	99 015	107 685	65 610	111 999	85 760
Unwrought	114 546	72 181	112 069	114 471	99 015
Scrap	3 877	3 333	4 097	7 107	2 972
Macedonia					
Unwrought	1 150	1 146	857	331	19
Netherlands					
Ores and concentrates	4 281	9 268	13 186	22 303	5 307
Unwrought	83 391	36 051	24 272	22 419	9 373
Scrap	7 818	9 700	17 508	22 006	11 325
Norway					
Unwrought	2 970	4 882	4 749	7 055	6 473
Poland					
Unwrought	50 189	53 095	56 504	44 235	35 465
Scrap	602	794	1 633	1 256	2 467
Portugal					
Unwrought	18 885	21 198	17 523	14 704	12 014
Romania					
Ores and concentrates	26 920	31 085	13 288	17 064	27 055
Unwrought	1 667	1 620	1 400	835	872
Slovenia					
Unwrought	12 854	10 262	8 897	12 761	14 103
Scrap	1 223	1 382	2 946	5 191	1 556
Spain					
Ores and concentrates	1 845	1 526	2 299	8 188	7 107
Unwrought	154 828	174 618	147 423	157 485	116 492
Scrap	27 866	30 499	30 625	42 629	35 506
Sweden					
Ores and concentrates	26 142	5 085	10 476	—	275
Unwrought	6 088	6 098	17 679	6 554	6 922
Scrap	4 062	3 538	3 101	3 771	2 089
Switzerland					
Unwrought	7 831	8 067	9 185	7 087	9 915
Turkey					
Unwrought	71 606	71 680	56 792	46 966	79 460
United Kingdom					
Unwrought, base bullion (a)	127 970	173 910	120 871	119 726	194 113
Unwrought, other	51 382	31 347	53 892	31 187	19 924
Scrap	6 278	3 898	5 914	17 685	4 621

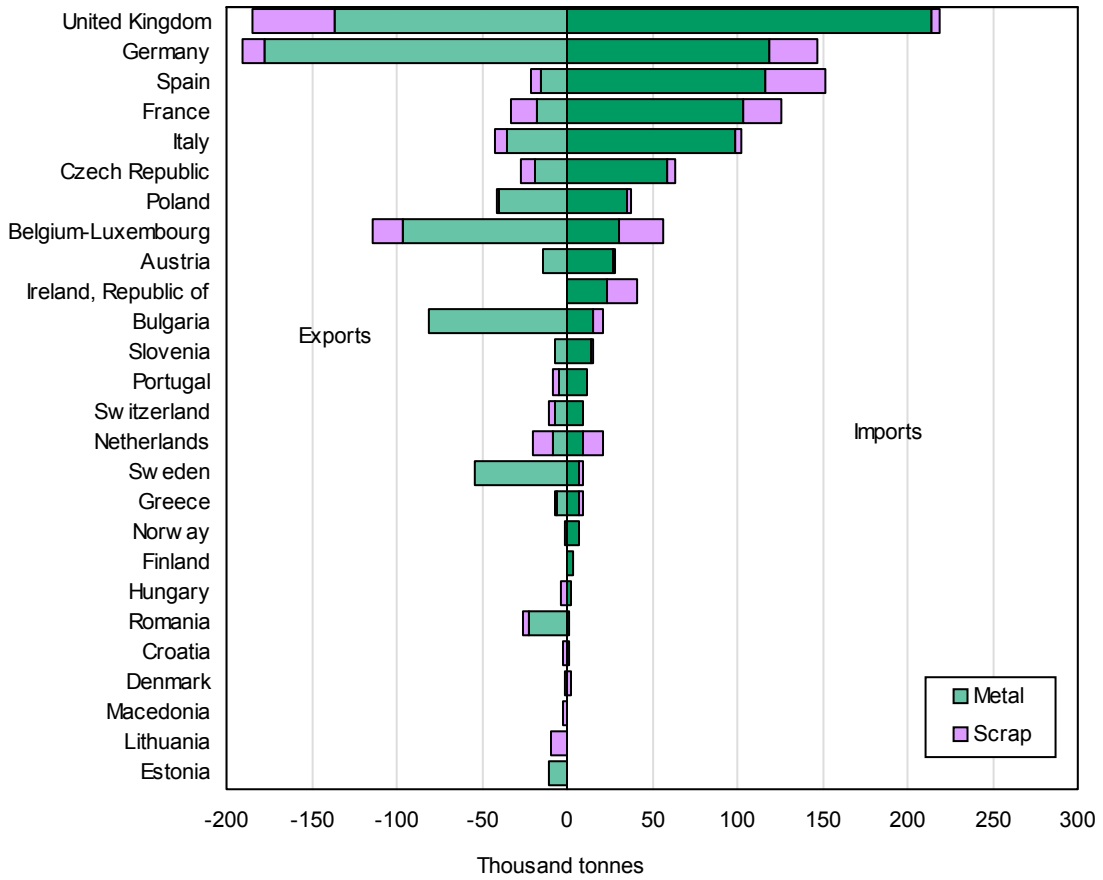
Note(s)

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

Lead ore - EU32 trade in 2008



Lead - EU32 trade in 2008



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 2008 (approximately 56 per cent of world production of lithium minerals). Chile was the largest producer by lithium content (52 per cent of world production). In the EU32 Portugal and Spain are the only countries producing lithium minerals.
- The lithium minerals spodumene and petalite, with lithium carbonate, are the usual traded forms. Prices were stable throughout 2008 and 2009 with spodumene concentrate (>7.25% Li₂O, F.O.T. Amsterdam) trading in the range US\$680 per tonne to US\$750 per tonne and lithium carbonate (USA large contracts) trading between US\$2.70 per pound and US\$3.00 per pound.

Production of lithium minerals

tonnes

Country	2004	2005	2006	2007	2008
Portugal					
Lepidolite	28 696	26 185	28 497	34 755	35 000
Spain					
Lepidolite	3 226	6 751	8 339	10 326	9 342

Exports of lithium

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg					
Oxides	1 837	1 545	1 236	1 370	1 281
Carbonate	10 053	4 999	5 107	4 915	3 567
France					
Carbonate	1 166	462	12	2	3
Germany					
Oxides	611	...	...	...	...
Carbonate	2 660	2 991	2 907	2 705	2 290
Italy					
Carbonate	206	269	347	225	193
Netherlands					
Oxides	187	115	154	331	511
Carbonate	199	224	405	318	299
Slovenia					
Carbonate	89	96	96	110	122
Spain					
Carbonate	3 157	1 123	554	192	128
Switzerland					
Oxides	80	78	69	75	88
United Kingdom					
Oxides	285	125	94	92	116
Carbonate	160	203	271	158	108

Lithium

Imports of lithium

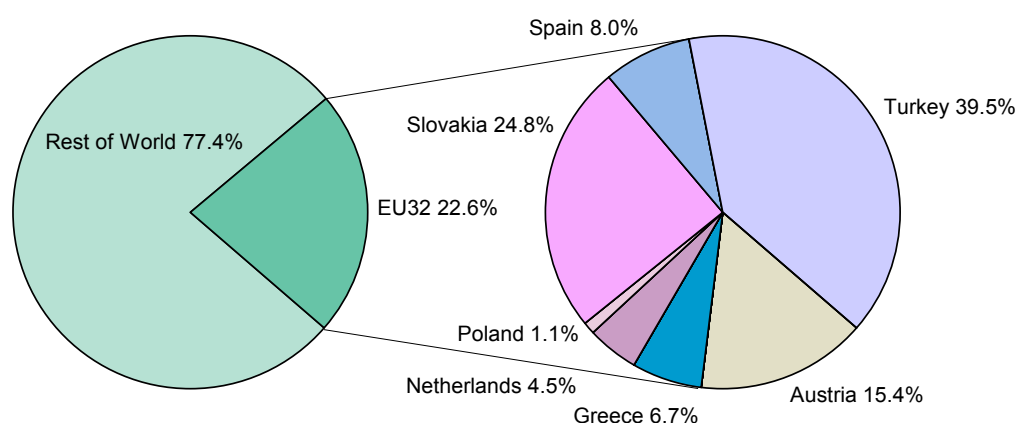
tonnes

Country	2004	2005	2006	2007	2008
Austria					
Carbonate	115	182	199	248	333
Belgium-Luxembourg					
Oxides	2 250	2 014	1 201	1 784	1 851
Carbonate	6 108	6 205	5 357	5 895	4 414
Czech Republic					
Carbonate	76	71	118	146	64
Denmark					
Carbonate	93	81	164	155	311
Finland					
Carbonate	53	77	85	73	84
France					
Oxides	407	482	369	314	256
Carbonate	1 484	1 392	1 186	1 289	1 251
Germany					
Oxides	3 699	4 209	4 260	5 163	5 420
Carbonate	7 189	8 101	7 948	8 131	7 098
Italy					
Oxides	148	223	159	160	246
Carbonate	1 505	2 263	1 646	1 303	1 519
Netherlands					
Oxides	270	178	359	428	537
Carbonate	1 081	1 171	1 356	1 459	729
Poland					
Oxides	132	136	266	245	61
Carbonate	117	128	252	184	162
Slovenia					
Oxides	127	116	115	144	186
Spain					
Oxides	329	480	573	600	501
Carbonate	759	1 553	828	1 811	3 908
Sweden					
Oxides	162	176	186	107	146
Carbonate	208	259	215	236	278
Switzerland					
Oxides	89	81	112	142	143
Turkey					
Oxides	179	183	248	245	257
Carbonate	417	433	491	683	617
United Kingdom					
Oxides	498	446	385	614	466
Carbonate	490	657	650	779	536

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. China was the largest world producer in 2008, with an estimated 57 per cent of world production. The largest EU32 producer was Turkey with 39 per cent of EU32 production (and nine per cent of the world total).
- In 2008, Chinese dead burned 90% MgO, F.O.B. increased from US\$255 per tonne in January to a high of US\$550–US\$575 per tonne by November. Prices started to fall in December 2008 and continued downwards in early 2009 to reach a low of US\$300–US\$320 per tonne in April before recovering to US\$320–US\$360 per tonne by the year end.

EU32 Production of magnesite 2008



Production of magnesite

tonnes

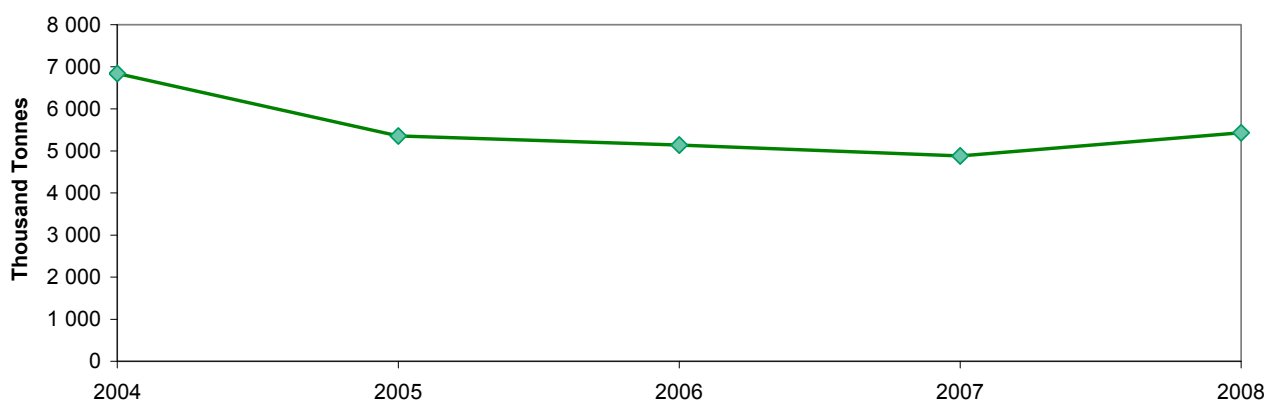
Country	2004	2005	2006	2007	2008
Austria	715 459	693 754	769 188	811 556	837 476
Greece	552 300	471 000	463 277	351 414	361 165
Netherlands (a)	245 495	285 336	293 006	* 245 000	* 245 000
Poland	57 900	55 300	63 000	65 000	* 60 000
Slovakia	965 900	920 100	941 100	957 000	1 347 000
Spain	567 504	556 129	520 646	463 850	* 436 000
Turkey	3 732 952	2 372 206	2 088 033	1 984 908	2 143 047
EU32 Total	6 838 000	5 354 000	5 138 000	4 879 000	5 430 000

Note(s)

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

(a) Chloride produced from solution mining

EU32 Production of magnesite 2004 - 08



Exports of magnesite and magnesia

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Magnesite	642	1 338	1 231	760	602
Magnesia	73 037	59 283	45 311	57 964	28 779
Belgium-Luxembourg					
Magnesite	512	575	1 520	1 958	2 392
Magnesia	53 755	52 665	75 011	64 293	81 186
Czech Republic	3 790	6 273	4 099	3 988	4 540
Denmark	165	232	307	451	461
France					
Magnesite	241	230	241	373	310
Magnesia	37 930	45 661	47 832	48 852	57 342
Germany					
Magnesite	218	61	132	463	22
Magnesia	66 422	81 021	93 286	87 264	72 684
Greece					
Magnesia	130 910	140 083	125 783	132 083	126 496
Ireland, Republic of					
Magnesite	6	—	5 991	5 487	5 006
Magnesia	69 105	82 417	46 656	3 981	9 912
Italy					
Magnesite	2 868	3 489	3 003	3 878	2 337
Magnesia	9 779	12 130	12 174	9 036	8 172
Netherlands					
Magnesite	8 704	1 452	4 750	582	494
Magnesia	431 175	492 077	465 555	128 060	344 675
Poland	796	1 208	654	2 632	1 921
Romania					
Magnesia	281	231	277	351	440
Slovakia					
Magnesite (a)	* 3 600	* 8 000	* 3 000	* 6 000	* 9 300
Magnesia	404 448	385 312	394 826	444 539	409 295
Spain					
Magnesite	25 557	901	19 635	607	725
Magnesia	185 811	189 005	179 046	185 364	175 307
Sweden					
Magnesia	1 431	1 421	2 277	1 593	235
Turkey					
Magnesite	39 670	41 353	28 937	40 414	68 054
Magnesia	230 675	198 654	205 989	181 870	175 441
United Kingdom					
Magnesite	49	87	26	51	158
Magnesia	24 796	20 077	19 036	16 371	13 647

Note(s)

(1) The term 'magnesia', 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 magnesia

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Magnesite	4 814	17 019	1 653	933	2 319
Magnesia	181 050	188 449	213 760	317 952	248 037
Belgium-Luxembourg					
Magnesite	505	767	3 872	4 326	4 064
Magnesia	65 125	84 730	152 330	101 911	141 283
Bulgaria	6 354	8 500	6 551	4 670	6 296
Croatia	1 479	1 647	1 564	1 872	1 682
Czech Republic					
Magnesite	5 973	6 860	5 320	6 527	4 193
Magnesia	42 226	43 277	51 674	52 330	54 246

Imports continued

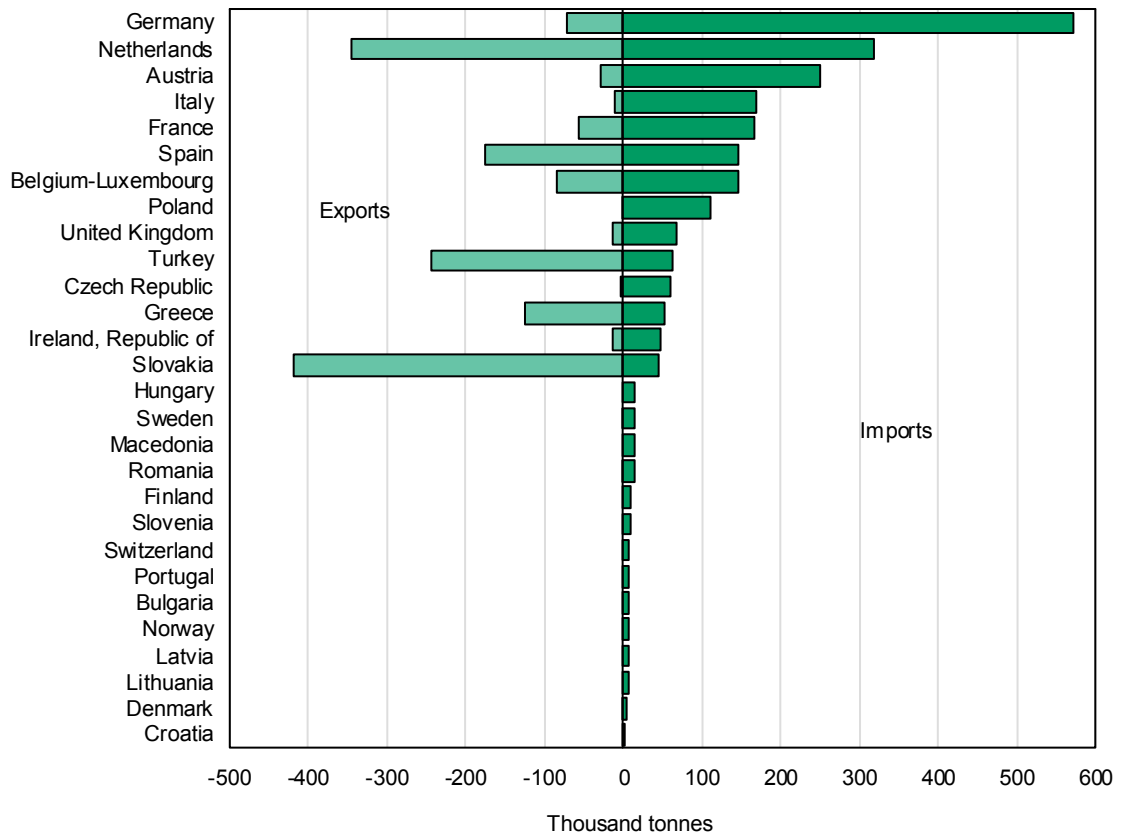
tonnes

Country	2004	2005	2006	2007	2008
Denmark					
Magnesite	1 984	2 002	444	512	456
Magnesia	2 575	4 560	4 478	3 327	4 149
Finland					
Magnesia	11 567	16 476	9 540	15 989	8 692
France					
Magnesite	1 701	3 427	2 509	2 355	2 378
Magnesia	148 780	161 488	161 029	163 908	164 235
Germany					
Magnesite	4 684	6 353	13 794	17 029	8 420
Magnesia	348 766	515 089	519 576	568 508	562 618
Greece					
Magnesite	20 579	14 250	15 645	12 611	44 397
Magnesia	11 985	17 232	22 763	20 682	7 328
Hungary	7 003	6 251	5 435	9 760	14 754
Ireland, Republic of					
Magnesite	25 886	12 653	1 967	5 971	4 385
Magnesia	49 664	49 466	35 800	48 088	42 999
Italy					
Magnesite	9 429	23 536	10 862	10 240	18 347
Magnesia	163 273	161 432	174 000	131 140	150 098
Latvia					
Magnesia	5 297	3 343	4 092	4 678	5 355
Lithuania					
Magnesia	5 448	5 398	5 513	6 501	5 196
Macedonia	1 288	1 384	5 047	18 863	13 956
Netherlands					
Magnesite	20 619	3 057	3 007	1 390	3 609
Magnesia	644 428	558 764	454 271	437 684	314 860
Norway					
Magnesite	2 587	2 125	4 265	126	69
Magnesia	1 643	500	1 784	4 298	5 989
Poland					
Magnesite	1 406	244	288	1 536	216
Magnesia	80 758	71 550	103 092	109 810	109 646
Portugal					
Magnesite	969	1 012	1 269	924	1 521
Magnesia	4 808	5 998	6 544	7 119	5 863
Romania					
Magnesite	66	155	516	187	139
Magnesia	26 142	27 088	27 447	19 666	13 003
Slovakia					
Magnesite	48	1 440	3 947	3 520	3 401
Magnesia	27 070	21 927	27 280	36 768	40 675
Slovenia					
Magnesite	125	391	166	123	113
Magnesia	9 435	9 500	8 312	7 994	8 159
Spain					
Magnesite	2 901	2 348	3 937	4 092	2 839
Magnesia	102 418	103 747	88 898	117 867	143 849
Sweden					
Magnesite	111	41	39	477	38
Magnesia	29 455	21 293	24 610	17 556	14 701
Switzerland					
Magnesite	294	168	394	1 024	69
Magnesia	6 538	6 708	7 506	7 144	7 772
Turkey					
Magnesia	38 084	52 432	29 148	43 360	61 519
United Kingdom					
Magnesite	11 187	13 896	10 644	10 194	7 016
Magnesia	83 539	78 843	64 896	57 905	59 300

Note(s)

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

Magnesite and magnesia - EU32 trade in 2008



Manganese ore

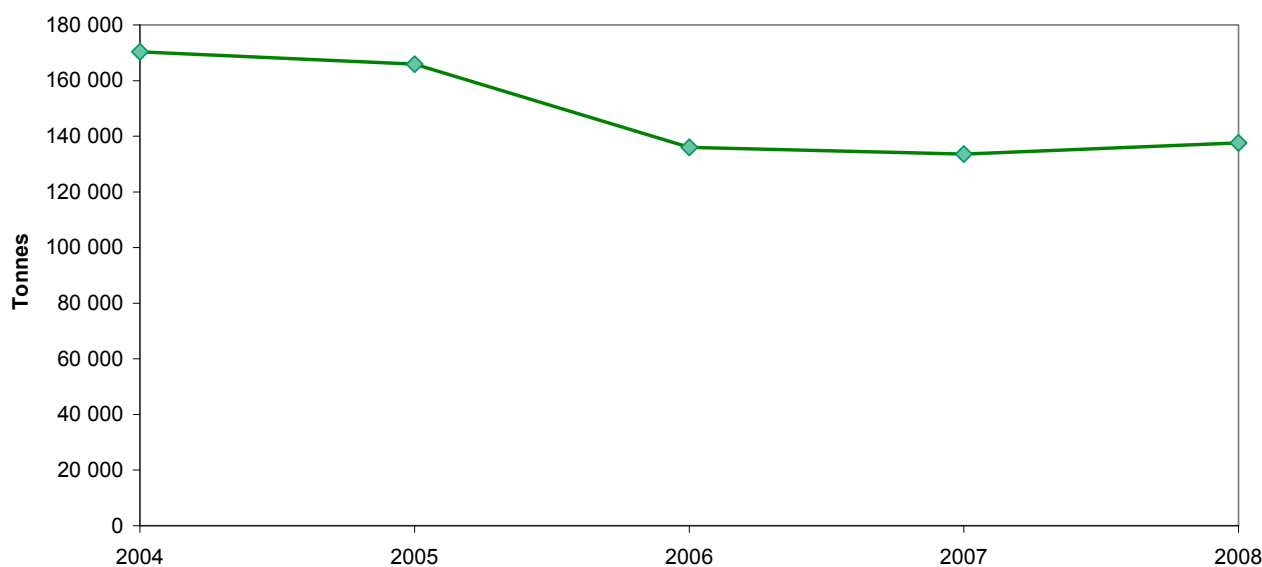
- Manganese is a hard, brittle metal. The chief ores are pyrolusite and other manganese dioxides. The principal use is in the steel industry as a desulphuriser and an alloying agent, where it imparts hardness and wears resistance. Manganese is also an important constituent of many aluminium alloys. Manganese dioxide is a component of dry-cell batteries; other compounds are used in the chemical industry.
- Economic concentrations of manganese are relatively rare. China was the largest producer in 2008 with an estimated 33 per cent of world production. Production of manganese in the EU32 is limited, with Hungary (37 per cent of EU32 production) the largest producer. Manganese ore, ferro-manganese, electrolytic manganese dioxide and manganese metal are the chief forms in international trade.
- Prices for manganese ore (48-50% Mn) increased during the early part of 2008 from US\$6.50–US\$8.00 per tonne to a high of US\$17.00–US\$18.00 per tonne by September. The price then fell dramatically, and continued to fall into 2009, reaching a low of US\$3.00–US\$4.00 per tonne by June. A slight recovery towards the end of 2009 saw the price finish the year at US\$5.90–US\$6.90 per tonne.

Production of manganese ore

tonnes

Country	2004	2005	2006	2007	2008
Bulgaria	27 800	38 500	20 500	27 900	39 100
Hungary	49 000	50 000	50 000	51 000	49 579
Italy	714	632	...	...	...
Romania	79 130	72 000	60 107	49 350	43 590
Turkey	13 751	4 751	...	...	...
EU32 Total	170 000	166 000	136 000	134 000	138 000

EU32 Production of manganese ore 2004 - 08



Manganese

Exports of manganese

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Metal	11 575	5 470	306	116	130
Belgium-Luxembourg					
Ores and concentrates	11 300	10 648	5 138	15 819	8 578
Metal	1 377	1 826	7 045	4 060	1 947
Bulgaria					
Ores and concentrates	42 122	53 559	25 595	19 335	17 369
Estonia					
Metal	94	663	222	464	226
France					
Ores and concentrates (a)	272 815	139 723	303 881	333 747	321 638
Metal	745	324	415	327	488
Germany					
Ores and concentrates	2 860	3 249	3 046	5 761	3 321
Metal	12 261	17 824	19 757	15 414	12 921
Italy					
Metal	113	241	298	309	494
Macedonia					
Ores and concentrates	...	...	5 117	...	6 314
Netherlands					
Ores and concentrates	12 975	14 903	33 386	8 223	19 103
Metal	12 548	13 585	16 739	19 767	19 144
Norway					
Ores and concentrates	105	1 410	7 880	56 939	10 266
Metal	274	131	203	2 373	1 363
Poland					
Ores and concentrates	1	43 186	1 309	151	18
Metal	33	67	52	460	35
Romania					
Metal	...	...	1	3 024	6 666
Slovenia					
Metal	143	2 584	228	236	58
Spain					
Ores and concentrates	989	776	1 336	1 299	518
Metal	6 117	6 651	5 827	5 783	4 562
Sweden					
Metal	196	143	176	131	95
Turkey					
Ores and concentrates	12 817	955	2 466	13 007	81 280
Metal	15	—	4	20	401
United Kingdom					
Metal (b)	* 3 200	* 3 100	* 2 000	* 2 100	* 3 100

Note(s)

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

(a) Including manganese ore

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

Imports of manganese

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Ores and concentrates	95	110	368	383	215
Metal	6 497	8 707	12 059	17 543	14 275
Belgium-Luxembourg					
Ores and concentrates	73 953	66 840	65 462	79 022	83 909
Metal	2 466	4 150	10 114	6 403	4 425
Bulgaria					
Ores and concentrates	46 768	13 631	17 367	27 602	—
Croatia					
Metal	93	93	89	586	64
Czech Republic					
Ores and concentrates	11 663	13 820	14 335	16 079	15 715
Metal	593	619	674	757	2 542
Denmark					
Ores and concentrates	159	111	699	608	1
Metal	164	157	161	317	233
Estonia					
Metal	401	552	909	836	478
Finland					
Ores and concentrates	20 381	28 335	10 433	27 251	24 926
Metal	547	753	2 182	2 379	2 649
France					
Ores and concentrates (a)	626 061	615 884	611 043	678 369	876 961
Metal	8 851	11 039	11 131	15 198	19 115
Germany					
Ores and concentrates (a)	8 034	7 645	11 327	15 997	14 916
Metal	22 435	29 449	45 937	42 368	47 581
Greece					
Ores and concentrates	1	22 001	46 164	—	51 425
Metal	1 510	905	730	291	271
Hungary					
Ores and concentrates	194	...	20	254	293
Metal	111	889	1 180	331	1 185
Ireland, Republic of					
Ores and concentrates (a)	268	285	368	286	75
Metal	5	5	15	118	7
Italy					
Ores and concentrates (a)	206 249	76 278	72 465	113 300	114 289
Metal	4 970	8 494	35 391	7 100	5 839
Macedonia					
Ores and concentrates	...	28 977	44 040	143 556	170 455
Netherlands					
Ores and concentrates	14 558	35 936	22 495	11 749	10 664
Metal	14 347	61 240	22 162	31 236	35 573
Norway					
Ores and concentrates	1 132 985	1 172 711	849 729	1 083 361	1 232 799
Metal	3 610	2 976	3 531	2 953	2 595
Poland					
Ores and concentrates	205 290	38 845	6 017	32 984	54 087
Metal	652	499	1 155	1 167	716
Portugal					
Ores and concentrates	275	28	63	51	765
Romania					
Ores and concentrates	534 014	357 327	3 134	79	16 432
Metal	303	427	1 000	3 030	646
Slovakia					
Ores and concentrates	257 331	273 270	308 417	253 048	211 653
Metal	246	146	445	313	350
Slovenia					
Ores and concentrates	8	6	4	187	10
Metal	296	294	435	388	438
Spain					
Ores and concentrates	575 518	415 959	393 476	349 131	640 677
Metal	9 786	10 537	9 165	9 563	10 033
Sweden					
Ores and concentrates	62	119	72	130	388
Metal	2 641	2 632	2 380	3 012	3 287

Manganese

Imports continued

tonnes

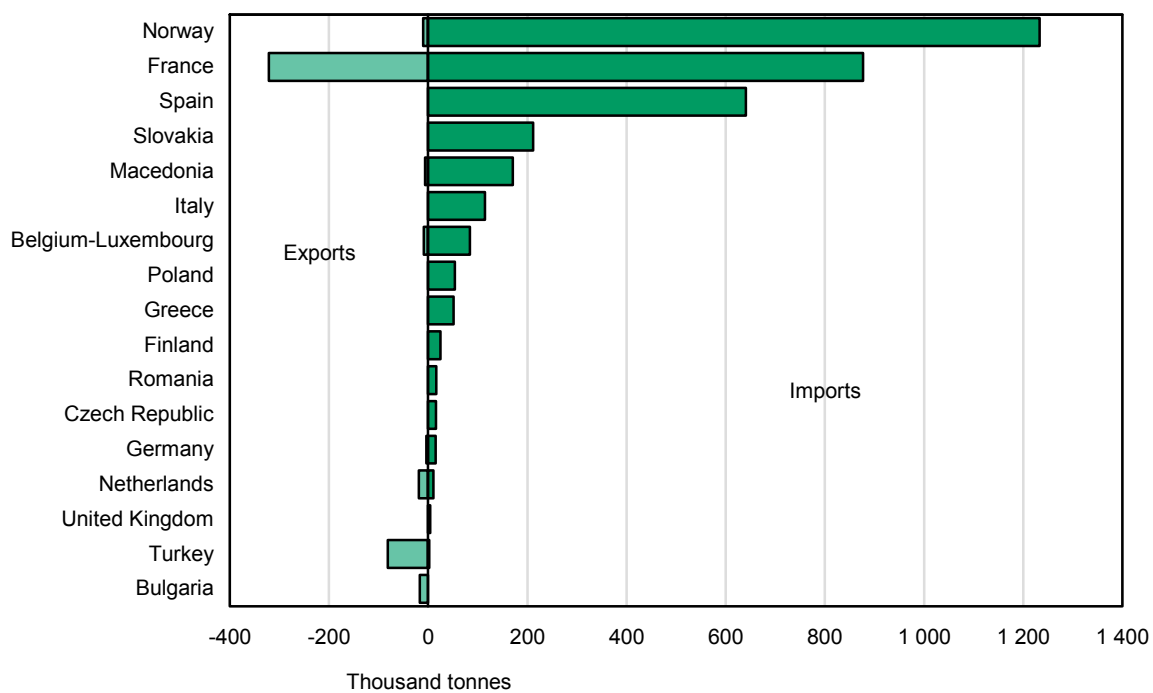
Country	2004	2005	2006	2007	2008
Switzerland					
Ores and concentrates	363	469	453	415	472
Metal	484	486	444	778	472
Turkey					
Ores and concentrates	156	259	383	428	2 531
Metal	495	300	509	719	874
United Kingdom					
Ores and concentrates (a)	2 585	698	4 229	1 569	4 133
Metal	9 189	8 223	8 563	7 021	8 773

Note(s)

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

(a) Including manganiferous iron ore

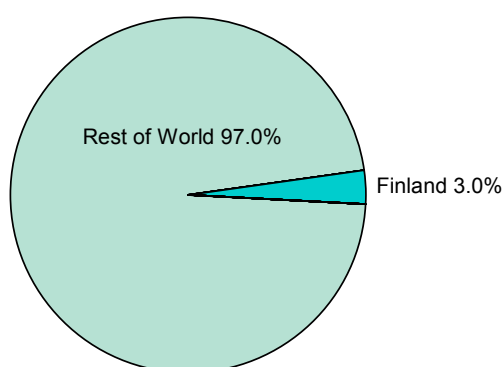
Manganese ores and concentrates - EU32 trade in 2008



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 nine countries commercially extracted mercury in 2008. China and Kyrgyzstan are the world's two largest producers and are together responsible for 77 per cent of total world output. Mexico is now the third largest world producer because their output in 2008 increased by 172 per cent compared to 2007. Finland is the only producer in the EU32 countries and its output represents three per cent of the world total.
- Mercury prices (free market, in warehouse) remained stable throughout much of 2008 at US\$500–US\$600 per flask, before rising to US\$600–US\$700 per flask by the end of the year. Prices then remained at this level until August 2009 before falling back to US\$500–US\$600 per flask by October 2009.

EU32 Production of mercury 2008



Production of mercury

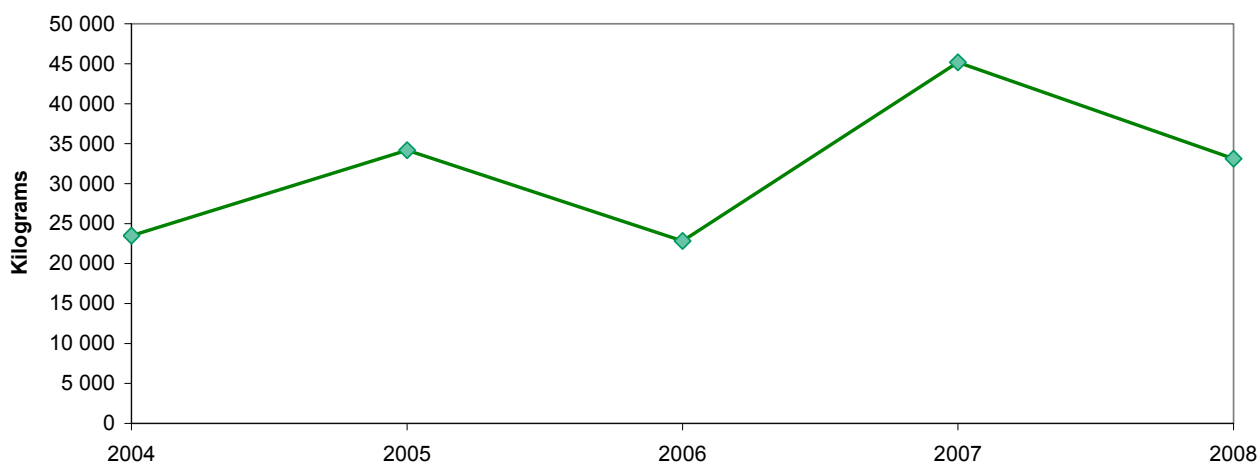
kilograms

Country	2004	2005	2006	2007	2008
Finland	23 500	34 200	22 820	45 195	33 120

Note(s)

(1) Several countries are believed to have unrecorded production of mercury from copper electro-winning processes

EU32 Production of mercury 2004 - 08



Exports of mercury

kilograms

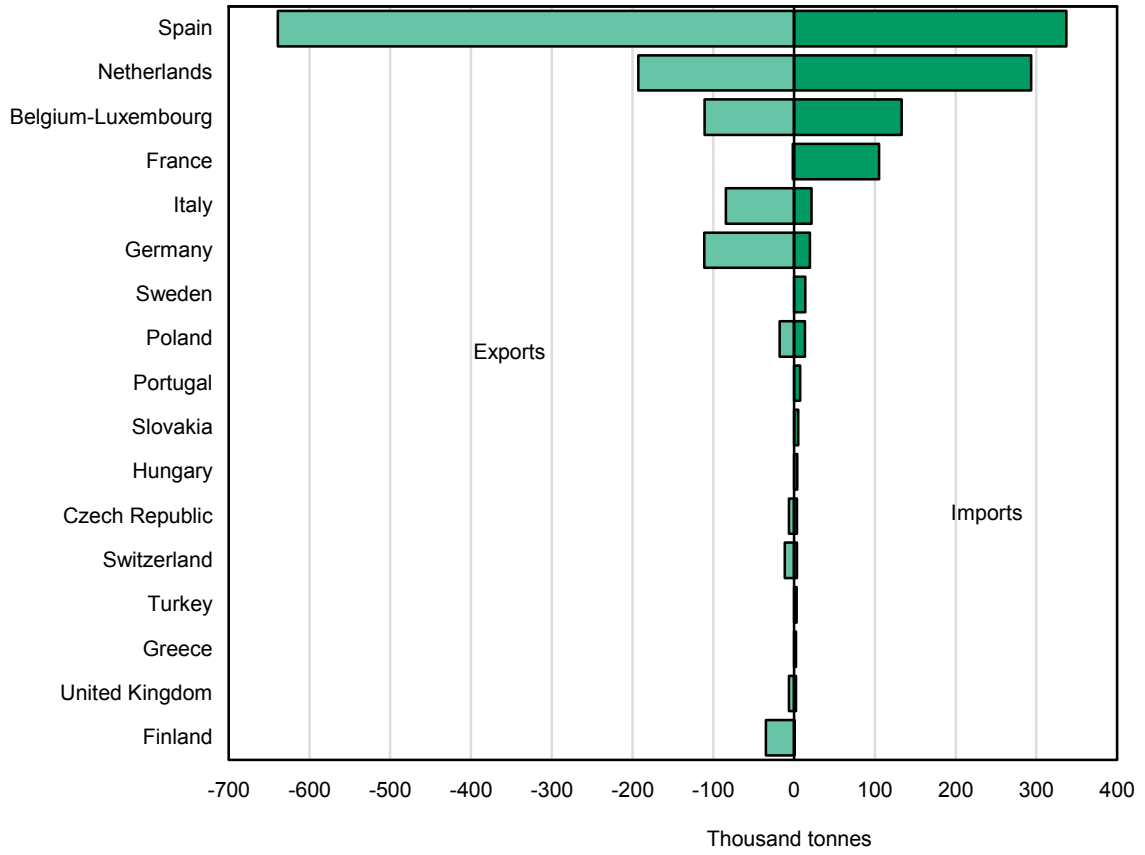
Country	2004	2005	2006	2007	2008
Austria	1 700	4 100	214	5 000	200
Belgium-Luxembourg	1 300	8 800	42 300	3 300	110 800
Czech Republic	22 172	8 200	1 700	3 600	6 300
Denmark	27 458	1 932	824	2 800	—
Estonia	...	3 400	—	—	...
Finland	23 462	32 090	24 859	45 600	35 000
France	93 800	15 400	27 300	9 100	1 700
Germany	55 500	36 200	40 000	42 300	111 100
Italy	6 952	18 244	14 820	125 946	84 247
Netherlands	183 998	188 220	176 670	196 039	192 605
Poland	2	3 000	33 900	61 600	17 700
Slovenia	7 309	1 517	28	—	...
Spain	596 739	581 653	463 954	779 110	639 203
Switzerland	316 631	171 790	87 136	140 336	11 592
United Kingdom	2 054	191 193	78 514	4 311	6 369

Imports of mercury

kilograms

Country	2004	2005	2006	2007	2008
Austria	3 900	1 600	2 000	4 400	200
Belgium-Luxembourg	54 682	18 658	44 810	8 369	133 278
Czech Republic	7 300	1 100	4 000	3 200	3 700
Denmark	403	2 901	129	300	400
Finland	554	28	38	200	209
France	299 200	202 600	138 100	190 000	105 300
Germany	80 600	36 200	70 600	84 100	19 700
Greece	187	954	933	100	2 500
Hungary	4 426	4 607	3 529	3 300	4 100
Ireland, Republic of	61	72	11 804	1 019	979
Italy	135 119	32 471	49 335	9 491	21 754
Netherlands	616 057	670 022	889 199	674 888	293 481
Poland	4 489	15 700	9 200	15 700	13 300
Portugal	291	0	0	—	7 500
Romania	24 287	20 288	49 623	80 000	2 300
Slovakia	2 738	3 457	3 100	3 400	5 200
Spain	301 097	572 872	628 737	906 297	337 117
Sweden	4 000	3 000	6 000	10 600	13 800
Switzerland	9 704	5 846	5 333	6 687	3 557
Turkey	6 024	1 440	2 052	9	3 069
United Kingdom	27 875	32 306	2 128	2 668	2 387

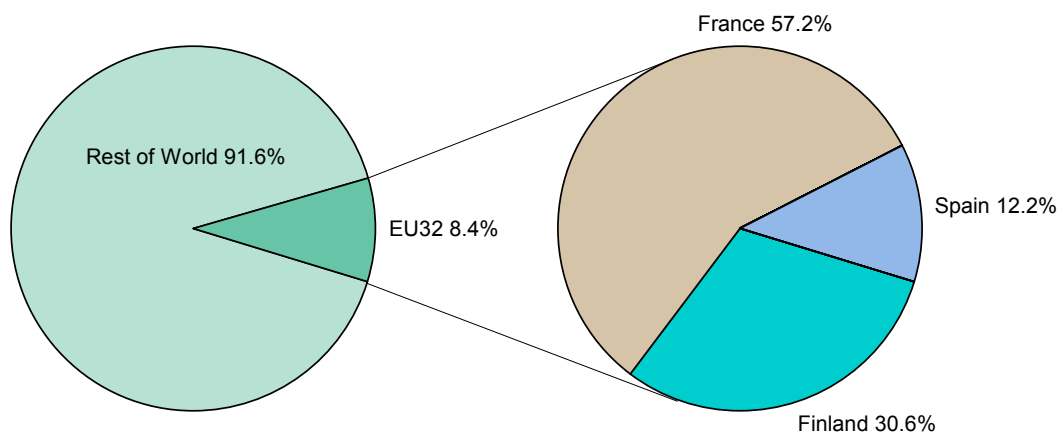
Mercury - EU32 trade in 2008



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. China was the largest world producer in 2008 with 37 per cent of the world total. Mica is produced in three EU32 countries, of which the largest producer is France (57 per cent of EU32 total). Altogether, output from the EU32 countries represents nine per cent of the world total.
- Because of the wide variety of micas there are many trading categories that are very sensitive to quality but generally stable in price. For example, USA micronized mica traded in the range US\$700 per tonne to US\$1000 per tonne throughout 2008 and 2009.

EU32 Production of mica 2008



Production of mica

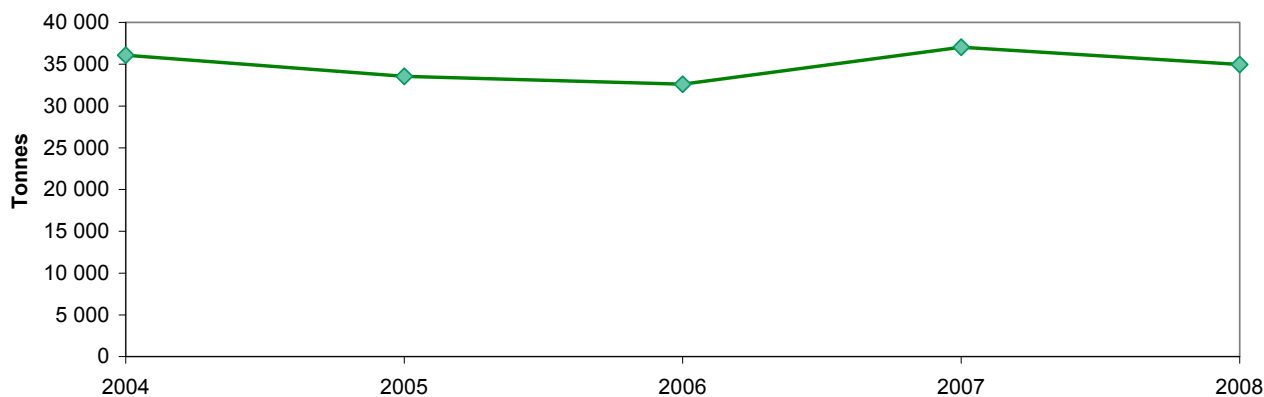
Country	2004	2005	2006	2007	2008
Finland	9 250	9 500	8 097	11 449	10 706
France (a)	19 000	* 20 000	* 20 000	* 20 000	* 20 000
Spain (a)	7 825	4 043	4 496	5 569	4 254
EU32 Total	36 000	34 000	33 000	37 000	35 000

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

EU32 Production of mica 2004 - 08



Exports of mica

tonnes

Country	2004	2005	2006	2007	2008
Austria	3 917	4 915	4 102	4 234	4 274
Belgium-Luxembourg	1 635	3 226	3 225	3 226	2 127
Finland	7 511	5 745	6 603	8 956	7 138
France	14 323	13 469	12 845	13 959	13 924
Germany	3 655	3 656	4 039	4 957	4 713
Greece	2 769	5 653	9 613	3	59
Italy	623	738	1 159	1 429	3 211
Netherlands	6 084	2 912	2 735	6 842	1 341
Norway	2 076	2 003	2 157	2 168	2 640
Spain	3 075	2 591	4 457	3 562	2 626
Turkey	15 975	565	430	—	840
United Kingdom	9 377	4 050	4 593	3 820	4 749

Note(s)

(1) This table shows unmanufactured mica and includes sheet, block, splittings, ground and waste.

Imports of mica

tonnes

Country	2004	2005	2006	2007	2008
Austria	645	512	615	722	857
Belgium-Luxembourg					
Unmanufactured	1 588	913	470	1 204	2 155
Ground	4 311	2 996	2 646	3 461	5 410
Waste	...	...	...	4 364	2 107
Czech Republic	879	819	1 629	2 262	1 958
Denmark	369	413	1 596	366	276
Finland	2 861	2 998	2 874	4 098	4 383
France					
Ground (a)	1 358	1 534	2 674	2 532	3 175
Waste	546	1 423	—	—	...
Germany					
Unmanufactured	237	89	12	16	386
Ground	28 784	30 820	33 101	36 345	33 175
Waste	1 212	1 101	980	782	966
Greece	94	131	111	123	218
Ireland, Republic of	551	889	650	508	291
Italy					
Unmanufactured	65	118	158	189	106
Ground	3 473	3 405	3 657	4 803	3 980
Lithuania	137	124	122	53	92
Netherlands					
Unmanufactured	54	143	176	400	751
Ground	9 951	7 381	7 251	9 933	2 618
Norway	1 559	1 001	1 141	1 267	2 427
Poland	878	547	918	1 118	880
Portugal	311	193	630	284	125
Romania	828	886	912	478	488
Spain	1 641	1 917	1 484	1 871	952
Sweden	514	592	515	584	755
Switzerland	426	601	1 151	3 021	1 088
Turkey	215	266	413	293	385
United Kingdom					
Unmanufactured	1 769	296	251	289	377
Ground	6 286	6 684	5 856	6 705	7 061
Waste	4 374	4 485	3 474	3 433	2 030

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 2008 was confined to only 14 countries, of which the three largest producers, China, the USA and Chile, together produced 79 per cent. There is no production in the EU32 countries.
- Molybdenum is marketed mainly as concentrate, oxide and ferro-molybdenum. Throughout much of 2008 the price for molybdenum oxide (drummed, free market, in warehouse) was relatively stable, ranging between US\$33.02–US\$34.33 per pound. However in the last three months of 2008 there was a dramatic fall in price to end the year at only US\$9.90–US\$10.52 per pound. The price fell further during the first part of 2009, reaching a low of US\$7.91–US\$8.50 per pound in April, before recovering to US\$17.69–US\$18.29 per pound in August. However, the price then fell again to end the year at US\$11.31–US\$11.83 per pound.

Exports of molybdenum

Country	2004	2005	2006	2007	2008
Austria					
Metal (a)	* 2 100	* 4 700	* 3 000	* 3 500	* 3 000
Oxides	125	...	...	...	...
Belgium-Luxembourg					
Ores and concentrates	16 219	17 683	24 320	22 340	11 314
Metal	221	342	194	556	243
Oxides	571	687	905	829	379
Bulgaria					
Metal	546	105	87	99	123
Czech Republic					
Metal	123	23	12	78	86
France					
Ores and concentrates	41	365	512	485	55
Metal	436	35	38	79	118
Germany					
Ores and concentrates	2 309	2 770	3 812	2 723	3 575
Metal	2 014	2 241	2 958	346	2 857
Italy					
Ores and concentrates	295	246	29	311	159
Metal	171	132	639	221	873
Oxides	21	47	107	185	604
Lithuania					
Ores and concentrates	...	310	...	173	186
Netherlands					
Ores and concentrates	30 424	47 395	27 264	26 613	16 284
Metal	120	59	190	409	282
Oxides	2 010	2 708	2 110	3 059	4 253
Poland					
Metal	...	61	122	113	54
United Kingdom					
Ores and concentrates	180	179	166	78	64
Metal	312	807	318	237	241

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	2004	2005	2006	2007	2008
Austria					
Metal	865	599	1 342	1 243	1 502
Belgium-Luxembourg					
Ores and concentrates	45 922	54 452	47 122	43 932	37 964
Metal	277	383	490	752	360
Oxides	1 519	2 072	2 618	2 796	2 075
Bulgaria					
Metal	53	108	73	47	15
Czech Republic					
Ores and concentrates	124	189	139	213	284
Metal	66	89	175	130	560
Denmark					
Oxides	190	247	196	432	361
Finland					
Ores and concentrates	5 603	28 469	9 270	5 789	3 498
France					
Ores and concentrates	1 492	1 783	1 896	1 511	1 933
Metal	762	993	1 075	830	1 094
Oxides	664	678	579	670	1 191
Germany					
Ores and concentrates	12 221	11 537	14 059	10 721	9 645
Metal	3 043	2 569	3 894	4 238	4 132
Oxides	703	725	2 049	1 776	1 905
Greece					
Metal	13	2	47	34	60
Hungary					
Metal	129	129	145	112	102
Italy					
Ores and concentrates	4 719	5 109	5 552	5 901	6 220
Metal	105	203	189	215	254
Oxides	247	117	229	183	125
Netherlands					
Ores and concentrates	39 710	31 781	34 891	30 403	36 305
Metal	141	287	801	1 060	572
Oxides	2 032	1 509	1 441	1 341	859
Poland					
Metal	142	102	208	616	843
Slovenia					
Ores and concentrates	524	5 674	700	876	690
Spain					
Ores and concentrates	3 805	3 317	4 584	4 622	3 787
Metal	30	31	163	113	189
Sweden					
Ores and concentrates	5 826	5 690	6 863	7 003	4 645
Metal	458	280	139	281	442
Oxides	594	392	1 133	780	711
Turkey					
Metal	10	4	6	8	89
Oxides	130	82	80	69	167
United Kingdom					
Ores and concentrates	18 371	18 600	19 032	18 381	15 130
Metal	1 854	2 877	3 445	1 390	1 085
Oxides	2	630	635	513	1 433

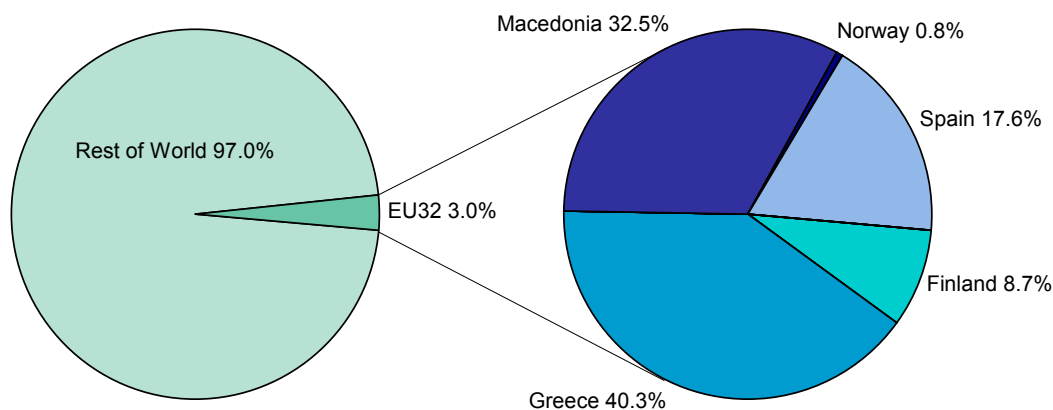
Note(s)

(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.
- About one third of world nickel mine production in 2008 was supplied by Russia and Canada. Australia overtook Indonesia to regain its position as the third largest mine nickel producer in the world. Greece is the largest mine producer in the EU32 with 40 per cent of the EU32 total followed by Macedonia (32.5 per cent of the EU32 total).
- Russia is also the largest refined nickel producer in the world and Canada is the third largest behind China. Together these three countries produced 45 per cent of the world total in 2008. Norway was the largest refined nickel producer in the EU32 in 2008 with 39 per cent of the EU32 total.
- Nickel has been one of the commodities worst hit by the worldwide economic downturn with prices falling to a low of US\$8805 per tonne during 2008, more than 600 per cent below its peak of 2007. Prices improved during 2009 due mainly to improved investment demand, Chinese imports and a recovery in the stainless steel sector. The price ended 2009 at US\$18 480 per tonne, an increase of 69 per cent since the beginning of the year.

EU32 Mine production of nickel 2008



Mine production of nickel

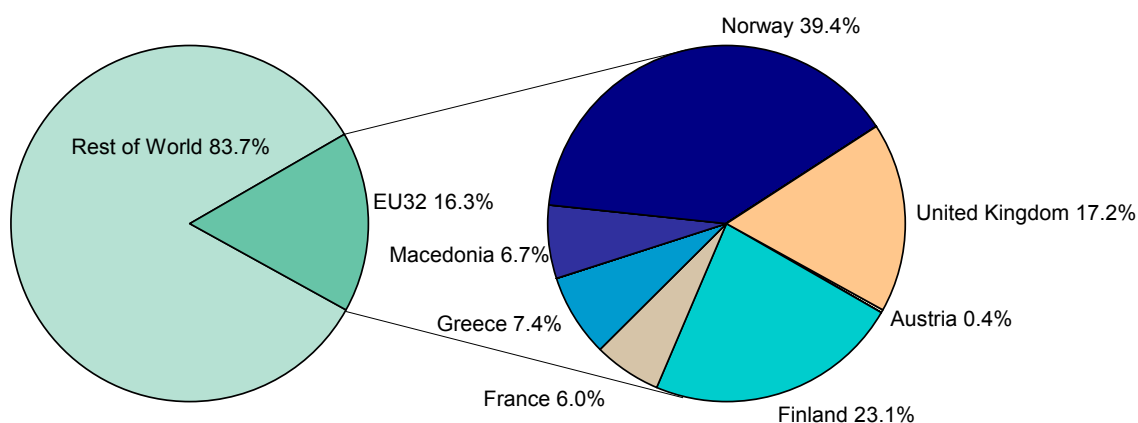
tonnes (metal content)

Country	2004	2005	2006	2007	2008
Finland	3 400	3 400	3 000	3 600	4 000
Greece	19 000	20 400	21 700	21 200	18 600
Macedonia	4 900	7 800	10 900	15 000	15 000
Norway	382	342	320	378	377
Spain	—	5 380	6 398	6 630	8 136
Turkey	—	700	1 900	1 700	—
EU32 Total	27 700	38 000	44 200	48 500	46 100

EU32 Mine production of nickel 2004 - 08



EU32 Smelter/refinery production of nickel 2008



Smelter/refinery production of nickel

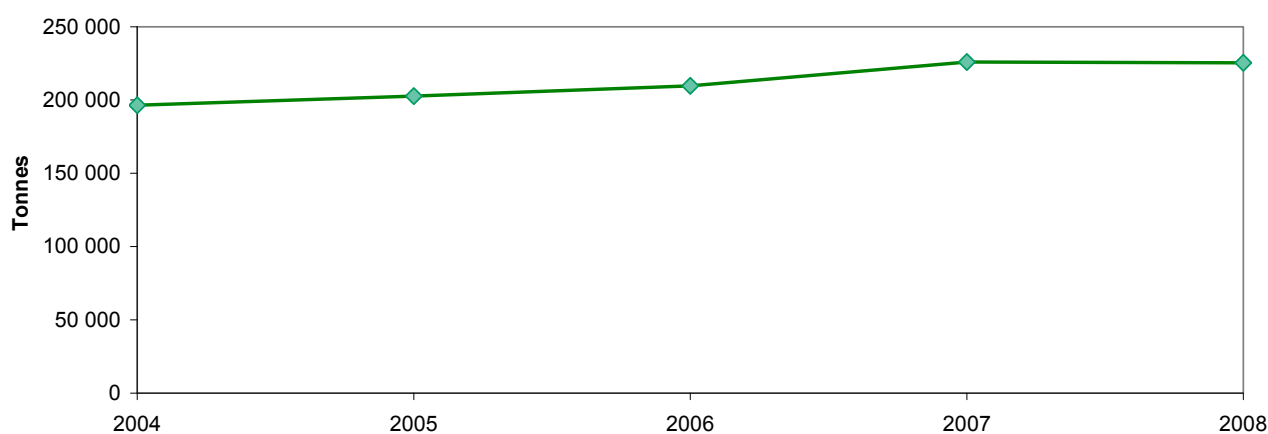
tonnes

Country	2004	2005	2006	2007	2008
Austria	1 300	1 000	900	900	900
Finland	49 580	39 159	47 469	55 000	51 963
France	12 103	12 684	13 700	14 800	13 500
Greece	18 116	19 235	17 700	18 668	16 640
Macedonia	5 300	8 100	10 900	15 000	15 000
Norway	71 410	85 374	82 257	87 600	88 700
United Kingdom	38 600	37 100	36 800	34 050	38 700
EU32 Total	196 400	202 700	209 700	226 000	225 400

Note(s)

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

EU32 Smelter/refinery production of nickel 2004 - 08



Exports of nickel

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Unwrought (a)	297	226	197	333	225
Scrap	1 520	1 927	2 337	2 208	1 910
Belgium-Luxembourg					
Ores and concentrates	...	853	877	1 423	2 750
Mattes, sinters etc.	768	209	559	68	115
Unwrought	16 290	13 376	14 324	15 642	13 298
Unwrought alloys	2 843	2 510	1 994	2 401	2 152
Scrap	1 694	1 008	3 656	4 954	2 872
Oxides	772	702	685	476	1 196
Czech Republic					
Unwrought (a)	967	57	690	171	758
Scrap	525	843	1 036	1 245	601
Oxides	296	658	602	617	643
Denmark					
Scrap	777	676	585	482	642
Estonia					
Scrap	296	34	713	1 260	840
Finland					
Ores and concentrates	...	...	—	—	14 069
Unwrought	36 458	30 628	37 747	43 427	40 108
Scrap	26	28	47	441	27
Oxides (b)	* 500	* 300	* 600	* 600	* 500
France					
Mattes, sinters etc.	1 320	241	417	517	178
Unwrought	9 203	10 148	11 761	12 308	10 754
Unwrought alloys	1 455	1 762	999	1 475	2 475
Scrap	6 618	6 373	7 826	7 578	7 558
Oxides	1 140	63	433	26	105
Germany					
Ores and concentrates	10 717	7 822	8 901	2 520	316
Mattes, sinters etc.	644	5 604	9 285	18 473	20 202
Unwrought	5 549	8 988	5 287	4 256	5 200
Unwrought alloys	8 732	9 376	9 970	9 664	8 988
Scrap	8 096	9 342	6 224	7 383	5 646
Greece					
Ores and concentrates	190	...	52 169	150	231
Ireland, Republic of					
Scrap	797	641	1 015	556	236
Italy					
Unwrought (a)	1 637	1 720	799	1 272	972
Scrap	644	1 923	448	724	658
Latvia					
Scrap	170	538	116	49	199
Lithuania					
Scrap	770	411	674	232	131
Netherlands					
Mattes, sinters etc. (b)	* 11 700	* 11 800	* 11 700	* 6 500	* 2 400
Unwrought (a)	24 467	21 895	77 742	80	117
Scrap	2 745	2 009	1 740	4 456	4 614
Oxides	28 549	6 017	1 757	...	...
Norway					
Ores and concentrates	9 575	7 581	7 860	5 379	8 093
Unwrought	71 982	84 012	81 440	88 628	88 940
Scrap	909	897	641	1 185	394
Poland					
Unwrought	(a) 110	(a) 480	312	(a) 466	(a) 334
Scrap	...	642	290	268	647
Oxides	468	529	577	558	759
Slovakia					
Unwrought	...	...	128	72	259
Scrap	...	...	134	116	1 061
Slovenia					
Unwrought (a)	144	117	118	232	268

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Spain					
Ores and concentrates	...	85 203	95 377	65 853	127 812
Unwrought (a)	177	572	795	767	600
Scrap	363	528	910	227	226
Sweden					
Unwrought (a)	133	112	516	390	288
Scrap	1 138	4 369	5 743	5 344	1 513
Oxides	317	291	349	457	511
Switzerland					
Unwrought (a)	49	73	154	113	94
Scrap	1 106	1 403	1 669	1 750	1 603
Turkey					
Ores and concentrates	3 511	52 062	91 828	175 712	130 179
Unwrought (a)	14	48	9	—	232
Scrap	172	300	102	79	734
United Kingdom					
Mattes, sinters etc.	964	196	517	40	13
Unwrought	38 249	38 524	31 610	24 147	26 235
Unwrought alloys	4 710	6 141	6 486	4 375	4 378
Scrap	10 465	14 119	15 555	16 872	18 229

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	2004	2005	2006	2007	2008
Austria					
Mattes, sinters etc.	369	460	684	443	476
Unwrought (a)	6 772	6 903	7 599	7 874	10 511
Scrap	632	447	670	605	1 164
Oxides	293	312	195	78	82
Belgium-Luxembourg					
Mattes, sinters etc.	162	214	203	1 194	1 250
Unwrought	42 387	41 364	51 130	37 554	29 492
Unwrought alloys	979	822	483	427	734
Scrap	1 644	1 221	271	9 946	566
Oxides	366	324	349	241	618
Bulgaria					
Unwrought (a)	250	202	205	195	204
Czech Republic					
Unwrought (a)	2 574	2 520	3 531	4 429	3 728
Oxides	712	785	844	919	838
Denmark					
Unwrought (a)	112	97	92	53	47
Scrap	447	317	403	529	100
Estonia					
Mattes, sinters etc.	556	26	0	1	0
Unwrought (a)	183	548	1 378	350	34
Scrap	875	125	562	803	129
Finland					
Ores and concentrates	169 170	104 983	190 233	256 932	290 914
Mattes, sinters etc.	42 944	50 194	45 851	50 856	33 247
Unwrought (a)	24 307	23 801	27 939	15 457	18 201
Scrap	1 332	860	757	299	481

Nickel

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
France					
Mattes, sinters etc.	12 329	15 399	19 818	19 864	18 952
Unwrought	26 842	22 656	26 631	25 752	23 368
Unwrought alloys	5 350	6 104	5 500	7 702	9 386
Scrap	2 068	1 554	2 393	1 341	2 166
Oxides	166	228	297	542	560
Germany					
Mattes, sinters etc.	7 264	6 902	6 459	1 911	797
Unwrought	72 788	87 939	70 947	74 083	68 767
Unwrought alloys	1 646	2 182	2 908	2 531	6 102
Scrap	11 347	11 672	15 116	19 799	18 316
Oxides	517	502	445	593	617
Greece					
Ores and concentrates	6	29 153	6 657	36	—
Unwrought (a)	61	58	40	46	101
Hungary					
Unwrought (a)	155	115	141	116	69
Ireland, Republic of					
Unwrought (a)	1 493	1 775	1 256	97	1 118
Italy					
Mattes, sinters etc.	353	32	1 550	1	1
Unwrought	41 944	37 708	48 178	41 802	42 339
Unwrought alloys	2 664	1 455	3 918	1 613	2 164
Scrap	3 075	5 119	1 606	1 372	892
Oxides	101	56	40	74	72
Macedonia					
Ores and concentrates	65 162	236 025	466 623	863 999	789 929
Netherlands					
Unwrought alloys	321	343	139	204	1 227
Scrap	6 582	6 738	9 870	14 008	12 647
Oxides (b)	* 7	* 22	* 142	* 23	* 30
Norway					
Mattes, sinters etc.	136 200	176 657	158 274	165 628	178 502
Unwrought (a)	222	80	60	215	201
Poland					
Unwrought (a)	2 207	1 683	2 573	2 344	3 398
Scrap	23	3	116	4 897	3 683
Portugal					
Unwrought (a)	310	602	739	450	524
Romania					
Unwrought (a)	563	745	747	528	338
Slovakia					
Unwrought (a)	190	274	221	139	190
Slovenia					
Unwrought (a)	959	929	874	967	2 686
Spain					
Unwrought	27 854	27 452	28 171	21 202	22 668
Unwrought alloys	380	1 188	1 174	1 426	1 547
Oxides	210	176	127	94	151
Sweden					
Mattes, sinters etc.	4 051	4 346	4 215	4 252	1 490
Unwrought	27 687	26 931	28 101	25 303	25 474
Unwrought alloys	1 076	1 324	1 414	356	1 317
Scrap	10 523	8 946	9 158	9 118	12 215
Switzerland					
Unwrought (a)	1 333	1 401	1 706	1 787	2 054
Turkey					
Unwrought (a)	3 353	3 333	3 417	3 710	4 038
Oxides	144	128	150	140	142

Imports continued

Country	2004	2005	2006	2007	2008
United Kingdom					
Mattes, sinters etc.	64 192	57 492	56 336	62 637	63 553
Unwrought	45 264	24 019	17 414	21 044	16 888
Unwrought alloys	2 238	1 629	2 883	2 947	3 210
Scrap	8 957	10 927	7 975	10 376	10 291
Oxides	103	277	59	49	13

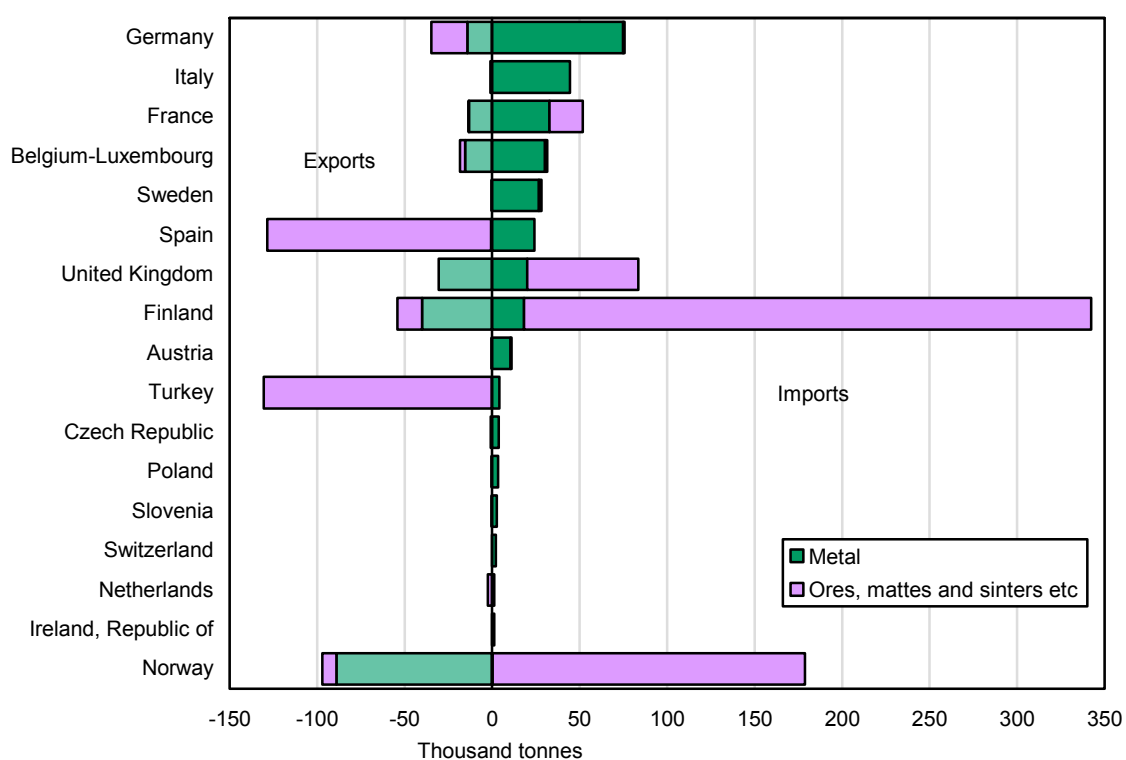
Note(s)

- (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 exports from certain countries

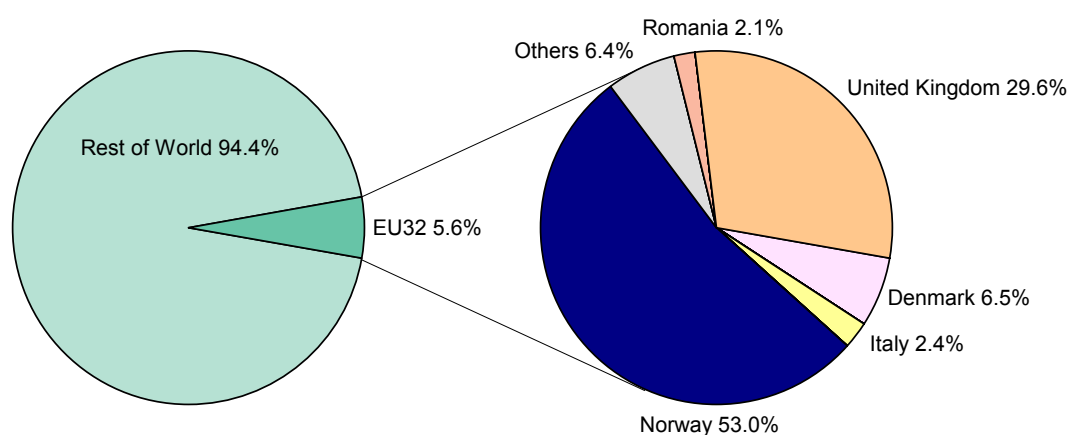
Nickel - EU32 trade in 2008



Crude petroleum

- Petroleum ('oil') is a fundamental energy resource and raw material for lubricants, olefins, polymers (plastics) and other synthetic materials.
- In 2008 a world total of 3911 million tonnes of crude petroleum was produced. The largest producing country was Saudi Arabia with 13 per cent of the world total, followed by Russia (12 per cent) and the USA (eight per cent). The EU32 countries produced just 5.6 per cent of the world total with 53 per cent of this coming from Norway and 30 per cent from the UK.
- Crude oil prices (Europe Brent spot prices) continued to increase during the first part of 2008, reaching a peak in July 2008 of nearly US\$144.00 per barrel, before declining sharply to end 2008 at about US\$36.00 per barrel. During 2009 spot prices displayed a generally increasing trend, although at a slower rate than early 2008, and reached nearly US\$78.00 per barrel by the end of the year.

EU32 Production of crude petroleum 2008



Production of crude petroleum

tonnes

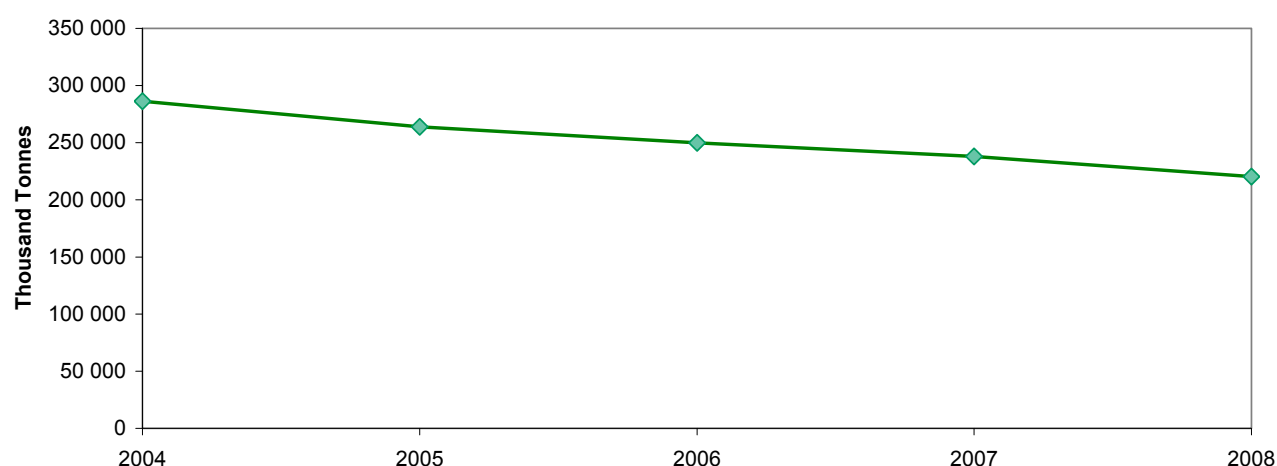
Country	2004	2005	2006	2007	2008
Austria	981 588	933 040	856 270	853 549	861 639
Bulgaria	33 100	30 000	27 500	25 700	23 000
Croatia	1 037 787	980 486	950 859	911 207	867 027
Czech Republic	299 000	306 000	259 000	240 000	236 000
Denmark	19 446 000	18 822 000	17 068 000	15 552 000	14 338 000
Estonia (a)	1 314 000	1 690 000	1 624 000	1 901 600	1 845 200
France	1 288 000	1 179 000	1 100 000	1 013 000	975 000
Germany	3 515 537	3 815 173	3 514 284	3 414 590	3 053 998
Greece	143 000	135 000	93 000	80 000	66 000
Hungary	1 076 844	947 542	886 000	838 672	774 590
Italy	5 445 000	6 100 000	5 800 000	5 800 000	5 200 000
Lithuania	301 874	216 634	180 894	154 449	127 658
Netherlands	2 890 979	2 268 746	2 022 475	2 576 222	2 162 000
Norway	150 974 000	139 802 000	136 695 000	125 763 000	116 864 000
Poland	886 188	847 844	795 742	720 603	754 907
Romania	5 462 000	5 215 000	4 777 000	4 837 000	4 528 000
Slovakia	42 410	35 000	30 520	23 000	21 000
Spain	262 707	166 014	143 432	143 123	127 285
Turkey	2 275 529	2 280 764	2 175 353	2 131 288	2 222 594
United Kingdom	88 715 159	78 162 720	70 896 869	70 959 333	65 293 585
EU32 Total	286 400 000	263 900 000	249 900 000	237 900 000	220 300 000

Note(s)

(1) The figures shown in this table exclude natural gasoline

(a) From oil shale

EU22 Production of crude petroleum 2004 - 08



Exports of crude petroleum

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg	2 967 608	2 616 977	2 833 897	2 422 211	2 496 349
Czech Republic	64 315	57 522	41 794	16 573	18 130
Denmark	14 324 704	13 567 566	11 456 257	9 493 573	8 593 198
France	39	20 374	2 675	190	65
Germany	1 253 391	1 257 658	344 965	196 926	40 011
Ireland, Republic of	63	7	11	55 635	—
Italy	824 206	986 121	937 813	1 442 498	1 195 500
Latvia	19 892	6 085	12 099	—	...
Lithuania	197 709	148 031	115 075	155 416	128 838
Netherlands	136 202	145 541	309 456	207 858	328 795
Norway	129 935 579	119 119 538	105 110 521	99 245 180	90 343 623
Poland	138 253	216 256	243 699	287 684	34 871
Slovakia	113 305	30 887	27 686	22 172	18 159
Spain (a)	* 3 000	* 28 000	* 53 000	* 2 000	* 24 000
Turkey (a)	* 29 000	* 75 000	* 545 000	* 3 584 000	* 4 115 000
United Kingdom	60 743 679	50 619 044	47 864 601	47 058 702	43 354 245

Note(s)

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

Imports of crude petroleum

tonnes

Country	2004	2005	2006	2007	2008
Austria	7 539 310	7 836 688	7 698 169	7 645 010	7 945 639
Belgium-Luxembourg	34 210 727	34 417 017	33 843 960	34 847 067	35 556 838
Bulgaria	(a)* 2 664 000	(a)* 3 752 000	(a)* 4 866 000	7 162 499	7 262 658
Croatia	4 197 554	3 855 070	3 778 918	4 285 565	3 476 266
Cyprus	417 475	...	...	...	...
Czech Republic	6 530 733	7 674 771	7 752 356	7 179 766	8 141 759
Denmark	3 725 978	2 666 384	2 576 191	2 136 643	2 240 240
Finland	12 249 366	10 603 534	12 176 669	12 221 330	11 908 304
France	86 416 072	84 951 337	83 411 036	81 011 061	81 854 226
Germany	112 096 299	113 067 864	113 960 654	105 162 534	105 835 665
Greece	18 390 500	18 926 138	18 370 720	16 938 841	6 422 841
Hungary	5 001 714	6 320 762	(a)* 7 667 000	6 064 641	(a)* 6 959 000
Ireland, Republic of	2 128 991	3 226 383	3 082 372	3 595 537	2 878 397
Italy	87 208 954	89 007 151	86 807 240	89 130 022	82 998 642
Lithuania	8 375 777	9 746 806	7 994 367	4 869 858	9 325 904
Macedonia	781 438	950 742	1 081 738	1 063 614	1 057 671

Petroleum and Natural Gas

Imports continued

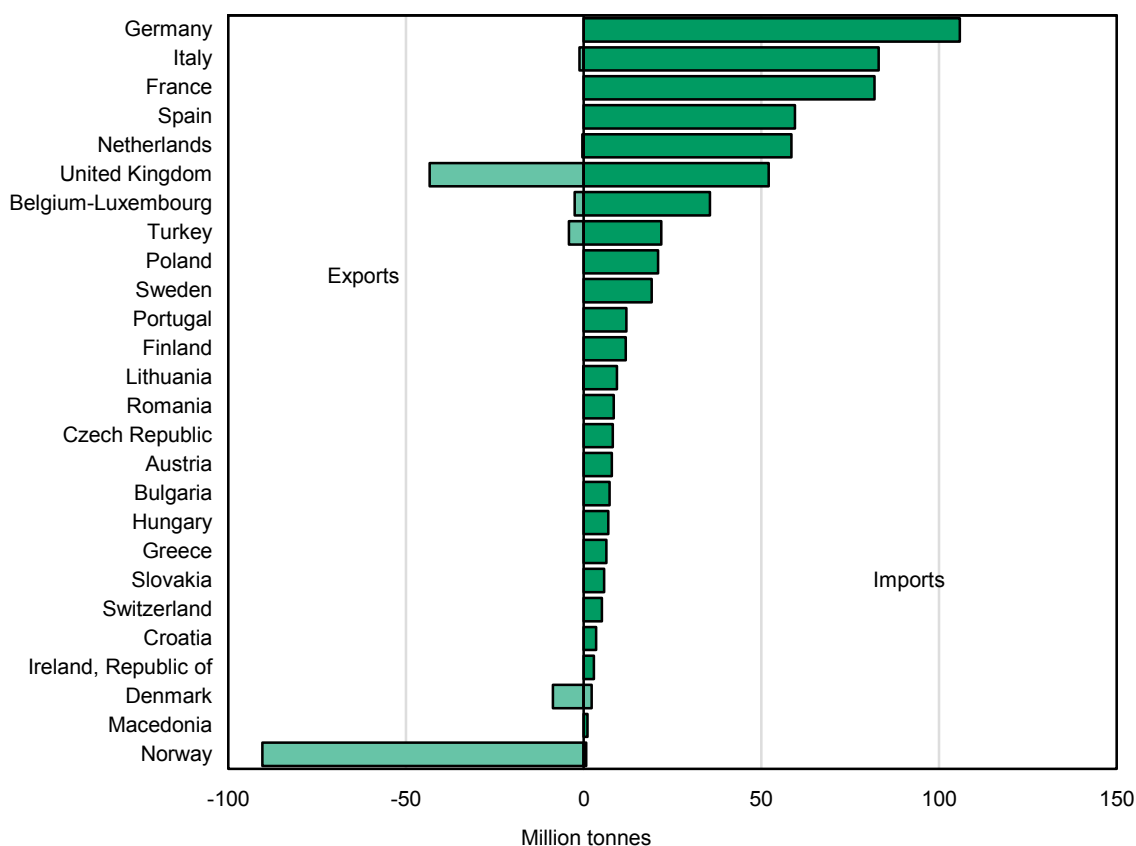
tonnes

Country	2004	2005	2006	2007	2008
Netherlands	61 377 494	62 152 486	61 548 064	57 027 374	58 484 561
Norway	440 346	983 848	440 374	1 446 918	752 400
Poland	17 316 135	17 639 489	19 479 284	20 778 118	20 949 949
Portugal	13 081 242	12 941 851	13 479 579	12 386 104	12 050 226
Romania	7 314 284	8 688 818	8 678 466	8 533 821	8 419 364
Slovakia	5 858 911	5 421 866	5 878 819	6 141 203	5 778 688
Spain	59 343 873	59 510 408	59 203 359	57 773 847	59 444 410
Sweden	20 873 087	19 770 639	19 170 472	17 719 046	19 184 387
Switzerland	5 086 184	4 744 965	5 413 010	4 595 181	5 141 634
Turkey	23 917 019	23 389 647	23 786 875	23 445 764	21 833 471
United Kingdom	56 128 686	54 067 943	55 735 570	44 129 689	52 103 843

Note(s)

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

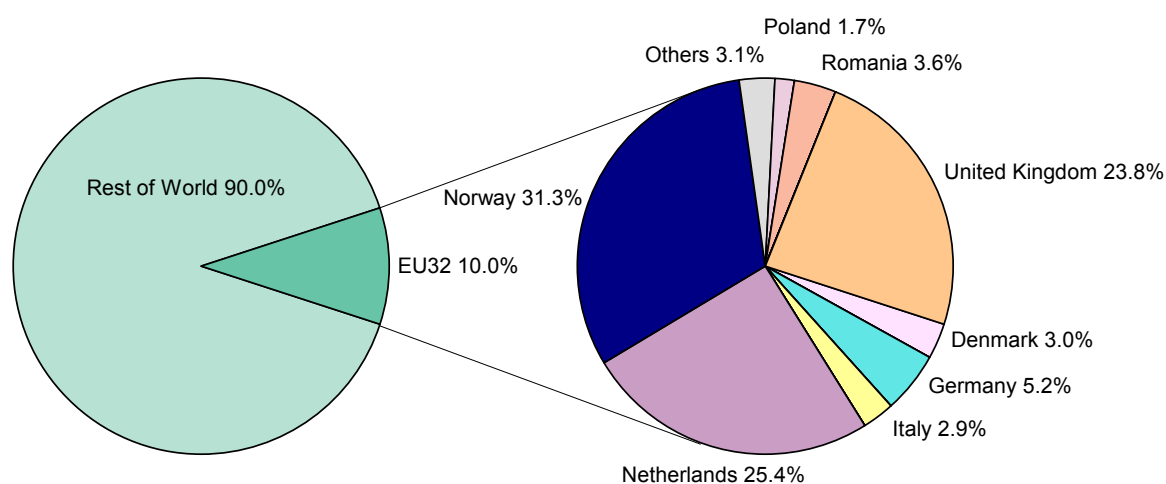
Crude petroleum - EU32 trade in 2008



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).
- In 2008 a total of 3 155 000 million cubic metres of gas was produced in the world. Russia (21 per cent) and the USA (18 per cent) are the largest world producers. The EU32 countries contributed 10 per cent to the world total, with 31 per cent of this coming from Norway, 25 per cent from the Netherlands and 24 per cent from the UK.
- The price of natural gas (European Union CIF) averaged US\$12.61 per million Btu (British thermal unit) in 2008, a 41 per cent rise on 2007.

EU32 Production of natural gas 2008



Production of natural gas

million m³

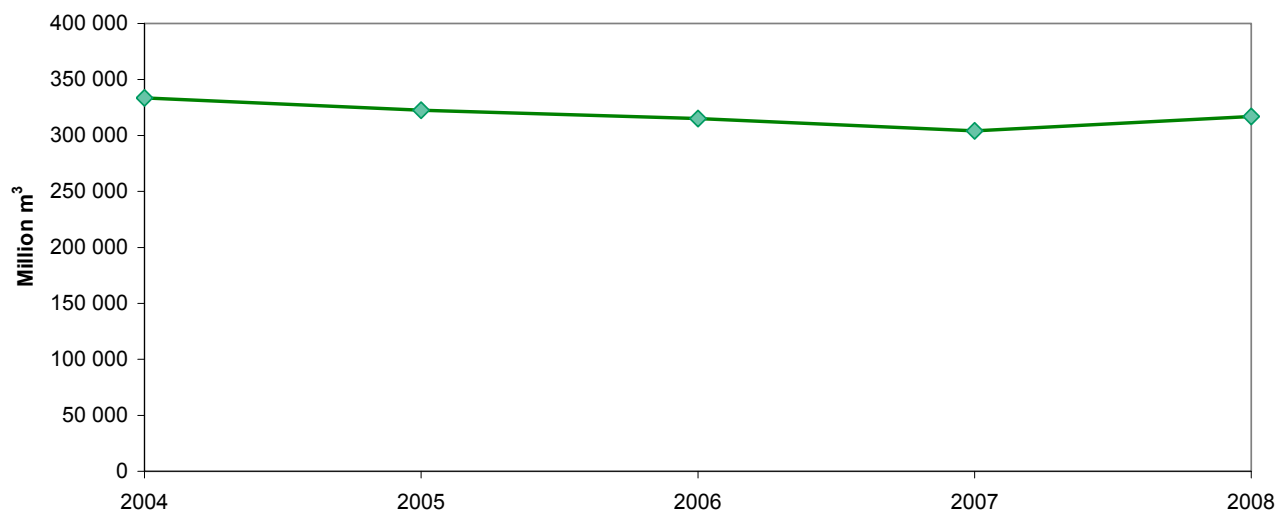
Country	2004	2005	2006	2007	2008
Austria	2 011	1 654	1 765	1 835	1 544
Bulgaria	333	573	519	295	218
Croatia	2 198	2 384	2 714	2 892	2 625
Czech Republic	175	356	148	148	167
Denmark	8 946	9 909	9 861	8 760	9 564
France	1 325	1 089	1 167	1 023	925
Germany	20 381	19 143	19 798	18 075	16 547
Greece	23	16	* 16	21	14
Hungary	3 112	3 041	3 254	2 653	2 703
Ireland, Republic of (a)	848	570	500	519	506
Italy	12 961	11 977	11 000	9 700	9 300
Netherlands	81 499	74 460	73 300	72 431	80 388
Norway	78 351	84 702	87 600	89 700	99 200
Poland	5 630	5 742	5 651	5 653	5 382
Romania	13 246	12 637	12 422	11 981	11 520
Slovakia	179	211	135	195	111
Slovenia	6	6	4	3	3
Spain	370	174	118	22	46
Turkey	344	484	307	839	894
United Kingdom	101 571	93 505	84 748	77 350	75 382
EU32 Total	333 500	322 600	315 000	304 100	317 000

Note(s)

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

(a) Sales

EU32 Production of natural gas 2004 - 08



Exports of natural gas

tonnes

Country	2004	2005	2006	2007	2008
Austria	979 540	1 082 286	1 645 995	2 688 210	2 812 303
Belgium-Luxembourg	19 331 793	17 889 507	39 448 874	20 807 227	59 248 950
Croatia	469 325	601 267	871 768	540 782	457 192
Czech Republic	62 751	58 767	—	—	—
Denmark	3 151 483	3 466 835	3 818 822	3 786 580	4 023 305
Finland	276	328	—	1 218	1 420
France	2 728 650	9 107 475	11 501 866	10 247 611	22 087 224
Hungary	—	11 560	—	127 853	—
Ireland, Republic of	—	—	642 980	5 447	—
Italy	686 700	649 706	331 234	585 818	1 749 247
Norway	57 013 142	61 351 894	63 323 422	63 999 250	71 394 708
Poland	12 367	26 501	—	—	...
Portugal	—	—	—	—	890 688
Slovakia	500	257 026	221 885	124 820	112 328
Slovenia	—	72 043	54 579	34 212	24 368
Spain	2 223 089	778 037	1 546	31 159	—
Switzerland	1	3 244	1	4	2
Turkey	—	—	2 974	5 392	412 655
United Kingdom	52 315	1 373 020	60 124	30 814	7 641

Note(s)

(1) This table includes both liquefied natural gas (HS code: 271111) in tonnes and natural gas in gaseous state (HS code 271121) in tonnes of oil equivalent

(2) To convert figures from million tonnes (of oil equivalent) to billion m³, multiply by 1.11

Imports of natural gas

tonnes

Country	2004	2005	2006	2007	2008
Austria	6 220 717	6 922 117	7 593 331	6 988 269	7 136 000
Belgium-Luxembourg	33 170 346	31 896 566	32 123 464	29 397 014	29 615 926
Croatia	979 394	1 088 406	1 085 554	700 955	855 326
Czech Republic	6 345 673	6 733 431	5 489 325	5 478 515	6 264 909
Denmark	33 801	242 936	—	—	—
Estonia	153 430	155 659	154 926	726 823	717 831
Finland	3 364 823	3 068 411	3 312 381	3 172 117	3 269 068
France	37 043 057	48 574 413	62 023 544	75 216 254	79 101 617
Germany	77 411 493	78 310 541	83 475 456	75 980 087	78 201 702
Greece	2 455 612	2 634 247	3 029 778	3 789 666	4 186 746
Hungary	7 993 113	8 238 371	8 013 603	7 366 053	8 574 143
Ireland, Republic of	1 237 980	2 383 218	1 946 640	3 838 104	4 364 595
Latvia	960 563	1 153 086	1 201 960	1 158 965	1 138 776
Lithuania	1 991 505	2 071 091	2 129 513	2 414 798	2 246 642
Macedonia	47 782	52 416	56 876	63 225	86 823
Netherlands	9 210 387	14 229 445	29 784 906	...	...
Norway	—	—	—	118 063	442
Poland	6 226 121	7 118 539	—	—	...
Portugal	2 812 628	3 588 097	3 356 949	3 758 075	4 188 706
Romania	3 725 638	4 140 078	4 048 749	8 877 219	7 757 273
Slovakia	5 099 100	5 177 312	5 157 793	4 249 360	4 640 012
Slovenia	798 848	851 258	811 065	807 877	750 581
Spain	19 758 243	24 439 892	26 548 202	27 048 984	32 044 466
Sweden	862 740	618 697	372 627	749 162	647 510
Switzerland	2 469 629	2 539 454	2 560 801	2 402 267	2 596 153
United Kingdom	5 198 582	7 309 558	7 881 575	15 277 213	18 133 087

Note(s)

- (1) This table includes both liquefied natural gas (HS code: 271111) in tonnes and natural gas in gaseous state (HS code 271121) in tonnes of oil equivalent
- (2) To convert figures from million tonnes (of oil equivalent) to billion m³, multiply by 1.11

Phosphate rock

- Phosphate rock is the term given to a range of phosphorus-bearing minerals that are commercially exploited. Over 90 per cent of phosphate rock is used to produce fertilisers. The remainder is used in the manufacture of detergents, animal feedstock and many other minor applications.
- China, the USA and Morocco are the world's largest producers and together the output from these countries represents 64 per cent of the world's phosphate rock. Finland is the only producer in the EU32, which is otherwise dependent on imports.
- Phosphate rock (USA, marketable, all grades, F.O.B. plant) averaged US\$76.76 per tonne in 2008 and US\$50.00 per tonne in 2009.

Production of phosphate rock

tonnes

Country	2004	2005	2006	2007	2008
Finland	838 000	822 987	857 922	830 989	780 000

Exports of phosphate rock

tonnes

Country	2004	2005	2006	2007	2008
Austria	802	1	942	—	...
Belgium-Luxembourg	101 115	108 238	82 232	115 628	84 619
Bulgaria	458	265	...	—	91
Cyprus	...	...	...	...	2 960
Czech Republic	33	545	726	732	1 091
Finland	16 375	996	1 141	6 942	3 248
France	6 362	4 463	10 147	15 919	96 127
Germany	43	5 048	700	168	314
Italy	4 417	4 883	6 789	7 800	7 661
Lithuania	...	150	1 406	2 011	140
Macedonia	3 104	3 388	1 944	2 050	1 685
Netherlands	94 150	91 592	98 687	106 235	120 214
Poland	507	1	1	1	203
Slovakia	48	438	2 603	—	...
Slovenia	...	189 207	140 281	109 350	164 848
Spain	7	42	7 259	7 840	4 754
Sweden	5	392	969	1 623	4 897
United Kingdom	34	1 548	335	504	759

Imports of phosphate rock

tonnes

Country	2004	2005	2006	2007	2008
Austria	210 010	67 853	94 630	106 018	(a)* 158 000
Belgium-Luxembourg	1 545 478	1 688 029	1 299 125	1 512 076	1 458 336
Bulgaria	515 889	543 637	449 874	462 247	534 734
Croatia	245 224	272 005	317 571	327 936	328 599
Czech Republic	24 282	22 633	28 141	33 954	20 928
Denmark	30 425	1 311	274	1 051	881
Finland	60 199	56 117	86 734	113 286	118 749
France	593 253	427 194	387 794	442 826	374 792
Germany	148 082	104 335	117 711	115 109	145 905
Greece	364 398	378 931	197 629	237 577	251 845
Ireland, Republic of	1 159	219	154	6 028	3 425
Italy	359 090	279 693	242 633	249 847	248 005
Lithuania	1 082 901	1 178 816	1 193 093	1 202 196	1 209 385
Macedonia	6 567	...	...	...	...
Netherlands	724 960	776 661	815 692	847 776	1 108 711
Norway	646 319	710 528	672 546	673 331	682 369
Poland	1 885 350	1 558 007	1 658 266	1 689 120	1 448 780

Imports continued

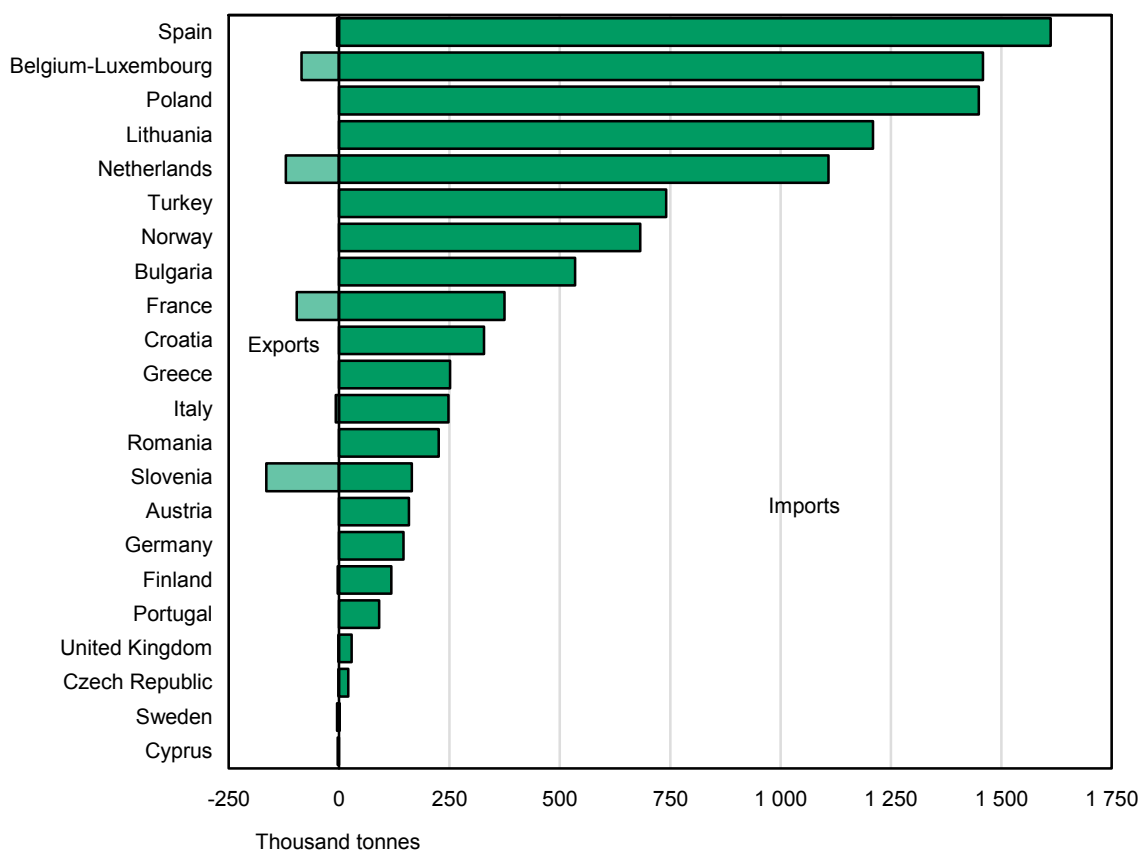
tonnes

Country	2004	2005	2006	2007	2008
Portugal	149 365	137 423	91 912	114 826	90 667
Romania	303 713	283 192	148 110	193 276	225 581
Slovakia	2 932	5 415	494	267	251
Slovenia	...	...	140 455	109 768	164 872
Spain	1 800 329	1 768 425	1 556 734	1 653 874	1 611 494
Sweden	1 878	1 626	4 283	2 369	925
Switzerland	2 854	3 516	1 612	4 645	358
Turkey	291 245	496 738	744 504	782 996	741 190
United Kingdom	11 586	30 177	7 803	23 052	28 971

Note(s)

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

Phosphate rock - EU32 trade in 2008



Platinum group metals

- The platinum group metals (PGMs) are platinum, palladium, rhodium, ruthenium, osmium and iridium. Of these, platinum and palladium are the most commercially significant. Platinum and palladium have important applications in electronics, jewellery and as catalysts (in catalytic converters for vehicles and in many industrial processes). They are also investment commodities.
- Mine production is confined to a handful of countries. The largest producers in 2008 were South Africa (61 per cent - chiefly platinum) and Russia (28 per cent - mainly palladium). There is no EU32 mine production.
- The price of platinum continued its upward trend in the early part of 2008, to a peak of US\$2276 per troy ounce in March, before the effects of the global economic difficulties reduced the demand for vehicles and hence for platinum. The price ended 2008 at US\$912 per troy ounce. The price trend over 2009 showed a gradual but steady rise, driven by a weak US dollar, strong investor interest and a high gold price. It finished the year at US\$1476 per troy ounce, a 157 per cent increase compared to the start of 2009.
- In 2008, the price of palladium rose significantly at the start of the year to reach US\$585 per troy ounce in February but then fell sharply towards the end of the year to finish at US\$175 per troy ounce. During 2009, however, the price of palladium increased steadily to reach US\$390 per troy ounce at the end of the year, an increase of 205 per cent.

Exports of platinum group metals

kilograms

Country	2004	2005	2006	2007	2008
Austria					
Platinum and platinum metals	£8 114 000	£12 253 000	£14 817 000	£30 801 000	£52 298 000
Waste and scrap	£50 000	£397 000	£281 000	£621 000	£621 000
Belgium-Luxembourg					
Platinum	1 000	700	2 600	4 100	7 800
Platinum metals	4 400	2 100	3 000	6 400	6 400
Waste and scrap	245 596	305 700	934 000	592 300	649 800
Bulgaria					
Waste and scrap (a)	* 24 000	* 31 400	* 73 200	* 94 700	* 1 400
Croatia					
Waste and scrap	49 784	76 039	27 719	18 314	27 018
Czech Republic					
Platinum and platinum metals	(a)* 4 600	(a)* 3 300	(a)* 500	(a)* 800	3 400
Waste and scrap	4 158	4 500	4 700	1 900	700
Denmark					
Platinum and platinum metals	642	1 435	32	48	1
Estonia					
Waste and scrap	3 983	...	...	...	...
Finland					
Platinum and platinum metals	6	5	23	19	30
Waste and scrap	7	75 669	713	463	218
France					
Platinum	3 032	3 324	5 283	4 758	2 033
Platinum metals	4 611	4 075	3 565	2 800	2 120
Waste and scrap	44 182	184 400	383 300	190 100	282 400
Germany					
Platinum	31 900	43 300	40 600	28 100	27 700
Palladium	15 900	20 800	24 400	27 800	28 600
Other platinum metals	4 600	11 100	16 000	22 300	24 700
Waste and scrap	815 821	1 648 800	2 797 600	3 399 700	3 238 800
Hungary					
Waste and scrap	...	...	...	89 200	...
Ireland, Republic of					
Waste and scrap	13 100	7 900	6 523	7 179	16 854
Italy					
Platinum	6 277	6 555	9 542	11 783	13 350
Platinum metals	3 892	6 039	6 951	5 828	8 295
Waste and scrap	105 220	206	1 065	94 988	257
Latvia					
Waste and scrap	716	1 002	468	219	181
Lithuania					
Waste and scrap	5 958	...	16	404	62 710
Netherlands					
Platinum	£18 570 000	£9 061 000	£8 718 000	£8 190 000	£18 207 000
Platinum metals	£1 377 000	£8 211 000	£3 971 000	£3 766 000	£10 385 000
Waste and scrap	201 129	876	16 569	25 850	352 175

Exports continued

kilograms

Country	2004	2005	2006	2007	2008
Norway					
Platinum and platinum metals	13 360	11 871	11 885	14 611	15 393
Waste and scrap	384	342	29 817	66 193	5 119
Poland					
Platinum and platinum metals	470	903	350	156	7 275
Waste and scrap	33 019	60	4 312	139	7 399
Portugal					
Waste and scrap	695	...	...	33 500	...
Slovenia					
Platinum and platinum metals	839	47	248	84	110
Spain					
Platinum and platinum metals	1 054	152	363	434	3 104
Waste and scrap	1 893	2 892	290	44	88 069
Sweden					
Platinum and platinum metals	£1 037 000	£663 000	£1 514 000	£900 000	£851 000
Waste and scrap	29 000	25 000	280 000	242 500	575 300
Switzerland					
Platinum	57 268	42 102	62 243	57 569	69 404
Palladium	61 960	75 105	46 578	52 880	86 503
Other platinum metals	1 703	2 047	292	636	717
Waste and scrap	118 241	235 630	200 470	393 326	616 867
United Kingdom					
Platinum	44 598	41 500	42 843	54 256	51 720
Palladium	61 198	51 807	48 688	59 369	2 021 831
Other platinum metals	12 610	17 852	23 353	31 484	27 629
Waste and scrap	2 681 379	2 881 226	3 507 381	3 793 637	4 278 682

Note(s)

- (1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys
(2) Kilograms 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
(3) See explanatory notes at the front of the volume regarding currency conversions

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

Imports of platinum group metals

kilograms

Country	2004	2005	2006	2007	2008
Austria					
Platinum and platinum metals	9 400	7 200	8 400	1 100	700
Belgium-Luxembourg					
Platinum	20 865	88 976	6 421	13 300	28 600
Platinum metals	2 080	2 873	4 061	2 000	100
Bulgaria					
Platinum and platinum metals	...	366	31	54	4 952
Croatia					
Platinum and platinum metals	17 184	12 320	107	171	152
Cyprus					
Platinum and platinum metals	78	97	73	70	528
Czech Republic					
Platinum and platinum metals	51 832	1 289	4 599	576	400
Waste and scrap	506	55	86	913	4 300
Denmark					
Platinum and platinum metals	1 443	2 076	2 962	...	...
Finland					
Platinum and platinum metals	231	495	309	198	365
France					
Platinum	6 416	5 390	4 455	6 263	8 471
Platinum metals	4 268	3 500	3 711	3 631	4 404
Waste and scrap	40 700	55 600	370 600	114 300	241 200

Platinum Metals

Imports continued

kilograms

Country	2004	2005	2006	2007	2008
Germany					
Platinum	39 600	58 400	46 900	51 500	47 100
Palladium	20 700	56 000	42 000	54 700	55 100
Other platinum metals	6 400	9 100	8 700	9 700	6 400
Waste and scrap	3 713 700	6 574 600	9 332 700	11 442 800	10 983 600
Greece					
Platinum and platinum metals	179	181	248	7 400	300
Hungary					
Platinum and platinum metals	184	985	91	126	100
Ireland, Republic of					
Platinum and platinum metals	2 620	4 934	3 999	10 425	2 105
Italy					
Platinum	12 087	15 586	17 279	20 491	16 570
Palladium	18 604	16 178	15 943	18 880	20 593
Other platinum metals	2 826	3 005	3 077	1 811	2 426
Waste and scrap	278	2 085	431	447	7 646
Latvia					
Waste and scrap	...	...	...	1 900	2 900
Lithuania					
Waste and scrap	1 100	5 403	26 700	65 900	40 800
Netherlands					
Platinum	£14 670 000	£12 517 000	£21 774 000	£22 793 000	£89 137 000
Platinum metals	£7 964 000	£3 682 000	£7 066 000	£7 725 000	£8 219 000
Norway					
Platinum and platinum metals	973	1 076	922	1 057	1 072
Waste and scrap	59	998	1 102	846	1 093
Poland					
Platinum and platinum metals	235	3 413	15 500	16 400	16 900
Slovakia					
Platinum	394	60	23 016	348 975	1 573 410
Slovenia					
Platinum and platinum metals	438	120	449	177	177
Spain					
Platinum and platinum metals	1 402	13 799	1 506	2 075	11 296
Waste and scrap	298	122	526	4 111	8 947
Sweden					
Platinum and platinum metals	£4 985 000	£6 513 000	£4 509 000	£6 109 000	£8 722 000
Waste and scrap	273 000	577 000	618 000	731 700	13 800
Switzerland					
Platinum	47 742	51 377	76 842	43 113	67 022
Palladium	96 530	46 565	126 416	46 744	60 666
Other platinum metals	3 725	780	1 078	913	1 255
Waste and scrap	161 433	156 229	172 679	267 258	494 962
Turkey					
Platinum and platinum metals	231	188	212	316	463
United Kingdom					
Platinum	47 735	51 553	23 472	26 015	29 943
Palladium	24 666	30 576	37 226	42 395	32 806
Other platinum metals	8 267	7 134	9 127	6 507	5 409
Waste and scrap	617 417	1 271 315	1 148 802	1 456 413	1 416 905

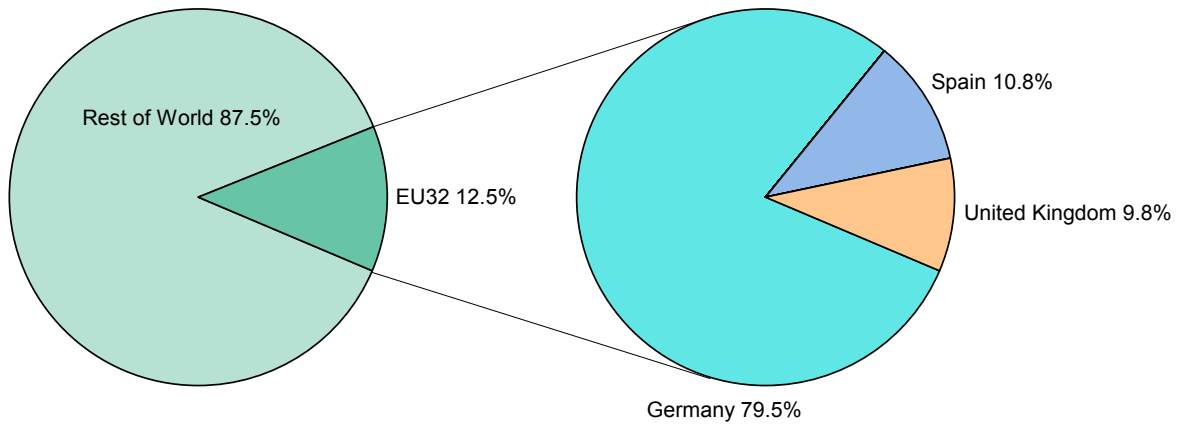
Note(s)

- (1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys
- (2) Kilograms 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
- (3) See explanatory notes at the front of the volume regarding currency conversions

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, with only 13 countries producing potash in 2008. Canada, Russia and Belarus together generated 65 per cent of world production. The EU32 is a significant producer of potash, producing 12.5 per cent of world production in 2008. Most of this was from Germany (79 per cent of EU32 total and 10 per cent of world total).
- Prices for standard grade potash were stable at US\$240–US\$250 per tonne until July 2009 when suddenly they leapt up to US\$550–US\$600 per tonne. They remained at this level until November when they dropped back slightly to US\$500–US\$550 per tonne.

EU32 Production of potash 2008

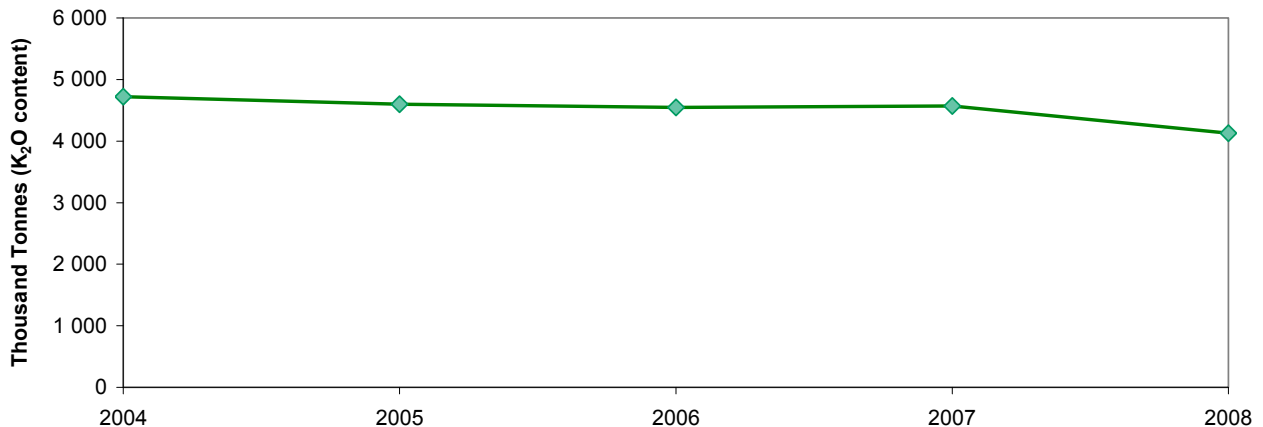


Production of potash

tonnes (K₂O content)

Country	2004	2005	2006	2007	2008
Germany					
Potassic salts	3 626 510	3 663 829	3 624 977	3 636 504	3 280 467
Spain					
Chloride	553 210	494 594	493 189	503 000	444 000
United Kingdom					
Chloride	539 500	439 200	427 000	430 000	403 800
EU32 Total	4 719 000	4 598 000	4 545 000	4 570 000	4 128 000

EU32 Production of potash 2004 - 08



Potash

Exports of potash

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Potassic fertilisers	158	4 713	8 584	13 595	14 613
Belgium-Luxembourg					
Fertiliser salts	487	158	43	...	...
Sulphate (a)	* 685 000	* 628 000	* 424 000	* 433 000	* 311 000
Chloride	141 056	116 930	102 641	137 689	84 791
Other potassic fertilisers	8 109	9 819	10 560	6 043	7 034
Czech Republic					
Potassic fertilisers	2 416	3 458	3 143	3 096	3 322
Denmark					
Chloride	3 162	1 052	29 533	127	45
Finland					
Sulphate	(a)* 34 900	33 484	(a)* 7 900	49 485	17 181
Chloride	1 008	38 915	65 003	50 342	50 822
France					
Sulphate	8 248	54 235	32 887	33 446	34 777
Chloride	19 459	6 376	3 185	8 166	11 416
Other potassic fertilisers	1 271	841	221	278	327
Germany					
Potassic fertilisers (b) (c)	3 077 154	3 235 651	3 624 977	3 636 504	3 280 467
Greece					
Potassic fertilisers	4 083	2 894	3 977	1 217	1 648
Hungary					
Potassic fertilisers	2 512	1 253	2 336	3 474	7 891
Italy					
Potassic fertilisers	1 169	1 270	2 194	5 572	6 345
Latvia					
Chloride	479	2 321	117	250	970
Lithuania					
Potassic fertilisers	8 037	10 463	8 939	5 752	2 846
Macedonia					
Potassic fertilisers	822	1 102	3	—	2
Netherlands					
Sulphate	578	382	842	7 918	1 424
Chloride	197 731	163 072	152 423	170 921	147 436
Other potassic fertilisers	391	759	1 557	1 162	1 341
Norway					
Chloride	10 107	7 611	2 243	1 285	—
Poland					
Potassic fertilisers	1 638	932	3 130	2 202	9 222
Portugal					
Potassic fertilisers	30	1 056	42	80	240
Slovakia					
Potassic fertilisers	204	26	...	1 407	434
Spain					
Sulphate	3 958	2 832	1 245	1 795	1 251
Chloride	675 140	514 042	201 242	163 891	360 538
Other potassic fertilisers	590	483	257	998	1 895
Sweden					
Sulphate	70 066	54 841	10 191	84 414	53 883
Turkey					
Potassic fertilisers	70	313	148	488	3 544
United Kingdom					
Chloride	* 510 000	* 340 000	* 430 000	* 350 000	* 283 000
Other potassic fertilisers	662	705	651	562	656

Note(s)

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

(b) K₂O content

(c) Including sulphate, chloride and other potassic fertilisers

Imports of potash

Country	2004	2005	2006	2007	2008
Austria					
Fertiliser salts	23 040	23 685	23 423	...	...
Sulphate	18 787	13 377	17 797	13 026	10 432
Chloride	145 757	144 234	133 514	123 747	119 347
Other potassic fertilisers	3 842	2 336	3 199	26 199	25 862
Belgium-Luxembourg					
Fertiliser salts	26 328	17 331	2 628	...	...
Sulphate	212 176	260 839	2 839	5 073	7 317
Chloride	1 276 732	1 211 640	576 972	587 275	559 104
Other potassic fertilisers	22 357	17 698	7 693	612	825
Bulgaria					
Potassic fertilisers	4 725	7 794	9 102	4 845	4 633
Croatia					
Chloride	168 015	131 567	149 424	159 288	157 994
Other potassic fertilisers	66	2 083	3 594	3 563	2 958
Czech Republic					
Chloride	108 061	97 723	43 238	32 745	28 052
Other potassic fertilisers	3 633	3 783	3 475	4 215	5 025
Denmark					
Sulphate	18 006	2 683	4 778	6 077	1 878
Chloride	119 153	38 706	106 772	34 292	47 885
Other potassic fertilisers	13 099	29 605	13 150	13 742	24 438
Estonia					
Chloride	30 923	14 509	11 173	7 048	8 665
Finland					
Chloride (a)	192 600	163 600	161 400	148 400	120 158
France					
Fertiliser salts	1 988	1 400	712	...	...
Sulphate	77 441	70 702	33 195	50 088	53 124
Chloride	1 866 144	1 492 127	777 056	900 560	837 119
Other potassic fertilisers	31 958	29 488	11 432	16 601	18 484
Germany					
Sulphate	4 426	5 964	5 414	17 108	11 801
Chloride	97 924	75 483	62 917	101 081	124 643
Other potassic fertilisers	570	4 065	809	1 344	2 503
Greece					
Sulphate	92 816	28 334	44 049	37 785	36 642
Chloride	29 191	46 667	36 887	22 518	28 144
Other potassic fertilisers	6 411	4 387	9 682	6 189	8 660
Hungary					
Chloride	140 551	137 278	133 764	168 692	181 373
Other potassic fertilisers	2 913	3 735	3 180	5 863	4 552
Ireland, Republic of					
Chloride	30 456	113 476	125 803	122 191	97 056
Other potassic fertilisers	4 924	5 747	4 566	1 785	4 347
Italy					
Sulphate	96 904	96 415	91 061	90 992	78 513
Chloride	392 833	334 324	302 115	396 162	346 465
Other potassic fertilisers	29 902	13 203	17 583	15 929	9 882
Latvia					
Chloride	25 408	19 361	9 489	8 875	10 845
Other potassic fertilisers	960	1 982	132	312	111
Lithuania					
Sulphate	12 553	12 086	10 439	15 637	10 971
Chloride	172 622	123 782	143 499	138 895	107 749
Macedonia					
Potassic fertilisers	5 736	362	995	490	607
Netherlands					
Sulphate	23 765	26 208	24 658	21 211	17 393
Chloride	387 637	445 767	265 838	314 011	307 612
Other potassic fertilisers	4 321	2 486	5 283	6 691	3 899
Norway					
Sulphate	267 653	247 379	266 149	241 918	190 757
Chloride	309 061	306 369	307 422	349 459	353 452

Potash

Imports continued

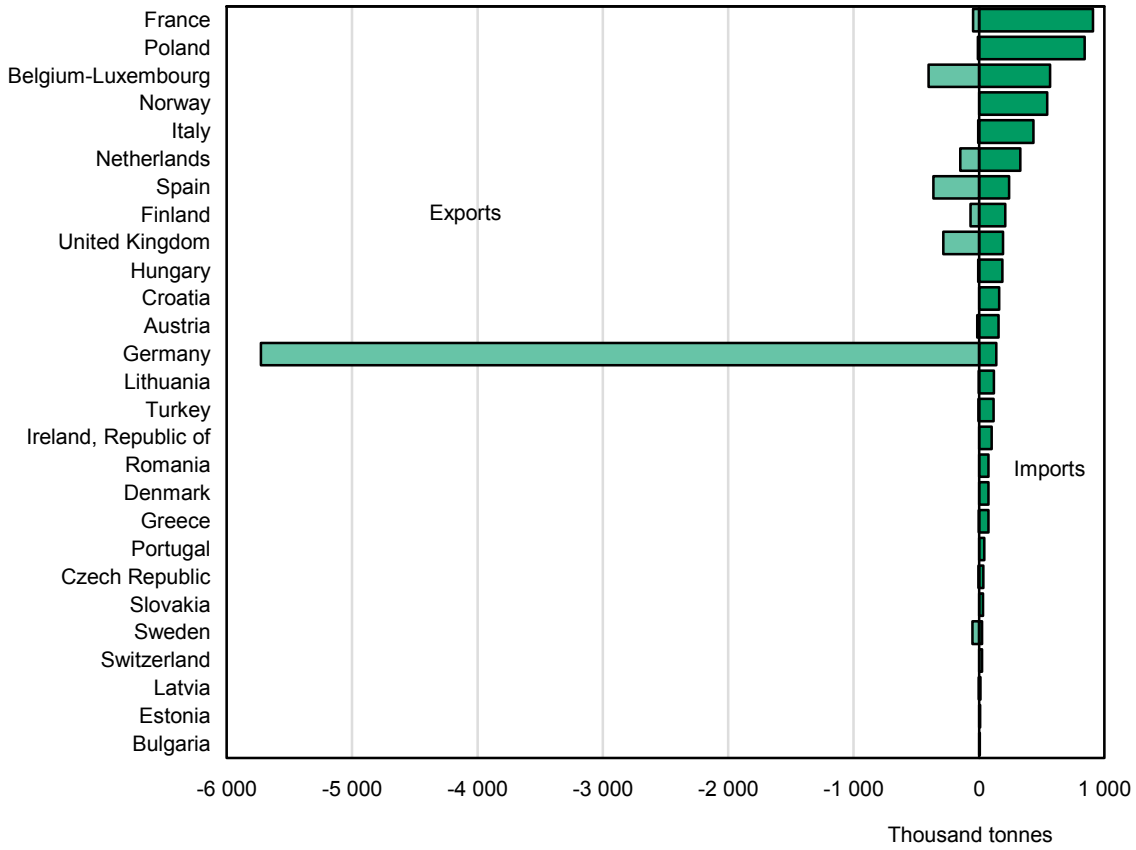
tonnes

Country	2004	2005	2006	2007	2008
Poland					
Fertiliser salts	2 264	621	1 066	...	...
Sulphate	24 143	21 770	14 517	20 242	19 161
Chloride	1 098 679	1 041 798	770 674	992 979	815 282
Other potassic fertilisers	4 174	4 726	4 110	4 659	7 143
Portugal					
Sulphate	7 526	3 631	3 227	4 223	1 869
Chloride	79 232	65 682	58 237	51 600	38 200
Other potassic fertilisers	1 752	2 780	2 141	1 629	1 708
Romania					
Sulphate	8 070	757	6 361	4 086	5 133
Chloride	53 008	41 974	35 384	50 558	68 877
Other potassic fertilisers	653	563	491	1 058	338
Slovakia					
Chloride	33 460	28 400	31 791	29 514	28 757
Other potassic fertilisers	2 722	576	1 752	2 375	1 832
Slovenia					
Potassic fertilisers	1 751	1 704	2 465	1 973	2 166
Spain					
Sulphate	48 174	47 561	10 412	5 547	40 911
Chloride	269 278	243 017	224 320	199 403	194 656
Other potassic fertilisers	22 019	4 667	86	25	3 548
Sweden					
Sulphate	2 819	4 911	10 191	1 004	2 872
Chloride	68 457	43 106	44 941	27 470	15 689
Other potassic fertilisers	4 409	1 119	4 109	4 886	4 735
Switzerland					
Sulphate	2 170	3 325	4 215	5 259	4 685
Chloride	19 185	18 971	18 811	19 279	15 158
Other potassic fertilisers	3 039	3 411	2 555	2 504	2 861
Turkey					
Sulphate	59 381	39 198	19 373	57 661	33 427
Chloride	130 748	135 433	78 671	96 038	82 412
United Kingdom					
Fertiliser salts	9 204	9 517	10 696	...	...
Chloride	207 056	198 893	170 942	202 623	165 331
Other potassic fertilisers	12 383	13 151	15 584	26 979	27 076

Note(s)

(a) K₂O content

Potash - EU32 trade in 2008



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 four countries of which China is by far the largest producer (95–99 per cent). There is no EU32 production, thus Europe is entirely import dependent.
- Despite the limited production base, REE prices were remarkably stable. Throughout 2008 and 2009, bastnaesite concentrate (70 per cent leached) traded at US\$2.25 per pound rare earth oxides (REO). The price for lanthanum oxide (99 per cent) rose steadily in 2008 from a starting rate of US\$5.20 per kilogram to a high of US\$9.60 per kilogram by June, where it levelled off and then began to fall finishing the year at US\$8.50 per kilogram. In 2009 the price experienced a generally downward trend, to reach a low of US\$4.90 per kilogram in October before rising slightly to end the year at US\$5.50 per kilogram.

Exports of rare earths

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Cerium compounds	1 564	1 980	1 569	2 596	2 702
Other rare earth compounds	6 415	6 449	5 911	9 039	8 508
Metals	456	421	333	359	373
Belgium-Luxembourg					
Rare earth compounds	721	413	302	802	408
Metals	237	187	444	253	299
Czech Republic					
Cerium compounds	6	8	8	6	3
Other rare earth compounds	2	4	5	6	5
Denmark					
Metals	0	0	0	4	2
Estonia					
Rare earth compounds	1 064	2 319	6 819	3 183	2 916
Metals	14	3	1	1	1
Finland					
Rare earth compounds	1	2	1	1	103
Metals	...	...	...	104	...
France					
Rare earth compounds	8 588	2 007	2 185	2 545	1 854
Ferro-cerium and other pyrophoric alloys	125	32	85	133	—
Metals	65	7	24	11	11
Germany					
Rare earth compounds	108	123	145	217	188
Metals	4	1	1	8	3
Hungary					
Rare earth compounds	...	0	...	...	14
Ireland, Republic of					
Rare earth compounds	85	14	73	8	9
Italy					
Rare earth compounds	20	13	43	38	153
Metals	81	168	56	177	112
Lithuania					
Cerium compounds	0	1	3	4	3
Netherlands					
Rare earth compounds	87	171	157	77	131
Metals	124	13	16	64	202
Norway					
Rare earth compounds	1	...	...	1	21
Metals	...	11	59	0	1
Poland					
Cerium compounds	0	0	0	15	8
Other rare earth compounds	—	0	0	33	22
Metals	...	...	...	—	5
Slovenia					
Cerium compounds	...	...	...	2	1

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Spain					
Cerium compounds	12	17	45	63	8
Other rare earth compounds	80	20	18	2	17
Ferro-cerium and other pyrophoric alloys	2	3	1	...	...
Switzerland					
Cerium compounds	1	1	2	2	1
Other rare earth compounds	2	3	7	3	1
United Kingdom					
Cerium compounds	47	121	111	37	73
Other rare earth compounds	1 157	1 189	954	1 089	622
Ferro-cerium and other pyrophoric alloys	197	2	76	80	7
Metals	10	26	29	143	237

Note(s)

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

Imports of rare earths

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Cerium compounds	2 034	3 055	2 009	3 431	3 487
Other rare earth compounds	3 973	2 685	2 618	3 762	3 589
Metals	463	374	403	512	561
Belgium-Luxembourg					
Cerium compounds	615	411	280	490	259
Other rare earth compounds	287	139	138	353	142
Ferro-cerium and other pyrophoric alloys	7	5	5	2	3
Metals	226	252	443	297	259
Czech Republic					
Rare earth compounds	92	198	227	228	155
Ferro-cerium and other pyrophoric alloys	1	3	6	4	5
Denmark					
Cerium compounds	2	...	1	1	11
Other rare earth compounds	21	16	41	30	10
Estonia					
Rare earth compounds	3 258	4 352	6 804	4 721	4 469
Metals	5	8	10	...	...
Finland					
Cerium compounds	73	83	117	92	101
Other rare earth compounds	10	13	21	5	7
France					
Cerium compounds	11 710	7 105	9 723	8 831	9 116
Other rare earth compounds	1 037	585	1 329	1 232	768
Ferro-cerium and other pyrophoric alloys	1	5	3	2	3
Metals	251	322	479	417	447
Germany					
Cerium compounds	1 082	1 082	975	901	673
Other rare earth compounds	7 776	6 961	7 024	9 748	10 192
Ferro-cerium and other pyrophoric alloys	214	6	3	7	6
Metals	285	402	369	410	430
Greece					
Cerium compounds	9	3	4	2	1
Ferro-cerium and other pyrophoric alloys	15	1	0	25	0
Hungary					
Rare earth compounds	158	131	146	242	116
Ireland, Republic of					
Rare earth compounds	74	32	7	23	21
Italy					
Cerium compounds	504	651	540	694	710
Other rare earth compounds	428	336	313	452	431
Ferro-cerium and other pyrophoric alloys	1	17	1	2	2
Metals	108	38	58	149	144

Rare Earths

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Lithuania					
Rare earth compounds	80	34	52	3	8
Netherlands					
Cerium compounds	103	141	290	473	278
Other rare earth compounds	2 254	1 879	2 781	3 868	2 766
Ferro-cerium and other pyrophoric alloys	7	3	3	3	4
Metals	10	14	135	100	261
Norway					
Metals	702	544	686	738	341
Poland					
Cerium compounds	56	79	109	85	148
Other rare earth compounds	5	39	74	63	58
Metals	3	6	7	1	—
Portugal					
Rare earth compounds	13	46	46	115	20
Ferro-cerium and other pyrophoric alloys	23	—	4	4	0
Metals	3	4	5	0	0
Romania					
Rare earth compounds	21	22	8	9	6
Slovakia					
Rare earth compounds	9	10	8	8	5
Slovenia					
Rare earth compounds	6	4	27	4	3
Metals	107	139	96	139	88
Spain					
Rare earth compounds	692	824	828	835	691
Ferro-cerium and other pyrophoric alloys	1 267	8	29	40	15
Metals	84	20	84	95	274
Sweden					
Rare earth compounds	58	26	20	56	68
Metals	56	41	37	74	46
Switzerland					
Rare earth compounds	29	34	38	34	34
Ferro-cerium and other pyrophoric alloys	...	...	...	...	6
Turkey					
Rare earth compounds	171	155	117	183	360
Ferro-cerium and other pyrophoric alloys	253	...	...	...	12
Metals	4	0	0	8	9
United Kingdom					
Cerium compounds	1 914	2 324	1 615	2 167	2 067
Other rare earth compounds	775	775	600	664	251
Ferro-cerium and other pyrophoric alloys	9	19	60	77	57
Metals	135	166	88	88	133

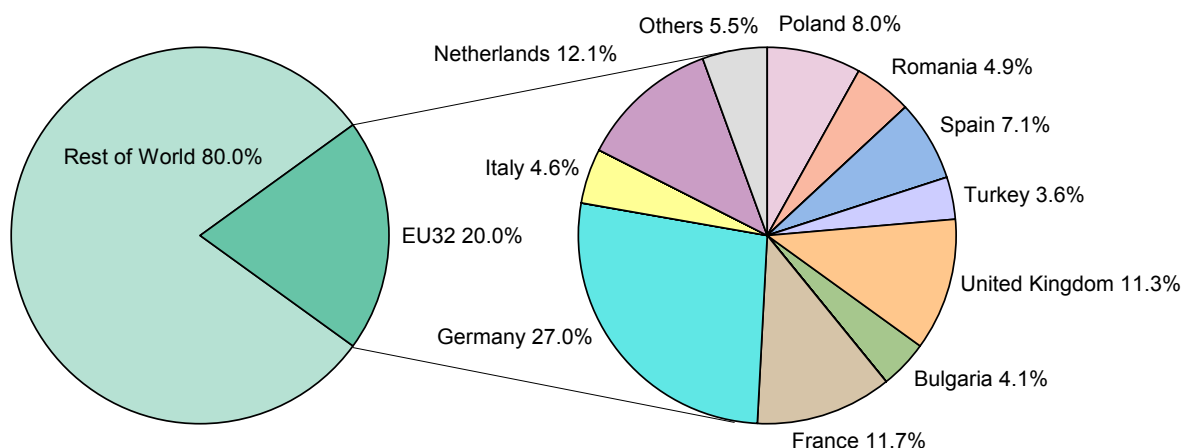
Note(s)

(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 2008 the largest producer was China (23 per cent). In the EU32 the largest producer was Germany (27 per cent of total EU32 production).
- Because of the wide availability of salt, markets tend to be generally stable. However, although the price of Chinese industrial solar salt started 2008 at US\$27–US\$29 per tonne, it leapt to US\$66 per tonne in August, before falling back to US\$44 per tonne by the end of the year. In 2009 the price fell further to US\$22 per tonne but then recovered in March 2009 to the range US\$27–US\$29 per tonne for the remainder of the year.

EU32 Production of salt 2008



Production of salt

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Rock salt	1 228	1 497	1 336	1 172	503
Salt in brine	745 670	771 455	764 103	735 724	866 674
Bulgaria	1 900 000	1 900 000	2 000 000	2 000 000	2 100 000
Croatia	32 723	36 970	29 589	32 536	3 956
Denmark	* 600 000	* 600 000	* 600 000	* 600 000	* 600 000
France					
Rock salt	406 000	494 000	...	...	...
Brine salt	1 433 000	1 468 000	...	...	...
Salt in brine	4 408 000	4 750 780	(a) 9 371 000	(a) 6 139 840	(a)* 6 000 000
Sea salt	1 365 000	1 026 000	...	...	...
Germany					
Rock salt	7 268 000	8 258 000	9 280 000	4 826 000	5 545 000
Brine salt	974 000	1 006 000	1 001 000	1 010 000	989 000
Salt in brine	7 212 000	7 449 000	7 189 000	7 558 000	7 307 000
Greece	187 522	198 024	* 200 000	212 000	220 000
Italy					
Rock salt and brine salt	3 174 313	3 475 734	2 823 960	2 214 133	2 334 315
Netherlands	5 896 000	6 155 000	6 056 000	6 177 000	6 200 000
Poland					
Rock salt	1 099 072	1 123 219	1 129 875	591 240	618 111
Brine salt	2 940 169	2 889 941	2 899 076	2 930 726	2 783 198
Other salt	195 873	118 703	808 247	785 694	706 618
Portugal					
Rock salt	661 704	597 945	586 190	590 588	* 590 000
Sea salt	75 400	92 495	76 858	64 048	69 249
Romania	2 399 956	2 442 640	2 621 129	2 475 349	2 526 774
Slovakia	121 600	105 100	122 500	117 000	109 510
Slovenia	2 852	803	1 624	3 029	535

Salt

Production continued

tonnes

Country	2004	2005	2006	2007	2008
Spain					
Rock salt	2 656 904	2 909 526	2 809 046	2 560 658	2 330 518
Sea salt	1 227 625	1 368 960	1 506 343	1 330 442	1 207 951
Other salt	108 733	121 461	115 826	102 524	100 946
Switzerland	486 000	539 000	525 000	353 000	358 000
Turkey					
Rock salt	6 100	512	...	...	...
Sea salt	582 440	529 235	* 500 000	* 500 000	* 500 000
Other salt	1 569 178	1 196 486	* 1 200 000	1 385 822	1 367 981
United Kingdom					
Rock salt	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000	* 2 000 000
Brine salt	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000
Salt in brine (b)	* 2 800 000	* 2 800 000	* 2 800 000	* 2 800 000	* 2 800 000
EU32 Total	55 500 000	57 400 000	60 000 000	51 100 000	51 200 000

Note(s)

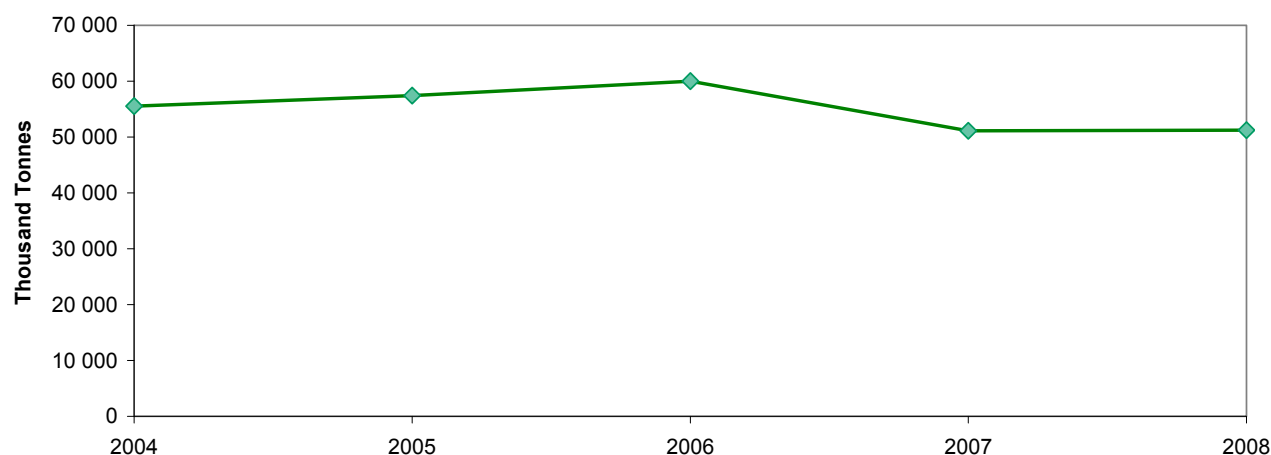
(1) This table does not include production of refined salt

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

(a) Salt; all forms

(b) Used for purposes other than salt-making

EU32 Production of salt 2004 - 08



Exports of salt

tonnes

Country	2004	2005	2006	2007	2008
Austria	183 850	199 133	202 465	235 775	388 681
Belgium-Luxembourg	105 680	121 103	94 196	55 208	61 231
Bulgaria	8 586	10 090	16 020	13 943	8 239
Croatia	9 226	5 688	9 759	3 986	4 530
Cyprus	559	635	521	769	956
Czech Republic	12 986	13 833	30 648	18 760	14 116
Denmark	350 587	355 887	115 980	261 895	265 036
Estonia	68	149	572	429	121
Finland	458	384	531	424	336
France	506 431	407 255	254 487	363 438	231 953
Germany	3 201 549	3 372 522	3 943 083	2 787 088	2 782 861
Greece	44 664	50 390	62 896	37 232	48 908
Hungary	576	49 578	45 215	1 459	1 388
Ireland, Republic of	233	1 521	2 492	3 867	8 783
Italy	289 415	317 124	361 602	212 223	322 221
Latvia	5 169	10 205	14 485	14 282	13 741

Exports continued

tonnes

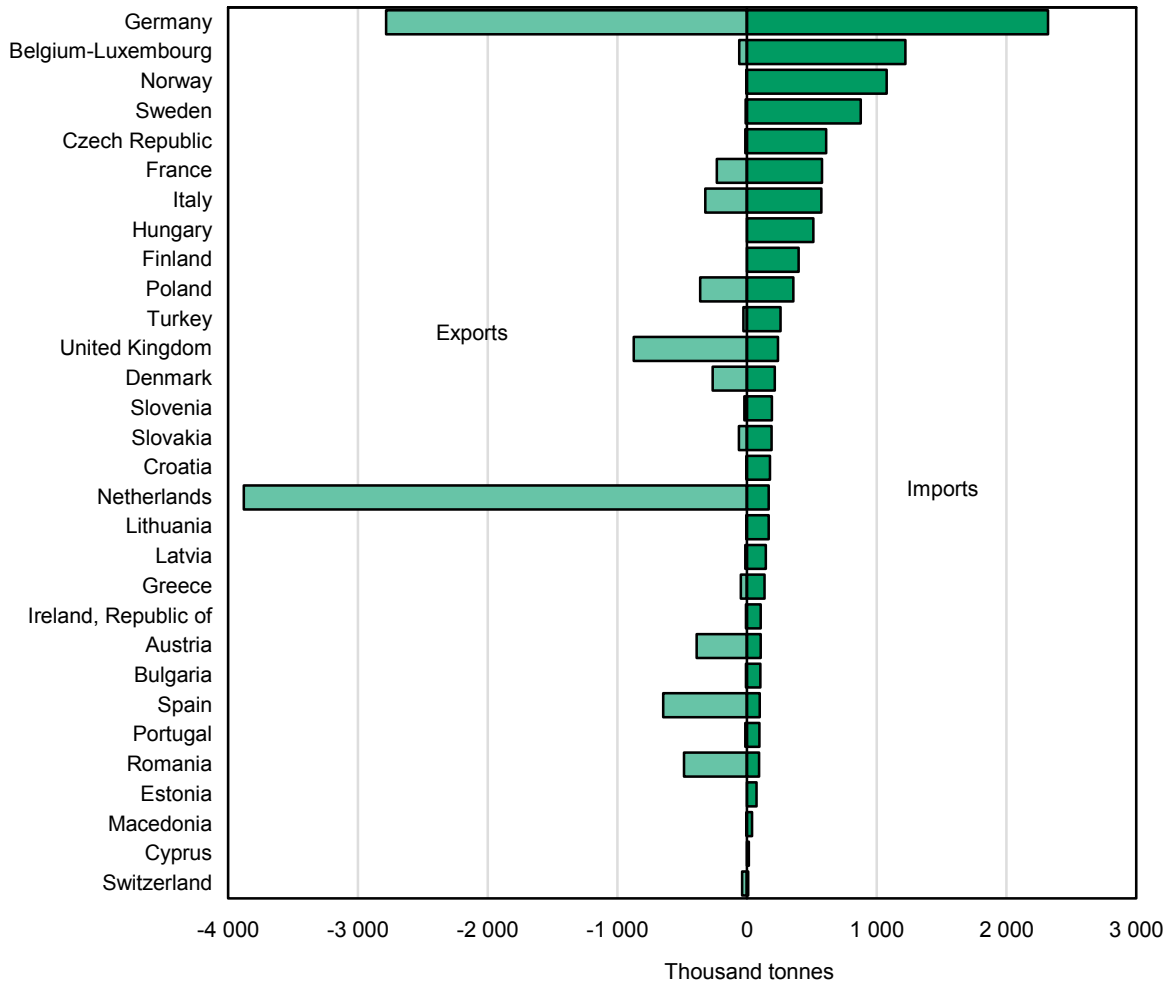
Country	2004	2005	2006	2007	2008
Lithuania	5 457	5 895	7 150	6 761	6 063
Macedonia	1 329	2 677	4 508	5 091	3 255
Netherlands	3 212 606	3 749 442	4 126 810	4 055 898	3 878 601
Norway	4 948	6 679	9 040	4 178	4 833
Poland	493 259	495 481	498 345	345 335	361 691
Portugal	4 444	6 130	11 872	25 341	13 412
Romania	497 826	598 154	503 629	506 641	486 040
Slovakia	51 539	53 451	51 566	51 517	62 133
Slovenia	5 253	8 034	20 702	18 280	20 590
Spain	744 750	750 180	743 390	463 791	646 288
Sweden	10 354	8 783	9 357	12 601	10 444
Switzerland	41 044	30 461	62 318	55 916	37 772
Turkey	30 898	22 167	17 095	11 164	27 393
United Kingdom	691 895	538 796	557 311	514 868	873 708

Imports of salt

tonnes

Country	2004	2005	2006	2007	2008
Austria	350 903	210 736	429 515	143 538	105 335
Belgium-Luxembourg	1 236 192	1 315 385	2 275 674	1 230 983	1 220 421
Bulgaria	138 631	165 727	181 801	71 848	103 007
Croatia	165 277	226 931	193 911	104 066	176 408
Cyprus	8 650	13 795	13 647	12 208	13 445
Czech Republic	909 966	891 667	1 151 331	567 960	610 149
Denmark	440 020	436 794	520 735	230 787	213 931
Estonia	78 849	58 269	78 483	72 445	72 149
Finland	408 367	438 346	401 961	409 761	397 033
France	850 703	1 110 898	1 024 789	592 976	578 882
Germany	2 467 276	2 558 898	2 591 036	2 476 738	2 319 273
Greece	173 729	162 669	277 940	177 719	134 557
Hungary	486 695	592 522	662 455	514 119	510 287
Ireland, Republic of	83 789	83 746	96 164	89 236	105 636
Italy	833 790	773 507	863 836	611 435	572 965
Latvia	122 251	139 662	149 696	123 316	144 424
Lithuania	204 839	198 994	197 262	171 915	166 505
Macedonia	34 790	39 178	40 184	35 657	37 575
Malta	3 863	5 453	1 629	3 590	3 794
Netherlands	535 581	630 738	1 150 949	193 457	167 508
Norway	741 959	910 846	1 026 541	988 001	1 075 905
Poland	294 590	376 829	582 080	313 297	356 929
Portugal	121 621	70 266	110 581	169 480	94 501
Romania	120 787	131 683	113 585	111 681	92 815
Slovakia	266 601	320 413	299 087	182 234	189 268
Slovenia	178 531	207 314	232 017	148 352	190 017
Spain	36 494	111 449	37 632	33 691	97 348
Sweden	929 193	738 931	1 054 982	744 328	875 294
Switzerland	9 299	48 114	19 300	8 913	8 988
Turkey	307 039	320 147	285 694	35 382	257 146
United Kingdom	219 581	287 623	246 879	237 772	237 288

Salt - EU32 trade in 2008



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 2008, known production was restricted to only five 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 EU32 is France.
- In 2008, kyanite prices, ex-works USA (54–60 per cent Al_2O_3 ,) traded in the range US\$167–US\$309 per short ton and in 2009 they ranged from US\$211 per short ton to US\$301 per short ton.

Production of sillimanite minerals

tonnes

Country	2004	2005	2006	2007	2008
France					
Andalusite	68 000	* 65 000	* 65 000	* 65 000	* 65 000

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	2004	2005	2006	2007	2008
Belgium-Luxembourg	49 319	77 463	48 825	47 141	62 423
France	51 653	55 052	59 002	66 776	66 242
Germany	14 382	12 191	13 257	16 143	18 231
Hungary					
Mullite	6 108	6 920	6 870	(a)* 7 500	(a)* 7 100
Netherlands	10 097	11 444	7 679	9 689	10 848
United Kingdom	2 016	2 417	1 925	2 430	2 076

Note(s)

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

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

Imports of sillimanite minerals

tonnes

Country	2004	2005	2006	2007	2008
Austria	1 981	2 194	2 100	3 160	2 639
Belgium-Luxembourg	53 146	81 538	50 726	52 899	68 986
Czech Republic	3 779	3 733	6 765	5 601	6 686
Denmark	2 274	2 909	3 023	3 377	2 482
Finland	302	445	207	109	2 638
France	3 360	3 080	4 813	6 026	6 255
Germany	60 782	58 047	80 183	109 961	79 668
Greece	107	25	62	734	2 662
Hungary	2 396	4 519	3 001	3 428	4 004
Italy	15 132	27 476	26 304	24 807	30 616
Netherlands	12 975	20 001	24 195	17 488	24 457
Norway	3 605	2 400	2 288	3 404	2 702
Poland					
Sillimanite minerals	14 928	9 975	21 196	23 321	16 975
Mullite	1 355	2 207	2 012	4 956	3 728
Portugal	337	160	192	293	646
Slovakia	2 444	4 312	2 069	3 299	1 919
Spain	15 262	27 308	22 102	27 792	34 909
Sweden	5 470	5 086	5 568	6 381	5 212
Switzerland	315	413	463	1 035	1 128
Turkey	5 110	5 504	2 939	6 987	9 535
United Kingdom					
Sillimanite minerals	24 348	39 650	10 268	10 239	11 920
Mullite	12 392	10 430	7 468	12 036	6 488

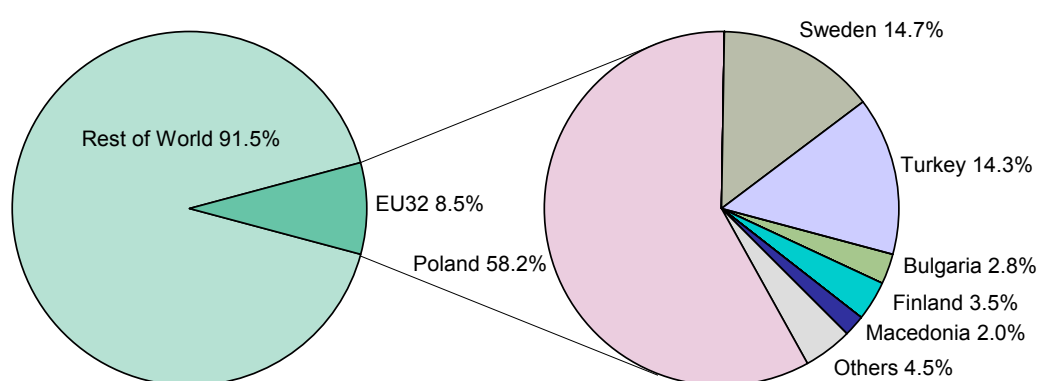
Note(s)

(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 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 2008 the world's largest producers were Peru, Mexico and China, together accounting for 45 per cent of world production. The largest EU32 producer was Poland (58 per cent of EU32 production and five per cent of world production).
- The first three months of 2008 saw the price increase sharply to US\$19.51 per troy ounce although this dropped back over the following three months. A second peak of US\$18.03 per troy ounce in July was followed by a significant drop to a low of US\$9.87 per troy ounce in November. Despite this, the average for 2008 was US\$15.02 per troy ounce. During 2009 the price for silver has generally increased from US\$11.29 per troy ounce at the start of the year to US\$17.79 per troy ounce at the end of the year, averaging US\$14.89 per troy ounce over the year as a whole.

EU32 Mine Production of silver 2008

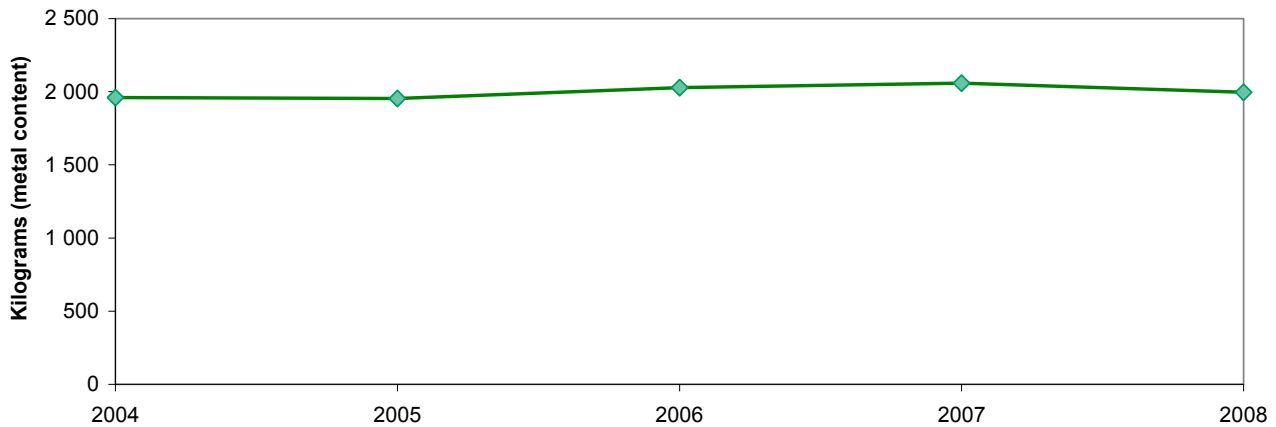


Mine production of silver

kilograms (metal content)

Country	2004	2005	2006	2007	2008
Bulgaria	* 45 000	* 55 000	* 65 000	* 55 000	* 55 000
Finland	49 400	47 462	50 843	44 895	69 906
France	682	—	—	—	—
Greece	—	2 300	25 500	38 300	35 500
Ireland, Republic of	5 200	10 500	12 900	9 650	8 462
Italy	100	100	—	—	—
Macedonia	—	—	* 10 000	* 30 000	* 40 000
Poland	1 372 700	1 262 400	1 265 100	1 199 000	1 161 000
Portugal	24 400	23 786	20 078	26 514	28 825
Romania	* 18 000	* 18 000	* 18 000	* 18 000	* 18 000
Spain	3 583	5 227	2 369	—	—
Sweden	319 563	309 933	292 255	323 171	293 068
Turkey	122 000	219 000	* 266 000	* 315 000	* 286 000
EU32 Total	1 961 000	1 954 000	2 028 000	2 060 000	1 996 000

EU32 Mine production of silver 2004 - 08



Exports of silver

kilograms

Country	2004	2005	2006	2007	2008
Austria					
Metal	77 400	62 600	120 400	115 100	95 000
Belgium-Luxembourg					
Ores and concentrates	29 800	7 200	8 000	47 600	33 100
Metal	24 100	12 600	45 200	31 200	42 000
Croatia					
Metal	733	352	324	461	163
Czech Republic					
Metal	291 519	29 337	98 354	102 968	117 325
Denmark					
Metal	17 710	14 748	24 299	43 775	18 782
Finland					
Ores and concentrates	507 350	416 650	262 669	700	38
Metal	9 804	6 764	6 041	3 400	3 400
France					
Ores and concentrates	7 100	...	...	26 500	51 100
Metal	404 600	252 300	228 673	208 832	215 148
Germany					
Metal	2 814 700	2 631 200	2 995 900	2 884 200	3 012 400
Greece					
Metal	3 299	152	3 325	8 300	7 400
Hungary					
Metal	2 519	1 033	395	527	139
Ireland, Republic of					
Ores and concentrates	1 137	19	...	2 560	—
Italy					
Metal	616 861	564 308	516 281	547 042	519 148
Lithuania					
Metal	560	245	300	...	600
Macedonia					
Metal	64	500	...	71	26
Netherlands					
Ores and concentrates	42 000	...	26 860	...	18 000
Metal	99 221	93 668	151 077	144 024	208 300
Norway					
Metal	69 207	66 139	52 952	45 461	59 381
Poland					
Metal	821 501	318 800	519 800	1 148 300	1 121 900
Portugal					
Ores and concentrates	...	...	...	4 000	13 500
Metal	1 356	1 673	411	218	7 876
Slovakia					
Metal	7 112	1 872	3 430	35 036	6 061
Slovenia					
Metal	2 699	6 382	3 100	5 200	8 800

Exports continued

kilograms

Country	2004	2005	2006	2007	2008
Spain					
Ores and concentrates	...	...	...	1 608	—
Metal	43 448	11 665	7 915	13 637	379 675
Sweden					
Ores and concentrates	...	...	...	59 400	...
Metal	473 000	421 000	368 000	364 500	521 200
Switzerland					
Metal	1 085 657	1 044 080	930 397	1 201 402	1 616 115
Turkey					
Metal	2 731	27 323	8 932	10 700	20 897
United Kingdom					
Ores and concentrates	7 583	13 387	...	1 627	192
Metal	1 754 885	2 289 098	1 069 383	2 317 951	6 071 009

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	2004	2005	2006	2007	2008
Austria					
Metal	127 600	127 900	168 300	151 600	441 900
Belgium-Luxembourg					
Ores and concentrates	1 090	625	536 600	195 900	254 200
Metal	476 800	175 200	258 700	443 200	354 200
Croatia					
Metal	3 340	3 837	5 043	3 684	3 293
Cyprus					
Metal	5 257	5 675	2 866	3 746	2 863
Czech Republic					
Metal	2 573 092	103 373	602 527	647 818	1 557 076
Denmark					
Metal	18 909	18 173	26 104	62 049	51 992
Estonia					
Metal	10 138	133 123	10 100	3 100	5 800
Finland					
Metal	75 350	70 623	64 504	55 400	44 800
France					
Ores and concentrates	19 800	1 955	16 300	39 800	21 300
Metal	675 245	731 182	734 679	643 280	544 821
Germany					
Ores and concentrates	...	...	1 323 500	859 400	6 024 500
Metal	1 434 200	1 861 800	2 227 600	2 565 300	2 668 900
Greece					
Metal	95 318	1 059 816	46 241	1 039 000	276 100
Hungary					
Metal	33 036	15 711	206 137	14 581	8 354
Ireland, Republic of					
Ores and concentrates	30	...	18 974	1 270	385
Metal	2 709	2 611	5 147	1 045	8 191
Italy					
Ores and concentrates	1 428	2 378	67 952	1 002	—
Metal	1 776 385	1 635 765	1 583 508	1 445 303	1 167 457
Latvia					
Metal	—	189 912	16	1 400	1 100
Lithuania					
Metal	5 885	3 943	4 500	5 200	6 900
Macedonia					
Metal	3 725	3 813	3 901	3 612	3 807
Malta					
Metal	1 031	188	1 800	600	5 300

Silver

Imports continued

kilograms

Country	2004	2005	2006	2007	2008
Netherlands					
Metal	139 218	139 625	263 049	229 637	265 925
Norway					
Ores and concentrates	3 118 000	...	7 923 075	—	...
Metal	86 037	90 331	64 511	62 077	67 398
Poland					
Metal	34 563	40 100	28 800	77 000	95 200
Portugal					
Metal	2 237	200	300	...	200
Romania					
Metal (a)	* 10 900	* 17 700	* 18 600	* 7 700	* 9 400
Slovakia					
Metal	14 584	57 439	6 400	12 200	8 200
Slovenia					
Metal	306 403	42 380	19 700	27 800	45 000
Spain					
Ores and concentrates	54 295	59 653	56 421	58 344	75 633
Metal	158 529	106 596	134 673	126 668	1 547 747
Sweden					
Ores and concentrates	15 000	...	...	21 000	...
Metal	161 000	151 000	137 000	162 900	122 200
Switzerland					
Ores and concentrates (a)	* 141 000	* 309 400	* 792 000	* 39 800	* 9 600
Metal	1 082 664	1 484 207	1 306 866	849 037	1 520 531
Turkey					
Metal	269 009	409 844	108 588	996 239	154 639
United Kingdom					
Ores and concentrates	306 311	12 640	249	8 283	8 332
Metal	2 105 057	1 485 290	7 316 639	5 518 256	3 943 638
Waste and scrap	2 488 771	2 282 562	2 741 705	3 049 452	4 222 712

Note(s)

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

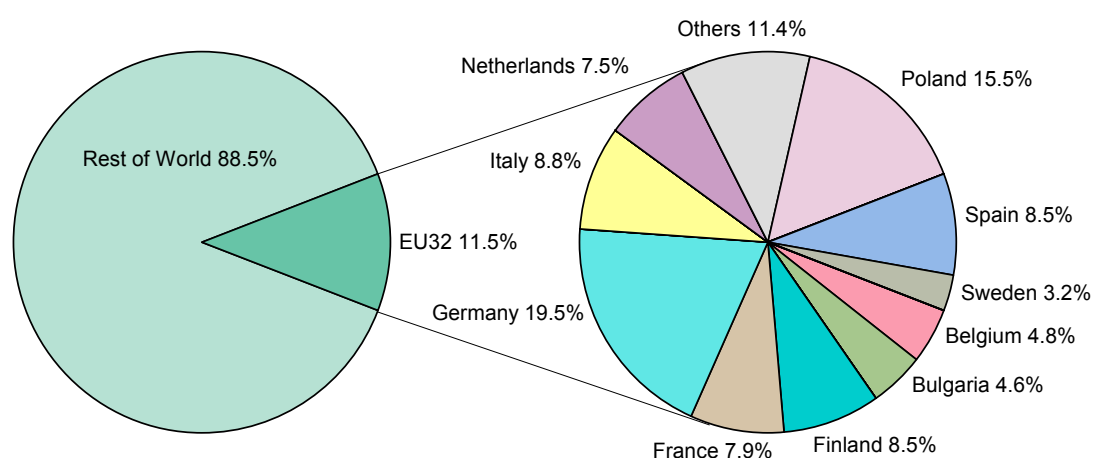
(2) In this table the term 'metal' includes both unwrought and partly worked silver and alloys

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

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 of recovered sulphur in 2008 were Canada and USA (both 14 per cent of world total) and the largest world producer of pyrites and sulphur ore was China. In the EU32 the largest producer was Germany (19.5 per cent of EU32 production).
- In 2008 sulphur prices increased dramatically as a result of reduced production in the USA and problems at other refineries. The price peaked in August 2008 at about US\$600 per tonne, but subsequently fell to about US\$70 per tonne by November, averaging US\$262.32 per tonne over the year. In early 2009, however, prices collapsed as demand fell sharply and the global recession took effect and they were reported to be close to zero at one point. Prices had recovered to around US\$30 per tonne by the end of 2009.

EU32 Production of sulphur and pyrites 2008



Production of sulphur and pyrites

tonnes (sulphur content)

Country	2004	2005	2006	2007	2008
Austria					
Recovered (a)	55 322	54 377	50 097	50 501	48 024
Belgium					
Recovered (a) (b)	371 000	376 000	391 000	395 000	394 000
Bulgaria					
Recovered (b)	301 000	312 000	340 000	359 000	352 000
Recovered (a)	25 000	30 000	35 000	35 000	30 000
Croatia					
Recovered (a)	9 000	9 000	7 000	9 000	7 000
Czech Republic					
Recovered (a)	60 000	65 000	65 000	65 000	61 000
Denmark					
Recovered (a)	4 660	4 223	4 142	3 896	3 467
Finland					
Pyrites	283 700	184 400	199 700	194 400	237 300
Recovered (b)	325 523	304 751	325 793	* 326 000	* 320 000
Recovered (a)	65 000	70 000	70 000	125 000	150 000
France					
Recovered (a)	698 400	622 345	616 234	605 820	* 590 000
Recovered (c)	150 000	127 000	75 000	62 000	64 000
Germany					
Recovered (a)	1 526 700	1 627 900	1 706 200	1 650 100	1 578 000
Recovered (c)	40 000	42 900	42 500	35 900	39 000
Greece					
Recovered (a)	160 000	162 000	162 000	165 000	120 000
Hungary					
Recovered (a)	35 000	65 000	50 000	65 000	55 000

Sulphur and Pyrites

Production continued

tonnes (sulphur content)

Country	2004	2005	2006	2007	2008
Italy					
Recovered (b)	113 000	92 000	87 000	84 000	82 000
Recovered (a)	575 000	650 000	680 000	650 000	645 000
Lithuania					
Recovered (a)	67 094	74 276	61 135	42 618	73 870
Netherlands					
Recovered (b)	137 000	141 000	141 000	116 000	106 000
Recovered (a)	410 000	440 000	495 000	505 000	515 000
Norway					
Recovered (b)	* 105 000	* 110 000	* 110 000	* 95 000	* 95 000
Recovered (a)	18 000	19 000	20 000	18 000	28 000
Poland					
Frasch	821 489	801 799	800 200	833 583	762 119
Recovered (b)	289 100	289 000	308 000	* 304 000	* 305 000
Recovered (a)	182 000	186 600	203 100	* 211 900	* 215 000
Portugal					
Recovered	25 000	30 000	38 000	27 000	22 000
Romania					
Recovered	53 000	79 000	60 000	64 000	61 000
Slovakia					
Recovered (b)	5 000	5 000	5 000	5 000	5 000
Recovered (a)	65 000	65 000	65 000	78 000	75 000
Spain					
Recovered (b)	488 000	541 000	547 000	543 000	551 000
Recovered (a)	145 000	* 150 000	* 150 000	* 150 000	* 150 000
Sweden					
Recovered (b)	185 800	180 000	180 000	177 000	179 000
Recovered (a)	62 238	59 839	68 391	66 569	84 456
Turkey					
Pyrites	20 000	55 000	59 000	61 000	79 000
Recovered (a) (c)	68 000	76 000	73 000	73 000	73 000
United Kingdom					
Recovered (b)	—	—	—	—	—
Recovered (a)	120 000	124 000	115 000	130 000	135 000
EU32 Total					
Pyrites	304 000	239 000	259 000	255 000	316 000
Frasch	821 000	802 000	800 000	834 000	762 000
Recovered	6 940 000	7 184 000	7 347 000	7 292 000	7 212 000

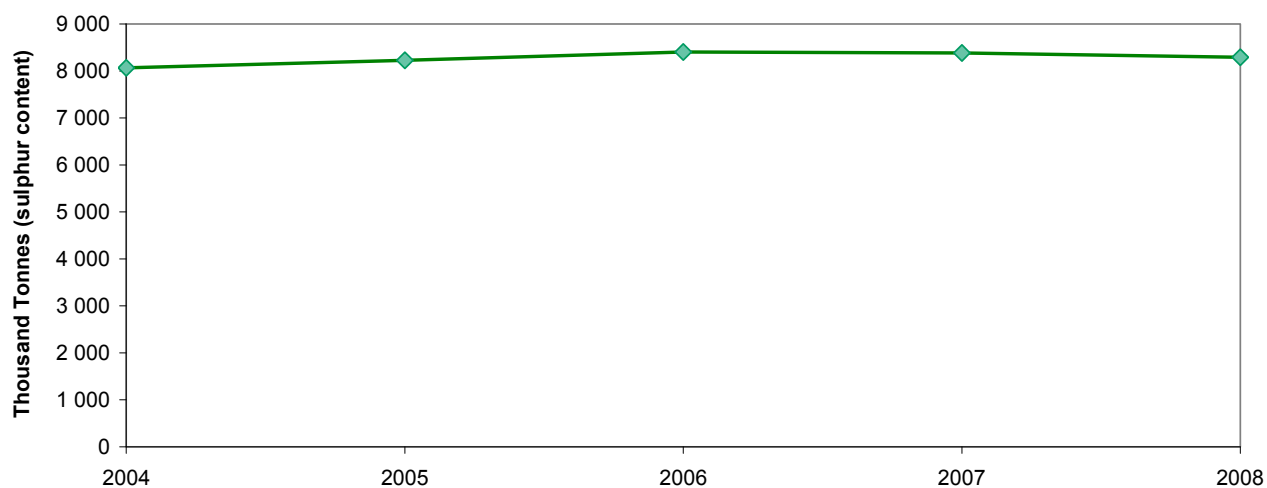
Note(s)

(a) From petroleum refining and/or natural gas

(b) From metal sulphide processing

(c) Other

EU32 Production of sulphur and pyrites 2004 - 08



Exports of sulphur and pyrites

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Pyrites	2 418	2 641	2 881	2 645	2 672
Sulphur	46	141	225	3 006	3 292
Sulphur, sublimed and precipitated	8 435	9 245	4 881	492	3 906
Belgium-Luxembourg					
Sulphur	36 824	47 927	38 494	18 393	73 317
Sulphur, sublimed and precipitated	338	290	465	531	368
Bulgaria					
Sulphur	20 103	25 019	31 737	33 039	28 993
Croatia					
Sulphur	8 505	8 028	6 606	8 614	7 604
Czech Republic					
Sulphur	9 787	9 294	11 718	5 579	16 670
Sulphur, sublimed and precipitated	1 581	503	113	114	658
Denmark					
Sulphur	2 608	332	176	153	4
Finland					
Pyrites (a)	* 279 000	* 100 000	* 73 000	* 90 000	* 386 000
Sulphur	...	3 135	3 674	3 513	2 521
France					
Sulphur	497 302	361 594	294 003	59 934	246 005
Sulphur, sublimed and precipitated	562	642	619	680	2 843
Germany					
Pyrites	339	240	486	741	485
Sulphur	894 683	898 820	796 341	828 544	654 808
Greece					
Pyrites	6 920	4 306	16 495	73 606	63 893
Sulphur	3 385	138	43 773	52 668	16 345
Hungary					
Sulphur	22 607	36 471	34 850	43 178	43 649
Italy					
Pyrites	7 384	4 763	8 646	8 024	10 071
Sulphur	165 618	225 403	290 353	263 362	219 095
Sulphur, sublimed and precipitated	930	2 159	36 881	39 061	4 693
Lithuania					
Sulphur	13 960	3 851	1	7	1 517
Netherlands					
Pyrites	76 812	82 502	82 883	102 300	132 802
Sulphur	304 026	248 680	436 669	460 352	850 183
Norway					
Sulphur	2 671	1	20	3 325	—
Poland					
Sulphur	560 340	575 796	478 736	555 603	446 202
Sulphur, sublimed and precipitated	13 706	17 364	18 426	26 376	27 041
Portugal					
Sulphur	10 838	28 122	9 747	15 410	7 539
Sulphur, sublimed and precipitated	121	80	500	1	136
Romania					
Pyrites	36	42	73	0	994
Sulphur	20 682	54 917	43 255	45 579	59 030
Slovakia					
Sulphur, sublimed and precipitated	65 648	60 776	63 019	75 817	71 373
Spain					
Sulphur	53 738	45 690	76 771	77 220	116 213
Sweden					
Sulphur	4 542	16 883	12 071	5 168	5 525
Sulphur, sublimed and precipitated	139	239	5 719	10 959	13 128
Turkey					
Sulphur	534	638	152	7 091	21 289
Sulphur, sublimed and precipitated	75	127	170	15 376	17 259
United Kingdom					
Sulphur	700	431	756	23 476	41 054
Sulphur, sublimed and precipitated	1 387	1 458	1 312	624	1 144

Note(s)

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

Imports of sulphur and pyrites

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Pyrites	3 126	3 251	3 537	3 809	3 754
Sulphur	58 218	60 054	70 350	84 659	89 038
Sulphur, sublimed and precipitated	6 339	9 589	10 850	5 556	17 842
Belgium-Luxembourg					
Sulphur, crude	152 830	167 624	...	...	265 363
Sulphur, refined	305 518	322 649	(b) 574 515	(b) 506 662	351 577
Sulphur, sublimed and precipitated	28	127	156	311	1 852
Bulgaria					
Sulphur	903	1 076	767	1 039	487
Croatia					
Sulphur	63 606	70 897	86 431	71 965	98 785
Sulphur, sublimed and precipitated	4 817	1 923	3 492	2 425	4
Cyprus					
Sulphur	1 226	1 356	893	995	895
Czech Republic					
Pyrites	83	134	223	281	1 576
Sulphur	34 787	16 983	40 147	55 196	43 473
Sulphur, sublimed and precipitated	70 159	89 595	70 555	57 410	65 242
Denmark					
Sulphur	7 883	7 066	2 335	204	2 082
Finland					
Sulphur	8 238	310	11 925	415	9 073
France					
Pyrites	5 643	4 521	2 533	160	173
Sulphur, crude	43 846	39 973	...	...	34 083
Sulphur, refined	27 041	42 353	(b) 72 785	(b) 56 072	16 009
Sulphur, sublimed and precipitated	12 555	5 809	2 439	797	5 861
Germany					
Pyrites	53 264	62 686	76 343	92 569	109 955
Sulphur	56 272	46 127	31 267	51 785	53 602
Sulphur, sublimed and precipitated	12 782	4 389	1 363	2 007	2 964
Greece					
Pyrites	5	...	31 906	94 621	40 754
Sulphur	83 733	68 765	3 933	35 625	42 733
Hungary					
Sulphur (a)	* 1 697	* 1 228	* 3 442	* 1 228	* 1 395
Sulphur, sublimed and precipitated	296	362	326	174	586
Ireland, Republic of					
Sulphur, sublimed and precipitated	1 371	2 327	2 486	887	305
Italy					
Pyrites	8 929	15 548	17 741	14 879	20 984
Sulphur, crude	8 646	3 150	...	...	32 195
Sulphur, refined	10 279	10 497	(b) 11 691	(b) 16 271	16 423
Sulphur, sublimed and precipitated	281	328	375	414	2 711
Lithuania					
Sulphur	255 917	306 635	320 658	317 678	293 365
Sulphur, sublimed and precipitated	1	560	607	0	404
Netherlands					
Pyrites	456	8 896	109	80	145 627
Sulphur	40 439	37 083	23 928	38 189	55 173
Sulphur, sublimed and precipitated	104 982	37 484	—	...	0
Norway					
Pyrites	225 513	26 940	...	...	77
Sulphur	4 559	16 413	11 983	5 224	4 690
Sulphur, sublimed and precipitated	138	240	5 571	10 790	12 932
Poland					
Pyrites	1 061	1 013	5 065	1 582	5 768
Sulphur	78 292	78 274	83 432	74 805	104 300
Portugal					
Sulphur	3 532	5 878	4 485	3 233	2 852
Sulphur, sublimed and precipitated	431	28	3	3	51
Romania					
Pyrites	...	...	...	3	1 072
Sulphur	2 075	964	1 413	1 959	2 390
Sulphur, sublimed and precipitated	9	113	112	2	180

Imports continued						tonnes
Country	2004	2005	2006	2007	2008	
Slovakia						
Sulphur	3 582	3 669	3 454	4 339	4 553	
Sulphur, sublimed and precipitated	94	689	266	753	1 518	
Slovenia						
Pyrites	375	400	463	612	683	
Sulphur	49 649	58 287	58 159	53 434	56 381	
Sulphur, sublimed and precipitated	—	90	135	1	7	
Spain						
Pyrites	1 012	1 542	1 478	2 585	1 903	
Sulphur, crude	220 662	182 318	(c) 133 552	(c) 152 566	146 376	
Sulphur, refined	13 582	5 778	...	...	7 199	
Sulphur, sublimed and precipitated	533	243	296	265	372	
Sweden						
Pyrites	699	319	557	750	691	
Sulphur	61 305	71 337	82 246	94 449	78 784	
Sulphur, sublimed and precipitated	2 693	16	23	4	112	
Switzerland						
Pyrites	117	76	69	51	135	
Sulphur	24 940	24 977	19 369	20 982	17 425	
Sulphur, sublimed and precipitated	120	61	50	5	35	
Turkey						
Pyrites	107	94	231	252	224	
Sulphur	90 502	139 197	162 187	168 952	128 685	
Sulphur, sublimed and precipitated	138	111	111	194	321	
United Kingdom						
Pyrites	29	26	19	105	704	
Sulphur, crude	44 963	24 222	11 608	5 101	64	
Sulphur, refined	3 984	7 263	7 334	8 577	9 574	
Sulphur, sublimed and precipitated	675	577	1 297	1 073	1 186	

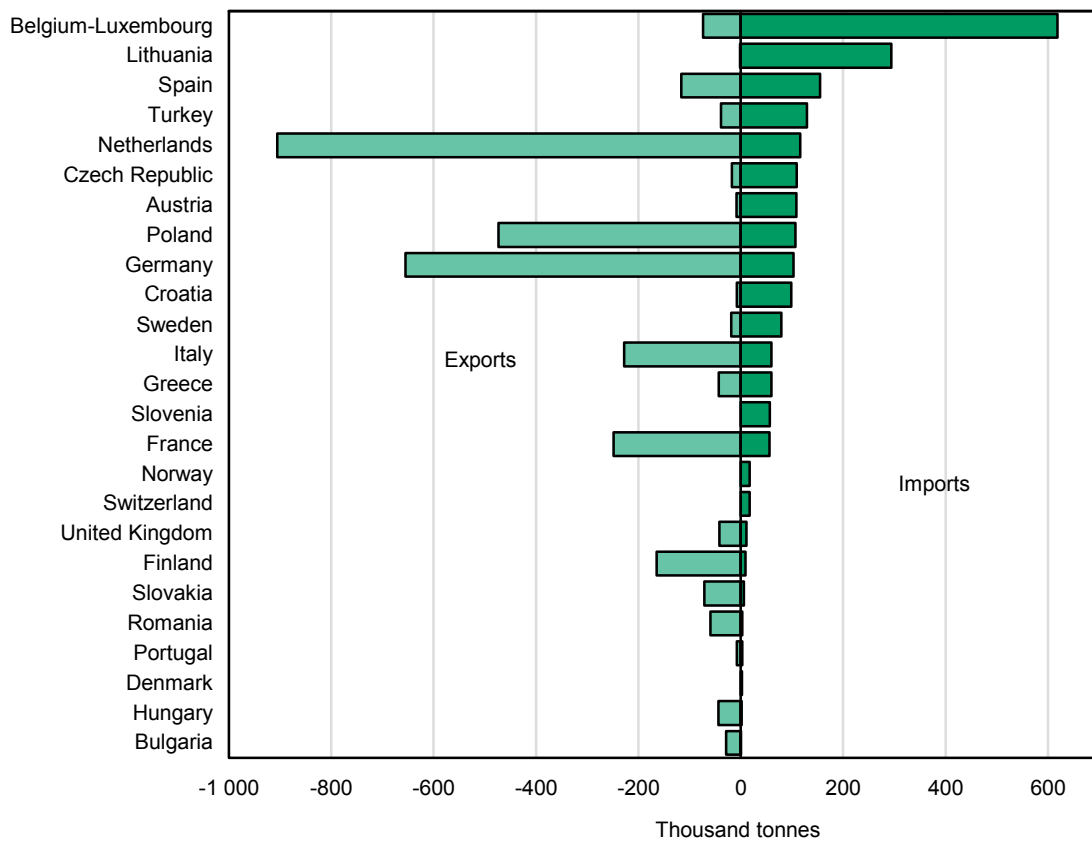
Note(s)

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

(b) Including crude

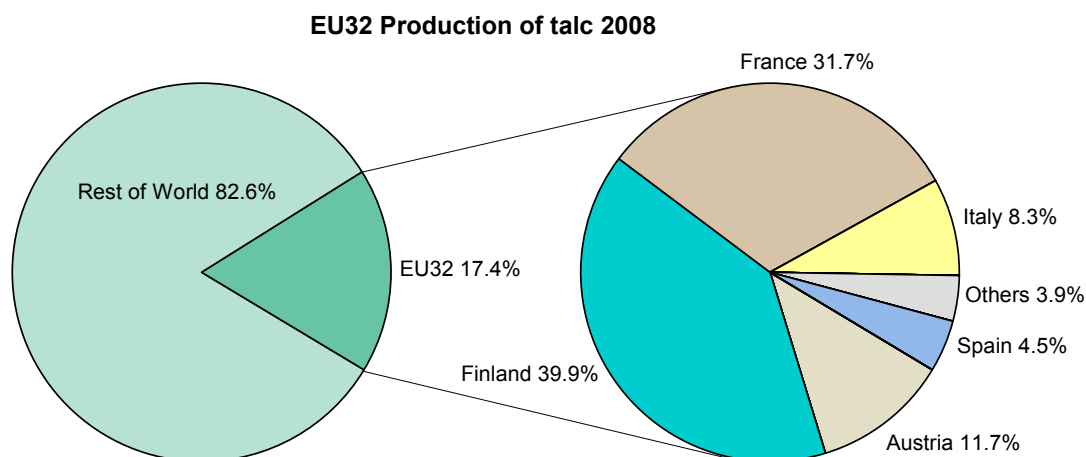
(c) Including refined

Sulphur and pyrites - EU32 trade in 2008



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 when finely ground. 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 2008 the largest world producer was China with an estimated 26 per cent of world production. The EU32 countries contributed 17 per cent to the world total and the largest producer was Finland, which accounted for 40 per cent of EU32 production.
- Talc is traded in a variety of forms and, as a result of widespread production, markets are very stable. During 2008 and 2009 prices ranged from US\$259 per tonne to US\$460 per tonne depending on grade.



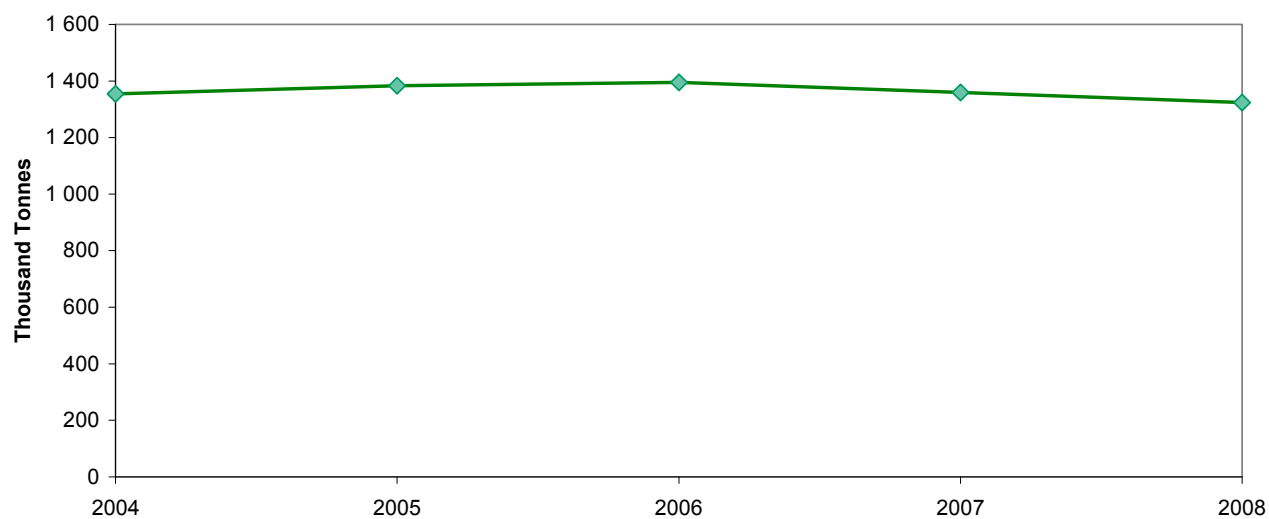
Production of talc

tonnes

Country	2004	2005	2006	2007	2008
Austria	136 305	166 569	159 447	153 409	154 577
Finland	528 943	508 169	547 146	535 882	527 686
France	402 000	416 000	* 420 000	* 420 000	* 420 000
Greece	200	250	* 250	200	* 200
Italy	111 887	140 581	130 714	112 080	* 110 000
Macedonia	4 350	1 955	1 025	1 775	977
Norway	32 000	34 000	* 34 000	* 34 000	* 30 000
Portugal	6 231	5 362	5 517	12 367	* 12 500
Romania	9 725	6 760	2 967	1 513	1 843
Slovakia	3 000	200	—	—	...
Spain					
Talc	107 829	90 589	83 502	78 042	59 299
Pyrophyllite	700	700	—	—	—
Sweden	8 000	7 000	6 000	7 000	4 000
United Kingdom	3 881	6 000	4 325	2 850	2 410
EU32 Total	1 355 000	1 384 000	1 395 000	1 359 000	1 323 000

Talc

EU32 Production of talc 2004 - 08



Exports of talc

tonnes

Country	2004	2005	2006	2007	2008
Austria	151 022	158 799	165 923	153 457	135 390
Belgium-Luxembourg	128 120	168 900	144 081	165 105	139 619
Finland (a)	* 275 000	* 278 000	* 246 000	* 284 000	* 320 000
France	262 147	279 659	273 706	276 014	269 771
Germany	3 862	3 906	4 790	5 394	6 382
Greece	2 566	3 479	4 065	5 016	3 926
Hungary	1 533	—	—	162	131
Italy	118 131	120 920	122 148	131 071	114 017
Macedonia	664	789	735	1 124	509
Netherlands	225 528	183 270	190 668	199 896	186 688
Norway	30 279	28 448	31 834	33 032	27 371
Portugal	1 117	1 614	6 013	4 243	3 841
Slovakia	1 239	1 051	1 011	1 494	1 994
Spain	60 832	56 493	47 142	39 689	51 180
Sweden	9 388	10 080	7 556	9 415	9 227
Turkey	1 963	2 806	1 195	1 742	1 636
United Kingdom	3 317	5 244	4 626	2 389	3 129

Note(s)

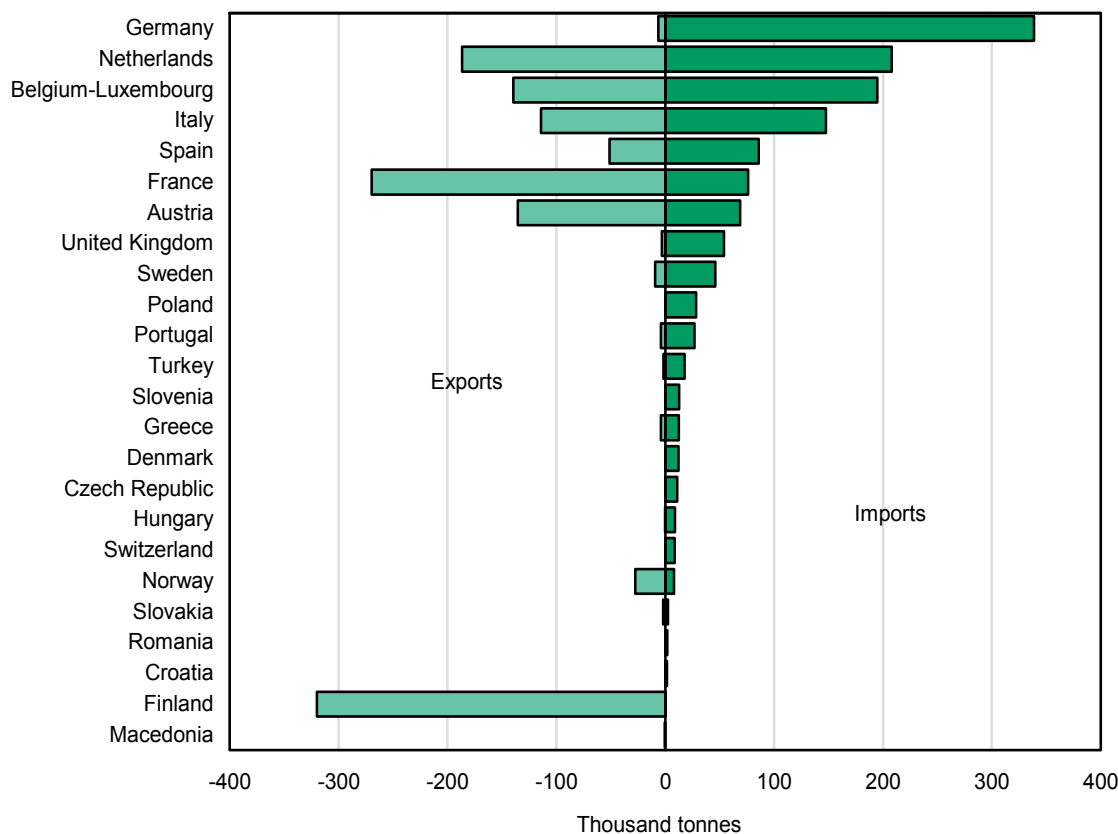
(a) BGS estimates, based on known imports into certain countries

Imports of talc

tonnes

Country	2004	2005	2006	2007	2008
Austria	49 930	50 768	49 900	58 500	68 797
Belgium-Luxembourg	135 046	224 624	186 227	202 593	194 833
Bulgaria	487	599	626	688	1 048
Croatia	1 726	1 378	1 753	1 985	1 709
Cyprus	242	386	307	343	521
Czech Republic	9 426	9 986	10 855	12 993	11 007
Denmark	14 085	14 103	13 299	10 830	12 055
Estonia	316	300	295	418	331
Finland	1 827	866	757	663	503
France	77 240	76 021	59 853	77 772	76 147
Germany	352 177	376 618	345 863	347 230	338 606
Greece	10 061	9 937	10 000	8 550	12 372
Hungary	9 178	...	8 175	9 224	8 875
Ireland, Republic of	2 508	2 632	1 278	375	473
Italy	126 745	125 913	129 218	140 461	147 549
Latvia	154	105	217	396	417
Lithuania	87	402	463	511	388
Malta	315	302	271	179	295
Netherlands	226 602	206 485	243 071	225 720	207 922
Norway	14 522	16 488	10 991	13 374	8 020
Poland	16 155	20 536	22 348	23 122	28 186
Portugal	20 203	23 583	30 955	36 089	26 774
Romania	1 609	1 962	2 101	2 006	1 971
Slovakia	192	1 552	4 174	1 344	2 448
Slovenia	5 628	5 357	5 297	5 301	12 860
Spain	80 626	80 726	87 578	96 298	85 942
Sweden	43 288	45 376	44 669	48 746	45 801
Switzerland	9 579	10 254	10 786	10 360	8 756
Turkey	16 810	15 454	17 143	18 549	17 706
United Kingdom	66 722	65 496	55 200	54 812	53 864

Talc - EU32 trade in 2008



Tantalum and niobium

- Tantalum and niobium are produced from their ores, sometimes combined in one mineral. Tantalum is also produced 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, such as those in mobile telephones. Niobium is a soft and ductile metallic element that is used mainly in special steels and superalloys.
- World production of tantalum in 2008 was dominated by Australia (approximately 47 per cent) and the largest producer of niobium ores was Brazil (> 90 per cent). There was no production in the EU32, which is entirely import dependent.
- Tantalum is normally traded in oxide form (tantalite). During 2008 the average price for tantalite (Europe 25%/40% basis) was US\$35 per pound Ta₂O₅.

Exports of tantalum and niobium

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Tantalum	—	—	—	13	20
Belgium-Luxembourg					
Tantalum	...	...	0	3	26
Czech Republic					
Tantalum	84	68	53	66	97
Estonia					
Tantalum	39	65	51	43	67
France					
Tantalum	20	101	9	21	18
Germany					
Niobium and tantalum ores	93	...	...	...	...
Tantalum	337	190	294	199	299
Lithuania					
Tantalum	13	5	5	48	31
Netherlands					
Tantalum	24	3	76	2	2
Portugal					
Tantalum	42	15	4	63	48
Switzerland					
Tantalum	14	27	17	14	7
United Kingdom					
Tantalum	77	131	83	77	55

Note(s)

(1) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

Imports of tantalum and niobium

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Tantalum	64	0	0	70	—
Belgium-Luxembourg					
Tantalum	20	1	0	3	3
Czech Republic					
Tantalum	261	141	164	206	253
France					
Tantalum	67	23	55	83	84
Germany					
Tantalum	281	164	148	125	188
Ireland, Republic of					
Tantalum	2	8	2	3	2
Lithuania					
Tantalum	12	10	11	47	38
Netherlands					
Tantalum	35	12	6	8	10

Imports continued		tonnes				
Country	2004	2005	2006	2007	2008	
Poland						
Tantalum	1	1	0	3	52	
Portugal						
Tantalum	68	115	103	69	83	
Spain						
Tantalum	4	62	10	112	—	
United Kingdom						
Tantalum	243	97	119	96	161	

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 dominated by China with 45 per cent of the world total in 2008, while mine production from the EU32 countries is limited to a small amount from Portugal.
- The LME tin price increased sharply during the early part of 2008, reaching US\$24 052 per tonne in May before falling back to US\$11 228 per tonne by the end of the year. Prices remained low at the start of 2009, falling slightly further to US\$10 670 per tonne in March, but subsequently recovered to around US\$15 000 per tonne by the middle of the year. For the remainder of 2009 prices were relatively flat, ending at US\$15 539 per tonne.

Mine production of tin

tonnes (metal content)

Country	2004	2005	2006	2007	2008
Portugal	200	243	25	41	32

EU32 Mine production of tin 2004 - 08



Smelter production of tin

tonnes

Country	2004	2005	2006	2007	2008
Belgium	8 900	7 700	8 000	8 400	9 200

Exports of tin

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Unwrought (a)	153	116	110	167	177
Scrap	278	62	125	103	141
Belgium-Luxembourg					
Concentrates	186	286	118	68	161
Unwrought	8 803	6 814	1 633	2 734	7 274
Unwrought alloys	184	388	7 421	7 072	2 448
Scrap	607	362	216	148	233
Czech Republic					
Unwrought (a)	191	381	74	253	86
Scrap	130	65	249	958	85
Denmark					
Scrap	178	68	124	90	28
Estonia					
Scrap	7	125	17	71	88
Finland					
Unwrought (a)	53	66	95	56	77
Scrap	86	58	89	201	193
France					
Unwrought	430	324	368	552	441
Unwrought alloys	527	1 020	1 010	884	236
Scrap	457	478	893	590	654
Germany					
Concentrates	...	163	331	—	—
Unwrought	978	1 343	1 015	1 246	1 612
Unwrought alloys	408	329	392	1 371	1 530
Scrap	994	701	965	1 222	1 649
Hungary					
Unwrought (a)	343	28	70	51	140
Scrap	169	67	123	141	246
Ireland, Republic of					
Concentrates	190	151	110	75	83
Unwrought (a)	103	67	71	1 094	34
Scrap	140	58	54	77	86
Italy					
Unwrought (a)	406	503	437	567	392
Scrap	180	17	269	204	249
Latvia					
Scrap	—	20	307	—	—
Malta					
Scrap	6	9	373	340	250
Netherlands					
Unwrought	3 921	5 330	6 971	8 061	2 566
Unwrought alloys	1 430	1 790	1 051	293	948
Scrap	685	297	761	545	157
Norway					
Scrap	211	323	236	189	119
Poland					
Unwrought (a)	64	116	182	1 520	355
Scrap	704	158	37	34	20
Portugal					
Unwrought alloys	0	—	146	172	—
Scrap	—	7	124	25	147
Slovakia					
Unwrought	(a) 7	59	(a) 251	20	107
Spain					
Unwrought (a)	205	139	120	98	433
Scrap	221	435	408	460	447
Sweden					
Unwrought (a)	261	217	250	201	213
Scrap	161	45	43	161	96
Switzerland					
Unwrought (a)	72	29	160	112	114
Scrap	107	157	130	123	76
Turkey					
Unwrought (a)	10	17	18	179	118

Tin

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
United Kingdom					
Concentrates	0	2	4	373	254
Unwrought	524	1 608	8 395	4 085	1 264
Unwrought alloys	885	442	698	696	532
Scrap	7 353	20 603	35 252	27 329	19 110

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	2004	2005	2006	2007	2008
Austria					
Unwrought (a)	765	1 926	2 177	2 486	2 679
Scrap	170	79	23	10	28
Belgium-Luxembourg					
Concentrates	329	377	154	17	318
Unwrought	1 686	1 210	1 312	1 657	1 112
Unwrought alloys	3 421	1 284	1 368	2 719	2 235
Scrap	5 726	1 382	4 866	3 907	2 422
Bulgaria					
Unwrought (a)	39	51	278	51	69
Czech Republic					
Unwrought (a)	550	634	665	616	802
Finland					
Unwrought (a)	126	178	173	166	184
France					
Concentrates	3	194	22	73	81
Unwrought	9 167	7 307	8 159	7 689	6 506
Unwrought alloys	638	1 080	931	409	554
Scrap	24	217	182	432	588
Germany					
Unwrought	21 258	20 438	21 584	23 917	22 160
Unwrought alloys	453	554	936	409	179
Scrap	408	506	917	1 689	2 243
Greece					
Unwrought (a)	671	615	244	323	265
Hungary					
Unwrought (a)	155	192	384	328	320
Ireland, Republic of					
Unwrought (a)	462	307	211	249	389
Italy					
Concentrates	241	24	572	65	—
Unwrought	5 610	5 899	5 526	4 113	4 124
Unwrought alloys	95	135	392	504	777
Netherlands					
Unwrought	6 801	8 730	13 696	7 858	11 003
Unwrought alloys	1 832	1 983	1 283	1 972	2 540
Scrap	155	201	466	607	503
Norway					
Unwrought (a)	126	78	126	74	80
Poland					
Unwrought (a)	1 367	1 437	1 583	1 838	1 857
Scrap	697	705	1 653	1 931	1 038
Portugal					
Unwrought	434	971	763	577	487
Unwrought alloys	71	100	274	419	130
Romania					
Unwrought (a)	188	216	421	137	127

Imports continued					Tin
					tonnes
Country	2004	2005	2006	2007	2008
Slovakia					
Unwrought (a)	2 033	2 610	2 246	2 260	2 276
Slovenia					
Unwrought (a)	68	151	73	101	87
Spain					
Concentrates	160	137	29	27	2
Unwrought	7 860	7 109	7 716	7 093	7 313
Unwrought alloys	292	170	220	167	261
Scrap	2 111	1 919	1 576	185	376
Sweden					
Unwrought (a)	724	761	838	720	555
Switzerland					
Unwrought (a)	726	909	1 042	1 241	1 093
Turkey					
Unwrought (a)	2 314	2 731	2 380	2 788	2 603
United Kingdom					
Unwrought	5 861	4 812	3 558	13 630	7 181
Unwrought alloys	1 145	2 067	891	525	400
Scrap	215	468	1 728	452	448

Note(s)

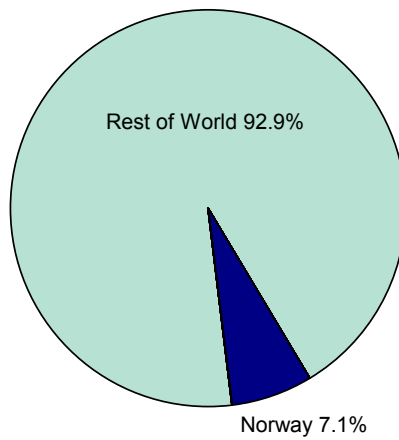
(1) In this table the term 'unwrought' tin corresponds to item 8001 of the Harmonised System and comprises ingots, pigs, unwrought bars, sticks, etc.

(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 per cent) of titanium minerals is in the form of titanium dioxide, a white pigment used in paint, plastics, rubber and paper.
- In 2008 Canada was the world's largest producer of titanium minerals, followed by Australia and South Africa. Together these three countries produced 58 per cent of the world total. EU32 production is restricted to Norway, which produced about seven per cent of the world total.
- For much of 2008, ilmenite (Australian, min 54% TiO₂, F.O.B., bulk concentrates) traded between US\$80.00 per tonne and US\$136.50 per tonne, but prices fell at the end of the year to the range US\$75.00–US\$80.00 per tonne. By the end of 2009 the price was between US\$60.00 per tonne and US\$85.00 per tonne. Rutile, which has a higher TiO₂ content (Australian concentrate, min. 95% TiO₂ F.O.B.), traded between US\$480 per tonne and US\$550 per tonne throughout 2008 and 2009.

EU32 Production of titanium minerals 2008



Production of titanium minerals

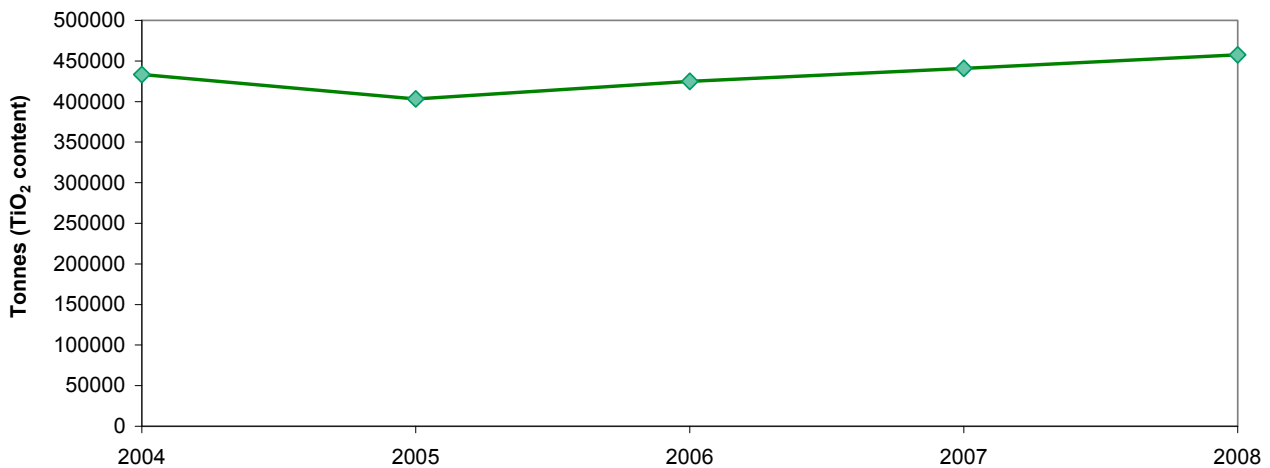
tonnes

Country	2004	2005	2006	2007	2008
Norway Ilmenite	866 700	806 800	850 000	882 000	915 000

Note(s)

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

EU32 Production of titanium minerals 2004 - 08



Exports of titanium

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Metal	397	317	513	576	717
Oxides	2 640	3 457	3 976	4 885	6 444
Belgium-Luxembourg					
Titanium minerals	139 393	131 597	100 498	129 722	100 210
Titanium slag	...	4 219	20 830	3 209	5 085
Metal	1 031	1 093	1 490	2 074	1 174
Oxides	397 481	366 632	401 614	422 885	401 906
Bulgaria					
Metal	27	9	4	28	835
Croatia					
Oxides	60	155	419	489	417
Czech Republic					
Titanium minerals	873	340	492	745	641
Metal	191	358	424	126	84
Oxides	37 673	40 707	43 010	43 166	42 860
Denmark					
Metal	166	184	146	162	152
Oxides	1 304	1 136	1 134	1 121	460
Estonia					
Metal	188	31	49	11	13
Oxides	68	144	163	1 491	579
Finland					
Metal	22	44	35	30	11
Oxides (a)	* 94 000	* 104 000	* 103 000	* 103 000	* 106 000
France					
Titanium minerals	64	62	116	2 242	93
Metal	4 086	5 891	5 722	5 112	5 391
Oxides	172 796	157 543	167 807	171 337	148 573
Germany					
Titanium minerals	319	607	490	776	3 322
Metal	8 048	8 911	8 893	8 713	8 278
Oxides	356 007	359 946	400 832	409 495	367 545
Greece					
Oxides	1 835	2 373	1 861	2 233	598
Hungary					
Oxides	278	126	324	991	1 402
Italy					
Titanium slag	...	1 499	...	...	...
Metal	4 439	4 130	4 101	4 884	5 478
Oxides	28 476	25 433	22 473	26 242	25 982
Lithuania					
Oxides	65	141	208	268	1 230
Netherlands					
Titanium minerals	4 050	1 390	1 660	449	1 341
Metal	1 846	2 181	1 902	2 182	1 551
Oxides	92 050	84 310	95 512	64 544	15 544
Norway					
Titanium minerals (a)	* 416 000	* 382 000	* 477 000	* 435 000	* 435 000
Metal	182	159	176	117	339
Oxides (a)	* 193 000	* 177 000	* 221 000	* 199 000	* 217 000
Poland					
Metal	25	740	917	52	117
Oxides	20 818	24 394	25 598	21 776	21 509
Portugal					
Oxides	431	512	840	1 064	1 189
Romania					
Metal	277	255	579	650	2 469
Slovakia					
Metal	5	13	28	5	76
Slovenia					
Metal	30	21	36	37	40
Oxides	38 497	44 123	50 755	55 867	55 110
Spain					
Titanium minerals	604	170	185	232	155
Metal	483	903	2 005	1 431	947
Oxides	85 867	83 905	85 307	91 583	58 342

Titanium

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Sweden					
Metal	1 737	1 955	1 461	2 667	1 002
Oxides	13 912	14 306	20 409	17 047	19 992
Switzerland					
Metal	562	560	692	868	987
Oxides	740	1 020	1 024	1 133	1 276
Turkey					
Metal	20	30	17	—	49
Oxides	1 365	2 350	2 023	2 489	2 607
United Kingdom					
Metal	11 913	17 212	14 028	12 934	11 155
Oxides	234 591	215 741	182 246	212 068	222 503

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	2004	2005	2006	2007	2008
Austria					
Titanium minerals	494	349	575	451	520
Metal	943	1 691	1 873	3 851	2 455
Oxides	18 612	25 640	27 485	26 856	30 861
Belgium-Luxembourg					
Ilmenite	—	—	720	—	1 337
Other titanium minerals	165 288	165 711	156 771	221 173	203 355
Metal	1 868	2 289	1 857	4 139	3 904
Oxides	339 444	291 670	314 131	145 929	133 378
Bulgaria					
Titanium minerals	407	1 287	300	712	42
Oxides	3 332	3 959	4 750	5 398	5 955
Croatia					
Oxides	2 401	2 561	2 827	3 244	2 989
Cyprus					
Oxides	1 172	1 286	1 227	1 243	1 603
Czech Republic					
Titanium minerals	53 570	80 407	149 925	179 323	193 858
Metal	800	1 143	1 155	1 086	1 122
Oxides	6 773	8 008	8 734	10 529	8 765
Denmark					
Metal	778	770	788	623	774
Oxides	22 269	23 156	24 678	19 514	17 055
Estonia					
Metal	113	294	74	393	97
Oxides	1 169	1 367	2 193	2 548	2 106
Finland					
Titanium minerals	...	5 080	34 403	20 578	26 200
Oxides	13 163	14 380	14 788	15 838	14 256
France					
Ilmenite	48 930	60 205	83 499	60 739	58 423
Other titanium minerals	81 141	86 552	78 849	71 292	12 531
Titanium slag	61 456	111 137	107 092	91 602	80 726
Metal	8 259	9 403	9 431	10 521	10 036
Oxides	140 068	119 699	135 309	126 786	128 226

Imports continued

Country	2004	2005	2006	2007	2008
Germany					
Ilmenite	315 214	333 603	414 037	425 175	446 154
Other titanium minerals	225 849	224 675	253 392	200 512	279 407
Titanium slag	—	—	17 403	112 474	76 107
Metal	14 756	15 978	18 426	19 385	19 449
Oxides	237 464	240 554	269 812	299 599	281 009
Greece					
Titanium minerals	563	528	440	826	399
Oxides	27 241	25 592	25 372	27 284	23 260
Hungary					
Titanium minerals	1 474	2 260	1 623	...	2 659
Metal	387	157	240	138	31
Oxides	8 677	7 523	7 845	8 291	8 590
Ireland, Republic of					
Metal	151	290	350	362	1 154
Oxides	5 685	5 059	4 703	4 822	3 961
Italy					
Titanium minerals	88 361	85 607	185 121	136 274	102 909
Metal	6 580	5 186	6 248	8 609	7 155
Oxides	158 592	154 950	161 253	166 223	141 959
Latvia					
Oxides	1 232	726	833	781	3 112
Lithuania					
Oxides	713	926	975	1 328	980
Macedonia					
Oxides	430	466	471	383	426
Malta					
Oxides	565	471	512	531	463
Netherlands					
Titanium minerals	154 460	127 941	79 377	103 580	87 769
Metal	2 835	1 857	2 234	4 295	1 073
Oxides	47 957	92 334	8 387	41 221	37 101
Norway					
Titanium minerals	...	33 000	73 690	17 600	73 307
Metal	505	636	661	637	937
Oxides	10 026	11 924	16 013	12 121	12 241
Poland					
Titanium minerals	98 214	100 539	95 057	100 002	91 208
Metal	271	328	2 550	2 122	451
Oxides	29 710	33 417	36 943	45 984	41 019
Portugal					
Oxides	20 120	17 458	18 565	19 545	18 800
Romania					
Titanium minerals	2 334	2 111	1 809	2 093	2 171
Metal	195	328	486	612	453
Oxides	6 378	7 600	9 794	11 132	9 127
Slovakia					
Titanium minerals	6 407	17 627	12 648	17 242	...
Metal	101	980	179	250	329
Oxides	2 173	2 804	2 742	2 193	2 389
Slovenia					
Titanium minerals	11 610	21 054	22 825	14 903	34 930
Titanium slag	...	...	64 246	53 245	65 180
Metal	300	614	392	348	257
Oxides	3 033	3 157	3 153	3 500	3 296
Spain					
Ilmenite	172 431	121 204	159 090	121 898	119 467
Other titanium minerals	2 316	1 746	1 807	22 037	9 133
Titanium slag	...	57	8	2 164	10 004
Metal	3 722	3 862	5 782	3 450	3 131
Oxides	116 397	117 203	112 778	123 132	138 275
Sweden					
Titanium minerals	389	300	911	1 032	995
Metal	1 856	1 382	2 294	2 623	2 391
Oxides	44 812	50 099	62 841	65 872	61 890

Titanium

Imports continued

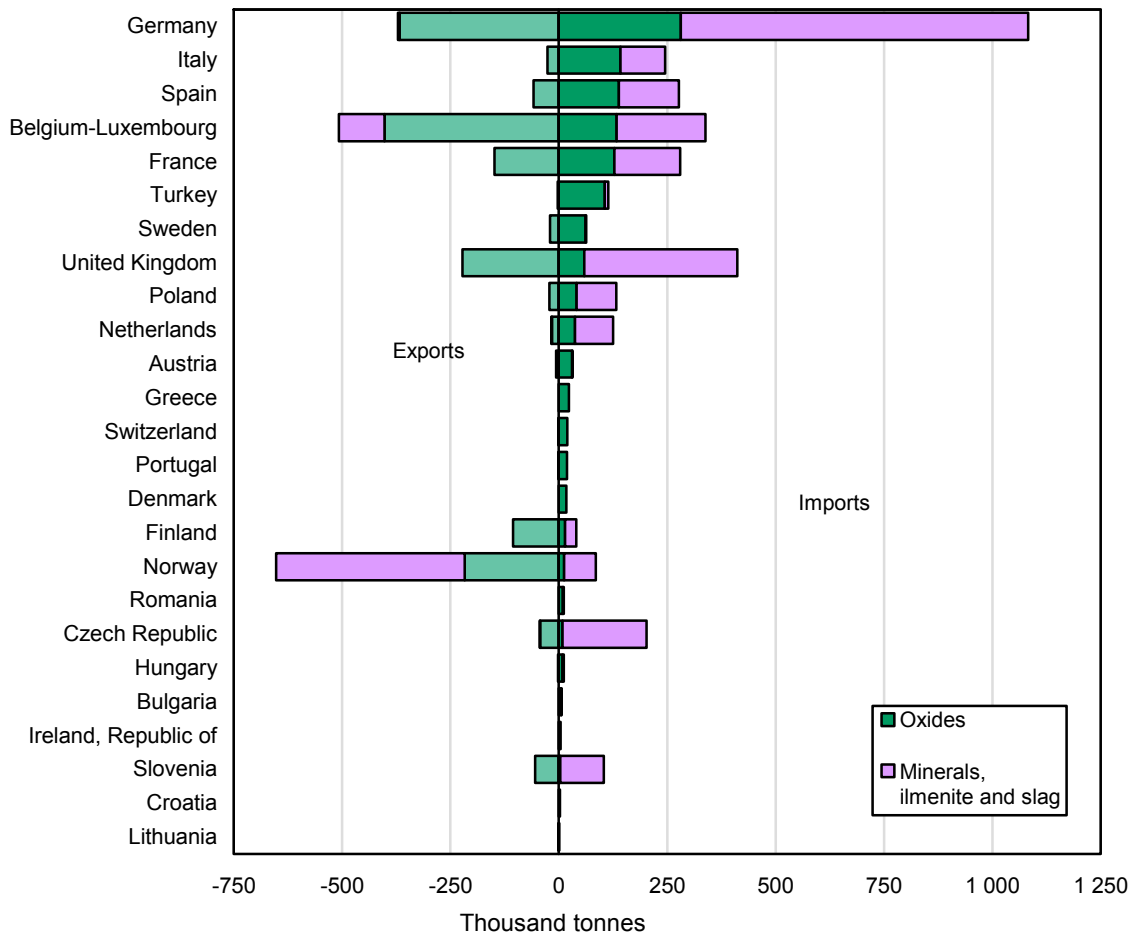
tonnes

Country	2004	2005	2006	2007	2008
Switzerland					
Metal	735	1 273	1 357	1 352	1 168
Oxides	19 349	19 055	18 805	20 455	19 550
Turkey					
Titanium minerals	10 435	6 755	6 831	* 9 000	7 762
Oxides	85 832	92 136	108 721	111 858	106 206
United Kingdom					
Ilmenite	110 596	80 435	175 882	181 794	194 719
Other titanium minerals	113 852	109 238	48 147	42	37
Titanium slag	...	64 849	91 603	151 494	158 195
Metal	27 401	27 938	30 267	30 905	32 305
Oxides	74 787	67 102	71 528	74 708	58 748

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

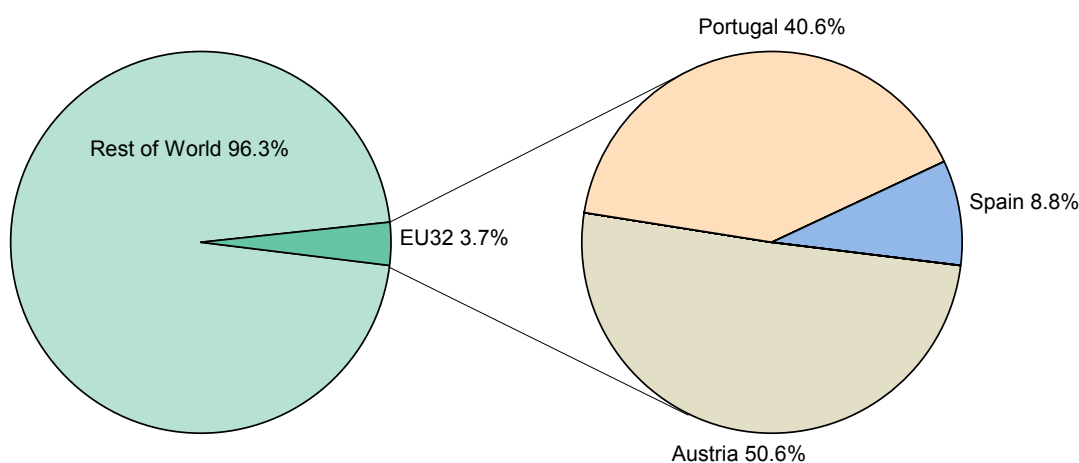
Titanium - EU32 trade in 2008



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 was the world's largest tungsten producer in 2008, with 76 per cent of the world total. Tungsten was produced in Austria, Portugal and Spain but overall the EU32 contributed less than four per cent to the world total.
- 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). Prices for APT (European free market) varied between US\$232 per tonne and US\$256 per tonne throughout 2008, but fell during the first part of 2009 reaching a low of US\$173–US\$200 per tonne in July. Prices subsequently recovered slightly to end 2009 in the range US\$185 per tonne to US\$210 per tonne.

EU32 Production of tungsten 2008



Mine production of tungsten

tonnes (metal content)

Country	2004	2005	2006	2007	2008
Austria	1 335	1 280	1 153	1 117	1 122
Portugal (a)	746	816	780	846	* 900
Spain	—	—	—	—	194
EU32 Total	2 100	2 100	1 900	2 000	2 200

Note(s)

(a) Wolframite and scheelite

EU32 Production of tungsten 2004 - 08



Exports of tungsten

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Metal (a)	* 1 300	* 2 100	* 2 000	* 1 600	* 1 600
Belgium-Luxembourg					
Metal	404	452	484	387	405
Carbide	39	25	62	54	36
Czech Republic					
Metal	133	185	142	102	86
Carbide	...	...	579	605	592
Denmark					
Metal	26	5	86	112	121
Finland					
Metal	91	77	80	113	360
France					
Metal	571	574	617	1 148	676
Carbide	251	265	343	431	354
Germany					
Metal	2 816	4 020	4 320	3 020	4 687
Hungary					
Metal	64	24	49	52	39
Ireland, Republic of					
Metal	72	963	183	180	10
Italy					
Metal	357	233	197	455	973
Netherlands					
Ores and concentrates	16	—	276	181	29
Metal	777	502	434	391	582
Poland					
Metal	89	84	89	76	143
Portugal					
Ores and concentrates	900	1 425	1 305	1 466	1 705
Metal	217	12	14	16	17
Slovakia					
Metal	...	16	66	2	9
Spain					
Ores and concentrates	17	—	—	0	286
Metal	141	77	59	177	223
Sweden					
Ores and concentrates	0	62	—	3 192	75
Metal	102	414	296	234	328
Carbide	114	37	491	446	436
Switzerland					
Metal	268	316	270	392	400
Turkey					
Metal	2	115	25	33	99
United Kingdom					
Metal	1 267	1 732	2 100	2 444	1 625
Carbide	92	83	251	303	51

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

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

Imports of tungsten

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Metal	400	825	670	548	435
Carbide	136	42	22	...	...
Belgium-Luxembourg					
Metal	372	340	454	513	426
Carbide	42	42	64	1 182	1 028
Czech Republic					
Metal	116	173	197	837	206
Denmark					
Metal	103	307	523	113	110
Finland					
Metal	119	121	21	130	296
France					
Metal	568	784	925	823	898
Carbide	692	592	898	866	859
Germany					
Ores and concentrates	389	493	512	604	967
Metal	4 976	5 515	4 450	4 791	5 184
Carbide	1 520	1 802	1 366	2 678	2 526
Ireland, Republic of					
Metal	177	292	173	277	215
Carbide	...	...	53	184	158
Italy					
Metal	321	257	236	280	255
Carbide	299	337	365	361	350
Netherlands					
Ores and concentrates	222	110	1 532	875	457
Metal	210	204	330	284	329
Carbide	56	99	49	36	94
Poland					
Metal	46	108	111	108	103
Portugal					
Metal	153	179	106	122	251
Carbide	109	105	97	119	169
Romania					
Metal	8	7	7	59	1 122
Spain					
Metal	259	134	556	914	731
Carbide	59	38	35	41	31
Sweden					
Metal	559	502	563	546	588
Carbide	747	925	738	876	904
Switzerland					
Metal	170	235	146	257	272
United Kingdom					
Metal	1 903	3 204	4 607	2 925	1 865
Carbide	838	974	913	1 409	1 023

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 as 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 four countries, of which Russia (estimated 40 per cent of world total) and South Africa (30 per cent of world total) are the largest producers. There is no EU32 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. Prices for vanadium pentoxide increased sharply at the start of 2008 from US\$7.40–US\$7.90 per pound and remained in the range US\$13.00–US\$18.20 per pound until October. In the latter part of 2008 prices fell back and ended the year at US\$6.50–US\$7.00 per pound. Prices continued to fall during the first part of 2009, reaching a low of US\$3.60–US\$4.10 per pound in April, but then recovered to end the year at US\$6.00–US\$6.70 per pound.
- Prices for ferro-vanadium followed a roughly similar trend, increasing at the start of 2008 from around US\$40–US\$42 per kilogram, then remaining between US\$60–US\$90 per kilogram through to October, before falling back to finish the year at about US\$28–US\$30 per kilogram. Prices continued to fall during the first part of 2009, reaching a low of US\$18–US\$20 per kilogram in May, and then rising to US\$33–US\$35 per kilogram in August. However, prices for ferro-vanadium fell again to end 2009 at US\$20–US\$23 per kilogram.

Exports of vanadium

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg					
Ores and concentrates	1 456	2 600	791	297	327
France					
Pentoxide	138	13	10	15	16
Metal	26	25	63	...	...
Germany					
Ores and concentrates	1 060	4 680	2 372	...	...
Pentoxide	296	1 216	1 444	1 250	1 173
Metal	522	1 469	573	...	...
Italy					
Ores and concentrates	1 267	1 092	1 291	527	217
Lithuania					
Ores and concentrates	...	...	...	346	358
Netherlands					
Pentoxide	1 167	381	411	157	45
Metal	...	11	...	...	...
Turkey					
Pentoxide	900	940	—	24	200
United Kingdom					
Pentoxide	2	20	23	697	589
Metal	1 075	433	70	—	2

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	2004	2005	2006	2007	2008
Austria					
Vanadiferous residues	* 27 000	* 29 000	* 29 000	* 37 000	* 36 000
Ores and concentrates	467	1 565	792	543	460
Pentoxide	(a)* 1 000	(a)* 300	(a)* 50	...	...
Belgium-Luxembourg					
Ores and concentrates	1 116	894	197	162	202
Pentoxide	3	267	12	64	38
Metal	32	60	67	...	...
Czech Republic					
Pentoxide	5 429	3 831	4 858	3 210	5 135
France					
Ores and concentrates	...	21	—	...	—
Pentoxide	441	556	533	656	674
Metal	72	88	71	...	...
Germany					
Ores and concentrates	22	104	53	79	60
Pentoxide	648	741	1 222	1 071	879
Metal	159	193	173	...	...
Italy					
Ores and concentrates	...	...	75	...	255
Pentoxide	134	156	209	150	173
Netherlands					
Pentoxide	1 718	714	362	316	227
Norway					
Metal	32	10	63	...	...
Poland					
Metal	32	32	41	...	...
Slovenia					
Metal	21	14	26	...	...
Spain					
Ores and concentrates	26	9	20	50	80
Pentoxide	118	62	71	45	43
Sweden					
Pentoxide	4	3	1	1	76
Metal	46	20	40	...	...
United Kingdom					
Pentoxide	306	339	472	425	344
Metal	338	812	407	583	314

Note(s)

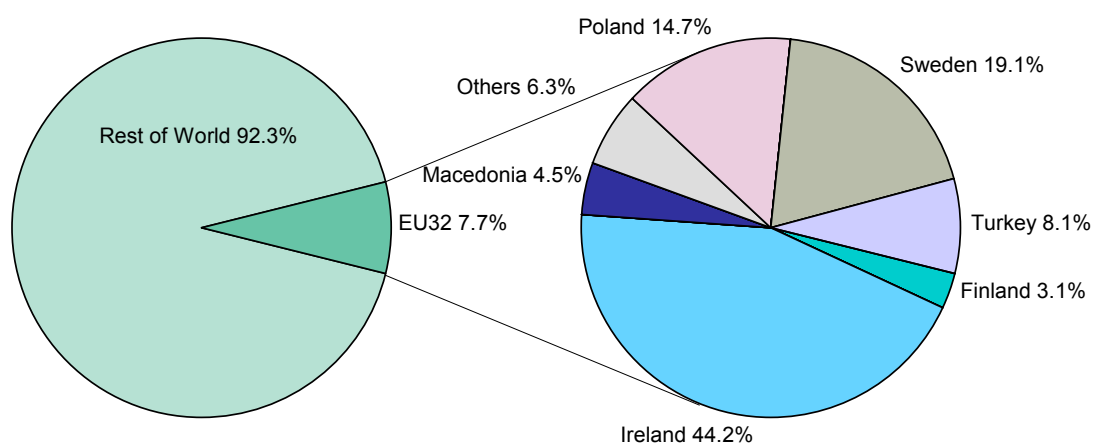
- (1) In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any
(2) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

(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 was the world's largest mine producer during 2008 with 27 per cent of the total. Australia and Peru are also major producers. The Republic of Ireland was the largest mine producer in the EU32 with 44 per cent of the EU32 total, although overall the EU32 contributed less than eight per cent to the world total. A number of EU32 countries have major zinc refineries.
- Prices for zinc dropped significantly in 2008 from US\$2500 per tonne in January to about US\$1100 per tonne by the end of the year. However, during 2009 they more than doubled from US\$1220 per tonne in January to around US\$2500 per tonne by the end of the year.

EU32 Mine production of zinc 2008

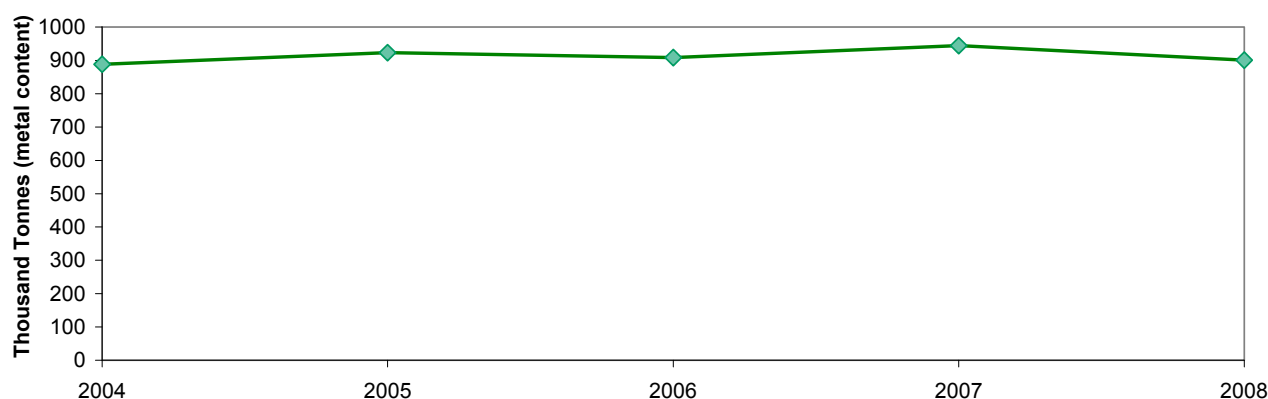


Mine production of zinc

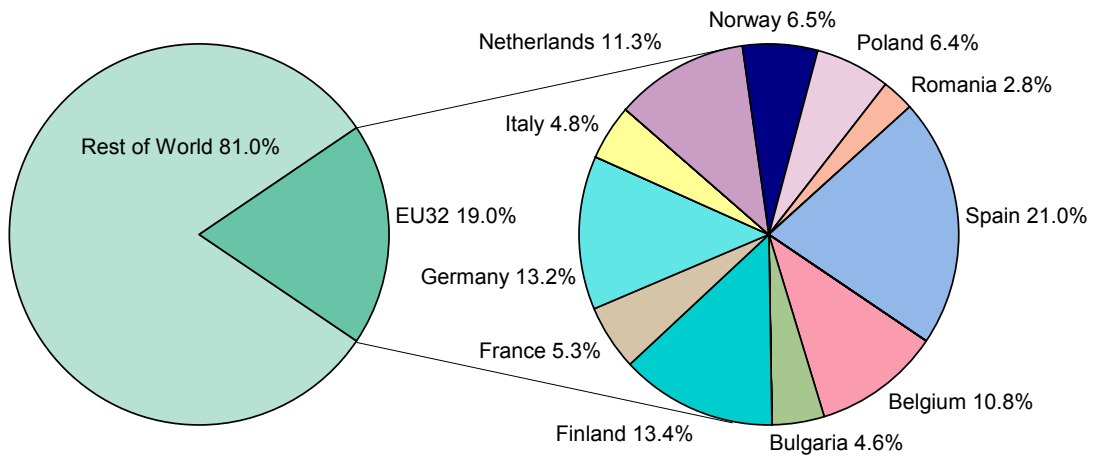
tonnes (metal content)

Country	2004	2005	2006	2007	2008
Bulgaria	* 12 700	* 12 000	* 10 400	* 11 500	* 10 300
Finland	37 200	40 500	35 700	38 900	27 800
Greece	—	4 000	16 000	20 700	24 200
Ireland, Republic of	438 300	445 400	425 800	400 900	398 200
Macedonia	—	—	9 349	32 195	40 286
Poland	140 381	135 600	126 600	129 600	132 300
Portugal	—	—	7 505	24 163	22 567
Romania	23 599	13 784	8 052	849	14
Sweden	197 034	215 691	210 029	214 576	172 194
Turkey	39 000	56 000	59 000	71 000	73 000
EU32 Total	888 000	923 000	908 000	944 000	901 000

EU32 Mine production of zinc 2004 - 08



EU32 Production of slab zinc 2008

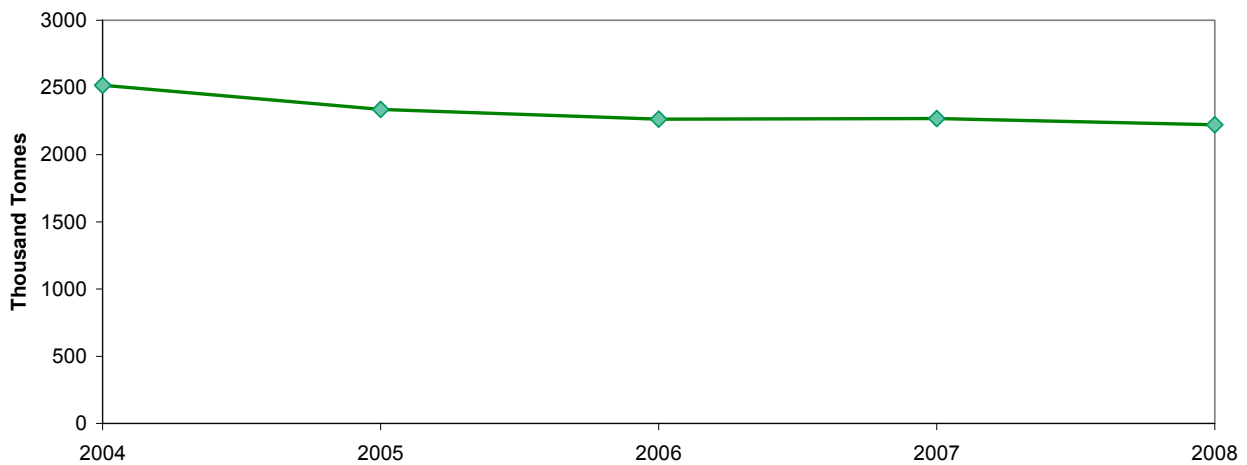


Production of slab zinc

tonnes

Country	2004	2005	2006	2007	2008
Belgium	272 500	222 000	251 000	240 000	239 000
Bulgaria	101 500	92 500	85 900	98 100	101 700
Finland	284 525	281 904	282 238	305 543	297 722
France	260 000	209 000	120 000	129 000	118 000
Germany	382 020	334 900	342 566	294 735	292 284
Italy	118 400	121 200	109 200	102 100	107 100
Netherlands	224 000	227 500	227 500	234 000	250 000
Norway	140 901	151 285	160 670	157 027	145 469
Poland	155 500	137 300	133 900	141 900	142 500
Romania	52 746	56 795	43 705	58 342	61 978
Spain	525 000	501 400	507 300	509 000	466 000
EU32 Total	2 517 000	2 336 000	2 264 000	2 270 000	2 222 000

EU32 Production of slab zinc 2004 - 08



Exports of zinc

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Unwrought (a)	37 304	13 469	19 981	14 682	13 794
Scrap	2 000	3 559	4 329	2 132	8 176
Belgium-Luxembourg					
Ores and concentrates	384 652	511 730	540 810	479 825	735 050
Unwrought	136 768	10 058	13 275	22 114	8 379
Scrap	26 546	37 754	57 851	42 673	15 900
Bulgaria					
Ores and concentrates	...	...	492	4 384	7 982
Unwrought (a)	89 287	82 902	227 543	90 573	96 678
Scrap	1 194	1 576	1 854	1 511	1 293
Croatia					
Scrap	325	417	511	683	700
Cyprus					
Scrap	80	63	69	1 746	...
Czech Republic					
Unwrought (a)	5 659	7 865	10 669	18 786	17 258
Scrap	2 976	2 498	3 086	2 981	2 705
Denmark					
Scrap	2 336	3 538	3 628	2 388	2 028
Estonia					
Scrap	1 146	539	1 121	725	2 860
Finland					
Unwrought (a)	236 171	235 403	233 231	260 434	257 411
Scrap	2 281	2 116	1 650	1 274	964
France					
Ores and concentrates	38 779	39 463	47 516	51 781	78 398
Unwrought	115 352	80 472	31 960	29 305	31 601
Unwrought alloys	35 879	33 940	12 205	7 238	5 073
Scrap	56 440	63 571	71 224	56 200	43 770
Germany					
Ores and concentrates	695	7 257	2 336	612	1 835
Unwrought	91 123	81 664	65 824	77 443	70 724
Unwrought alloys	37 762	30 115	29 999	30 439	28 835
Scrap	52 545	55 913	54 939	59 297	51 801
Greece					
Ores and concentrates	0	3 276	12 615	14 890	43 003
Unwrought (a)	709	334	1 802	29 861	448
Scrap	709	517	421	644	413
Hungary					
Unwrought	3 798	415	1 189	—	(a) 523
Scrap	3 571	3 938	4 557	3 716	1 902
Ireland, Republic of					
Ores and concentrates	564 018	522 312	483 949	412 703	404 303
Scrap	450	684	569	3 044	649
Italy					
Ores and concentrates	93 317	96 439	114 339	105 437	99 121
Unwrought	2 331	9 230	37 659	21 048	7 967
Unwrought alloys	3 523	2 854	7 792	6 689	2 857
Scrap	15 157	13 652	12 934	13 574	8 603
Latvia					
Scrap	504	629	750	757	443
Lithuania					
Scrap	691	685	976	517	232
Macedonia					
Ores and concentrates	...	3 306	23 106	58 973	...
Unwrought (a)	745	124	30	5	28
Scrap	222	720	719	874	576
Netherlands					
Ores and concentrates	31 254	5 836	3 730	13 939	0
Unwrought	265 840	273 832	615 269	243 354	244 789
Unwrought alloys	19 867	9 364	38 116	31 276	23 932
Scrap	32 684	41 593	39 073	67 010	19 815
Norway					
Unwrought	127 410	134 690	138 491	130 570	130 397
Unwrought alloys	6 710	5 600	12 275	13 899	9 227

Exports continued

tonnes

Country	2004	2005	2006	2007	2008
Poland					
Ores and concentrates	44 257	63 913	61 094	61 595	58 035
Unwrought	72 820	74 938	62 332	73 096	83 571
Unwrought alloys	850	857	2 513	1 829	3 606
Scrap	269	797	233	422	430
Portugal					
Ores and concentrates	...	...	13 035	40 950	75 414
Scrap	1 855	2 050	2 023	3 345	2 910
Romania					
Ores and concentrates	31 665	26 611	16 796	4 043	503
Unwrought (a)	42 991	42 012	32 008	48 339	59 395
Scrap	7 950	1 073	228	1 348	442
Slovakia					
Unwrought	...	3 522	5 232	16 356	14 600
Unwrought alloys	5 977	3 618	14 053	7 147	10 412
Slovenia					
Unwrought	167	180	(a) 1 553	(a) 1 557	(a) 1 937
Scrap	788	803	846	873	975
Spain					
Ores and concentrates	37 986	67 420	31 416	98 359	121 688
Unwrought	294 548	333 966	270 233	220 002	191 897
Unwrought alloys	54 670	32 673	87 073	66 155	92 781
Scrap	5 125	11 981	7 946	5 295	6 210
Sweden					
Ores and concentrates	379 155	372 925	402 219	405 682	389 473
Unwrought (a)	280	165	1 143	103	538
Scrap	21 598	16 134	29 015	2 777	2 898
Switzerland					
Unwrought (a)	499	897	1 001	679	1 078
Scrap	2 582	2 480	2 856	2 408	2 445
Turkey					
Ores and concentrates	110 692	138 288	144 662	123 956	253 573
Scrap	2 318	53	176	281	468
United Kingdom					
Unwrought	1 581	1 661	5 325	5 932	3 883
Unwrought alloys	26 260	38 267	37 120	33 799	28 408
Scrap	9 710	9 881	4 571	7 543	5 699

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

Imports of zinc

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Unwrought	47 866	58 838	61 856	65 391	61 877
Unwrought alloys	31 444	28 955	41 002	33 939	33 911
Scrap	2 035	609	737	149	210
Belgium-Luxembourg					
Ores and concentrates	1 410 560	1 182 083	1 109 923	1 100 875	* 1 100 000
Unwrought	261 216	46 505	73 894	218 660	211 576
Unwrought alloys	13 872	35 653	24 414	13 475	8 612
Scrap	42 534	44 890	44 221	60 039	40 657
Bulgaria					
Ores and concentrates	167 098	149 735	198 504	208 313	146 655
Unwrought (a)	4 285	1 450	9 994	3 330	5 095
Croatia					
Unwrought (a)	3 516	3 329	11 506	4 674	4 656
Czech Republic					
Unwrought	24 991	28 263	33 732	35 666	36 733
Unwrought alloys	9 214	8 039	11 113	11 992	11 344
Scrap	220	565	334	4 008	2 792

Zinc

Imports continued

tonnes

Country	2004	2005	2006	2007	2008
Denmark					
Unwrought	10 813	9 855	11 494	9 931	12 591
Unwrought alloys	1 548	1 457	1 320	1 345	910
Estonia					
Unwrought (a)	19 503	9 129	7 253	4 362	7 676
Finland					
Ores and concentrates	479 603	499 024	520 081	555 569	582 049
Unwrought (a)	994	1 314	1 443	4 513	4 242
France					
Ores and concentrates	458 760	423 664	250 791	259 750	238 502
Unwrought	103 037	143 476	170 263	166 110	164 172
Unwrought alloys	56 492	45 566	47 309	44 124	45 480
Scrap	6 046	6 996	7 833	7 247	3 694
Germany					
Ores and concentrates	480 355	401 829	314 268	357 692	383 789
Unwrought	248 654	245 794	313 034	316 603	305 075
Unwrought alloys	83 556	76 981	83 795	87 785	89 738
Scrap	23 997	22 480	30 028	19 586	17 395
Greece					
Unwrought (a)	29 255	20 110	19 320	58 708	28 996
Hungary					
Unwrought (a)	15 779	14 529	19 093	16 843	17 011
Ireland, Republic of					
Unwrought (a)	3 622	3 629	7 010	7 687	5 453
Italy					
Ores and concentrates	249 978	219 491	175 253	195 798	161 838
Unwrought	273 146	261 192	229 040	314 714	179 691
Unwrought alloys	35 835	34 929	42 768	51 514	81 350
Scrap	15 991	14 172	18 541	21 599	15 369
Latvia					
Unwrought (a)	1 172	654	953	664	1 256
Lithuania					
Unwrought (a)	393	547	1 554	627	563
Macedonia					
Unwrought (a)	5 025	3 750	15 658	6 721	4 954
Netherlands					
Ores and concentrates	408 032	484 472	532 861	359 520	430 617
Unwrought	188 510	144 592	200 472	182 072	155 003
Unwrought alloys	2 318	2 387	40 482	38 602	24 062
Scrap	20 288	15 257	14 619	13 633	6 270
Norway					
Ores and concentrates	231 563	255 158	248 486	284 791	243 213
Unwrought (a)	296	247	2 828	2 167	3 286
Poland					
Ores and concentrates	114 800	78 746	129 551	127 720	150 283
Unwrought	19 580	13 333	28 714	31 838	26 811
Unwrought alloys	12 022	13 337	11 421	13 660	11 906
Scrap	4 636	3 899	2 681	4 445	6 378
Portugal					
Unwrought	13 450	11 862	19 015	16 367	19 551
Unwrought alloys	14 675	11 573	5 778	5 054	4 617
Romania					
Ores and concentrates	109 019	150 282	137 878	173 536	161 527
Unwrought (a)	19 555	14 640	23 732	13 135	7 394
Slovakia					
Unwrought (a)	41 424	43 437	45 143	44 959	41 003
Slovenia					
Unwrought (a)	21 146	21 716	29 435	28 407	23 819
Spain					
Ores and concentrates	917 968	1 090 022	1 188 067	1 257 304	1 114 634
Unwrought	3 862	8 203	7 577	21 634	26 779
Unwrought alloys	16 601	17 858	18 933	17 411	15 000
Scrap	4 062	3 927	4 996	6 601	7 396
Sweden					
Unwrought	29 682	29 847	25 763	21 570	29 211
Unwrought alloys	18 009	16 812	20 325	22 600	12 059

Imports continued

tonnes

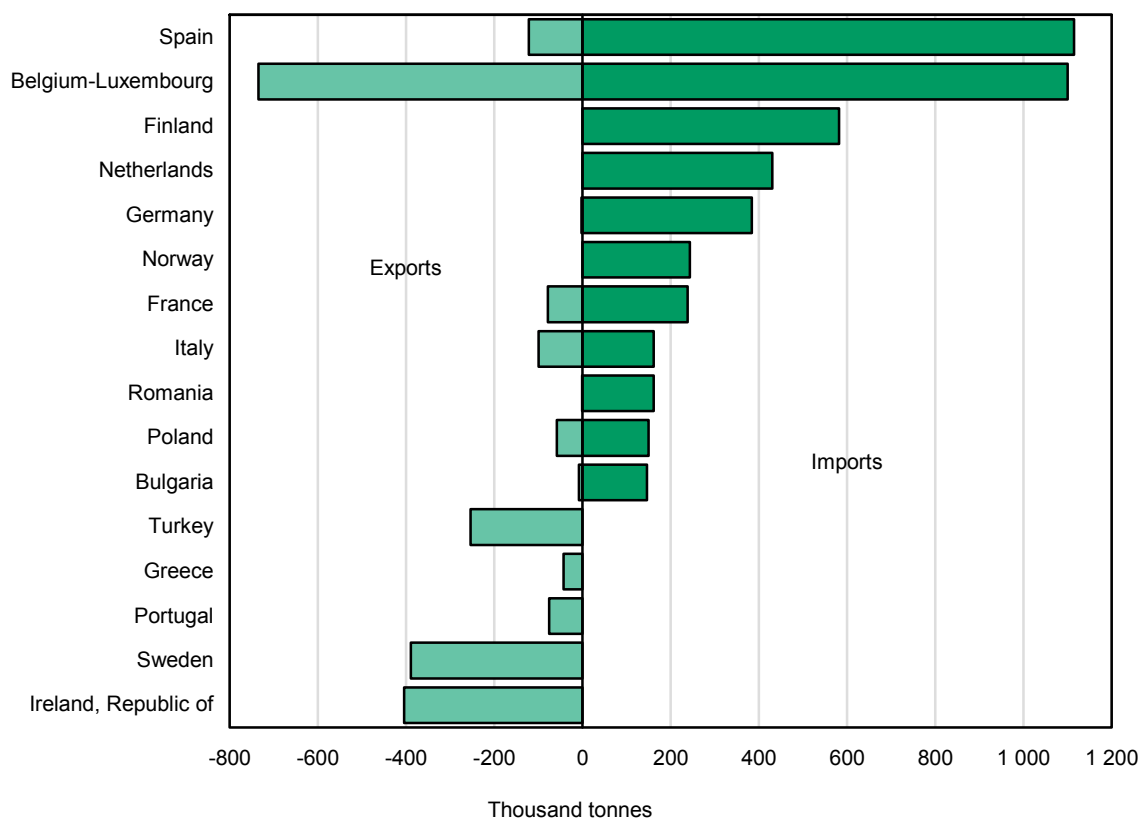
Country	2004	2005	2006	2007	2008
Switzerland					
Unwrought	14 577	13 045	12 189	14 473	13 715
Unwrought alloys	3 194	2 601	2 214	2 700	2 471
Turkey					
Unwrought	143 904	141 842	397 384	136 916	147 215
Unwrought alloys	4 993	6 121	5 481	3 775	4 091
Scrap	379	153	3 206	1 913	1 381
United Kingdom					
Unwrought	139 477	135 840	119 676	122 458	119 911
Unwrought alloys	15 960	16 128	15 666	13 201	8 524

Note(s)

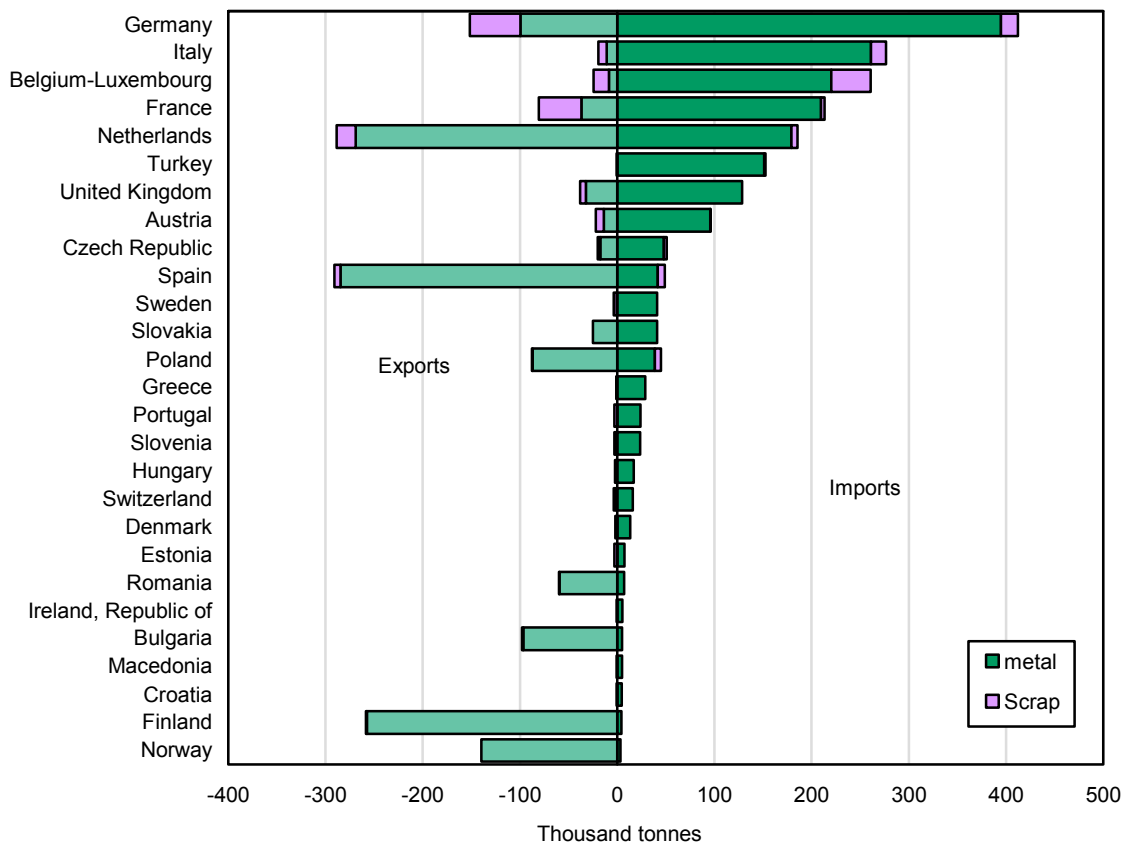
(1) In this table the term 'unwrought' zinc corresponds to item 7901 of the Harmonised System and comprises blocks, pigs, slabs, etc.

(a) Including alloys

Zinc ore - EU32 trade in 2008



Zinc - EU32 trade in 2008



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 2008 were Australia (39 per cent) and South Africa (29 per cent).
- The price for zircon sand (Australian bulk F.O.B.) ranged from US\$725–US\$800 per tonne for much of 2008. From October 2008 to March 2009 the price rose to US\$900 per tonne and it remained in the range from US\$880–US\$900 per tonne for the rest of 2009.

Exports of zirconium

tonnes

Country	2004	2005	2006	2007	2008
Belgium-Luxembourg					
Concentrates	11 105	22 965	27 054	23 645	16 056
Metal	170	222	144	251	157
France					
Concentrates	1 129	1 058	2 316	1 832	1 440
Germany					
Concentrates	2 567	5 211	1 643	2 057	2 799
Metal	275	286	434	514	625
Italy					
Concentrates	25 633	21 760	23 472	25 596	41 296
Metal	441	455	260	630	233
Netherlands					
Concentrates	8 548	8 178	7 391	14 539	8 223
Slovenia					
Concentrates	...	1 009	1 186	509	202
Spain					
Concentrates	10 844	9 805	9 811	11 803	14 151
Metal	989	820	110	200	525
United Kingdom					
Concentrates	505	699	902	1 096	716
Metal	183	127	90	54	61

Note(s)

(1) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

Imports of zirconium

tonnes

Country	2004	2005	2006	2007	2008
Austria					
Concentrates	1 486	1 200	1 285	2 054	2 163
Belgium-Luxembourg					
Concentrates	3 991	14 504	18 763	17 593	17 337
Metal	534	605	556	469	433
Bulgaria					
Concentrates	1 149	1 589	1 421	1 357	1 081
Czech Republic					
Concentrates	1 605	655	1 498	1 482	751
Metal	32	60	86	78	101
France					
Concentrates	48 004	53 701	48 973	47 719	55 030
Metal	276	207	378	570	456
Germany					
Concentrates	(a) 80 328	(a) 79 729	—	—	—
Metal	516	503	571	880	791
Greece					
Concentrates	611	629	466	547	429
Hungary					
Concentrates	...	3 266	...	2 427	2 439

Zirconium

Imports continued

tonnes

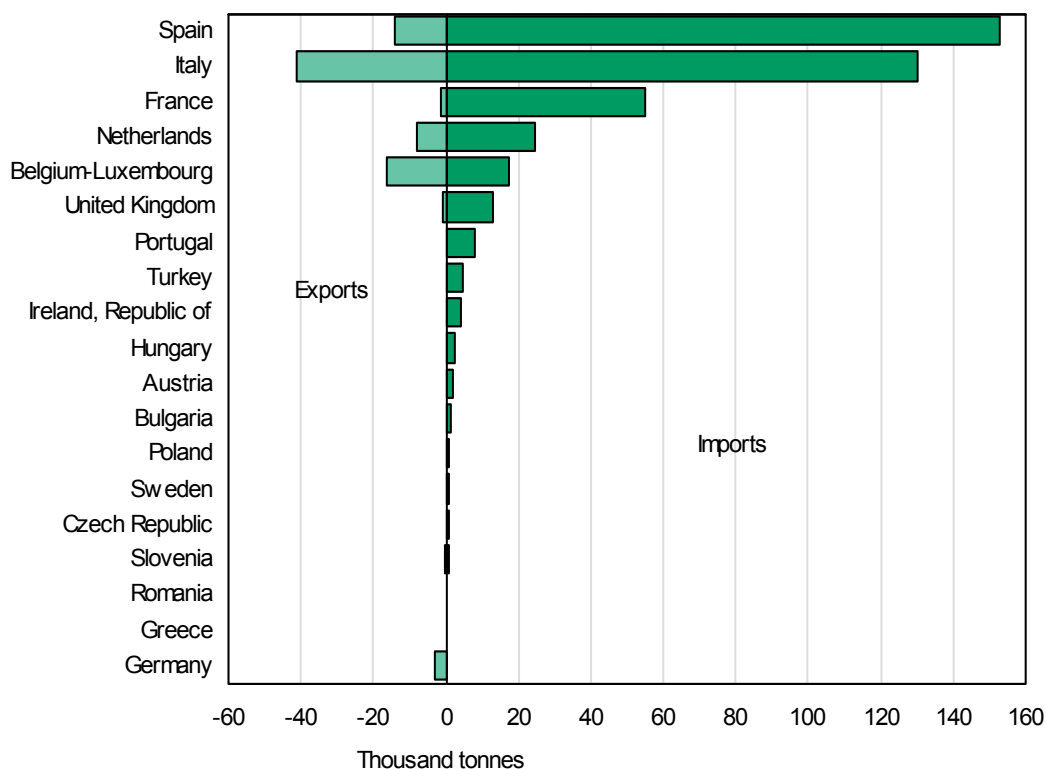
Country	2004	2005	2006	2007	2008
Ireland, Republic of					
Concentrates	152	248	258	425	3 976
Italy					
Concentrates	149 787	147 435	143 672	114 838	129 999
Metal	122	120	128	315	130
Netherlands					
Concentrates	13 613	10 975	15 948	20 462	24 694
Metal	105	88	123	199	240
Poland					
Concentrates	1 085	870	863	542	833
Portugal					
Concentrates	2 045	5 918	6 426	7 205	8 162
Romania					
Concentrates	809	552	766	303	437
Metal	30	22	32	16	136
Slovenia					
Concentrates	416	625	443	550	548
Spain					
Concentrates	143 860	153 619	149 710	138 442	152 604
Metal	94	56	55	65	136
Sweden					
Concentrates	564	588	750	825	832
Metal	82	91	134	219	185
Switzerland					
Metal	86	117	29	29	19
Turkey					
Concentrates	3 881	4 581	1 118	980	4 844
United Kingdom					
Concentrates	32 917	19 519	13 729	11 007	13 092
Metal	444	338	467	446	521

Note(s)

(1) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

(a) Including niobium and tantalum concentrates

Zirconium concentrates - EU32 trade in 2008



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 a few countries. Of these, Turkey (37.5 per cent of world production) was the largest in the world in 2008 and was the only EU32 producer.
- Borates are traded in a variety of forms. The price of Argentinian lump colemanite (F.O.B. 40–42% B₂O₃) was US\$400–US\$450 per tonne throughout much of 2008 but rose slightly at the end of the year to US\$420–US\$460 per tonne. However, during the first part of 2009 prices fell back to US\$370–US\$410 per tonne, where they remained for the rest of the year.

Production of borates

tonnes

Country	2004	2005	2006	2007	2008
Turkey	1 727 000	2 087 000	2 373 345	1 997 163	2 139 224

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 four countries produce nepheline syenite. Russia was the largest known producer in 2008, followed by Canada and Norway. Iran is also believed to produce nepheline syenite but the production quantity in 2008 was not available.
- Norwegian nepheline syenite (bulk F.O.L., UK port, glass grade, 0.5mm) traded at £97 per tonne throughout 2008 and the first part of 2009. Prices for the latter part of 2009 were not published.

Production of nepheline syenite

tonnes

Country	2004	2005	2006	2007	2008
Norway	329 000	320 000	312 000	312 000	346 000

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, low flammability, high heat resistance and high sound absorption. It is chiefly used in building materials.
- More than 20 countries produce perlite. Greece is believed to be the largest perlite producer in the world, followed by China and the USA.
- Perlite can have a wide range of properties and shipments are individually assessed according to specification. Thus, the price range is large. During 2008 raw perlite (bulk, F.O.B. Turkey) traded at US\$40–US\$45 per tonne, rising to US\$55–US\$65 per tonne by the end of the year. In 2009 it remained at the same level until November when the lower end of the range rose further to US\$60–US\$65 per tonne. Milled filter-grade perlite (ex-works USA) traded at US\$600–US\$800 per tonne in 2009.

Production of perlite

Country	2004	2005	2006	2007	2008
Bulgaria	8 500	15 300	4 500	13 900	7 400
Greece	1 053 388	1 075 129	* 1 100 000	1 100 000	1 000 000
Hungary	65 000	69 900	71 019	67 542	132 000
Italy	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Slovakia	23 840	8 630	10 560	20 000	25 000
Turkey	133 829	156 935	* 160 000	* 160 000	* 160 000

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 decolouriser, 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 world producer in 2008 was Japan. In the EU32 countries, Belgium and Sweden are the largest producers.
- The price for selenium metal increased at the start of 2008 from US\$30–US\$34 per pound in January to US\$37–US\$39 per pound in March, before it fell heavily to finish 2008 at US\$18–US\$22 per pound. The price remained at that level until July 2009 when it rose to US\$29–US\$31 per pound by September. It subsequently fell back slightly to end 2009 at US\$25–US\$27 per pound.

Production of selenium metal

Country	2004	2005	2006	2007	2008
Belgium	* 200	* 200	* 200	* 200	* 200
Finland	65	66	70	52	65
Germany	* 14	* 12	* 12	* 12	* 12
Poland	83	82	87	85	82
Sweden	131	122	135	126	130

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 a small number of countries produce strontium minerals. China is believed to be the world's largest producer with nearly 80 per cent of world production. In the EU32, Spain and Turkey are the only known producers, contributing nearly 16 per cent to the world total.
- For much of 2008, celestite (Turkish, 96% SrSO₄) traded at between US\$65–US\$80 per tonne. In October 2008 the price rose to US\$90–US\$105 per tonne, where it remained throughout 2009.

Production of strontium minerals

tonnes

Country	2004	2005	2006	2007	2008
Spain	206 001	336 630	280 195	142 512	138 590
Turkey	* 77 000	* 18 000	* 6 300	* 4 200	* 1 600

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. 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 2008, accounting for 20 per cent of the world total. Kazakhstan was the second largest producer followed by Australia, both contributing 19 per cent to world production. In the EU32, a small amount of uranium was mined in the Czech Republic. In addition there was minor production from Romania and Germany.
- Over 80 per cent of uranium is sold under long-term contracts, however, a spot market has been in existence for several years and this is frequently referred to when negotiating prices for long-term contracts. The spot market price continued to fall throughout 2008, ending the year at about US\$51 per pound. In 2009 it fell further to reach a three-year low of US\$42 per pound before recovering slightly to end the year at US\$45 per pound. The long-term price also fell in 2009 but remained higher than the spot price and ended 2009 at US\$60 per pound.

Mine production of uranium

tonnes (metal content)

Country	2004	2005	2006	2007	2008
Czech Republic	435	420	383	322	290
Germany	77	80	65	41	* 40
Romania	90	* 90	* 90	* 77	* 77
EU32 Total	602	590	538	440	407
EU32 Total (U ₃ O ₈ equivalent)	710	696	635	519	481

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 in 2008 with an estimated 55 per cent of world production. Spain and Finland were the only known EU32 producers, together contributing four per cent to world production.
- Wollastonite is traded on the basis of the aspect ratio of its crystals and by mesh size. Prices were stable throughout 2008 and 2009 at between US\$50 per tonne and US\$105 per tonne depending on grade.

Production of wollastonite

Country	2004	2005	2006	2007	2008
Finland	16 763	15 950	16 200	16 364	15 600
Spain	...	* 30 000	* 30 000	10 918	9 500

Note(s)

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